APPENDIX A

RESPONSE TO PUBLIC COMMENT ON THE DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT (MAY 22, 2013)

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Contents

Introduction

The Adirondack Park Agency (APA or Agency) issued the Draft Supplemental Environmental Impact Statement (DSEIS) in May of 2013. The public had an opportunity to provide oral comments at eight public hearings and to submit written comments throughout the comment period. Approximately 650 people attended these hearings and 250 spoke publically at the hearings. The Agency received 3,749 letters and emails and 5 petitions (2,380 signatures) during the public comment period which ended on July 19, 2013. Many of the comments expressed a preference or opinion as to the value of different land classifications or activities. These comments were considered carefully by the Agency and staff. Public comments are set out below in italics, followed by the Agency responses.

I. APSLMP CLASSIFICATION CRITERIA

A. PHYSICAL CHARACTERISTICS

According to the Adirondack Park State Land Master Plan (APSLMP or Master Plan) one fundamental determinant of land classification is the **physical characteristics** of the land or water which have a direct bearing upon the capacity of the land to accept human use. Soil, slope, elevation and water are the primary elements of these physical characteristics. These characteristics affect the carrying capacity of the land or water both from the standpoint of the construction of facilities and the amount of human use the land or water itself can absorb. These factors highlight the essential fragility of significant portions of the State lands including most lands above 2,500 feet in altitude, as well as low-lying areas such as swamps, marshes and other wetlands. In addition, rivers, streams, lakes and ponds and their environs often present special physical limitations. (APSLMP at p. 13.)

The following comments and responses pertain to the physical characteristics of the land being classified.

1. Carrying Capacity

Essex Chain is too small for a lot of recreational use.
Lakes with motorized access have campsites with greater damage.
Lakes are not huge and are fragile. Protecting them will bring a long term return on the investment.

> The Essex Chain Lakes and wetlands have been subjected to very little human disturbance over the past century, as is evidenced by the abundant aquatic plant diversity, including at least two protected plant species. Public motorized watercraft use, including float planes, could change the lakes' ecosystems through the disruption of the soft substrate found in the lakes' shallow connecting channels, release of stored nutrients, increased turbidity, displacement of sensitive aquatic plants, and introduction of contaminants to the waterbodies. The potential for introduction of non-native invasive species is also more likely with motorized watercraft. The need to restrict motorized watercraft use necessitates a Wilderness-type classification such as Primitive. Additional management through the Unit Management Planning process, and the consideration of the carrying capacity of the lakes, will address issues related to non-motorized watercraft use.

Using the existing road system enables access without damaging the Forest Preserve by cutting trees.

> Development and use of road networks by motor vehicles cause a variety of environmental and ecological impacts. Road networks can fragment forests, accelerate the introduction of invasive species, diminish the sense of remoteness and lead to user conflicts. Road networks can alter the character of the Forest Preserve above and beyond the initial tree cutting. These impacts have been evaluated by the Agency as part of this classification process.

Snowmobiling can be expanded without impacting the environment.
Snowmobiling with proper snow conditions has less impact on the forest than other sports.
Snowmobiles are better than other vehicles (ATVs), cause less damage.

> Within the area of action, the Agency has determined that certain, limited forest lands do not feature rare or sensitive resources and could likely withstand greater human use, including motorized recreation. These lands are those being classified as Wild Forest: primarily a corridor along the east boundary of the Hudson Gorge Wilderness Area and a wider area on both sides of the Hudson River to the north of the Hudson Gorge Wilderness Area and lands in the northern section of the Essex Chain Lakes Tract to within one-quarter mile of the Essex Chain Lakes and Deer Pond.
>
> Whether motorized or non-motorized, the expansion of virtually any recreational use will affect the environment. Motorized recreational uses, in general, have greater potential to

alter and degrade the wild, natural environment than non-motorized uses due to chemical emissions and noise pollution, impacts on the sense of remoteness, wildness and other intangible characteristics, certain biological impacts (e.g., introduction of invasive species), as well as some physical impacts. The evaluation of this difference in impact potential between Wild Forest and Wilderness-type categories of recreational uses was central to APA's deliberations concerning which land classification categories should be assigned to different portions of the area of action.

In those areas assigned a Wild Forest classification (where use of motor-vehicles may be permitted), snowmobiles and ATV's (on designated roads) conform to the APSLMP; exactly where their use will be permitted is determined through the Unit Management Plan (UMP) planning process. In general, riding a snowmobile on a snowmobile trail causes less physical damage to the trail and terrain than ATV riding. It should also be noted that while newer snowmobiles with four-stroke engines emit significantly less chemical pollution (excepting nitrous oxides, which are emitted in significantly higher quantities) and are typically quieter at lower speeds, they are still vehicles that emit pollutants and, at high speeds have been shown to be noisier than snowmobiles with two-stroke engines[1].

2. Private Land Classification

Why was the land classified as it was when private; do these classifications suggest the land could handle more use?

Prior to the acquisition of these lands by the State on New York, the lands were classified pursuant to the APA Act and the Adirondack Park Private Land Use and Development Plan. The lands were classified as Low Intensity Use, Rural Use and Resource Management. These private land classifications were based on natural resources, existing land use patterns, and public considerations present at the time. The APA Act directs staff to focus development where it was possible, desirable and suitable.

Now that the land has been acquired by the State for addition to the Forest Preserve, land is classified, pursuant to the APSLMP, according to the land's "character and capacity to withstand use." The APSLMP directs the staff to ensure that the "protection and preservation of the natural resources of state lands within the Park must be paramount." It further states human use should not degrade the land's physical and biological context

[1] Liikonen, L., Alanko, M., Jokinen, S., Niskanen, I., and Virrankoski, L. Finland Ministry of the Environment. Snowmobile Noise. Helsinki: 2001. https://helda.helsinki.fi/bitstream/handle/10138/38417/FE33en_2007_Snowmobile_noise.pdf?sequence=1 (last accessed December 2, 2013).

or its social or psychological aspects such as the sense of remoteness and degree of wildness.

Many of the same natural resource characteristics help guide land classifications on both private land and Forest Preserve. For example, deep well drained soils are considered amenable to both private land development, including onsite wastewater treatment systems, and public recreation including trails and campsites. Similarly, wetlands are not conducive to private land development or public recreation facilities.

Distinctions can be made between certain natural resource considerations' effect on private land use development potential and capacity to withstand public recreation use. For example, one consideration for private land development potential is the relative amount of wetlands, where the implication is that, with all other considerations being equal, an area with relatively few wetlands could withstand a higher level of development. Regarding public recreational use, an area may have a relatively low amount of wetlands, but if the wetlands are concentrated along waterbodies that would receive most of an area's public use, then the area could be considered to have a lower capacity to withstand use.

B. BIOLOGICAL CONSIDERATIONS

The APSLMP states that **Biological considerations** play an important role in the structuring of the classification system. Many of these considerations are associated with the physical limitations related to wetland ecosystems, habitats of rare, threatened or endangered species and sensitive wildlife habitats. These considerations are relevant to the characteristics of the land and sometimes determine whether a particular kind of human use should be encouraged or prohibited. (APSLMP at p. 13.)

The following comments and responses pertain to the biological characteristics of the land being classified.

Alternative 1A balances natural resource protection with access and with recreation. Recreation is secondary to resource protection.

Land classification guidance in the APSLMP requires that the Agency evaluate the recreational opportunities that may be afforded the public on newly acquired tracts of Forest Preserve lands. This is no less important an assessment as evaluating these lands' physical, biological and intangible characteristics and resources for their qualities. An example in the APSLMP of one of the "more concrete" land classification determinants, is, "the suitability of a given system of lakes and ponds for canoeing or guideboating,"

which is distinct from "the ability of larger bodies of water to provide for adequately distributed motorboat use." (APSLMP at p. 14.)

The APSLMP expressly limits the Agency's balancing of natural resource protection with provision of public access and recreational opportunities if such balance results in a meaningful diminishment of the protection of natural resources. The APSLMP states on page 1 that, "the protection and preservation of the natural resources of the state lands within the Park must be paramount. Human use and enjoyment of those lands should be encouraged, so long as the resources in their physical and biological context as well as their social or psychological aspects are not degraded." The APSLMP further emphasizes the special importance of the quality of the water resources of the Adirondack Park and sets forth, for each Forest Preserve water body, a primary management objective "to maintain and enhance its biological, natural and aesthetic qualities." (APSLMP at pp. 3-4.) The Agency's choice of appropriately protective land classifications for most of these tracts' water bodies and wetlands (primarily Primitive and Wilderness) is a critical, first step in helping ensure this primary APSLMP objective will be met.

Alternative 1A protects the resiliency of the rivers, lessens the impact on the integrity of the ecosystem, and is needed for increased outside pressures associated with climate change. Alternative 1B protects against climate change better than other alternatives. Alternatives 1A and 1B provide long-term ecological protection.

In the Preferred Alternative, those lands (including all waters) identified by APA staff as the most ecologically sensitive are recommended for classification as either Wilderness or Primitive. The APSLMP requires that lands classified as Primitive be managed in accordance with wilderness management practices. Some of the sensitive water bodies and wetlands of the Essex Chain Lakes area would have been less protected under Alternatives 1A and 1B because the western boundaries of the proposed Wilderness areas excluded First and Pine Lakes. The Upper Hudson, north of the Iron (Polaris) Bridge, will be classified as Wild Forest but will be protected with a restriction on motorboats in the Area Description.

The varying degrees of climate-change protection provided by the different alternatives are difficult to determine; all alternatives would allow for regeneration of forest throughout the area that should act as a major "carbon sink." Since motorized activities will not comprise the predominate forms of recreation in the area as a result of this classification recommendation, APA staff believe there will not be significantly different levels of greenhouse gas emissions resulting from the Preferred Alternative over Alternatives 1A and 1B.

What are impacts of classification on white-tailed deer?

The classification of land does not directly impact species diversity. The addition of these working forests to Forest Preserve will cause a change in the forest maturity and is likely to influence species composition. Regardless of classification, the forest will no longer be harvested and will mature. Species that favor open and immature woodlands will migrate to other lands, likely the neighboring easement lands which will continue to be managed for timber. Species which favor habitat edge or disturbed areas are likely to do the same. Conversely, species which prefer a mature forest will migrate to the new Forest Preserve lands.

With specific reference to white-tailed deer (*Odocoileus virginianus*), D. A. Saunders describes their range and habitat in his book "Adirondack Mammals" (1988). White-tailed deer prefer the openings and edges of deciduous and mixed forest, early successional forests, fields and farmland, together with mature conifer forests that provide winter shelter. Mature conifer forests that develop are likely to provide additional wintering yards important to white-tailed deer in the Adirondacks,[2] and a deer population of some size can be expected to remain. Conversely, populations of some animal species that prefer or require mature forests will become newly established on these Forest Preserve lands.

Lakes have sensitive shorelines and fishery.
Lakes have been a put & take fisheries which require regular stocking and cannot be described as "fragile".
Windfall strain brook trout are present in some waters and need special management.

In the Essex Chain Lakes, there are sensitive wetland communities consisting of deep water marsh and emergent marsh wetland that are contiguous to the shorelines. Due to their size, wetland covertypes present, diversity and abundance of aquatic macrophytes, and hydraulic connection to the main waterbodies, they have the highest value rating of 1 as defined in 9 NYCRR Part 578.

Several of the lakes have been privately stocked with Atlantic salmon, rainbow trout, brook trout, and in some instances, rainbow smelt. A small, naturally reproducing native population of lake trout is known to be present in Third Lake and Fifth Lake. Not all of the lakes are suitable for trout survival. During 2012, the NYS Department of Environmental Conservation (DEC) completed water chemistry analyses on eight of the

[2] Saunders, D. A., *Adirondack Mammals*. State University of New York, College of Environmental Science and Forestry, (1988), White-tailed Deer excerpt accessed on September 4, 2013 <http://www.esf.edu/aec/adks/mammals/wtd.htm>.

lakes that included pH, temperature and dissolved oxygen profiles. Trout require cold water during the summer months in order to survive; typically, temperatures less than 65F and dissolved oxygen levels above 4 parts per million are required for their long-term survival. Third Lake, Fifth Lake, Eighth Lake, Jackson Pond and Deer Pond all have temperature and dissolved oxygen profiles satisfactory for long-term trout survival.

Cedar Pond was reclaimed several years ago and subsequently stocked with Windfall strain brook trout by DEC. Cedar Pond is the only pond stocked with this heritage strain brook trout and DEC is responsible for managing fish and wildlife in the Adirondack Park. Any special fish management of Cedar Pond will be determined during the UMP process.

Additional ecological information addressing the Essex Chain Lakes and Fisheries was added to the FSEIS. The Essex Chain Lakes will be managed as wilderness under a Primitive classification.

Snowmobiles help wild animals travel to find food in the winter by packing down deep snow.

Scientific research does not support an assessment that snowmobile trails benefit wildlife. Some studies do indicate that both white-tailed deer and the predators of white-tailed deer (primarily eastern coyotes, but also, sometimes, domesticated dogs) will make limited use of snowmobile trails for traveling in winter. An APA staff literature review found no studies that conclude this packing of snow by snowmobile use provides a net benefit or harm to either deer or their predators. Other research indicates that higher death rates of subnivean (beneath-the-snow) wildlife may be caused by packed snowmobile trails (possibly because they interfere with these animals' ability to travel beneath the insulated snowpack to find food), but this research is not conclusive.[3]

Allowing motorized use does not protect the ecology.
Motorized access will increase noise, ATV destructive impacts, invasive species, & cause overfishing. Wilderness classification (and closing roads) will protect biology of region. Adirondacks are a place where many amphibians and small creatures live, which are vital to biodiversity/genetic diversity.

The potential for increased use to negatively impact wildlife species and their terrestrial and aquatic ecosystems was one of the key issues Agency staff examined during the classification process. It is an important factor supporting classification of the Essex

[3] Cherry, M. and Kratville, S. "Effects of winter recreation on subnivean fauna" (Abstract); http://beringiasouth.org/effects-of-winter-recreation-on-subnivean-fauna (last accessed on December 2, 2013).

Chain Lakes area as Primitive and a significant stretch of the Hudson River as Wilderness.

Closing most roads in the existing network of roads will reduce harmful habitat fragmentation and wildlife fatalities resulting from collisions, which can have particularly negative consequences for smaller species such as amphibians. Roads are also vectors for invasive species.

Prohibiting the use of motorized watercraft and the expanded use of float planes (beyond float plane use allowed on First and Pine Lakes) can be expected to help protect the natural, aquatic and shoreline resources in ways that include eliminating engine emissions and exhaust, noise, propeller contact, turbulence from propulsion systems, waves produced by movement and possible transfer of non-native invasive plants and animals.

Motorized use is not hurting wildlife.

Motorized recreational use can have significant negative impacts on wildlife. Potential impacts from motorized use include habitat deterioration and fragmentation, collision fatalities, and non-native invasive species introduction. Through the Preferred Alternative, the Agency staff has proposed to limit motorized use to those areas with physical and wildlife characteristics most suitable for motorized recreation.

Invasive species control is not a classification issue, it is management.
I am concerned about aquatic invasive species too – think there would be more with motorized access.
Lakes are not as resilient as the forest and are particularly vulnerable to invasive, not-native species introduction.

Invasive species can occur on State lands regardless of their classification category. However, invasive species are generally more abundant in lakes with motorized access (including float planes) and along roads open to motor vehicles. While no aquatic invasive species were found during field work conducted by both The Nature Conservancy and DEC, a review of current literature concerning the transport of aquatic invasive species from infested water body to uninfected water bodies indicates that "[m]uch of the ongoing spread of AIS to inland waters throughout North America can be attributed to the overland movement of small-craft boats."[4] Furthermore, "[t]ranslocation

[4] Rothlisberger, John D. et al. "Aquatic Invasive Species Transport via Trailered Boats: What Is Being Moved, Who Is Moving It, and What Can Be Done." *Fisheries* 35.3 (2010): 121–132. See also Bossenbroek, Jonathan M., Clifford E. Kraft, and Jeffrey C. Nekola, "Prediction Of Long-Distance Dispersal Using Gravity Models: Zebra Mussel Invasion Of Inland Lakes," *Ecological Applications* 11.6 (2001): 1778–1788; Johnson, Ladd E., Anthony Ricciardi, and James T. Carlton, "Overland Dispersal Of Aquatic Invasive Species: A Risk Assessment Of Transient Recreational Boating." *Ecological Applications* 11.6 (2001): 1789–1799; Leung, Brian, Jonathan M. Bossenbroek,

of organisms by boaters can be intentional (e.g. as bait)[5], but is often unintentional[6], with organisms inadvertently carried in bilge water, live wells, and bait buckets. Organisms can also be entrained on boat exteriors, e.g., entangled on propellers and trailers or attached to other entangled organisms."[7]

The Preferred Alternative limits motorized use of the Essex Chain lakes area as well as the Hudson Gorge area.

Protect the river (Hudson).

South of the Iron (Polaris) Bridge the Hudson River will be protected to the greatest degree possible as part of the Hudson Gorge Wilderness Area. North of the Iron (Polaris) Bridge the river will remain protected from motorized uses by its existing designation as a Scenic river pursuant to the Wild, Scenic and Recreational Rivers Act and by the area description within the APSLMP proposed as part of this classification action.

C. INTANGIBLE CONSIDERATIONS

The APSLMP states that another significant determinant of land classification involves certain **intangible considerations** that have an inevitable impact on the character of land. Some of these are social or psychological, such as the sense of remoteness and degree of wildness. (APSLMP at pp.13-14)

The following comments and responses pertain to intangible considerations of the land being classified.

People of NYS have limited quiet water opportunity on large lakes.

Due to their removed location from public highways, their forested condition, and their complete lack of shoreline development and motorized uses by Gooley Club members,

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and David M. Lodge, "Boats, Pathways, and Aquatic Biological Invasions: Estimating Dispersal Potential with Gravity Models." *Biological Invasions* 8.2 (2006): 241–254.

[5] Keller RP, C VanLoon, AN Cox, DM Lodge, L-M Herborg & J Rothlisberger. "From bait shops to the forest floor: earthworm use, transport and disposal by anglers."*American Midland Naturalist* (2007): 158:321-328.

[6] Johnson et al. 2001; Puth, Linda M., and David M. Post. "Studying Invasion: Have We Missed the Boat?" *Ecology Letters* 8.7 (2005): 715–721.

[7] Johnson et al. 2001; Rothlisberger et al. 2010.

the Essex Chain Lakes will offer boaters a combination of remoteness, wildness, quietude and beautiful views after 2018. The APSLMP clearly calls for any area with such rare resources to be protected; classification requiring wilderness-type management will accomplish this goal. In this situation, though, since reserved rights for float-plane landings and take-offs at First and Pine Lakes will detract from the available quietude and sense of remoteness, a Wilderness recommendation for classification of the lands surrounding these water bodies is inappropriate. Instead, Primitive is the classification category intended for such a situation by the APSLMP.

Want a Lake Lila type of experience.

The Agency received several comments related to the desire to create a non-motorized area for paddling and camping such as Lake Lila, Lows Lake or Little Tupper Lake. These water bodies are considerably larger than any of the Essex Chain Lakes or Pine Lake and are located (at least largely) in Wilderness. Despite those differences and the occasional presence of float planes on First and Pine Lakes, the recommended Primitive classification for most of the water bodies of the Essex Chain Tract should result in the creation of a major new opportunity for motor-free paddling and camping. It is expected that for many, these experiences will be equally as enjoyable as the experiences that can be had on those larger lakes.

Newer four-stroke engines are quiet.

Snowmobiles with four-stroke engines are typically quieter at lower speeds, however, at higher speeds may be noisier than snowmobiles with two-stroke engines[8].

D. ESTABLISHED FACILITIES

The classification system takes into account the **established facilities** on the land, existing public uses and the various administering agencies' policies in place. Examples of this would be the presence of an existing campground or ski area which would require the classification of intensive use. (APSLMP at p. 14.)

The following comments and responses pertain to the established facilities on the land being classified.

[8] Liikonen, et al (2001).

The Final Supplemental Environmental Impact Statement needs to show the full extent of the roads.

> The Final Supplemental Environmental Impact Statement has been modified to incorporate a map with descriptions of the existing road system (see FSEIS Map 3).

The land is not Wilderness in character due to the number of miles of existing roads, the bridges, and culverts.
Whitney recovered and so will these lands.

> The APSLMP definition of Wilderness includes:
>
> > A wilderness area is further defined to mean an area of state land or water having a primeval character, without significant improvement or permanent human habitation, which is protected and managed so as to preserve, enhance and restore, where necessary, its natural conditions... (APSLMP at p. 19).
>
> This definition and other language of the APSLMP concerning Wilderness classification recognizes that the land may not be in pristine condition at the time the State acquires it and that it may, over time, be restored to a wilderness condition. Historically, many Forest Preserve additions to Wilderness, Primitive and Canoe areas have come from heavily logged and stripped lands.

Mountain bikes on road would be compatible with existing infrastructure in the Essex Chain and Indian River parcels.

> The APSLMP recognizes All Terrain Bicycles (also referred to as mountain bikes) as a conforming use, subject to an approved UMP, in Primitive and Canoe areas on roads which meet the definition of state truck trails. Mountain bikes are not permitted in Wilderness. In Wild Forest, where mountain bikes are allowed, the precise locations for their use will be determined during the UMP process.

Link Blue Mountain Wild Forest to Vanderwhacker Mountain Wild Forest over the Iron (Polaris) Bridge.
Connect Indian Lake to Minerva – keep Iron (Polaris) Bridge open.
The Cedar and Rock Rivers need bridges to connect the communities.
Provide access on the road to the Cedar River and rebuild the bridge.

The site of the Iron (Polaris) Bridge across the Hudson will be classified as Wild Forest. Wild Forest Area management guidelines and criteria of the APSLMP allow for trails and their associated bridges, as well as for roads and their associated bridges. The suggestions made in these comments concerning bridges in these locations would be considered during unit management planning for the area. Certain other potential legal restraints such as DEC regulations and APSLMP guidelines will need to be considered at that time. The site of the washed out bridge over the Cedar River will be unclassified in the Preferred Alternative, but may be reclassified as Wild Forest if the DEC and the Agency are able to revise the DEC River Act regulations and the APSLMP, respectively, to allow for the construction of a bridge at that site. Regarding the need for a bridge across the Rock River, APA staff cannot respond because no particular location can be inferred from the comment and any need for such a bridge to connect communities is not clear. Such a topic could be addressed during the unit management planning process. There is an existing bridge across the Rock River outside the area under consideration for classification or reclassification.

The ultimate decisions about the existing road network and motorized use within the Essex Chain are dependent both on the classification and unit management planning process.
APSLMP prohibits a material increase of roads in WF. There is no current inventory, so the mileage would be in legal limbo.

No determination of the total mileage of roads in the area that may ultimately be open for public use of automobiles is required at the time of this classification action. Rather, the guidelines and criteria of the APSLMP relevant to this issue will be considered during DEC's upcoming unit management planning process.

II. CLASSIFICATION ALTERNATIVES

These public comments addressed the proposed classification alternatives and variations of those alternatives such as preferences for Wilderness or Wild Forest and also addressed classifications that were not proposed in the DSEIS, such as an historic use classification or intensive use corridors. In order for the Agency to consider any classification which was not presented in the DSEIS, the SEQR process would be re-opened with a supplement to the DSEIS and additional public notice, comment and hearings. This option is not being pursued at this time as neither a Historic nor an Intensive Use classification is being considered.

A. General Wilderness Alternative Comments

Wilderness keeps access for safety too far away.

The APSLMP allows motorized use in cases of emergency such as search and rescue in all classification categories, including Wilderness.

Alternative 1A supports sustainable recreation.

All of the classification alternatives presented in the Draft Supplemental Environmental Impact Statement were designed to protect natural resources and support recreation. The Agency has not defined "sustainable recreation" for the purposes of the APSLMP and is not required to do so as part of the classification process. To the extent that the comment refers to concern for the carrying capacity of these lands to support recreation under various classifications, please see pp. 3-4.
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Wilderness encourages healthy recreation and makes the Adirondack region attractive.
Need a Wilderness core in the center of the Adirondacks.
There are too many opportunities for Wilderness already.
Indian Lake has enough Wilderness.

All of the classification alternatives presented in the Draft Supplemental Environmental Impact Statement were designed to support healthy recreation. The classification of State lands must be based on those criteria of the APSLMP that require assessments of physical, biological and other important natural resource characteristics. The APSLMP does not include specific limitations on the amount of Wilderness within the Park or within any smaller area such as a town, nor does it state or infer ideal geographic locations.

B. General Wild Forest Alternative Comments

Wild Forest provides a diversity of opportunities.
Wild Forest enables more access, not just motorized.

Wild Forest classification does provide for a greater diversity of recreational opportunities. Snowmobile trails, which are not permitted in lands classified as Wilderness, Primitive or Canoe, can be allowed on Wild Forest. However, snowmobile trails must be located in accordance with Article XIV of the NYS Constitution, the APSLMP, the 2009 Snowmobile Trail Management Guidance and individual UMPs. The opportunities for All Terrain Bicycles are more expansive in Wild Forest than in Primitive or Canoe, but All Terrain Bicycles are not completely prohibited in those classifications if used on state truck trails designated for such use by DEC in an approved UMP.

Wild Forest will help Newcomb be both a gateway to Wild Forest (south) and Wilderness (north) attracting new users.

> The Town of Newcomb currently has within its borders State lands classified as Wilderness, Wild Forest, Historic, and Intensive Use. There are also private lands under conservation easements held by the State that the public has access to for multiple uses located in the Town. The Preferred Alternative, including a large Primitive Area, opens new lands to a variety of recreation uses.

Indian Lake needs more access and can only become the Southern Gateway to Finch lands if lands south of the Cedar River and west of the Hudson River are Wild Forest.

> Under the Preferred Alternative, lands will be classified as Wild Forest, Primitive and Wilderness south of the Cedar River, with a potential for a Wild Forest corridor along the Chain Lakes Road (South) to the Cedar River. The proposed Wild Forest corridor provides a north-to-south access route for all types of recreation uses and serves to connect Indian Lake to the entirety of the Indian River tract. There will be an unclassified corridor on the northern portion of the Chain Lakes Road (South) at the outset, which could be reclassified to Wild Forest if the regulatory impediments to a bridge over the Cedar River are resolved.

Details under Wild Forest Alternative 4B aren't listed.
Snowmobile Association is concerned because details aren't listed for Special Management Area.

> A Special Management Area is not a classification category and is normally defined within a UMP. The details of a Special Management Area would be developed in the UMP had Alternative 4B been the Preferred Alternative.
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> The APSLMP states that nothing prevents DEC from establishing special, restrictive or prohibitive measures in any classified area to protect natural resources as necessary. Such measures are typically developed and implemented through the unit management planning process following classification.

Wild Forest for maximum snowmobile use is favored.
Snowmobiles should be allowed on all existing roads.
Blue Mountain snowmobile trail is not safe – could find a better location if a Wild Forest classification were chosen.

> In a Wild Forest area the use of snowmobiles is permitted on designated roads and trails. The designation of roads and trails for snowmobiling is determined through DEC's unit management planning process. According to DEC staff, existing problems with the Blue

Mountain Wild Forest trail referred to during the public comment period are trail maintenance problems – not trail location problems.

C. General Intensive Use Alternative Comments

Classify the Chain Lakes Road as Intensive Use.
Want Intensive Use corridors, trail connections.
Historic use of roads must be looked at – look at Intensive Use for roadside camping like in Moose River Plains.

The APSLMP defines two types of intensive use areas: campgrounds and day use areas (APSLMP at p. 37). As pointed out in the FPEIS, the area's "resource characteristics must be unusually capable of withstanding such intensive use with little or no degradation in natural or scenic resource quality." FPEIS at p. 25. The sensitive water bodies in the Essex Chain tract have had restricted recreational use by hunting camp lessees in the past, with no public access. This lack of access has sustained their pristine condition. The present condition of this unique resource will not be maintained with the introduction of more intensive recreational use.

Motorized use trail connections can be accommodated through a Wild Forest designation pursuant to a DEC Unit Management Plan. The Preferred Alternative provides the potential for such connections through a Wild Forest corridor along the Chain Lakes (North) and Camp Six roads. This corridor, along with the area north of the Iron (Polaris) Bridge's Wild Forest designation, leaves open the opportunity for trails to connect the Blue Mountain and Vanderwhacker Wild Forests.

Roadside camping is a management option which can be considered in a Unit Management Plan in areas classified as Wild Forest. Primitive camping is available in all classifications.

The history of use and character of Moose River Plains Intensive Use Camping Area is unique in the Adirondack Park (APSLMP at pp. 39-41). The description of the Moose River Plains Wild Forest addresses the unprecedented nature of this Intensive Use Area:

> The area is unique also for how, in the 1960's, the Department of Environmental Conservation improved the extensive road system and developed numerous individual camping sites along the road. This has provided an outdoor recreational opportunity intermediate between that of a developed campground and typical primitive camping in Wild Forest and Wilderness.

The APA recommended reclassification of Wild Forest lands to create the Moose River Plains Intensive Use Camping Area in 2010 to acknowledge the existing public use and management of Forest Preserve lands since the 1960's, prior to the development of the APSLMP. This unusual reclassification action did not create an intensive use area on newly acquired lands as is suggested here. The 2010 action was part of an integrated planning effort which improved past management practices to regulate the density and type of primitive camping in Wild Forest while accommodating for the existing density of campsites in the new Intensive Use corridor. It is not a precedent for establishing intensive use corridors through newly acquired lands.

The DSEIS also noted that an existing DEC Intensive Use campground facility already exists at Lake Harris in the Town of Newcomb which provides a more intensive recreational experience in a more developed setting within 5 miles of the Essex Chain Tract.

D. Additional Alternatives

Create Primitive bike corridors as was done in Catskills.
Classify as Wilderness but no opposition to mountain biking.

Primitive Bicycle Corridor is not a classification category in the APSLMP. The Agency must choose from existing classification categories, most of which do allow for All Terrain Bicycle options. In the Preferred Alternative, the APSLMP would allow the use of All Terrain Bicycles on designated routes in Wild Forest lands including Wild Forest corridors, on state truck trails as defined in the APSLMP, and on roads open to the public on land classified as Primitive. If permitted, such use would be detailed in an approved UMP.

In order to allow for All Terrain Bicycles in Wilderness (or Primitive other than on state truck trails), the APSLMP would need to be revised through a separate public process.

Lands above 3000 ft. should be designated as Forest Preserve, lands below 3000 ft. should not be added to the Forest Preserve.

The New York State Constitution (Article 14, section1) dictates that newly acquired State lands such as these in Essex and Hamilton Counties must be added to the Adirondack Forest Preserve so they will be "forever kept as wild forest lands." Environmental Conservation Law section 9-0101(6) serves to ensure this. Through the ECL's provisions, these lands are defined as Forest Preserve and no option exists for the Agency to exclude any portion of them.

Only land over 2500 feet elevation should be considered for classification as Wilderness. Peaks over 2500 feet elevation should be protected through a Special Management Area if they are determined to be sensitive.

If an area's physical and biological conditions require wilderness management the APSLMP requires that it should be classified as either Wilderness, Primitive, or Canoe. Cedar Mountain (2,554 ft.) and Polaris Mountain (2,515) are the only mountains in the subject area above 2,500 feet in elevation. Cedar Mountain is recommended for addition to the Hudson Gorge Wilderness Area and Polaris Mountain is recommended for inclusion in the Polaris Mountain Primitive Area.

The APSLMP identifies the criteria the Agency and DEC are required to evaluate in determining the possible need for either wilderness management or the zoning of an area as a "special management area" via Unit Management Planning. Ruggedness and the erosivity of mountainous terrain, along with the sensitivity of high-elevation ecosystems, are important factors. The sensitivity of aquatic ecosystems and existing habitats are two others. The uniquely pristine qualities of the Essex Chain Lakes and their associated wetlands dictate that those areas be classified using a category that requires wilderness management.

Look at historic and cultural resources.
Wild Forest protects our cultural heritage.
Classify Outer Gooley as Historic.
Use Outer Gooley Club for State Administrative purposes.
Preserve Outer Gooley farmhouse.

The State did not acquire the structures on the Essex Chain parcel as part of the land acquisition; however, the State is responsible for the structures now that the lands have changed from private to public ownership. All buildings and structures on the property are scheduled to be moved or removed after the leases expire in 2018. A bond has been established to insure that the structures are removed. Staff at the NYS Office of Parks Recreation and Historic Preservation (OPRHP) have indicated that the camp structure at the Outer Gooley Club on the Indian River Tract may be eligible for listing on the State Register of Historic Places. Information supplied to OPRHP by the Outer Gooley Historical Association indicates the possible presence of a dugout canoe in or near Pine Lake.

A determination on whether the Outer Gooley Club building should remain or be moved to a nearby location will need to be made as part of the Unit Management Planning process. Historic classification under the Master Plan was not considered for the Outer Gooley Club because one of the requirements for this classification is that the structure must already have been either on the National Register of Historic Places or have been recommended for listing by the NYS Board for Historic Preservation. The Outer Gooley Club building was neither on the National Register of Historic Places nor recommended

for listing by the NYS Board for Historic Preservation; therefore it did not meet the Master Plan criteria for classification as Historic. In addition, the State must make a commitment of resources to manage the location primarily for historic objectives (APSLMP at p. 41).

The DEC submitted Building-Structure Inventory Forms to the NYS Office of Parks, Recreation and Historic Preservation (OPRHP) for the main camp building and 8 cabins at the Inner Gooley Club located on Third Lake. On September 25, 2013, OPRHP found that the main camp and six of the cabins met the eligibility criteria for inclusion in the National Register of Historic Places, based on the limited information provided. According to the inventory forms submitted by DEC, the camp was constructed in 1890, the cabins were constructed between 1946 and 1955, and the bath house and a shed were constructed in 1994.

The Inner Gooley Club is also not being considered for classification as Historic under the Master Plan. Similar to the Outer Gooley Club, the structures are not on the National Register of Historic Places and have not been recommended for listing by the NYS Board for Historic Preservation as required by the APSLMP for Historic classification.

Should be all classified as Wild Forest.
Should be classified as a mix of Wild Forest and Intensive Use.
All of the rivers should be classified as Canoe and the rest as Wild Forest for access.
Merge all Wild Forest together (Blue Mountain Wild Forest-Essex Chain Lakes Tract-Vanderwhacker Mountain Wild Forest).

The APSLMP directs the Agency to reclassify the Hudson Gorge Primitive Area to Wilderness. Therefore, that unit, within the larger subject area, should not be reclassified as Wild Forest.

Staff's careful consideration of the classification criteria in the APSLMP supports the mix of classifications and reclassifications proposed in the Preferred Alternative, which includes Wilderness, Primitive, Wild Forest, and State Administrative Areas.

Don't reclassify any of Vanderwhacker Mountain Wild Forest.

In the Preferred Alternative, none of the Vanderwhacker Mountain Wild Forest will be reclassified to another state land classification.

A Special Management Area could handle preserving the historic buildings in any classification category.

> Historic buildings, structures or sites not part of a Historic Area are examples of areas that may be included under special management guidelines.
>
> While the "special management guidelines" of the APSLMP encourage "special management to reflect unusual resource or public use factors," this management must, "in no instance… be less restrictive than that of the major land classification" in which the natural area or (potentially) man-made structure or improvement lies. (APSLMP at pp. 49-50.) Preserving historic buildings are allowable where APSLMP management guidelines and criteria for the category specifically do provide for maintenance of certain conforming buildings. This is primarily in Historic, State Administrative and Intensive Use Areas.

Special Management Areas are not intended for large areas (thousands of acres)

> The special management guidelines in the APSLMP do not include size as a criterion (APSLMP at pp. 49-50). A listing of Special Management Areas, described as "Illustrative Special Interest Areas," is provided in the APSLMP, and these areas vary in size from precise locations to entire islands. (APSLMP at p. 116.) The "Moose River Plains" is listed, and recently the "Historic Great Camps," at just under 3,000 acres, was added to this list. For the latter, a special area management plan was drafted and approved as a joint part of the UMPs written for both the Blue Ridge Wilderness Area and the Moose River Plains Wild Forest Area.

Keep the Hudson Gorge as a Primitive Area.
The Northwoods Club prevents reclassification of the Hudson Gorge from Primitive to Wilderness (especially because there is motorized use in the inholding).

> A Primitive classification is used to prescribe Wilderness management for an area whose high-quality and/or sensitive resources: 1) deserve the highest level of protection that can be afforded an area via the Agency's classification process; but, 2) are judged by professional standards to be lacking in characteristics considered minimally necessary for opportunities for wilderness experience. In the case of the Hudson Gorge Primitive Area, the APSLMP specified in 1972 exactly what prevented Wilderness classification: "the [two] substantial private inholdings and their critical relationship to the river gorge."[9] It also dictated that the area "should be upgraded to wilderness as soon as the private lands can be acquired or their uses limited by conservation easement so as to be compatible

[9] The Northwoods Club property has no river frontage and was not then a State land inholding.

with the adjacent state lands." Since the two inholdings of concern are now mostly acquired,[10] this condition is met. The reclassification does not change, in any way, DEC's current Wilderness management of the area.

The land adjacent to the Hudson Gorge Primitive Area and the Vanderwhacker Mountain Wild Forest owned by the Northwoods Club is not considered an inholding within the Hudson Gorge Primitive Area, because it is located between two Forest Preserve units.

Have Wild Forest on the periphery and Wilderness in the center as a compromise.
Expand Wilderness north of boundary in Alternative 1A.
Accept the proposal of the Upper Hudson Recreational Hub with all lands classified as Wild Forest with Intensive Use corridors.
Outer Gooley could be the spoke of that hub.
APA should develop all new alternatives.

During the public comment period there was strong support for resource protection as well as community connectivity and recreational access. The Preferred Alternative includes a mix of Wild Forest, Wilderness and Primitive classifications designed to protect the natural resources of the Forest Preserve while allowing for a variety of recreational opportunities and connections between the nearby communities. The Final Supplemental Environmental Impact Statement details the environmental, economic, and legal factors leading to the Preferred Alternative.

E. Alternatives for Other Lands

Boreas Pond Lodge should be used as information center, outpost or lodging.
Propose parking area and boat launch on MacIntyre Tract.

The Boreas Pond and MacIntyre tracts of land are not owned by New York State. Consequently, they are not being classified as part of this 2013 classification package.

All of the Finch lands will be classified the same as whatever is done here.

Any other TNC/Finch lands that are acquired by New York State will be classified by the criteria set forth in the APSLMP, regardless of where they are located and when they are evaluated.

[10] All of the Indian River Tract inholding is acquired, as is most of the O.K. Slip property – including both inholdings' entire frontages on the Hudson River including the Gorge.

III. STATE ENVIRONMENTAL QUALITY REVIEW (SEQR) COMMENTS

A. Economics

The FPEIS requires a section on economic impacts (FPEIS at p. 6) and a more detailed discussion on Economic Considerations has been added to the FSEIS.

The FSEIS needs a full economic impact analysis of all the alternatives.

> An economic impact section has been added to the FSEIS.

APA is not charged with economic development; that is the job of the Towns.

> Although economic impact is not listed as a criterion for classification under the APSLMP, SEQRA requires the Agency to balance environmental impacts with economic and social considerations. All levels of government in New York State are engaged and concerned with improving the economic well being of the communities in the region.

Intensive Use will enable more economic development and access opportunities.

> The APSLMP defines an Intensive Use Area as "an area where the state provides facilities for intensive forms of outdoor recreation by the public. Two types of Intensive Use areas are defined by this plan: campgrounds and day use areas" (APSLMP at p. 37).
>
> Intensive Use areas can allow for more intense levels of overnight use, however, the Master Plan states that "the state should rely on private enterprise to develop intensive recreational facilities on private lands within the Park . . . and should not acquire lands for these purposes" (APSLMP at p. 6). Among the considerations in regards to classifying lands as Intensive Use is the goal that the State minimizes its potential competition with existing business or future business opportunities. For these reasons as well as those explained in the FSEIS, Intensive Use was not considered.

We are not "open for Business" unless south of the Cedar River and west of the Chain Lakes road (Indian River tract) is Wild Forest.
Wilderness can help towns too.
There are Wilderness- based businesses selling canoes, kayaks, and hiking and mountaineering equipment like The Mountaineer.
Wild Forest only way to create 4 season recreation and help economy.
Recreational opportunities result in economic opportunities.

Every land classification provides for recreation opportunities pursuant to a NYS Department of Environmental Conservation Unit Management Plan (UMP). The economic impact resulting from a classified unit is dependent upon the total use of that unit. A variety of factors influence the use of a unit including the appeal of the natural resources, available recreation infrastructure (including trails, camping sites, etc.), proximity to population centers and accommodations, access points, local event programming, and the marketing of the resource. While the FSEIS includes an economic impacts analysis, further study, including market analysis, is required to make quantitative predictions in impact from different recreation activities.

The State University of New York College of Environmental Science and Forestry is currently tabulating use data for each of the Park's units. Comprehensive data for each of the Park's units is one necessary component of this analysis.

Vehicle access associated with economic boost (Moose River as example).
Protected lands will attract more visitors than lands overrun with motor vehicles.

Many people access the Forest Preserve through use of a motor vehicle. Additionally, many seek an experience in areas without an automobile. There is currently not enough data to specifically correlate vehicle access, or lack thereof, with total use or economic impacts.

Counties should take care of the road network since DEC is underfunded.

The management and maintenance of the road network is an issue to be taken into account in the unit management planning process administered by the DEC. That process will include a significant public input component.

Greatest economic benefit is from promoting access to ponds, lakes, rivers, streams and trails by all citizens.

Non-motorized paddle sports, boating, and fishing are each major components of the Adirondack tourism economy. The APSLMP states that the protection and preservation of the natural resources of the State lands within the Park must be paramount. Human use and enjoyment of those lands should be permitted and encouraged, so long as the resources in their physical and biological context, as well as their social or psychological aspects, are not degraded.

Towns grow with one small business at a time, small business is willing to take chance if it is Wild Forest, too big a risk if Wilderness.

Small business is an essential component to the Adirondack economy. Park-wide, about 83% of business enterprises maintain fewer than ten employees, and 63% have fewer

than five employees. The growth of these businesses, as well as the addition of new enterprises, is incremental.

The business potential resulting from a classified unit is dependent upon the total use of that unit (and the associated spending of the users). In addition to classification, a variety of factors influence the use of a unit including the appeal of the natural resources, available recreation infrastructure (including trails, camping sites, etc.), proximity to population centers and accommodations, access points, local event programming, and the marketing of the resource.

Look at leasing as the National Park Service does.
Revise the 5 year lease and allow camps to stay.
Keep lease clubs, they provide economic benefit.
Don't have preferential treatment – lease members shouldn't have access public doesn't have.

The Nature Conservancy holds leasehold interests on sections of the tracts involved with this classification package. The leases to private clubs, which end on September 30, 2018, grant exclusive rights to leaseholders that are outside the classification process. However, the lease agreements have some bearing on classification and must be considered in the environmental review and Agency decisions for classification. Article XIV of the NYS Constitution prohibits the State from leasing Forest Preserve lands; once the current leases expire, the State may not extend the leases.

Propose an Adirondack Trail system looping around Park funded by trail passes.

Many states and communities rely upon user fees to help build and maintain trail systems. The establishment of a user fee-funded trail system in the Adirondack Park is a broader State policy issue outside the framework of this particular land classification.

Adirondack Park is #1 snowmobiling destination, 28% of riding days are in Adirondack Park according to last year's economic study.

A 2012 survey commissioned by the New York State Snowmobile Association and performed by the SUNY Potsdam Institute for Applied Research estimated that 28.3% of all New York State snowmobile riding days are spent in the Adirondack Park. According to the study, more snowmobile riding days occurred in the Park than in any other New York State region.

B. Snowmobiles

A large grouping of comments received reflects the interest of some members of the public in completion of a snowmobile trail network of major trails that will connect the Adirondack communities of Indian Lake, Newcomb, and Minerva – as well as the concern that the preferred alternative should not prevent this.

Minerva needs to be connected to the snowmobile trail network.
Snowmobile trails should connect Minerva to Indian Lake.
A snowmobile community connector trail should go over the Iron (Polaris) Bridge.
The reclassification of Vanderwhacker Mountain Wild Forest and Blue Mountain Wild Forest lands to Wilderness would block connections.

> The Preferred Alternative provides the potential for a snowmobile trail between Minerva and Indian Lake via Newcomb through a Wild Forest Corridor and over the Hudson at the Iron (Polaris) Bridge. The development of such a trail would occur in DEC Unit Management Plans for the Vanderwhacker and Blue Mountain Wild Forests.
>
> Additionally, the Preferred Alternative does not preclude DEC from constructing the community connector snowmobile trail system called for by DEC's and OPRHP's 2006 "Snowmobile Plan for the Adirondack Park." This plan identifies a need to connect Indian Lake to Newcomb and Newcomb to Minerva. DEC's 2005 UMP for Vanderwhacker Mountain Wild Forest, moreover, identifies multiple snowmobile trail alternative routes to connect Minerva to Newcomb, plus other alternative trail routes for connecting Minerva and Schroon Lake (the connection to Schroon Lake is now completed). All of these options will be unaffected by the proposed alternatives. In addition, a critical community connector trail between Newcomb and Indian Lake has been established over former Finch Paper lands through an easement purchased by New York State. This connector allows snowmobilers to ride from Indian Lake to Newcomb; the connector will continue to Minerva once DEC implements the trail-construction actions proposed in the amendment to the Vanderwhacker Mountain Wild Forest UMP.
>
> The APA strongly supports the objective of completing a network of community connector snowmobile trails across the Park. This objective is set forth in broad form by DEC's 2006 "Snowmobile Plan for the Adirondack Park" which recognizes the snowmobile community's desire for long community connector trails. DEC integrates these snowmobile plan objectives in accordance with the APSLMP in all UMPs where it has been determined public motor-vehicle recreational use is permissible.
>
> Additional guidance was developed in the 2009 snowmobile trail "Management Guidance" – an appendix to the "Memorandum of Understanding between the Adirondack Park Agency and the Department of Environmental Conservation

Concerning Implementation of the State Land Master Plan for the Adirondack Park (Revised March, 2010). This guidance had the support of most user groups.

When determining which classification category should be assigned to a given area, the APA must conduct its evaluation focused first and foremost on the land's natural resources and characteristics (which include physical and biological ones, along with social and psychological conditions) in order to evaluate the land's capacity to withstand the impacts of various potential uses – including public motorized recreation – without significant degradation.

A community connector snowmobile trail should be between Indian Lake and Minerva via the Iron (Polaris) Bridge and with a new bridge crossing the Cedar River.

The Preferred Alternative provides the potential for a snowmobile trail between Minerva and Indian Lake via a Wild Forest Corridor, if certain regulatory and legal issues are resolved. The development of a trail, as well as use of the Iron Bridge for a snowmobile bridges or construction of a bridge over Cedar River, would be pursuant to DEC Unit Management Plans for the Vanderwhacker and Blue Mountain Wild Forests.

Additionally, the 2006 Snowmobile Plan provides a community connector trail from Indian Lake to Newcomb and from Newcomb to Minerva; there are similar connections from these communities to other nearby communities.

IV. UNIT MANAGEMENT PLANNING

A. Classification versus Management

Many recommendations were made during the public comment period that were management recommendations and were not directed to the classification action. Details of management actions will be addressed through the UMP process, but are subject to the guidelines established in the APSLMP.

Comments regarding management recommendations which are subject to the guidelines set forth in the APSLMP are addressed individually below.

Management needs to take care of the ecosystem.
Share the land with different user groups using it at different times of the year.
Have more trails (type not specified).
Put parking at culvert between 4th and 5th lakes.
Closing roads with gates prevents horse/wagon access.
Look at complex planning, holistic approach front vs. back country.
Work out details in UMP, can be restrictive in Wild Forest.

Regulate through the UMP, not the classification, to enable flexibility.
Let regulations take care of land, not classification.
Let UMP decide about motors.
Proper management will mitigate over-use.
Can reclassify it from Wild Forest to Wilderness later if management under Wild Forest guidelines is not effective enough to protect the resources of the area.
Public is making comments without ability to see, therefore classify as Wild Forest and let the UMP define details.

It is the responsibility of the Agency, as dictated by the APSLMP, to make classification decisions based on the physical and biological characteristics of an area, as well as intangible factors based on human use and the potential for an area to provide appropriate recreational opportunities.

Detailed management recommendations are made through the UMP process, subject to the Guidelines for Management and Use in the APSLMP for that classification category. The APSLMP states that nothing in the guidelines for lands falling within each major classification shall be deemed to prevent the Department of Environmental Conservation, or any other state agency administering such lands, from providing for more restrictive management where necessary to comply with constitutional requirements or to protect the natural resources of such land (APSLMP at p.15). The Department may, but is not required to, manage lands more restrictively than the classification category requires.

Provide access that disperses use in many directions.
Mountain biking is important, don't mix with ATV's or cars.

The APSLMP requires the Agency to make classification decisions based on the physical and biological characteristics of an area, as well as intangible factors based on human use and the potential for an area to provide appropriate recreational opportunities. Recommendations regarding specific uses should be made during the Unit Management Planning process.

Need for DEC to have management and stewardship resources.
Ask the State for stewardship resources needed to protect these natural resources.

The classification process does not include identifying or providing monetary resources for land management or stewardship. Unit Management Plans include budget estimates by DEC for implementation of specific management actions.

DEC's current recreational plan (interim access plan) is not good.

The Department has prepared and implemented an interim recreational access plan that addresses access to the lands and uses that may occur on these lands prior to classification. This plan is temporary and a Unit Management Plan will be developed following classification.

DEC needs to write the recreational plan for the easement lands to see how they can be used to compliment the Forest Preserve – motorized use can be used on easement lands instead of Forest Preserve.

The Department and the Agency have a Memorandum of Understanding regarding Conservation Easements and the development of recreational management plans. Conservation easement lands are private lands subject to state-owned easements, and are not subject to the APSLMP or classification, so are outside the scope of this process. It Generally there are less restrictions on motorized use on easement lands than there are on Forest Preserve. The Agency will participate in the review of a recreation management plan for the easement lands pursuant to the terms of the Memorandum of Understanding.

Education is the key to invasive species management, not boat types or (motorless vs. motor).
Boat wash stations would help curtail invasive species.
Beware of Japanese Knotweed: protect against this invasive species or the area will be ruined forever.

Invasive species can occur on State lands regardless of their classification category. However, invasive species are generally more abundant on lakes with motorized access, along roads open to motor vehicles, and waterbodies open to float planes. Educational opportunities, treatment of populations of invasive species, and the use of boat wash stations are all considerations that should be addressed during the Unit Management Planning process.

Additional comments regarding invasive species can be found in the Biological Considerations section of the FSEIS.

If ATVS allowed, limit when they have access.
ATVs new ones ok and fees could pay for road work.
ATV users have rights, but put them on lands that are suitable for ATV's.
Joined Gooley Club to ride ATVs and state should provide for ATV use by elderly.
Look at how Maine and NH have made snowmobile trails available to ATV's, expanding the season.

The APSLMP allows all terrain vehicles on "existing public roads or Department of Environmental Conservation roads open to such vehicles" in areas classified as Wild Forest if approved in an UMP (APSLMP at p. 34) and in accordance with Vehicle and Traffic Law §2405. Lessees will have rights to use ATVs in accordance with their leases

and agreements with DEC until October 2018. DEC has no intent to authorize ATV use in the Essex Chain Lakes Tract.

Public motorized access to Essex Chain Lakes and lack of enforcement would lead to illegal ATV use and unauthorized motor boat launches.

Illegal actions on Forest Preserve are an enforcement issue outside the scope of this classification action.

We should reclassify the rivers.
Reclassify (designate) the Hudson River from Wild to Scenic from the confluence of the Indian River one mile north.
The legislature designated rivers, not the APA through classification.

The Hudson, Cedar, Indian, and Rock Rivers were designated by the state legislature pursuant to the Wild, Scenic and Recreational River Act, ECL Article 15, Title 27 (Rivers Act) (see FSEIS Map 2). The APA may recommend designations to the legislature, but is not authorized to change designations under the Rivers Act. The Preferred Alternative does not include any proposals to change any of the rivers' current designations. DEC regulations promulgated under the Rivers Act also restrict certain management actions on lands adjacent to these rivers regardless of the land's final classification (6 NYCRR 666.4).

The APSLMP also provides guidelines for management and use of Wild, Scenic, and Recreational Rivers and adjacent lands. Although the legislature designates rivers, the Adirondack Park Agency has responsibility to interpret the APSLMP guidelines regarding designated rivers.

Equine access should be allowed.

None of the classification alternatives presented or classification categories listed in the APSLMP prevent access by horse on designated trails subject to an approved UMP.

A. General Access Comments

Alaska and Boundary Waters depend on float planes for wilderness access.

The Preferred Alternative allows for float plane access to First and Pine Lakes. The APSLMP does not allow public motorized use, including floatplanes, on lakes in areas classified as Wilderness, Primitive or Canoe.

Tax payers paid for this land and tax payers should have access to these lands.

Most of the property is currently open to the public. Some of the land acquired by the State in the Essex Chain parcel is subject to leases which grant private recreation clubs the exclusive right to use the land until the lease expires in 2018. Once the leases expire, lands in the vicinity of these camps will also be open to the public.

Decreasing access limits recreational opportunities.

The public expressed strong support for resource protection, community connectivity, and recreational access. The Preferred Alternative addresses these public interests by recommending a diversity of classifications which will provide for a range of uses including hiking, kayaking, cross-country skiing, snowmobiling, hunting, fishing, bicycling, and other motorized and non-motorized uses pursuant to NYS Department of Environmental Conservation Unit Management Plans for the newly created and impacted units.

Look at United States Forest Service in Alaska to learn about access.

The APSLMP sets the criteria for land classification of state lands in the Adirondack Park. The US Forest Service is subject to a difference set of laws and regulations than are the APA and DEC.

All 7 alternatives violate the ADA.
Equal opportunity, not equal outcome: make some accommodations for access, but not all.
The elderly need roads for access.
Help make access to rivers closer to promote world class fishery.
Increased access for veterans, enable recreation and healing.
Possible to have access to a nearby pristine area.

The Americans with Disabilities Act ("ADA") does not require that the State make each of its facilities accessible to and usable by individuals with disabilities. Rather, a "public entity shall operate each service, program, or activity so that the service, program, or activity, when viewed in its entirety, is readily accessible to and usable by individuals with disabilities." When looking at whether the State has made reasonable accommodations for persons with disabilities, the State is not required to take any action that would result in a fundamental alteration in the nature of a service, program, or activity.

The ADA provides for meaningful access to programs, but not to additional or different substantive benefits. Lands in every land use classification provide access points for non-motorized recreation which can be enjoyed by persons with disabilities. For any

classification, specific access points will be developed by DEC through the UMP planning process.

A Wild Forest classification does not guarantee that persons with or without disabilities can use motorized vehicles for recreation on all state lands classified as Wild Forest. Snowmobiles are only allowed on designated trails. Persons with disabilities may use motor vehicles to access Wild Forest lands under the CP-3 Program[11] administered by DEC, but only on designated trails and roads which the DEC uses for administrative purposes. The Preferred Alternative includes a narrow Wild Forest corridor to Fourth and Fifth Lakes, which could provide access for persons with disabilities, subject to an approved UMP and the CP-3 program.

Adirondack Park is not bike-friendly, makes more sense to allow mountain bikes on trail-specific criteria, as opposed to classification of land.

All-Terrain Bicycles are a conforming use in all classification categories other than Wilderness Areas as defined by the APSLMP; however, they are conforming uses in Canoe and Primitive areas only on roads open to the public and on state truck trails. In land classifications that allow All Terrain Bicycles, specific trails are designated in the UMP.

Need access for all roads and the ability to use gravel from the property past the 1 acre gravel pits. Want more gravel pits.

The deeds for the Essex Chain and Indian River parcels include easements for three gravel pits at specific locations for specified uses. Conveyance of additional gravel pits on Forest Preserve lands to the Towns would raise constitutional questions and is outside the scope of classification.

Subsequent decisions about the status of roads will be made through the Unit Management Planning process.

Mountain biking can be used as access to fishing areas.

All terrain bicycles are one of several ways to potentially access fishing opportunities, as long as the access is on roads open to the public or state truck trails designated for All Terrain Bicycles in a UMP in Primitive areas, or in Wild Forest on roads or trails

[11] CP-3 is the DEC Commissioner's Policy on Motorized Access Program for People with Disabilities. Additional information on this program can be found at http://www.dec.ny.gov/outdoor/2574.html

designated for use by All Terrain Bicycles in a UMP. The APSLMP does not allow All Terrain Bicycles in Wilderness areas.

Prohibit float-plane access into interior of Essex Chain.
There are 7 miles of paddling on the Chain Lakes, no need for motors.
The entire area should be motor-less year round.

Other than First Lake, which is subject to an easement for float plane landings, the APSLMP prohibits motorized use on an area classified as Primitive; in the Preferred Alternative, the Lakes will be managed under wilderness guidelines and no motorized activities will be allowed on the lakes.

Want motorized access to non-motorized lakes.
Wants seasonal float-plane access to Third Lake.
0.8 mile parking is too far from river.
Parking lot to Deer Pond too far away.
Provide car accessible take-out north of Indian River/Hudson confluence.
Allow access for outfitters and guides.

Current parking locations have been established by DEC on an interim basis, pending classification. An assessment of future access locations will be made during the Unit Management planning process based on applicable regulations and an assessment of potential parking facility location and public recreational access needs. The Rivers Act and DEC regulations restrict certain management actions on lands adjacent to these rivers regardless of the land's final classification, including the distance from the river shoreline structures and improvements may occur.

The Preferred Alternative provides that Third Lake will be classified as Primitive, which will be managed as Wilderness. Therefore, floatplane access to Third Lake would not be possible, under the Preferred Alternative. A portion of the Boots to Cornell Road within Wild Forest could allow motorized access closer to the Essex Chain Lakes pursuant to a DEC UMP.

Allow motors on Hudson from Ord Falls to Blackwell Dam.
Want motorized access on Hudson.

The Hudson River is a Scenic River, and motor boat use is generally not permitted under the APSLMP. The DEC may allow motor boat access where the use is already established, is consistent with the character of the river area, and will not result in any undue adverse impacts upon the natural resource quality of the area. The Preferred

Alternative's Area Description for the Hudson River north of the Iron (Polaris) Bridge, requires that motorboats be prohibited on that section of the Hudson River.

V. GENERAL COMMENTS RELATING TO THE APSLMP

APSLMP has the force of law and the Agency members must use the APSLMP as guidance.

NYS Courts have ruled that the Master Plan has "the force of a legislative enactment" since it was approved by the Governor and Legislature in 1972/73. Subsequent updates and revisions, including classification actions, must also be approved by the Governor.

Need to update the APSLMP and start Complex Planning.
Want to be able to groom XC ski trails on Wild Forest, not just on Intensive Use.
Look for powder skiing opportunities.
The APSLMP should be amended to allow for boat wash stations.

A number of comments suggested that the APSLMP be updated. This classification action must use the current APSLMP guidelines previously adopted by the Agency and approved by the Governor.

The APA is required to address the economic impact, and the APA Act trumps the APSLMP.

The basic purpose of the APA Act is to insure optimum overall conservation, protection, preservation, development and use of the unique scenic, aesthetic, wildlife, recreational, open space, historic, ecological and natural resources of the Adirondack Park while recognizing the complementary need for growth and service areas, employment, and a strong economic base.

Classification under the APSLMP is subject to SEQRA; this Act requires consideration of economic impacts. A section on this topic is included in the FPEIS at pp. 37-38 and in the FSEIS.

The classification process must be transparent.

The classification process has been subject to eight public hearings as well as discussions in public session by the Agency Board at Agency monthly meetings. Over 3700 public comments were received on the alternatives and responses to these comments have been addressed. Transcribed notes and recordings from the hearings and meetings, copies of

the letters and petitions, and a video webcast from the Ray Brook Public Hearing are available to the public.

Don't rush this process, take more time to better understand and see the land. Wait until the leases expire before you classify the land.

The APSLMP requires that "land acquisitions should be classified as promptly as possible following acquisition and … classification of new acquisitions will be done annually" (APSLMP at p. 7).

The Chain Lakes Road (South) from Indian Lake north to Cedar River was never abandoned by the Town.

The Agency does not have any information in the deeds for these tracts of land that suggest the road is owned or controlled by another entity other than New York State. The previous landowners did not allow public access on the roads in the parcels; use of the roads was limited to the landowner and lessees.

The Town of Indian Lake commented that it had contributed to road maintenance and cooperated with the Town of Minerva on some improvements over time but the actual legal status of the roads through the Indian River tract is not the subject of the classification process.

VI. NON-APSLMP COMMENTS

A. Article XIV of NYS Constitution

Allow logging to continue.
Keep logging – they maintain the roads.
Allow timber management and timber sales in the UMP.
Lands will be protected regardless of classification.

Once the land was acquired by the State of New York, it became part of the Forest Preserve. These lands are defined as Forest Preserve by Environmental Conservation Law section 9-0101(6). The New York State Constitution (Article 14, section 1) dictates that these lands "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, nor shall the timber thereon be sold, removed or destroyed." Active timber management and the other types of management suggested would conflict with the provisions of Article 14, Section 1 of the New York State Constitution.

In addition to the lands purchased in fee to be added to the Forest Preserve, conservation easements were purchased on over 89,000 acres. These lands can continue as working commercial forests and provide additional recreational opportunities.

An additional 1,170 acres of land has been set aside for community purposes in the Towns of Newcomb, Indian Lake, and Long Lake.

B. Local Government

Honor the promise the state made to the Towns.

The Preferred Alternative, in conjunction with State-owned easements on adjacent lands, is consistent with the Governor's commitment to provide a wide variety of new recreational opportunities on the former Finch lands. Following the 2007 purchase of 161,000 acres of land from Finch, Pruyn & Company, The Nature Conservancy and DEC worked with elected officials and other stakeholders regarding the future of these lands. The Nature Conservancy conducted an assessment of the land and developed a plan for the 161,000 acres, which included 89,036 acres to continue as working commercial forests, protected by a conservation easement; 65,000 acres to be acquired by the State of New York from The Nature Conservancy as new public lands; and 1,170 acres set aside for community purposes in Newcomb, Long Lake and Indian Lake.

In 2011, New York State acquired 89,036 acres of conservation easements which allow for forest products to be harvested from these lands, while providing some opportunities for public recreation. Overall, New York State has conservation easements on 782,000 acres of private land within the Park.

APPENDIX B

SNIZEK, E. APA RESOURCE ANALYSIS & SCIENTIFIC SERVICES.NOVEMBER 26, 2013. ESSEX CHAIN LAKES AQUATIC RESOURCES. UNPUBLISHED PAPER.

Essex Chain Lakes Aquatic Resources
November 26, 2013

Introduction

The water resources of the Adirondacks are critical to the integrity of the Park. The protection of the major watersheds of the state was a major reason for the creation of the Forest Preserve and continues to be of significant importance. Waters, particularly lakes and ponds, have their carrying capacity from a physical, biological and social standpoint just as do tracts of public or private land. The use made of state waters also has a direct impact on adjacent land holdings (APSLMP page 3).

A dominant feature of the landscape in the Essex Chain Lakes Tract is the series of eight interconnected lakes. Together with nearby ponds, this tract has eleven lakes and ponds interconnected or within portaging distance of each other to provide a six- to seven- mile canoe route. Together with this canoe route, there are a total of 18 ponds and lakes in this tract.

When evaluating the potential impacts of recreational use on the water resources in the Essex Chain Lakes Tract, the long-term ecological integrity and potential impact to the freshwater resources was evaluated. Changes to freshwater ecosystems originate from many anthropogenic (human) and natural causes[1]:

- Terrestrial vegetation alteration and degradation of the riparian zone
- Aquatic vegetation alteration and degradation
- Introduction of Aquatic Invasive Species (AIS)
- Introduction of pollutants
- Other on-site and external threats

[1] McEwen, A., Dawson, C., and Gerstenberger, L. 2011. Adiriondack Park Forest Preserve Carrying Capacity of Water Bodies Study: Phase 1- Selecting Indicators for Monitoring Recreational Impacts. State University of New York, College of Environmental Science and Forestry.

Description of Aquatic Resources

First Lake

First Lake is 51± acres in size and has a maximum depth of 62± feet. It is hydraulically connected to the other seven Chain Lakes and serves as the outlet lake, its waters eventually flowing into the Rock River. A small, shallow unnavigable channel runs from First Lake to Second Lake. Boat access between these 2 lakes requires a portage of approximately 0.15 miles.

Second Lake and Third Lake

Second Lake is the third smallest of the eight Chain Lakes measuring 23± acres in size and having a maximum depth of 19± feet. A deep, wide channel connects it with Third Lake. A fish barrier net is positioned across the channel to prevent fish from migrating between the lakes.

Third Lake is the largest (262± acres) and deepest (maximum depth 80± feet) of the Essex Chain Lakes. It has been privately stocked with Atlantic salmon, rainbow trout, brook trout, and rainbow smelt for several years. A small native population of lake trout is also known to be present in the lake. Temperature and dissolved oxygen profiles (completed in 2012) are adequate for long-term trout survival during the summer months.

Channel from Third Lake to Fourth Lake

The channel connecting Third Lake to Fourth Lake is part of a 21± acre emergent marsh and deepwater marsh wetland complex that surrounds a large portion of Fourth Lake (Figure 1). Due to the size, wetland covertypes present, diverse assemblage of aquatic macrophytes, and proximity to Fourth Lake, this 21± acre wetland complex, including the channel, has a high value rating. The wetland provides spawning and nesting habitat, food and cover for wildlife, and cycles large quantities of nutrients.
The channel is shallow and has a bottom consisting of silt, muck, and organic substrate that is easily disturbed.

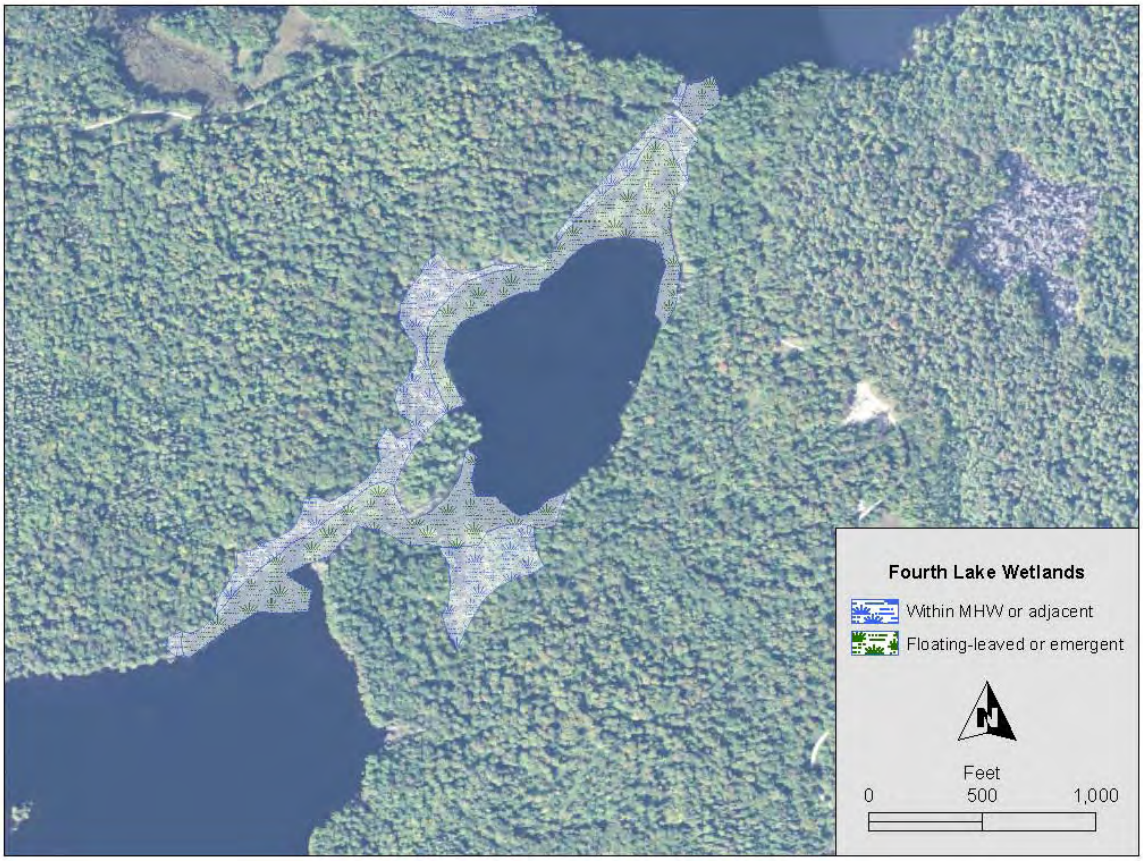

Figure 1

Fourth Lake and Channel from Fourth Lake to Fifth Lake

Fourth Lake is approximately 27± acres in size. It is almost completely surrounded by the 21± acre emergent marsh and deepwater marsh wetland complex that is contiguous with the channel to Third Lake (Figure 1).

Access to Fifth Lake from Fourth Lake is through a culvert that is large enough for passage by small watercraft. The channel connecting Fourth Lake to Fifth Lake is a high value deepwater marsh and emergent marsh wetland consisting of a large diversity of wetland vegetation. The channel is shallow and consists of silt, muck, and organic substrate that is easily disturbed.

Fifth Lake and Channel from Fifth Lake to Sixth Lake

Fifth Lake is 71± acres in size, with a maximum depth of 65 feet. It has been privately stocked with Atlantic salmon, rainbow trout, brook trout, and rainbow smelt for several years. A small native population of lake trout is known to be present in the lake. Temperature and dissolved oxygen profiles are adequate for long-term trout survival during the summer months.

The channel connecting Fifth Lake to Sixth Lake is part of a 37± acre emergent marsh and deepwater marsh wetland complex that surrounds a majority of Sixth Lake and encompasses all of Seventh Lake (Figure 2). Due to the size, wetland covertypes present, diverse assemblage of aquatic macrophytes and proximity to the waterbodies, this 37± acre wetland complex, including the channel, has a high value rating. The channel is shallow and consists of silt, muck, and organic substrate that is easily disturbed. The channel is extremely shallow near the entrance to Sixth Lake with large floating organic mats partially blocking the channel. Small watercraft, such as canoes and kayaks, can navigate the channel, but it is almost impassable for motorboats.

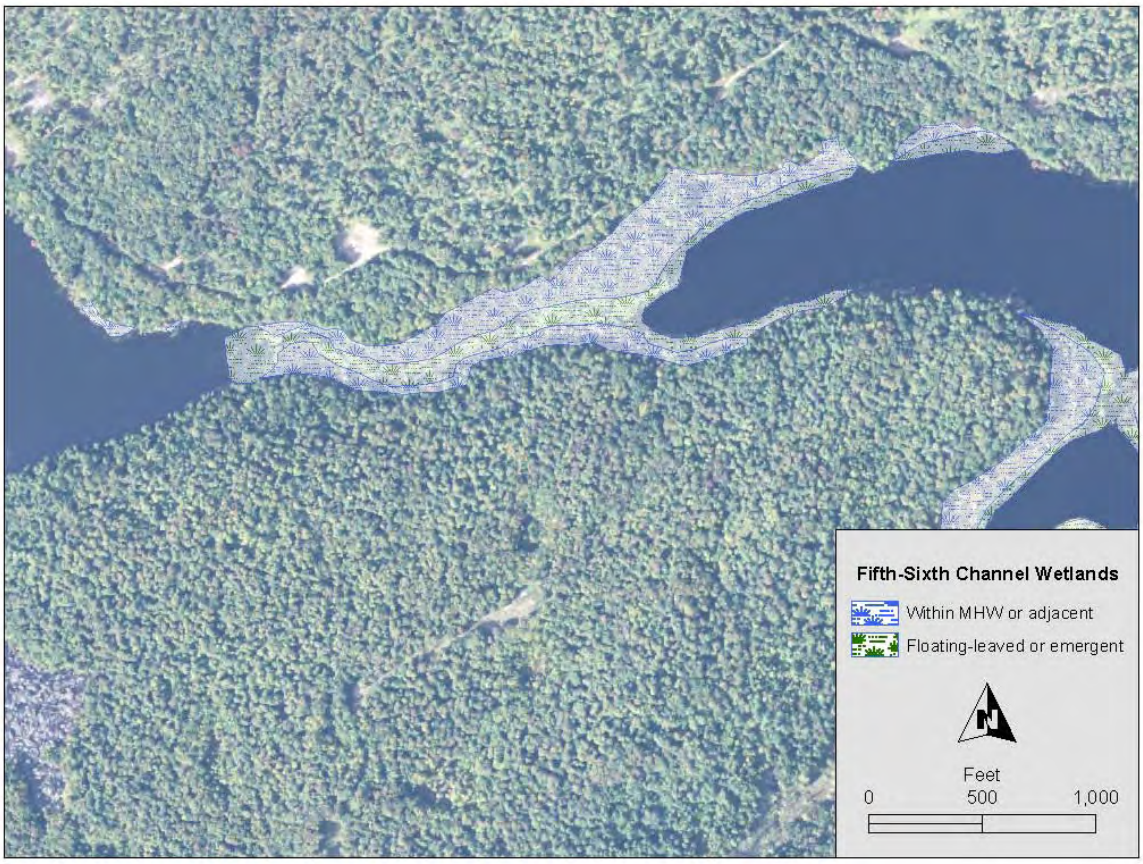

Figure 2

Sixth, Seventh and Eighth Lakes

Sixth Lake and Seventh Lake are 36± acres and 9± acres, respectively (Figure 3). Both lakes are mostly surrounded by emergent and deepwater marsh wetlands as described previously. An analysis of temperatures and dissolved oxygen levels during the summer months indicates neither lake could support long-term trout survival.

Eighth Lake is the second smallest lake, measuring 17± acres with a maximum depth of 36± feet. The lake is hydraulically connected to Seventh Lake, but a navigable channel is not present. The lake has been stocked with brook trout, and temperatures and dissolved oxygen are adequate for their long-term survival.

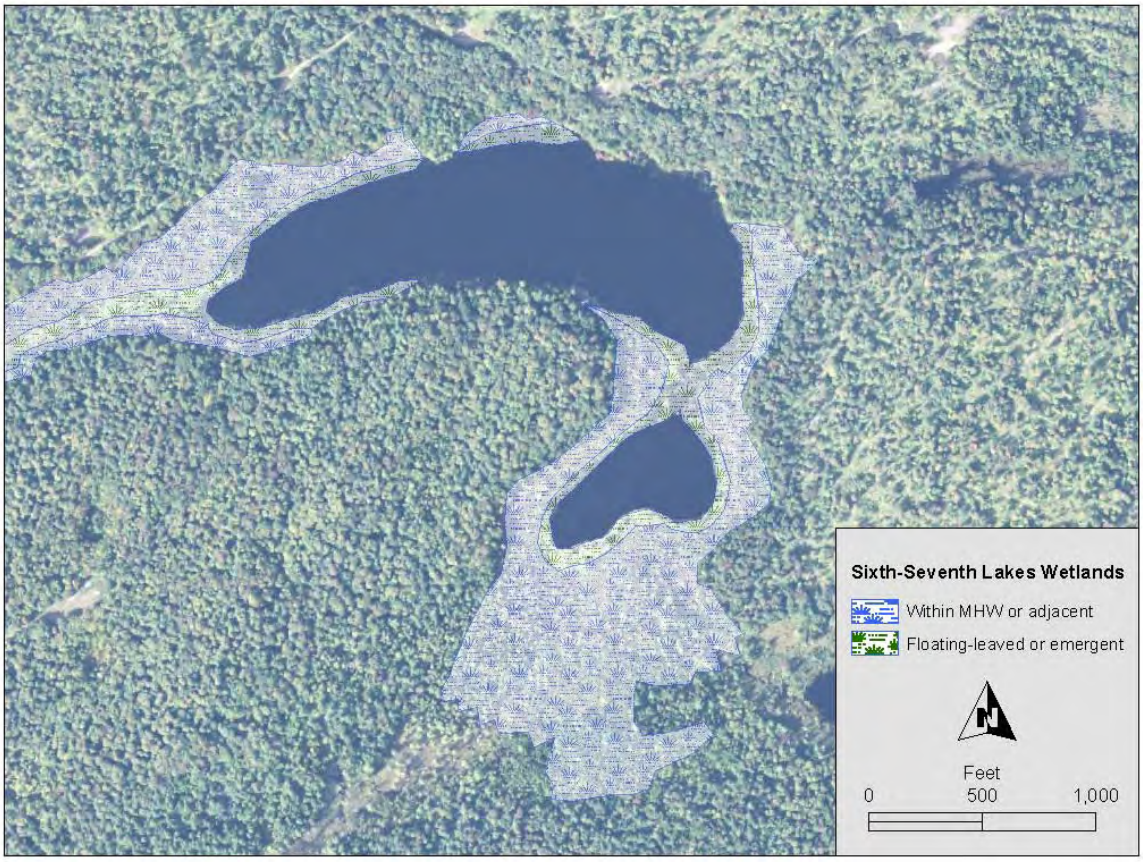

Figure 3

Wetland Communities and Aquatic Plant Diversity

The channels connecting Third Lake to Fourth Lake, Fourth Lake to Fifth Lake, and Fifth Lake to Sixth are large (greater than 20 acres) emergent marsh and deepwater marsh wetlands. Due to their size, wetland covertypes present, diversity and abundance of aquatic macrophytes, and hydraulic connection to the main waterbodies, they have the highest value rating of 1 as defined in 9 NYCRR Part 578. Emergent marsh is the most valuable individual covertypes and one of the highest in productivity. These wetlands provide nesting habitat, food and cover for wildlife, and the capacity to stabilize lake sediment, and cycle large quantities of nutrients. Deepwater marsh

wetlands provide valuable fish spawning and nursery habitat and are a food source for waterfowl and other wildlife.

Agency staff and Adirondack Park Invasive Plant Program staff completed site visits on July 11 and September 18, 2013. A total of 17 emergent and deepwater marsh wetland plant species were identified during the two site visits. This diverse wetland community is represented by the following species: watershield *(Brasenia schreberi)*, bladderwort (*Utricularia spp.*), naiad (*najas spp.*), Farwell's milfoil (*Myriophyllum farwellii)*, Robbins pondweed (*Potamogeton robinsii*),Largeleaf pondweed (*Potamogeton amplifolius)*, variableleaf pondweed (*Potamogeton gramineus*), water marigold (*Bidens beckii*), white-stemmed *pondweed (Potamogeton praelongus)*, bur reed (*Sparganium sp*), pickerelweed (*Pontederia cordata*), white water lily (*Nymphaea odorata*), yellow-lily (*Nuphar variegata*), eelgrass (Vallisneria *americana*), pipewort (*Eriocaulon aquaticum*), threeway sedge *(Dulichium arundinaceum*),and rush *(Juncus spp.).* The species list was developed from two cursory Agency site visits and the region will benefit from a more thorough quantitative aquatic plant assessment by the Adirondack Park Invasive Plant Program or one of their partners. A quantitative assessment will identify additional species in order to understand the full extent and value of the aquatic plants found in these critical wetland habitats.

New York State Protected Plant Species

Two of the plants identified during the two site visits are NYS protected species. Farwell's milfoil (*Myriophyllum farwellii*) was identified in Third Lake and in the channel between Third and Fourth Lake. It is listed as threatened in Environmental Conservation Law, Section 193.3. Plants listed as threatened are likely to become endangered within the foreseeable future throughout all or a significant portion of their ranges within the State. Water marigold (*Bidens beckii*) was found in Third Lake and in the channel between Third and Fourth Lake. It is listed in the 2010 New York Natural Heritage Program (NHP) rare plant watch list as threatened. The NHP watch list contains native species that are considered rare, uncommon, or declining in numbers.

Agency staff observations during the two site visits describe the wetlands in the channels as consisting of a diverse assemblage of healthy native aquatic macrophytes with some areas exhibiting moderately dense pockets of Farwell's milfoil and water marigold.

Effects of Motorized Watercraft on Submerged and Emergent Aquatic Plants

The three channels interconnecting the Essex Chain Lakes are shallow (less than 6 feet deep) and have a bottom substrate consisting of silt, muck, and organic substrate that is easily disturbed. Research has shown that boats capable of traveling in shallow waters may cause physical damage to emergent and submerged aquatic macrophytes, which create subsequent biological impacts as habitat is altered or damaged. The primary mechanism appears to be the direct

cutting of plants, but other researchers have determined that scouring of the sediment, uprooting of plants, and increased wave activity may also be factors[2] [3] [4].

Motorized Watercraft Impacts to the Ecological Integrity of the Water Bodies and Vulnerability of Wetlands

When evaluating the potential impacts of recreational use on the newly acquired tracts, the long-term ecological integrity and special characteristics of the lakes, ponds and wetlands have been included in any final deliberation since these are considered to be the area's most sensitive natural resources.

Motorized watercraft can impact the aquatic ecosystem by a variety of mechanisms, including resuspension of sediment by propeller activity and wave action. Disturbance of fish and wildlife habitat, destruction of aquatic plants and water pollution are also factors to consider. Motorboats are known to affect water quality by increasing turbidity, phosphorous and chlorophyll *a*. Any increase in nutrients, such as phosphorous, will contribute to increases in aquatic macrophyte growth and algae. Shallow lakes, shallow part of lakes and rivers, and channels connecting lakes are the most susceptible to impacts[5].

Motor boats can also impact water quality by releasing chemical contaminants into the water column from unburned gasoline and oil. These contaminants consist of the breakdown of gasoline compounds such as benzene, toluene, ethyl benzene, xylene (collectively known as BTEX), methyl tertiary butyl ether (MTBE) and polycyclic aromatic hydrocarbons(PAHs)[6]. PAHs and BTEX represent the most toxic of gas and oil components to aquatic life. Dispersal of these contaminants in the water column and deposition in sediments can result in these compounds being accumulated by aquatic biota and transferred up the food web[7].

Fisheries Management

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[2] McEwen, A., Dawson, C., and Gerstenberger, L. 2011. Adiriondack Park Forest Preserve Carrying Capacity of Water Bodies Study: Phase 1- Selecting Indicators for Monitoring Recreational Impacts. State University of New York, College of Environmental Science and Forestry.

[3] Asplund, T.R. 2000. The Effects of Motorized Watercraft on Aquatic Ecosystems. Madison(WI):Wisconsin Department of Natural Resource, Bureau of Integrated Science Services; University of Wisconsin. Report No. PUBL-SS-948-00.

[4] Asplund, T.R. and C.M.Cook. 1997. Effects of motor boats on submerged aquatic macrophytes. Lake and Reservoir Management. 13(1):1-12.

[5] Yousef, Y.A., W.M. McLellon, and H.H. Zebtuh. 1980. Changes in phosphorus concentrations due to mixing by motor boats in shallow lakes. Water Research 14:841-852.

[6] Asplund, T.R. and C.M.Cook. 1997. Effects of motor boats on submerged aquatic macrophytes. Lake and Reservoir Management. 13(1):1-12.

[7] McEwen, A., Dawson, C., and Gerstenberger, L. 2011. Adiriondack Park Forest Preserve Carrying Capacity of Water Bodies Study: Phase 1- Selecting Indicators for Monitoring Recreational Impacts. State University of New York, College of Environmental Science and Forestry.

Several of the lakes have been privately managed and stocked with Atlantic salmon, rainbow trout, brook trout, and in some instances, rainbow smelt. A small, naturally reproducing native population of lake trout is known to present in Third Lake and Fifth Lake. Not all of the lakes are suitable for trout survival. During 2012, NYS DEC completed water chemistry analyses on eight of the lakes that included pH, temperature and dissolved oxygen profiles. Trout require cold water refugia during the summer months in order to survive; typically, temperatures less than 65°F and dissolved oxygen levels above 4 parts per million are required for their long-term survival. Third Lake, Fifth Lake, Eighth Lake, Jackson Pond and Deer Pond all have temperature and dissolved oxygen profiles satisfactory for long-term trout survival.

Aquatic Invasive Species

No aquatic invasive species were found during field work conducted by both The Nature Conservancy and NYS DEC. A review of current literature concerning the transport of aquatic invasive species from infested waterbody to uninfected waterbodies indicates that "Much of the ongoing spread of AIS to inland waters throughout North America can be attributed to the overland movement of small-craft boats[8] [9] [10] [11]."

Furthermore, "Translocation of organisms by boaters can be intentional (e.g. as bait[12]), but is often unintentional, with organisms inadvertently carried in bilge water, live wells, and bait buckets. Organisms can also be entrained on boat exteriors, e.g., entangled on propellers and trailers, attached to other entangled organisms[13] [14]."

[8] Bossenbroek, Jonathan M., Clifford E. Kraft, and Jeffrey C. Nekola. "Prediction Of Long-Distance Dispersal Using Gravity Models: Zebra Mussel Invasion Of Inland Lakes." *Ecological Applications* 11.6 (2001): 1778–1788.

[9] Johnson, Ladd E., Anthony Ricciardi, and James T. Carlton. "Overland Dispersal Of Aquatic Invasive Species: A Risk Assessment Of Transient Recreational Boating." *Ecological Applications* 11.6 (2001): 1789–1799.

[10] Leung, Brian, Jonathan M. Bossenbroek, and David M. Lodge. "Boats, Pathways, and Aquatic Biological Invasions: Estimating Dispersal Potential with Gravity Models." *Biological Invasions* 8.2 (2006): 241–254.

[11] Rothlisberger, John D. et al. "Aquatic Invasive Species Transport via Trailered Boats: What Is Being Moved, Who Is Moving It, and What Can Be Done." *Fisheries* 35.3 (2010): 121–132.

[12] °Keller,R.P., A.N.Cox, C. Van Loon, D.M. Lodge, L.M. Herbor, and J. Rothlisberger. 2007. From bait shops to the forest floor: earthworm use and disposal by angler. American Midland Naturalist 158:321-328.

[13] Johnson, Ladd E., Anthony Ricciardi, and James T. Carlton. "Overland Dispersal Of Aquatic Invasive Species: A Risk Assessment Of Transient Recreational Boating." *Ecological Applications* 11.6 (2001): 1789–1799.

[14] Puth, Linda M., and David M. Post. "Studying Invasion: Have We Missed the Boat?" *Ecology Letters* 8.7 (2005): 715–721.

Float Planes

Float planes are recognized as potential vectors for spreading AIS. In 1998 the Great Lakes Panel of the national Aquatic Nuisance Species Task Force (ANSTF) developed "generic" voluntary guidelines for float planes that were adopted by the ANSTF as national guidelines in April of 1999. Those guidelines still serve as the national standard even though some local jurisdictions have recently expanded on them, and, in a couple of cases, made them mandatory.

Float planes are currently allowed to land on First Lake, and this practice should not be affected by this classification. Since First Lake is downstream of the other Chain Lakes and is connected to Second Lake by a shallow unnavigable channel, the probability of transporting AIS (via watercraft to the other Essex Chain Lakes), which may be introduced to First Lake by float planes is greatly reduced.

Float planes can also damage fragile wetlands and shoreline vegetation by wave action and repeated drop-offs and pickups from the same shoreline locations.

Summary

The Essex Chain Lakes and wetlands have been subjected to very little human disturbance over the past century, as is evidenced by the abundant aquatic plant diversity, including at least two protected plants species, which appear to be thriving in the area. Allowing public use of motorized watercraft, including float planes, will risk changing the ecosystem forever by disrupting the soft substrate found in the shallow connecting channels, releasing stored nutrients, increasing turbidity, displacing sensitive aquatic plants, and introducing contaminants to the waterbodies. The potential for introduction of non-native invasive species is also more likely with motorized watercraft. Introduction of AIS is problematic since NYS does not have the resources to eradicate or manage AIS infestations once established in a State-owned waterbody. A primitive classification of the Essex Chain Lakes will provide the greatest protection possible by prohibiting motorized watercraft and float planes to the greatest extent possible, and providing strict AIS spread prevention education and guidance to the public when accessing the waterbodies with small watercraft.

APPENDIX C

JENKINS, JERRY. 2001. FINCH PRUYN BIOLOGICAL SURVEY 2000-2001 SUMMARY OF RESULTS. UNPUBLISHED PAPER.

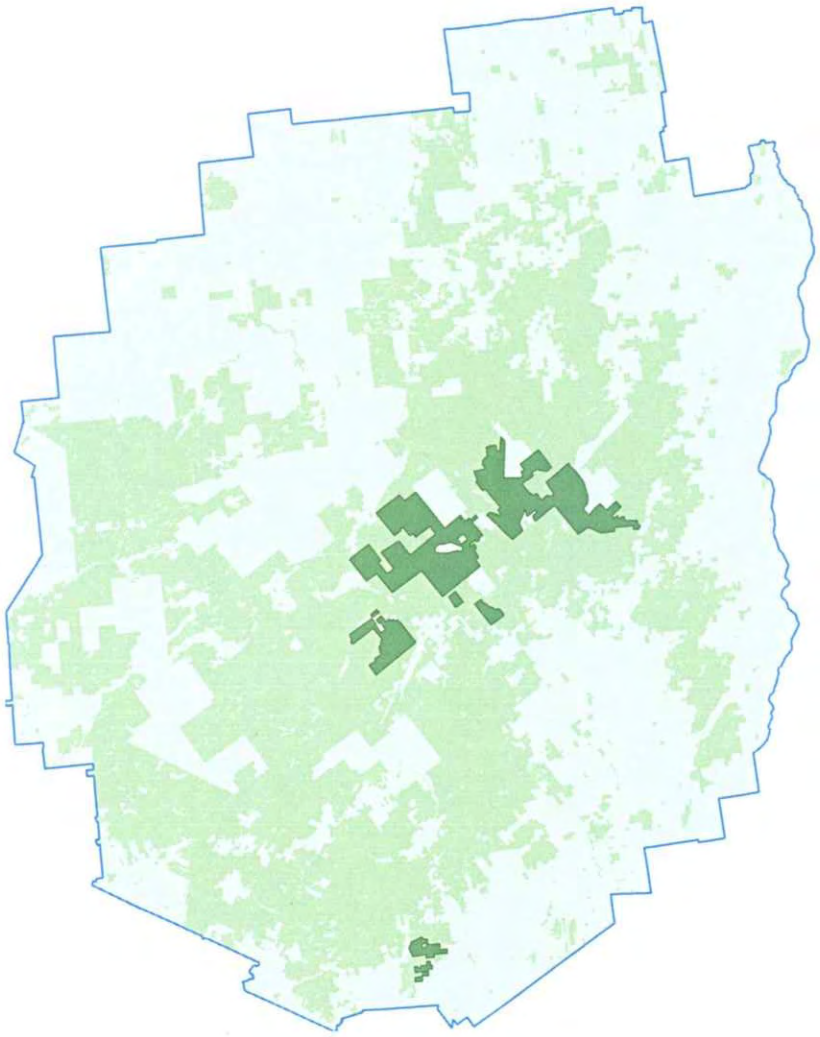
DISCLAIMER: This report was written by Jerry Jenkins following two seasons of field work in 2000 and 2001. The property owner at that time, Finch, Pruyn & Co., contracted with The Nature Conservancy's Adirondack Chapter to conduct a biological survey of its lands. The goal of the survey was to identify ecologically significant plants, animals and natural communities and threats to their persistence. The report included more land than has since been purchased by New York State and some of the place and tract names in the report do not match those used in the Final Supplemental Environmental Impact Statement.

FINCH-PRUYN BIOLOGICAL SURVEY

2000 - 20001

SUMMARY OF RESULTS

Jerry Jenkins, November 2001



CONTENTS

1 GEOGRAPHY

1.1 *Size, Location, Boundaries*

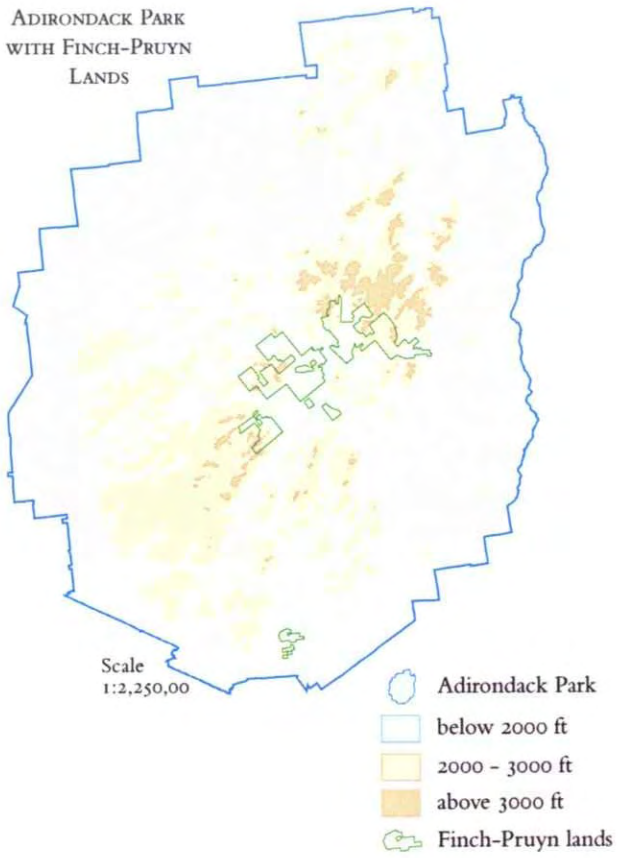
Finch Pruyn's Adirondack land consists of nine tracts, totaling approximately 167,000 acres, grouped into a northern unit of 137,000 acres and a southern unit of 29,000 acres.

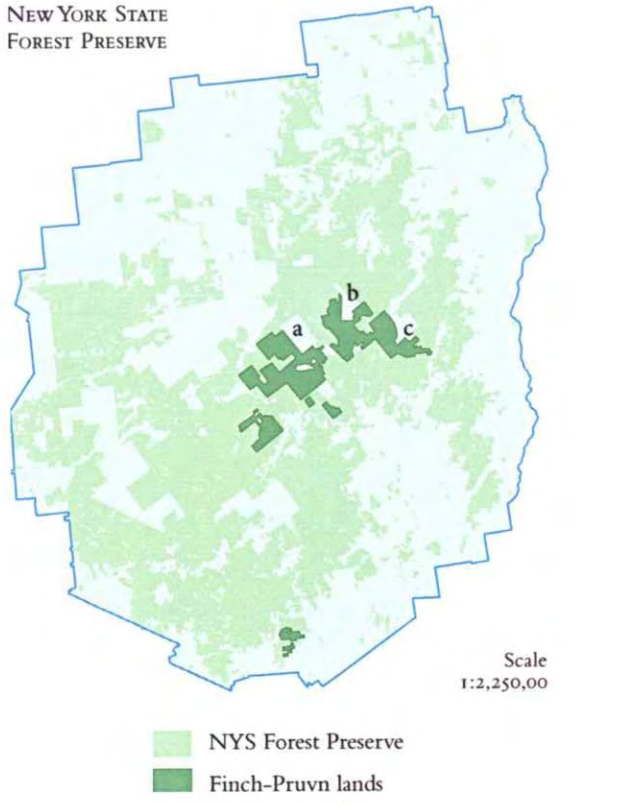
The northern unit, which in turn contains three main tracts of land, is located in the center of the Adirondack Park, just to the south of the High Peaks. Its most northern tract lies on the southwest flank of the High Peaks, just south of Marcy and between the Boreas and Santanoni mountains. Its southern tract is at the edge of the Park's main southern mountains, which lie on two ridges trending southwest from Indian Lake that do not have a collective name. The middle tract lies in a high, fairly swampy watershed divide between Blue Mt Lake and the Hudson River.

The southern unit consists of four fairly small tracts centered on a group of rolling hills just west of the Sacandaga Reservoir, almost at the southern edge of the Park. It is quite pretty forest land but without the biological distinction of the northern unit, and will only occasionally be mentioned in this summary.

The northern unit is centered in, and almost completely surrounded by, the New York State Forest preserve. The only major private landholdings adjacent to it are the Huntington Forest (a), owned by Syracuse University; the National Lead lands (b), a former iron and titanium mine; and the Elk Lake tract (c), a private resort and club.

The Finch-Pruyne lands are, after the International Paper Company lands, the second largest private landholding in the Adirondack Park, and the one most centrally located within the Forest Preserve.

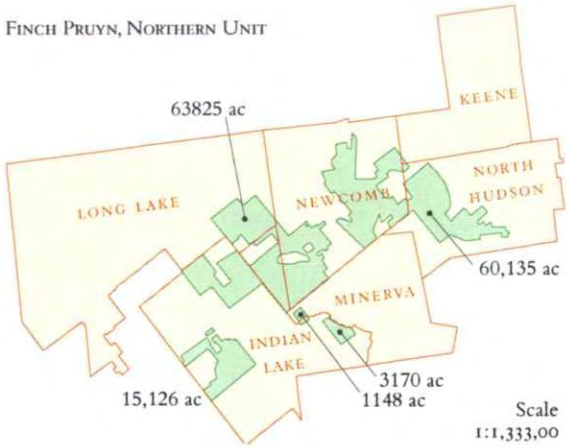




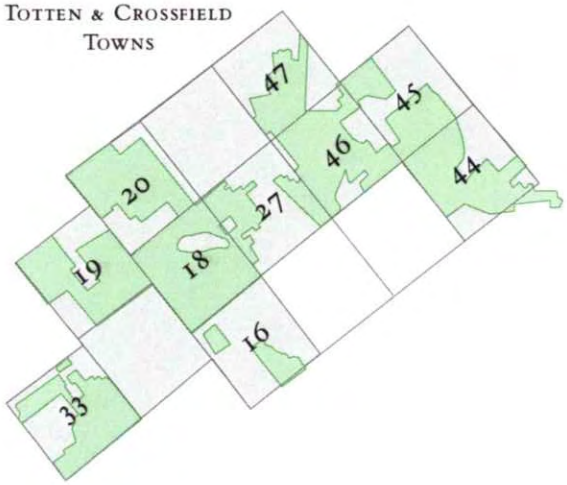
The northern unit lies mostly in the modern towns of Long Lake and Indian lake (Hamilton County), and Newcomb, Minerva, and North Hudson (Essex County). There is also a tiny piece in the town of Keene. The acreages shown are from our GIS maps, and are only approximate.

The property lines and some of the modern town lines are rotated about 38 degrees counterclockwise from true north. They follow the lot lines of the Totten & Crossfield, bought from the Indians and then forfeited to the King by Edward and Ebenezer Jessup in 1771, forfeited by the King to New York in 1882, and sold or granted by New York to a series of owners over the next fifty years.

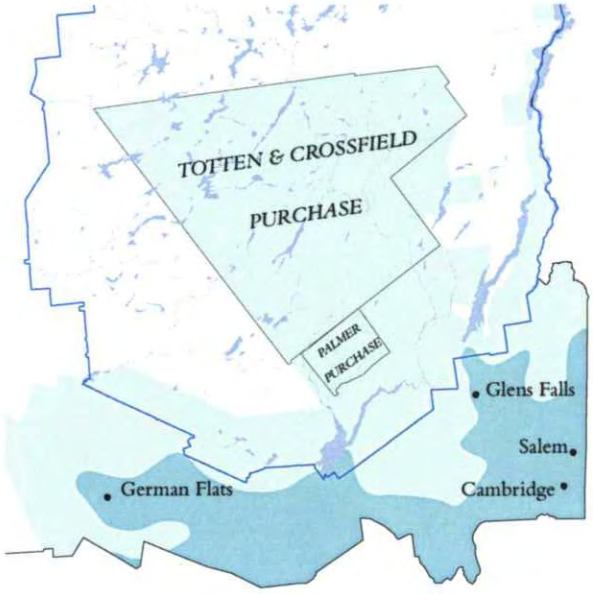
Finch Pruyn, Northern Unit



Totten & Crossfield Towns



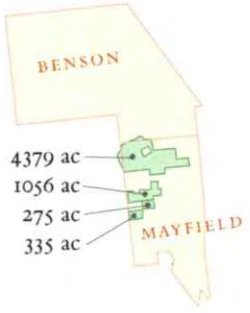
Northern New York in 1775



Much of Finch-Pruyn's northern unit was acquired in the mid- and late nineteenth century, when New York and Albany lumber- and railroad-men were trading Adirondack land by the town. Finch currently owns most of seven of the original towns – Totten & Crossfield 18, 19, 20, 33, 44, 45 & 46 – and substantial parts of 16, 27, and 47 as well.

The southern unit, about a fifth the size of the northern, includes 7,016 acres in Fulton County, 8,250 acres in Saratoga County, 8,950 acres in Warren County, and 4,722 acres in Washington County.

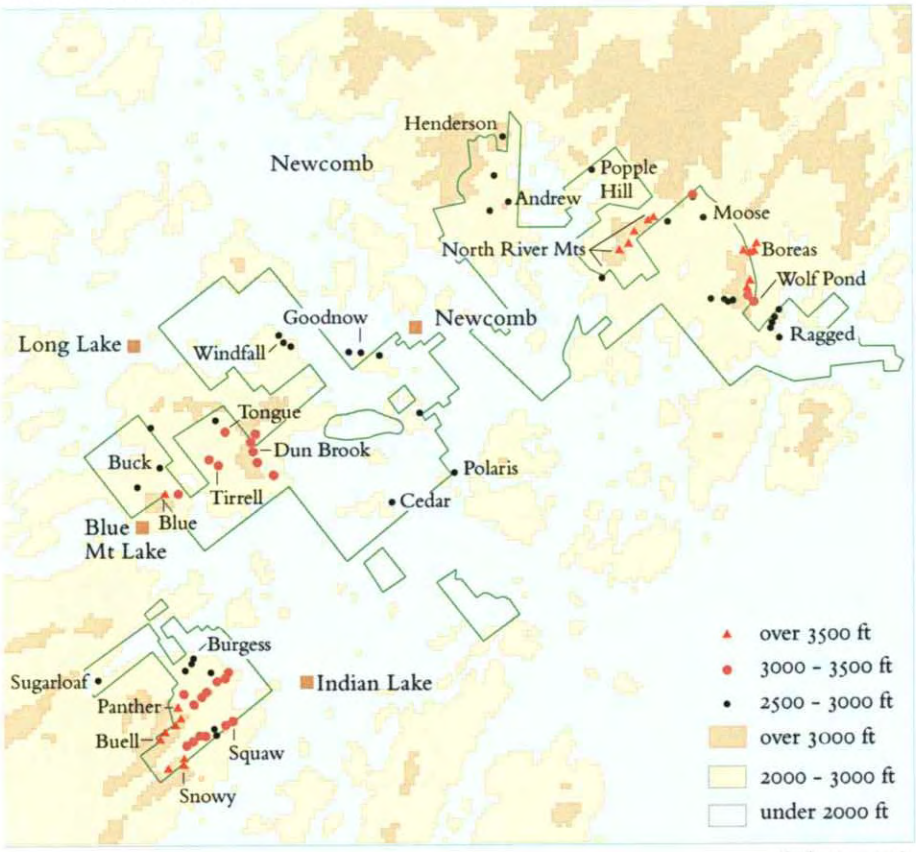
[THE MAP IS INCOMPLETE: I NEVER HEARD ABOUT THE OTHER SOUTHERN LANDS UNTIL THIS MOMENT!]



1.2 *Topography & Relief*

The Adirondacks are a topographic dome, believed to have been created by a local hot spot somewhere deep below them. The center of the dome is in the High Peaks, in the northeast corner of the map. The northern unit lies just southeast of the High Peaks. Most of it is a high and rolling but not rugged plateau, between 1500 and 2500 ft elevation. The lowest points, both about 1300 ft, are at the far eastern end of the property, along the Blue Ridge Road, and near the eastern end of the Hudson River Gorge, east-northeast of Indian Lake. The highest points, between 3900 and 4000 ft, are on the slopes of Snowy and Panther Mountains in the southwest, and in the North River Mountains in the northeast. Roughly half of the property is between 1500 and 2000 ft, and most of the remainder between 2000 and 3000 ft. Only a few percent are above 3000 ft.

HIGHLANDS & SUMMITS



Scale 1:534,000

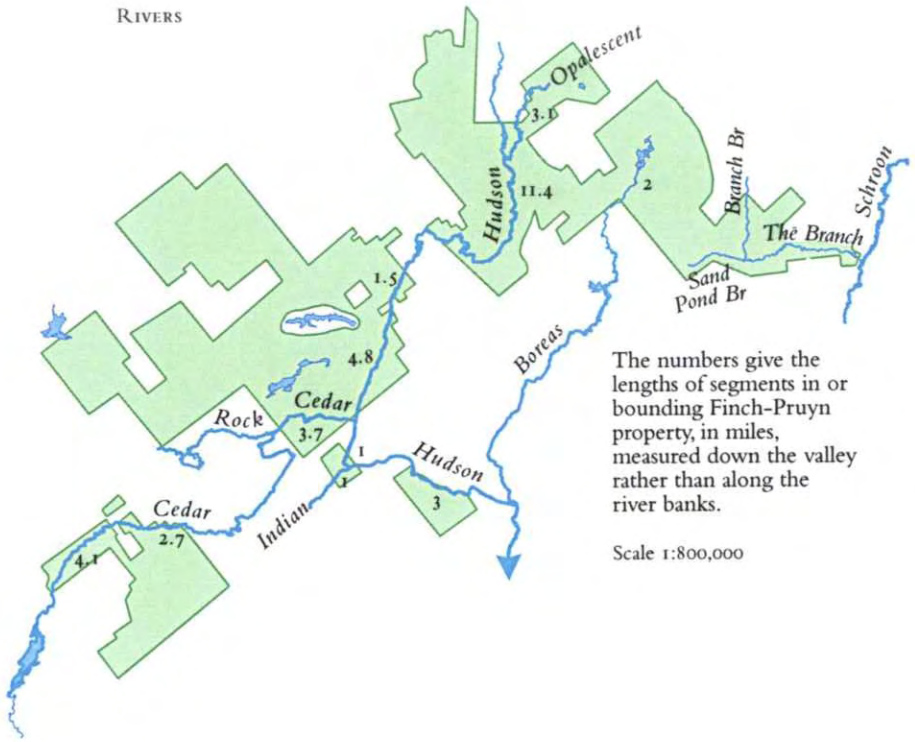
There are 22 named mountains with summits on or at the edge of the property, plus at least another sixty unnamed ones, the exact number depending on how separate you require a bump to be before you count it. Roughly 19 summits, in six named groups, rise above 1300 ft. All are continuously wooded, at least in the portions on Finch lands: no large open cliffs or alpine summits occur on Finch property.

1.3 *Rivers & Lakes*

Much of the northern unit is drained by the Hudson and its tributaries the Opalescent, Cedar, and Indian. A small part in the far east drains east into the Schroon, and then south to the Hudson. A small part in the northwest drains west into the Raquette and then north to the St. Lawrence. The southern unit is next to, and drains into, the Sacandaga Reservoir, and then into the Hudson.

WATERSHEDS

Four major rivers run though the property. All are important biologically and scenically. The Hudson, with about 22 miles, measured down-valley, in or bounding Finch lands, is the largest, longest, most central, and probably the most important in all respects. The Cedar, with about 11 miles within Finch lands, is much less used and known than the Hudson, but both extremely beautiful and of considerable biological interest. The Indian, of which only the last mile is in Finch lands, is heavily used recreationally and has a small but exceptional biological site at its mouth. The Opalescent, with 3 miles in Finch, has no outstanding individual biological features, but is very pretty, and, because of its position on the edge of the High peaks and the large amount of spruce in its flood plain, is perhaps the most boreal of the group.

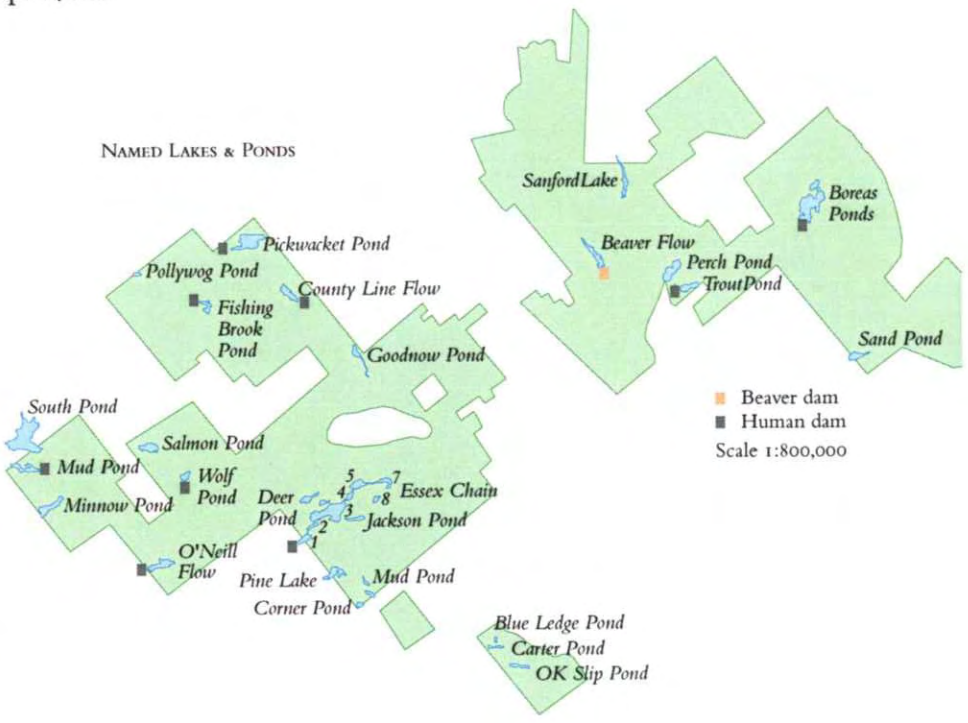


The numbers give the lengths of segments in or bounding Finch-Pruyn property, in miles, measured down the valley rather than along the river banks.

Scale 1:800,000

Of the smaller streams, the Boreas River and Sand Pond Brook are the most interesting, the Boreas because it drains a large wetland complex, and Sand Pond Brook because it has several hundred acres of undisturbed alluvial forest.

There are about 30 named lakes and ponds and at least 40 other small ponds on the Finch property. At least 16 of the named ponds, including the Boreas Ponds and the Chain Lakes, the two largest groups of ponds on the property, have had their water levels raised by people or beavers. Many of the dams were built over a century ago, to supply water for log drives. All are small – always less than 15 ft high and many less than 5 ft high – and none are currently used for power generation or to regulate flows.



2 SUMMARY OF FIELD STUDIES

I have spent a total of 35 working field days on this project, 20 in 2000 and 15 in 2001. In addition, 22 person-days were put in by Bryan Pfeiffer, Sarah Cooper-Ellis, and Sue Willams. Bryan did 10 days of bird survey work with me, 5 in 2000 and 5 in 2001. Sarah and Sue worked with me for 5 days each survey mosses and liverworts in 2000, and Sue worked another 2 days with me in 2001.

In addition there have been four field days when I have been visiting and discussing sites with Nature Conservancy staff, but only doing limited amounts of new field work.

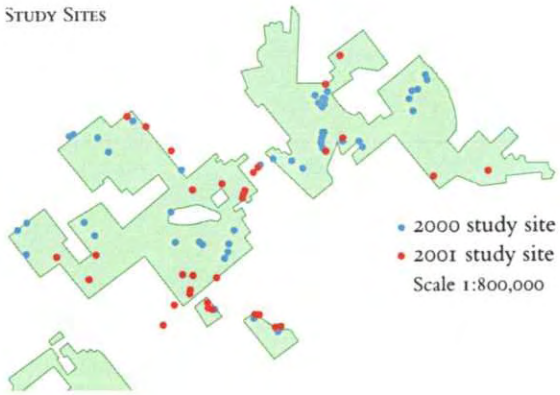
On 10 of our 35 working days we did both bird and plant work; on the other 25 days we did only plants.

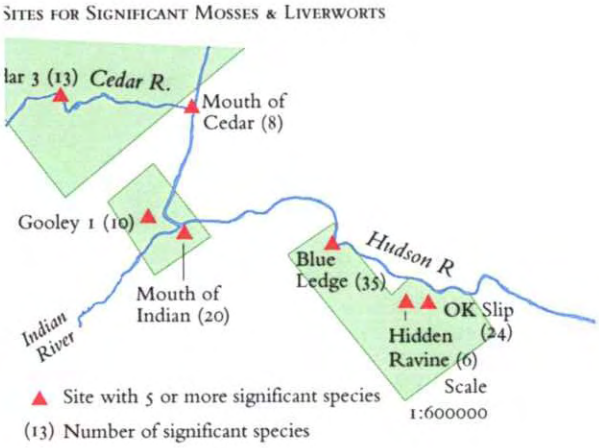
In 2000 we did biological work at about 63 primary sites. Most were visited only once, but several of the interesting ones were visited two or three times. In 2001 we added about 31 new sites, and revisited 10 from the previous year.

2.1 *Significant Plants*

I count as significant those species that are either a) rare or uncommon in New York as a whole; b) rare or uncommon in the Adirondacks; or c) frequently encountered in the Adirondacks but rare elsewhere in the state. The latter I call regional specialties. Because our knowledge of the abundance of many uncommon species is very sketchy, and even more because there is no reason that the rarer of two species is automatically more vulnerable or more valuable, the differences between the different levels of rarity are probably not all that important. Any significant species, whatever the level of rarity, is a species that you have and a lot of other people don't have, and so worth being aware of.

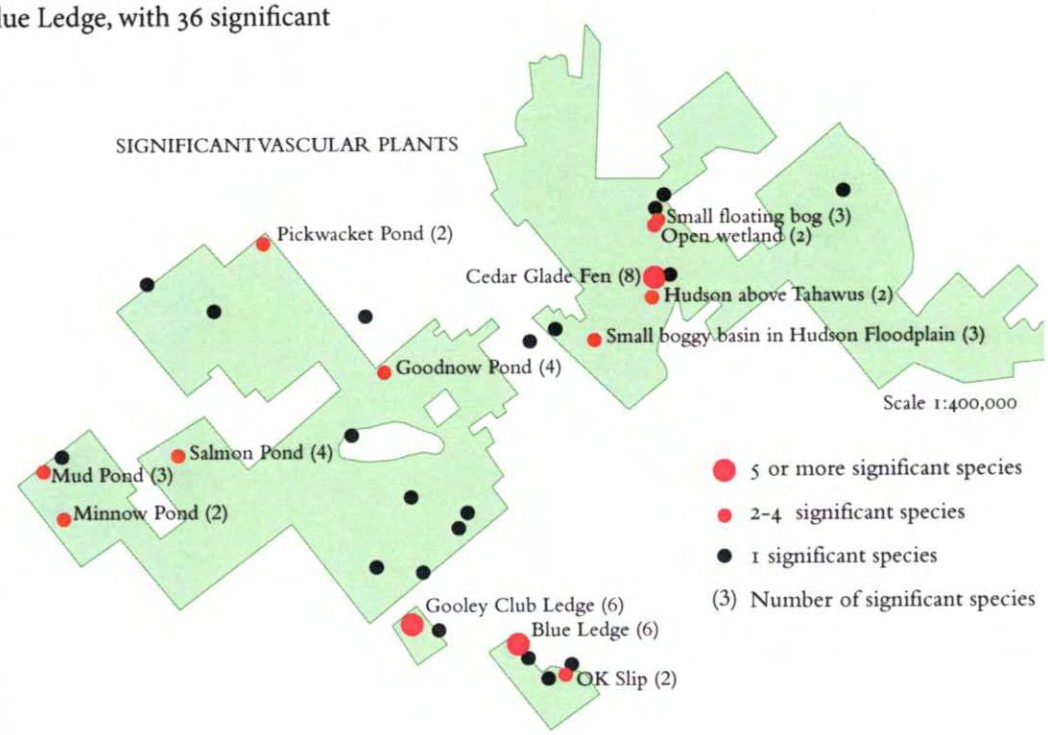
We examined both vascular plants (everything from trees to ferns) and bryophytes, the mosses and liverworts. Altogether we found 95 significant species, of which about 37 are believed to be rare in New York State and 20-22 uncommon in New York State. Another 30 appear be rare or uncommon in the





Adirondacks, but not in New York. This is, by a factor of several times, the largest number of significant species I have ever encountered on a single Adirondack survey.

Bryophytes We had approximately 142 individual records of 62 significant species of mosses and liverworts from 15 sites. Eight sites had six significant species or more. Seven of these eight were limy outcrops along the Cedar and Hudson Rivers; the other was the Cedar Glade Fen shown on the map of significant vascular plants. Blue Ledge, with 36 significant species, had the largest number of significant species in our study, and one of the largest we have encountered in any study.



The significant mosses we encountered, were almost entirely limited to limy cliffs and wetlands. Other significant Adirondack species can occur on large wet granitic ledges and in the alpine zone, but neither habitat occurs on the Finch property.

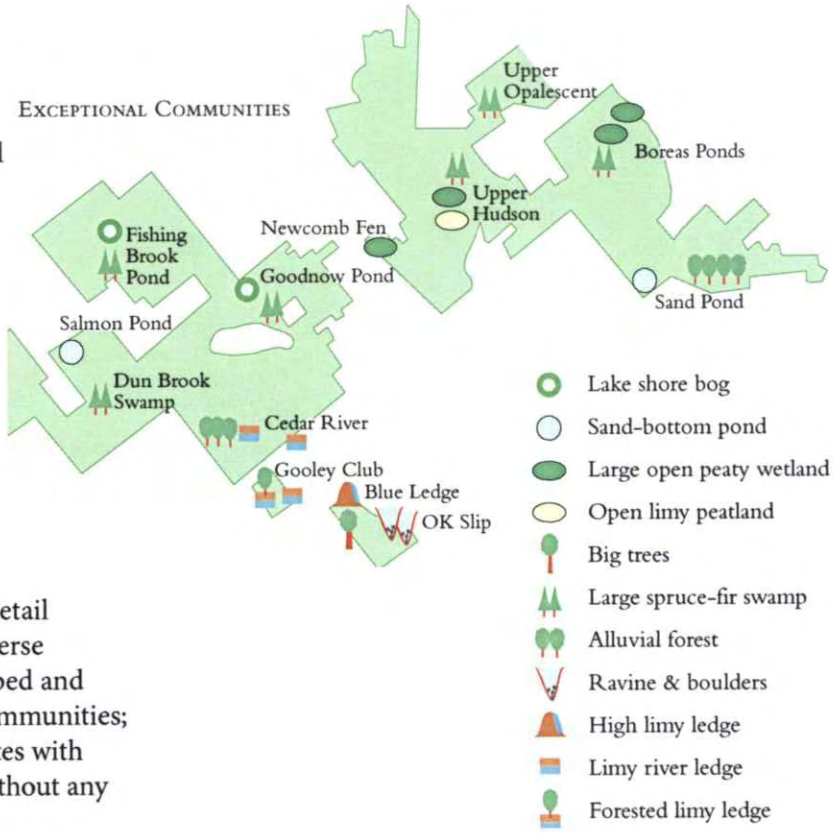
Vascular plants Significant records of vascular plants were more widely distributed but less numerous. We had approximately 62 records of significant vascular plants from 29 sites. Three of these sites – two limy ledges and a limy fen – had 6-9 significant species each. Another 10 sites had 2-5 significant species each, and the remaining sites had one significant species each.

The largest numbers of significant species, and virtually all the rare species were at limy sites: three limy ledges a small slightly limy bog, and a limy cedar fen. The remainder of the records, which were mostly regional specialties rather than rare or uncommon

2.2 *Exceptional Communities*

By an exceptional community I mean one which is either particularly large, or unusual in composition or structure, or pristine and little modified by human activity.

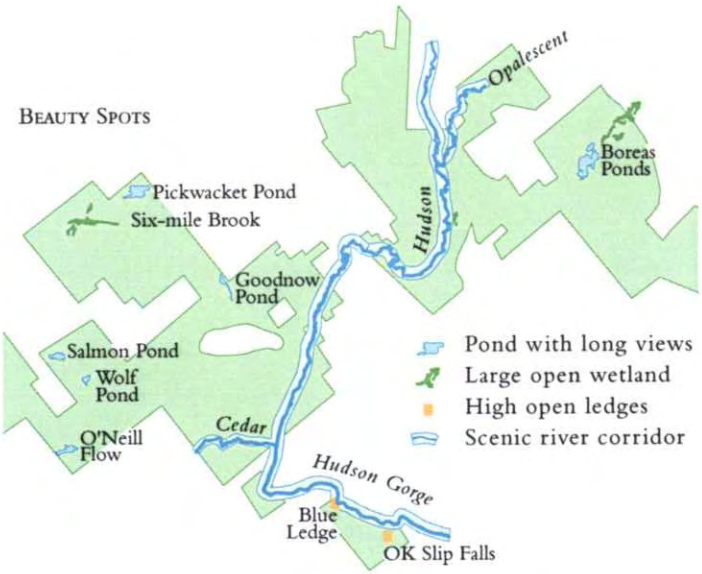
The selection of communities given here is of course arbitrary in that a number of others could have been included as well. But while others could certainly be included, all of the ones shown here have enough exceptional features that I think it would be hard to *exclude* them from any comprehensive list of special sites.



The individual sites are discussed in more detail in the next few sections. They are a very diverse group. There are small and large and disturbed and undisturbed sites; common and unusual communities; high and low diversity communities; and sites with large numbers of rare species and others without any rare species at all.

2.3 *Exceptional Scenery*

As with exceptional communities the choice is arbitrary. Beautiful places occur throughout the property. I have chose to map four particular types: pristine ponds which offer views of surrounding hills and mountains; large open wetlands, which are the largest, and most varied open vegetated landscapes on the property; two areas of high ledges which are spectacular in themselves and also have fine views; and the whole of the Cedar-Opalescent-Hudson corridor, which has both beautiful shore scenery and many long views of adjacent hills. The Hudson Gorge is certainly the most spectacular part of the river corridor, but the other parts are fine as well.



2.4 *Bird Studies*

Bryan Pfeiffer and I did a total of 10 days of breeding-bird study, five days in late June 2000 and five days in early June 2001. We visited about 22 sites for dedicated bird work in 2000, and made casual observations at a number of others. In 2001 we visited 15 new sites and revisited a number of sites from the previous year.

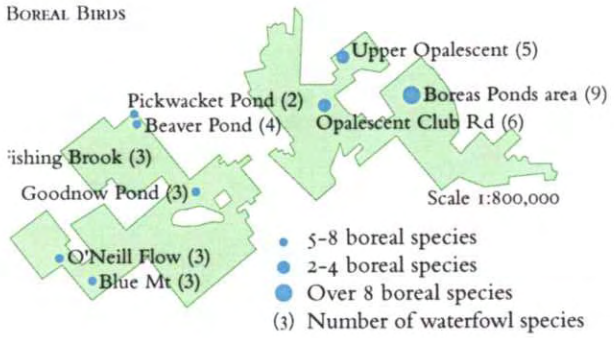
We found a total of 91 species, 75 in 2000 and 81 in 2001. The rarest species, both in this study and likely in the Adirondacks as whole, were the merlin, rusty blackbird, and bay-breasted warbler. In each case a single individual was seen once.

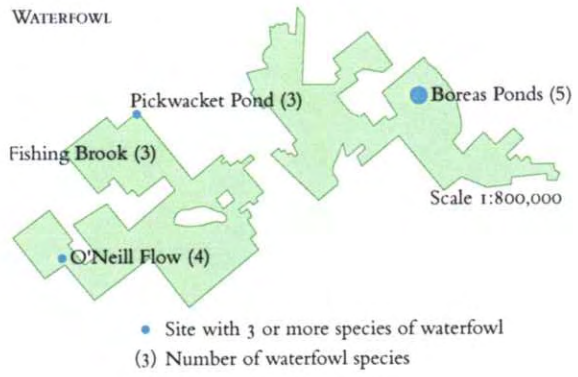
Because our time and coverage was limited, we could not make a full breeding bird list or search thoroughly for rarities. Instead we concentrated on the boreal birds. This is a group of about 15 northern species that require conifers to nest and are rare outside of the Adirondacks.Twelve of the 15 species were found to be widely distributed in the Adirondacks in the 1980's and were found near or on the Finch property during the Breeding Bird Atlas Project of the mid 1980's. Our goal was to see if they had persisted, and, if so, which habitats had the most species.

We found a total of 12 boreal species, 11 of them relatively widespread in the Adirondacks, and one, the bay-breasted warbler, uncommon or rare. Most of our observations were of individual birds or pairs; the only areas where we observed substantial numbers of individuals were near the Boreas Ponds and near the summit of Blue Mt.

The Boreas Ponds and associated wetlands also seemed to have the highest diversity, with 9 of the 12 boreal species we observed occurring there. The boreal corridor along the upper Hudson and Opalescent was also quite good, with a total of seven species there. The diversity of boreal species seemed lower to the west, consistent with the smaller and less continuous stands of spruce, but we did relatively less work there and there may in fact be more species than we found.

Our scattered observations of waterfowl suggest that all the large ponds have a number of breeding species, and that the Boreas Ponds, which are large and well vegetated, have the largest number.





3 THE MAJOR COMMUNITIES

3.1 *Deciduous Forests*

Except for waterbodies and open wetlands – which together are less than 10% of the property – the Finch lands are continuously wooded. Somewhere between half and three-quarters of the property is hardwood forest and hardwood-dominated mixed forests, typically with beech, yellow birch, sugar maple, red maple, red spruce, and hemlock as the common canopy trees. White birch and aspens are common in disturbed or regenerating sites, balsam fir in the swamps and on ridges, white pine on sandy terraces and rocky slopes, and ash and black cherry here and there, mostly at lower elevations and on more fertile sites.

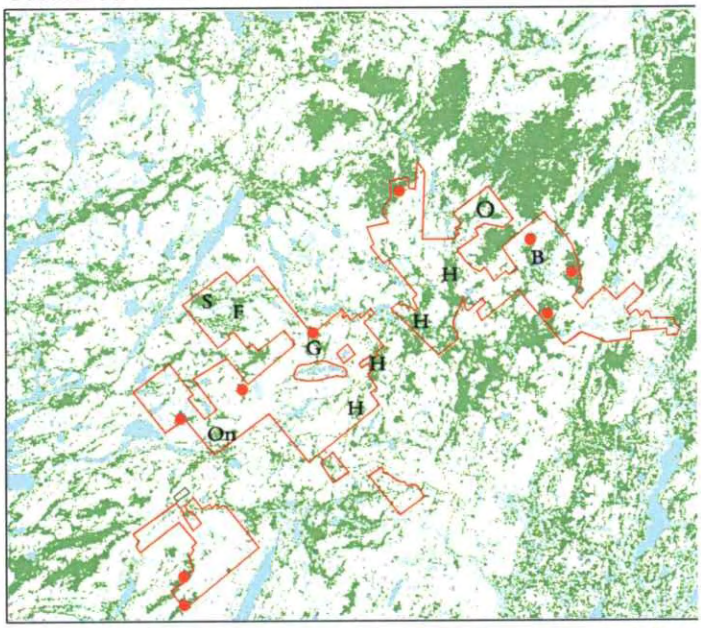
The hardwood forests do not have rare species or, with one exception, unusual communities and so were not studied deliberately in this project. My casual observations, based on a few transects taken while on route to other sites, are that:

- The forests here are typical of those elsewhere in the eastern Adirondacks: forest condition is generally good, most trees over 14 in diameter have been removed from most stands, and herb and understory diversities are average or low, reflecting the acid bedrock.
- Larger and presumably older trees occur only rarely. The best examples we saw were on the trail to Blue Ledge, and along the shore of the Hudson between Blue Ledge and OK Slip. Some of the stands along the Blue Ledge trail were very handsome and may deserve preservation.
- Excepting of course the diseased beech, the quality of the young canopy trees was often quite high and attests to very careful forest management in the last 30 years.
- Amounts of sugar maple advance regeneration ranged from good to quite low, and it is possible that some of the same kinds of advance regeneration failure and apparent conversion of maple to beech stands that I have been researching elsewhere in the Adirondacks are occurring here.
- With one exception, a talus forest below a limy ledge on the Gooley Club property, and despite a moderate amount of searching, no examples of rich forests, characterized by fertility-requiring trees and a high-diversity herb flora, were found.
- The common birds of deciduous forests (ovenbird, wood thrush, scarlet tanager, rose-breasted grosbeak, black-throated blue warbler …) were all present but relatively uncommon. The common birds of mixed woods (hermit thrush, solitary vireo, black-throated green warbler, blackburnian warbler …), on the other hand, were common everywhere.

3.2 *Conifer Forests*

Conifers and conifer-dominated hardwood stands are common at all elevations above about 1800 ft, and probably cover between a quarter and a third of the property. We do not have a good way to map them. The map below, based on an interpretation of a Landsat Thematic Mapper image prepared by the Adirondack

CONIFER & MIXED FORESTS



B Boreas Ponds
F Fishing Brook
G Goodnow Pond
H Hudson River corridor
O Opalescent River basin
On O'Neil Flow

Conifer & mixed forest
Hardwood forests
Water
Upland conifer stand

Park Agency, gives a general sense of where conifer and conifer-dominated forests occur, but does not distinguish upland and swamp forests, and can't be relied on for either the extent of the forests or their exact placement. I have indicated some of the major upland conifer stands on the Finch property by red dots; much, but not all, the rest are lowland stands.

Our study suggests, as indicated by the annotations on the map, that while upland and wetland conifers are both common on the Finch lands, the wetland conifers, found along the rivers and in large flat basins adjacent to lakes, are more extensive. It also suggests that while conifer stands in the High Peaks, some of the lowland basins to the west, and along the ridges to the southwest are fairly continuous, those on the Finch lands, both upland and swamp, tend to occur as stands of 20 to a few hundred acres, separated from each other by deciduous forests. For animals that refused to cross the intervening hardwoods this might be an important barrier. But the conifer stands here are not separated by settled land or large waterbodies or deep desert valleys, but only by comparatively short segments of hardwoods forest. Whether these interruptions constitute a significant level of biological isolation is, so far as I know, as yet unstudied.

3.3 *Mountain Conifers*

Upland conifer forests, between about 2000 ft where they start and 3500 or 4000 ft where they become subalpine forests, are extremely common, both here and elsewhere. Our experience elsewhere is that they are important for several boreal bird species but tend to be highly uniform, generally quite low in diversity, and without distinctive plants or plant communities. We usually consider them a low-priority habitat for field study, both because they are not currently subject to much human use and because we never find anything there. With the exception of a single trip up Blue Mt where we looked for, and found, a small population of Bicknell's thrush, they were not studied in this project.

3.4 *Conifer Swamps*

Conifer swamps may be dominated by red spruce and balsam fir, or white cedar, or, at the edges of bogs, by black spruce and tamarack. The cedar swamps, which are often associated with limy groundwater, are the most biological distinctive. They are often higher in plant diversity than other conifer swamps and can contain a moderate number of rare or specialized plants. The spruce-fir swamps tend to be on acid soils and are of medium or low diversity and generally without rare nor specialized plants. The tamarack-black spruce swamps are typically found on deep peat and tend to be very low in diversity. They typically lack rare species but have a predictable group of bog species that we consider regional specialties.

Conifer swamps are common on the Finch property, and are found in all the major lake basins and as continuous bands along the upper parts of the Hudson and Opalescent Rivers. The largest areas are marked with letters on the map on page 10 . Almost all are spruce-fir swamps, which, true to the regional and in fact the continental pattern, are pretty and extremely mossy but low in diversity and without unusual species or communities. Most have been cut for spruce at some time in the past, and have relatively small trees.

Only a few unusual swamps were found in this survey. These include:

- Small patches of cedar swamp at the southwest end of Trout Pond, with several uncommon mosses.
- A spruce swamp with some cedar, located about a half mile southeast of Trout Pond, with a fairly diverse moss flora and occasional large trees.
- Narrow bands of spruce-tamarack bog forest along the edges of the outlet channel below Goodnow Pond, or at the edges of other lake shore bog mats.

3.5 *Alluvial Forests*

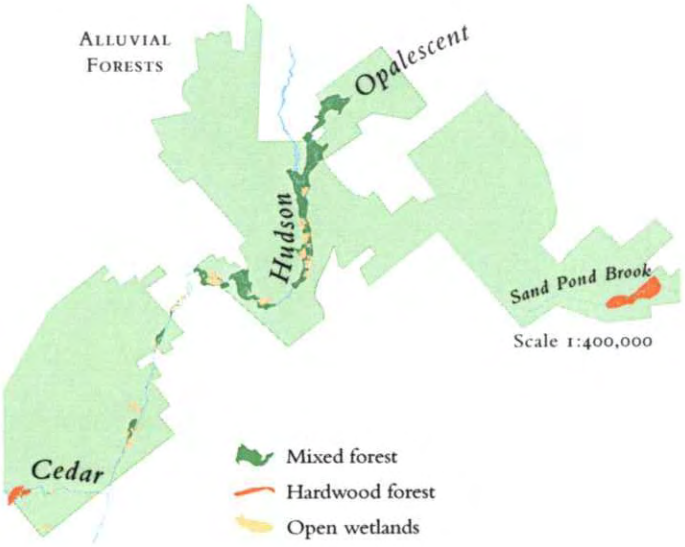
An alluvial forest is any forest on river-deposited soils. Some flood annually and differ substantially in structure and composition from adjacent upland forests. Others rarely flood, and are essentially just upland forests on richer and flatter soils. Three sorts of alluvial forests occur on the Finch lands.

1 Along the upper Hudson and Opalescent rivers there are open red spruce-white cedar-red maple forests with an understory of grasses, ferns, a few shrubs (especially red raspberry and beaked hazelnut), and tall herbs. They typically occur on sandy banks and terraces 2-5 yards above the summer water level. The canopies are quite open, often more like alluvial glades than continuous forest. The flora is a mixture of moist-forest and river-shore species. Diversity is fairly low, and there are no uncommon or specialized plants.

The principal importance of these forests is as scenery and animal habitat. They often contain large trees, and are a very attractive mixture of forest and openings. They often have good den and nest trees, and, like all edge habitats, are much used by animals and birds.

2 Along the Cedar River, starting about two miles above the Hudson and extending upstream for a mile or more, are open, alluvial hardwood glades with sugar and red maples and yellow birch, on a flat terrace several yards above the stream. Many of the trees are quite large and handsome; I do not know whether the open structure is maintained by flooding or beaver or both. So far as I know this community is unique on the Finch property. I was not able to get into it to do a transect, and cannot comment on its composition or diversity.

3 Along Sand Pond Brook, at the far east end and one of the lowest elevations on the property, there are about two miles of low alluvial forest dominated by silver maples. The soils are low and mucky, with much clay, quite unlike the sandy terraces of the Opalescent and Hudson. The trees are very large and spreading, and the forest understory is moderately diverse, with a number of common lowland herbs (jack-in-the-pulpit, hellebore, ostrich fern) that are otherwise scarce on the



Finch lands. No rare species occur.

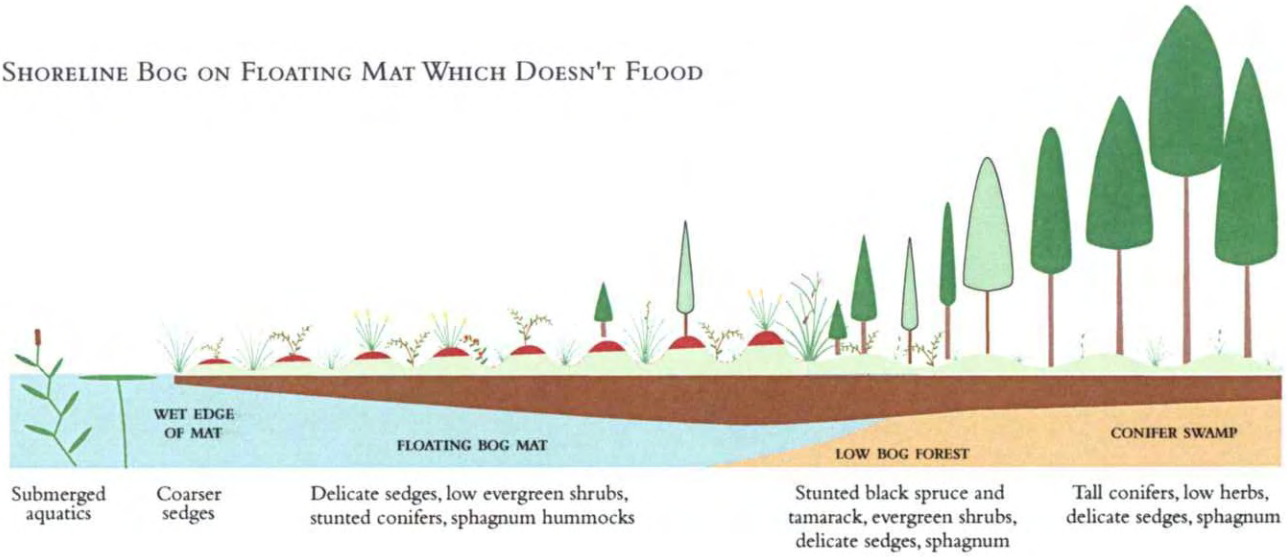
This sort of forest is common along the streams of the Champlain Valley. Good examples are rare in the interior Adirondacks, though a large example does occur on the Raquette River southeast of Tupper Lake. (It is on land briefly flooded 130 years ago by the ill-fated Setting Pole Dam, and may depend on sediments deposited when the waters were impounded.) The Sand Pond Brook forest is a particularly fine example: largely undisturbed, several hundred acres in extent, and with large trees and handsome woods.

I consider all three types of alluvial forests quite valuable: all are unusual and very attractive themselves, all are much used by animals, all have unusually large trees compared to the rest of the property, and all contribute to the scenic beauty of the streams on which they occur.

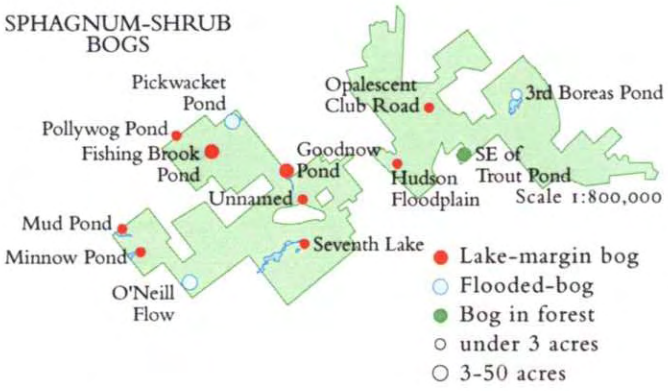
3.6 *Sphagnum Bogs*

By a sphagnum bog, in which category I include what some ecologists call *poor fens*, I mean a low-nutrient wetland, isolated from

Shoreline Bog on Floating Mat Which Doesn't Flood



mineral-rich ground water and receiving most of its water from rainfall, on deep peaty soils, dominated by a mixture of sphagnum moss, low, small-leaved evergreen shrubs, and narrow-leaved sedges. The characteristic bog plants are all northern; many are at their southern range limits here and are rare or uncommon outside the Adirondacks.

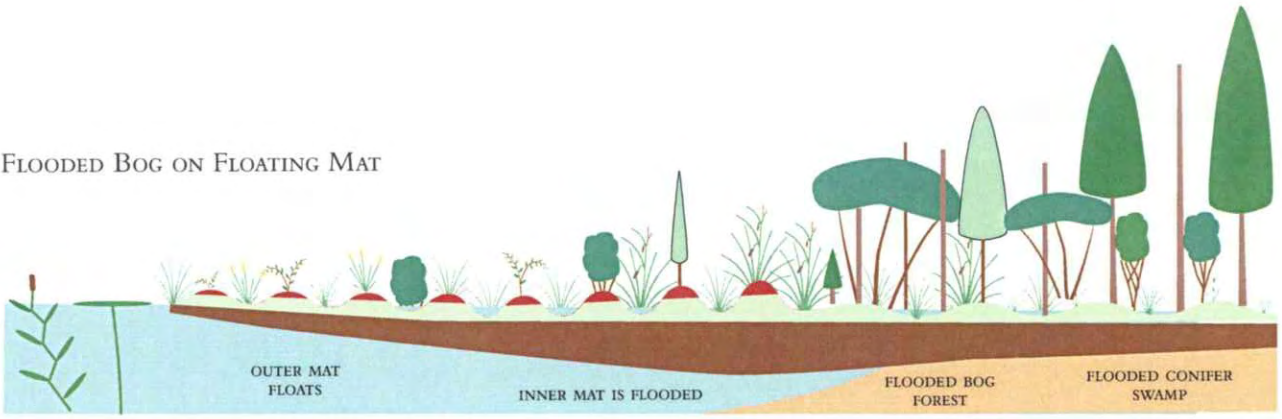


Because bogs are slow-growing communities which contain a significant number of uncommon northern species, they are in many cases relic communities, able to persist and in some cases to expand, but not easily or often created. Small bog mats, a few meters in extent, can and do form in a few decades; but I know of no instance in the Adirondacks, or indeed in the northeast United States, where a large bog has formed within historical times. Our supply of bogs, unlike our supply of ponds or beaver meadows or forests, is fixed; we can alter them or destroy them, but not make new ones. This suggests that it is important that the existing ones be carefully conserved, and it is why I try to map them carefully in all my wetland inventories.

We mapped thirteen bogs or bog ponds in the survey, and were told of one more, at Deer Pond northeast of the Boreas Ponds, that we were not able to inspect. Nine are relatively undisturbed lake margin bogs, ranging in size from a few tenths of an acre at Mud and Minnow Ponds to about 20 acres at Fishing Brook Pond and 50 acres at Goodnow Pond. These last two are both the largest and in many ways the finest on the property, and are biological features of great importance.

Three lakes with altered water levels have *flooded bogs*. When a bog is flooded the shoreward parts, which are usually not free to float, become converted into sedge meadows, while the center parts, which can float, become bog islands. This is a very common alteration of Adirondack bogs, and can be caused either by people or beaver. Because the resulting bog islands are only a part of the original bog, and because they are often partly altered by flooding, flooded bogs are not usually as diverse as lake shore bogs. But they are still interesting landscape features, and refuges for species that don't grow elsewhere in the pond.

Flooded Bog on Floating Mat



Delicate sedges, low evergreen shrubs, stunted conifers, sphagnum hummocks

Remnant bog plants on hummocks, coarse sedges, deciduous shrubs

Dead trees, tall shrubs, coarse sedges

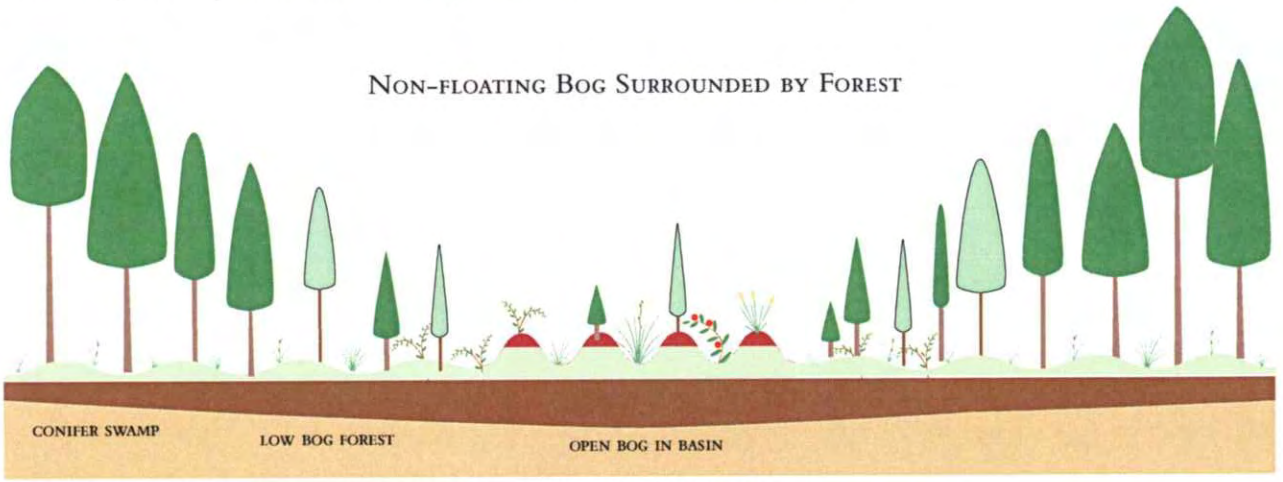
Dead trees, tall shrubs, remnant conifers on hummocks

Of the three flooded bogs on the Finch property, the ones at the third Boreas Pond are small but in good condition and with a number of significant species. The ones at O'Neill have been simplified by flooding, and contain very few species. The ones at Pickwacket, which are long and slender, like reefs or barrier islands, are in good condition and a very striking feature of the pond.

One of the bogs, southeast of Trout Pond, is a relatively dry, forest-interior bog something like the one diagrammed below. Such bogs, like the muskegs of the north, can form directly by the development of a thick sphagnum peat layer within a forest and may never have a floating mat. They are typically fairly dry and shrubby, with conspicuous hummocks; they can be very pretty landscapes (unless, as in parts of the north, they are all you have seen for days), but are usually less diverse then floating bogs.

Because bogs are low diversity communities, and because all the bog plants are wide-ranging northern species, Adirondack bogs tend to have uncommon or regionally significant species, but not rare species. This was true here, were we had 23 records for 7 significant vascular plants – roughly a quarter of all of the significant species and a third of all records – in bogs. None of the seven significant bog species are rare in either the Adirondacks or New York. Two (two-seeded sedge, white-fringed orchis) are uncommon in the Adirondacks. The other five (Pickering's reedgrass, few-flowered sedge, bog aster, twin-scape bladderwort and humped bladderwort) are regional specialties, widely distributed here but rare everywhere else.

Non-floating Bog Surrounded by Forest



Tall conifers, low herbs, delicate sedges, sphagnum

Stunted black spruce and tamarack, evergreen shrubs, delicate sedges, sphagnum

Delicate sedges, low evergreen shrubs, sphagnum hummocks

Although mosses, particular *Sphagnum*, are abundant in bogs, all the species we observed were common and widespread, and no rare or regionally significant species occurred.

The 13 bogs on the Finch property probably total less than 100 acres, under 1% of the total area, and somewhere between 5 and 10% of the wetland area. This is probably about average for the Adirondacks as a whole. In the boreal core of the Adirondacks, northwest of here, bogs are somewhat commoner and significantly larger. Across the hill and mountain areas of the south and northeast, they are much less common. Overall they are a widespread Adirondack community, but nowhere a particularly common one.

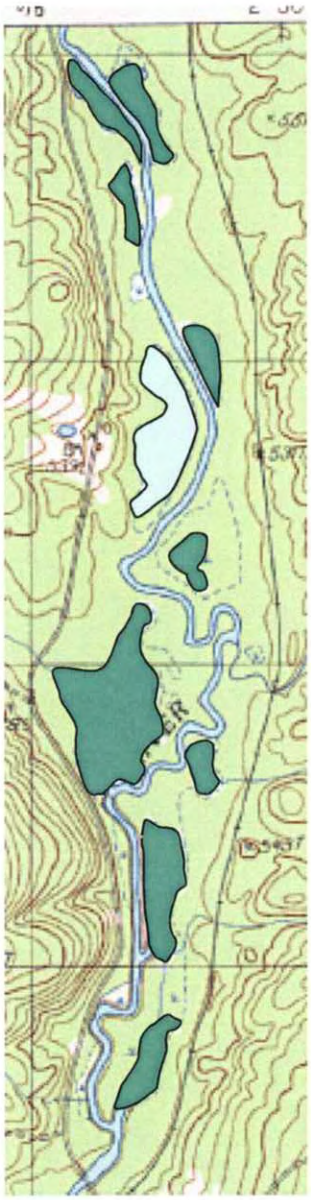
In summary: the 13 bogs and bog ponds on the property are of considerable conservation value because:

- They are a characteristic community of the boreal Adirondacks, and very rare roadside the Adirondacks.
- They are, even within the Adirondacks, a relatively uncommon community.
- They are unusual and beautiful places.
- They are to some extent a relic community, forming at most very slowly under the current climate.
- They contain at least seven significant plant species.
- Many Adirondack bogs have been altered by human or beaver flooding, making unflooded bogs, of which there are at least 9 here, uncommon and of particular value.
- Most bogs, both on the Finch lands, and in the Adirondacks as a whole are fairly small, making the two relatively large ones, at Goodnow Pond and on Fishing Brook Pond, of particular value.

3.7 *The Cedar Glade Fen*

One peatland, located between the Tahawus road and the Hudson River, in a floodplain basin near the river, apparently receives limy seepage, and has a very different flora from the acid sphagnum bogs described above. While there are still sphagnums, dwarf shrubs, and sedges, the spe-

Basins in the Floodplain of the Hudson South of Tawahus



Scale 1:25,000

Limy cedar fen

Other open wetlands

cies differ from those of acid bogs. Similar, the larch and spruce that are so common in acid bogs are absent, and white cedar is common.

Bogs of this sort are usually called fens and I have called this site the Cedar Glade Fen. But be aware that *fen*, like *bog*, is a broad term and can include both wetlands with some groundwater influence, and wetlands with specifically limy groundwater. The former are common and rarely have significant species; the latter, as is the case with the Cedar Glade Fen, are uncommon, and often have significant species

This wetland is the most unusual that we have encountered in our study, and one of the most unusual that we know of in the Adirondacks. It has eight significant plants. Two, the adder's tongue orchid and slender-flowered sedge, are rare in New York; three, the bog honeysuckle, alder buckthorn, and two-seeded sedge, are at least uncommon and possible rare in the Adirondacks; and three, Pickering's reedgrass, Michaux's sedge, and few-flowered sedge, are Adirondack specialties, frequent here but rare elsewhere.

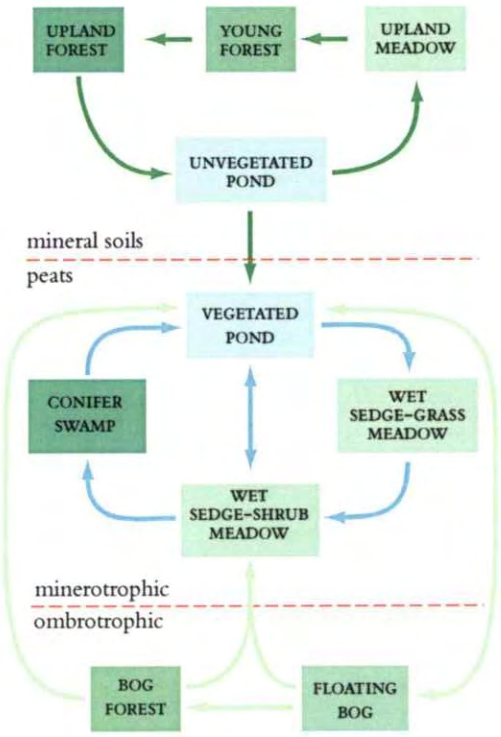
The population of Pickering's reedgrass here is noteworthy. It is an eastern north American endemic, found from Maine to Minnesota. So far as I have been able to determine, it is uncommon or rare everywhere except in the Adirondacks. And even here it is not common; on the Finch lands I found it at only four out of the roughly 45 wetlands I examined. Further, most of the Adirondack colonies I have seen are small, usually less than a few dozen plants, and often only one or two. The colony in the cedar fen, is in contrast, the largest I have seen anywhere, with many hundreds of plants scattered over a few hundred yards of bog.

3.8 *Beaver flows and Other Open Wetlands*

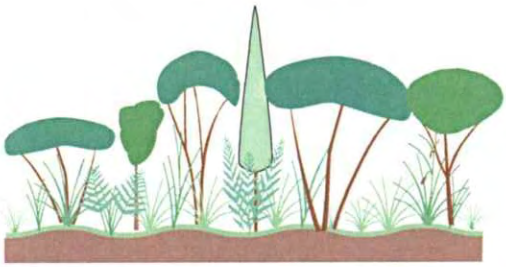
The remaining open wetlands are mostly sedge-shrub marshes. As a group they differ from bogs in having less peat and more contact with groundwater, and so in being more fertile. In consequence of their fertility they have a taller, broader-leaved leaved, and less evergreen flora - typically some mixture of sedges, herbs, and medium-sized to tall shrubs. The mixture varies with fertility, history, and water level. The result

LOW SHRUB-SEDGE MEADOW

THE ADIRONDACK WETLAND CYCLE



TALL SHRUB-SEDGE MEADOW



is a complex, but basically intelligible set of permutations – the same basic group of ten or twenty common plants, but in different combinations and with different abundances. Describing these variations can be a minor ecological industry. I treat them very simply here.

For me, the most important distinction is between those wetlands that result from the filling and draining of impoundments, and those whose basins and waterlevels are more or less permanent. The former move, casually or cyclically, around the central blue loop in the diagram of Adirondack wetlands on the preceding page. The latter tend to remain where they are for long periods of time, or to follow, more rarely and more slowly, the outer green paths.

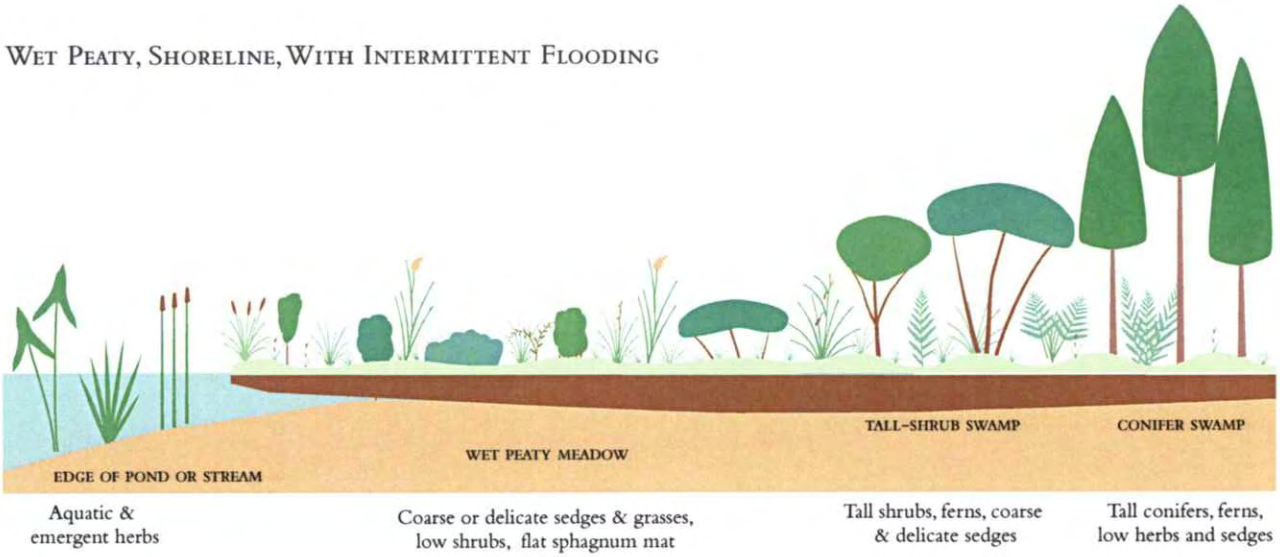
In the case of open, non-boggy wetlands, I call the impoundment-related wetlands *beaver flows*, and the stable-water level ones *lake shore* or *basin* wetlands. All three types can be very similar. Further, because beaver can modify a pre-existing wetland and then leave, they can be hard to disentangle in the field. But beaver flows commonly have simpler floras, shallower peat, less sphagnum moss, well-defined drainage channels, and often a clear zonation corresponding to former water levels.

Beaver flows occur throughout the Finch property; they come in all sizes and our map shows only the largest ones. In several cases where the beaver flow was probably created in a pre-existing open wetland I have still mapped it as a beaver flow, even though traces of the old wetland have persisted and the vegetation may be more complex than that of most beaver flows.

Human impoundments that have drained, like the Shadow Dam west of Goodnow Flow and possibly some of the large meadows on Fishing Brook, much resemble beaver flows, and are mapped with them.

Floodplain basin wetlands are restricted to low gradient segments of the Hudson and Cedar Rivers. (Several more, some of which are large, occur upstream on the Cedar River on New York State land.) They range in size from a few 10ths of an acre to the Newcomb Fen which is three-quarters of a mile long and contains several hundred acres. They tend to be shallow basins behind levees that flood at high water. The commonest vegetation type is a mixture of low sedges, aquatic herbs, and low to medium-sized deciduous shrubs. Only

Wet Peaty, Shoreline, With Intermittent Flooding



two (the Cedar Fen and a tiny bog pond near the pumping station in Newcomb) are boggy. They can be very like beaver ponds, differing more in their structure than composition; they have a less developed drainage system and less separation of herbs and shrubs into zones. In addition, some of them seem slightly influenced by mineral-rich groundwater, and have marginal rings of white cedar and several herbs suggesting a higher nutrient status than is true in most beaver ponds.

Floodplain basins like these seem to be unusual in the eastern Adirondacks, but commoner on the low-gradient northwestern rivers like the Oswegatchie, Grasse and St. Regis that run through large areas of glacial outwash. I believe that this is the only segment of the Hudson where they occur, and do not know any on the Ausable, Sacandaga, or Schroon. I regard them as transitional wetlands, intermediate between those of deciduous forest rivers where the floodplain wetlands are all forested, and boreal forest rivers like the St. Regis where the scattered open wetlands we see in the Hudson floodplain seem to have coalesced to form a continuously open wetland floodplain.

Despite their differences, all of these open wetlands share a basic vascular flora of perhaps 40-50 species and a basic moss flora of 10-15 species. Most of the species are widespread and common. Only a few of the species are uncommon or regionally specialized and none are rare.

3.9 *Importance of the Open Wetlands*

Because non-boggy open wetlands are quite common throughout the Adirondacks, and because only few of them contain significant plants or birds, I tend to think of them as having collective importance, but, in most cases, not individual uniqueness. Their collective importance derives from three features:

- They have a considerable number of plants, especially sedges, shrubs, and flowering herbs, that do not occur in forests or forested wetlands. In deciduous forest areas the open wetlands typically contain about a third of the flora. In northern landscapes where the plant diversity of forests is quite low, the open wetlands may contain between a half and two-thirds of the flora.
- They are used, at one time and another, by almost all of the animals and birds of the surround forests, and in addition contain animals and birds that don't use the forests. They are thus the best sites for bird diversity, and likely for mammal diversity as well, that we have. This is

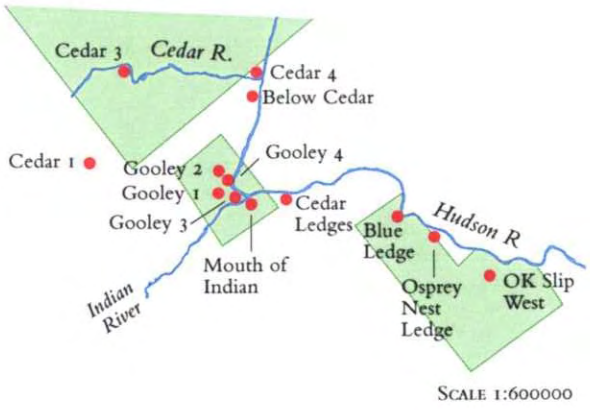
especially true of the boreal birds, many of which are cavity nesters and use the snags at the edges of wetlands. Our best sites for boreal birds on the Finch property were all open wetlands; we picked up essentially all the woodland species like Swainson thrush and boreal chickadee at their edges, plus obligate wetland species like Lincoln's sparrow and olive-sided flycatcher in their interiors.

- The open wetlands, and especially the large ones, are both extremely beautiful in themselves, and characteristic regional features. All boreal landscapes have large open wetlands. The Adirondacks are the first mountains with lowland boreal valley that you encounter as you go north, and are the first mountains to have large open wetlands.

In spite of their overall similarity, some of the open wetlands have individual distinctions worth mentioning. The most noteworthy features are probably:

- The relative abundance of boreal birds, and particularly Lincoln's sparrow, in the large open beaver flows northeast of the Boreas Ponds and near the Opalescent Club Road.
- The boggy, and very boreal looking lake shore wetlands that line the southern part of Goodnow Pond and first mile of its outlet channel.
- The extremely large floodplain basin in Newcomb.
- The series of floodplain basins along the Hudson between the Newcomb bridge and the south end of Blackwell Stillwater; these are a very pretty and distinctive part of the landscape of the river, and also have a few species (Atlantic sedge, Robbin's spikerush…) that are either uncommon or regional specialties.

MARBLE LEDGES



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3.10 *Outcrops*

The small outcrops of granitic rocks that occur on steep terrain throughout the Finch property are not, so far as we can tell, biologically distinctive. Their floras, both vascular and bryophyte, are of low or at most only moderate diversity, and do not contain uncommon species.

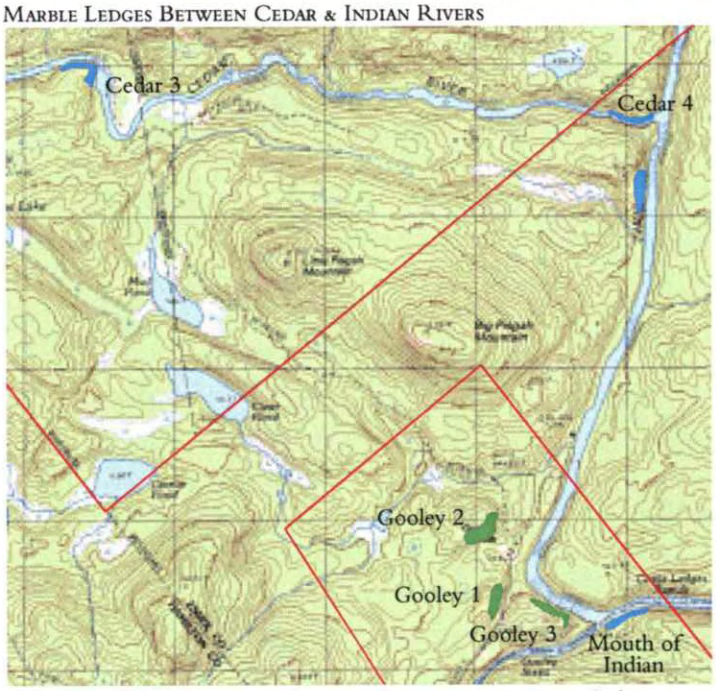
The limestone outcrops, all found within about two miles of the mouth of the Indian River, are a different story. They have extremely diverse bryophyte and vascular floras and the largest concentrations of rare and unusual species that have we encountered in this study, or, indeed, in any Adirondacks study.

The rock making these outcrops is the Grenville Marble, a white, crystalline, granular, often crumbly, calcitic marble about 1.0 billion years old that occurs as narrow, interrupted bands among the ubiquitous Adirondack granites and anorthosites. It outcrops in many parts of the Adirondacks, but usually in limited amounts. Mostly it is covered by or mixed with soil or found as bands in other rocks and only rarely forms significant outcrops by itself. The longest and highest known exposures are along the Hudson River, in or near the Hudson Gorge. Five of the six best are on Finch land.

Besides the outcrops described here, small outcrops occur along Lake Harris and Rich Lake in Newcomb, off the Finch property. In addition the presence of lime-requiring plants in several wetlands along the upper Hudson suggests that there maybe marble bedrock nearby, or marble fragments incorporated in the till. We made several trips in this area searching for outcrops, but found none.

The known outcrops on the Finch property are probably all part of the same layer of rock. They are very similar in color and texture, and occur in a fairly narrow altitude band, between 1400 and 1600 ft.

Marble Ledges Between Cedar & Indian Rivers



These outcrops fall into three groups.

1 The first, and most numerous, are low ledges, commonly much weathered and ice-scoured, along the river shores. These are usually less than 3 yards high, often undercut by river erosion, and often capped by harder non-limy rocks. When they are neither too dry nor too scoured by the river they can be extremely mossy. They commonly have a variety of microhabitats, depending on wetness, exposure, shade, and height above the channel, and have some of the most diverse moss floras we have ever encountered in areas of this size. They are, however, probably too near the river channel and too subject to floods and ice to support rare vascular plants.

Altogether we know perhaps 8-10 of these river ledges, four along the Cedar River and the rest on the Hudson. The best three appear to be:

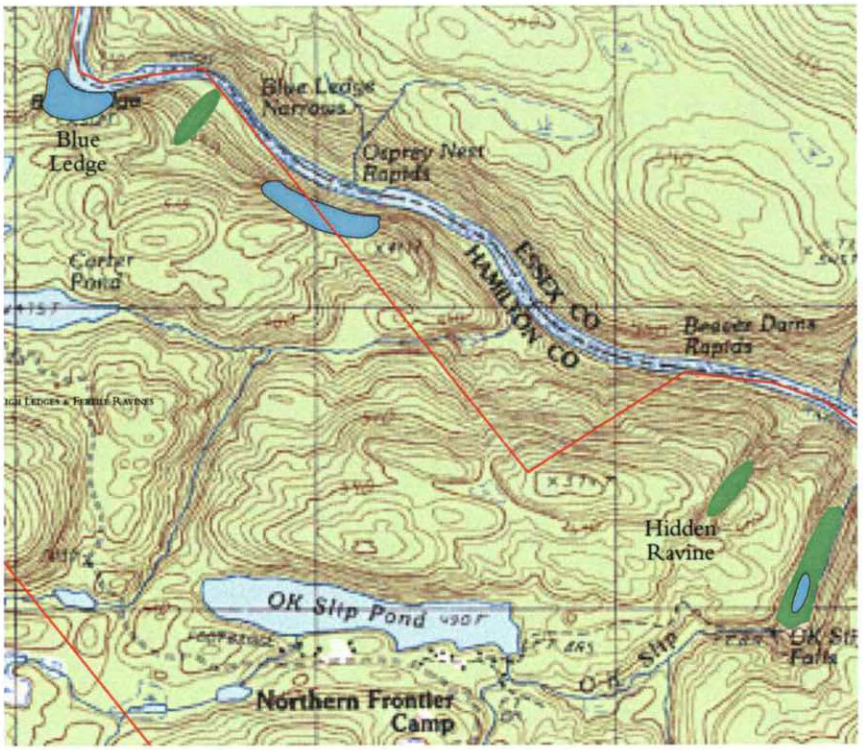
- Ledge 3 on the Cedar River, about 1.8 miles above the mouth, on Finch property, with about 57 species of mosses and liverworts, of which 13 are uncommon or rare.
- Ledge 4 the Cedar River, on the north shore where the Cedar meets the Hudson and just outside of Finch property, with about 58 species of mosses and liverworts of which 7-8 are rare or uncommon.
- A ledge at the mouth of the Indian River, extending onto the north shore of the Hudson, on Finch land, with 59 species of bryophytes, of which 20 are rare or uncommon.

Each of these sites has a single significant vascular plant: Steller's cliffbrake, a small limestone fern, rare in the Adirondacks, at the two on the Cedar, and the hairy honeysuckle, an Adirondack specialty, at the mouth of the Indian.

2 The second group includes 3 wooded ledges, all about 50 ft high but interrupted and not sheer, in the woods near the Gooley Club. The ones we call Gooley 1, on the road, about a quarter mile before the club, are the largest and best. They are our only example on the Finch lands of a rich hardwoods forest, with a diverse canopy and rich herb layer with lime-requiring species. The canopy contains sugar maple, ash, elm, basswood, hop hornbeam, and, as at other rich sites in the north, white

spruce. The total vascular flora is at least 73 species, and a 30 m transect yielded 51 species, remarkable high for a shaded site. At least a third of the species are lime-indicators like maidenhair fern rattlesnake fern, leatherwood and prickly gooseberry. There are six significant vascular plants at this site, by far the most we encountered at any woodland site. Four – leatherwood, Goldie's fern, and the grasses *Milium* and *Schizachne* –are probably rare in the Adirondacks; a fifth, Braun's holly fern is either uncommon or rare in the adirondacks; and the sixth, hairy honeysuckle, is a regional specialty.

The mosses at this site, while not quite as diverse as those at the river sites, were also very good: we found 48 species of mosses and liverworts, of which 10 were uncommon or rare.



3 The last group of outcrops are the high cliffs at Blue Ledge and to its east and on the walls of the ravine near OK Slip Falls. Both sites are spectacularly scenic. Blue ledge is a tall marble ledge, several hundred feet high, partly wooded and partly open, that overlooks a beautiful pool in the Hudson Gorge, with rapids above and below. It is a wet cliff with large amounts of ice in the winter and much rockfall and treefall. OK-Slip Falls is in a recessional gorge about a half mile from the Hudson. It has sheer cliffs granitic cliffs on three sides, a talus of large, vegetated and very slippery boulders below the falls, and small marble outcrops on the north side.

Both are important, though to this point largely unknown botanical sites.

Blue Ledge is the more important of the two. It is all marble, and because it faces northwest and remains wet through the summer it is has functioned as a refuge – a small, detached piece of an arctic mountain – and allowed a relic community of northern plants to persist.

The most notable are six rare vascular plants: purple mountain saxifrage, hair-like sedge, wild chives, hyssop-leaved fleabane, smooth woodsia, and Steller's cliffbrake.The first three, so far as I know, currently grow nowhere else in New York; the fleabane also grows on the ledge above the Osprey Nest Rapids just to the east; the Woodsia is currently known from one other site in New York; and the cliffbrake is uncommon in New York and rare in the Adirondacks, though known from two nearby river ledges that we studied, as well as a cave mouth near the boreas River.

Because the vascular plants at Blue Ledge are extremely rare, I made several trips to evaluate their abundance and distribution. The fleabane is the most common, found all over the ledge and reproducing abundantly; the saxifrage is also found scattered at various heights on the ledge, though in much smaller quantities.

The other four, as best I could tell with making a full roped descent, are only found at or near

the wet base of the main ledge. The cliffbrake occurs in several populations with a moderate number of plants; chives are represented by a few dozen plants on a single small shelf; the Woodsia by perhaps 4-6 small scattered clumps in recesses of the cliff base; and the sedge, despite much searching, by a single clump.

Populations this small are, of course, threatened both by chance events and environmental change; how much longer they can persist here is impossible to predict.

The mosses at Blue Ledge are equally striking. We found a total of 96 species, of which 36 species are uncommon or rare and 4-6 of these known from very few other places in the state.

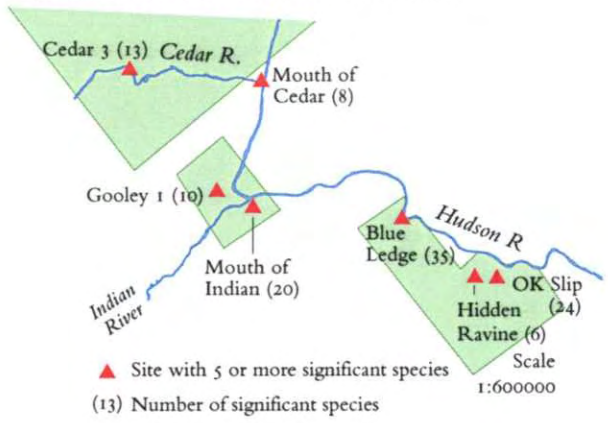
The combination of rare plants and rare mosses make Blue Ledge a unique site; the only place that I know that comes close to it are the cliffs of Smugglers Notch in northern Vermont.

The ledges and talus at OK-Slip Falls, which are much less limy and don't have as much rockfall as Blue Ledge, are none the less biologically significant. We found a total of 69 mosses and liverworts there, of which 22 species are uncommon or rare; and also two vascular plants, Braun's holly fern and Pennsylvania buttercup, which are uncommon or rare. This makes it both the second most diverse area for mosses that we examined, and the one with the second most rarities.

Several small ravines that we examined between Blue ledge and OK Slip, while not having marble outcrops, have a richer than normal flora, often with Braun's and Maidenhair ferns, and sometimes with interest mosses. The one we have called the Hidden Ravine is in many ways like a small version of OK Slip. It has a boulder-filled floor, and is doubtless a stream ravine whose stream was captured and diverted. There are ice caves below the boulders and I have found at least 6 uncommon or rare mosses on the walls of the ice caves.

Both the total number of rare species here and their distribution is significant. At the sites I have been studying in eastern New York and Vermont over the last ten years, it is exceptional, even in good areas, to

MAJOR SITES FOR SIGNIFICANT MOSSES & LIVERWORTS



have a single site with five or more significant species. Here we have, within a circle of two miles radius, seven sites with five or more significant species, and three of these with twenty or more significant each, is unheard of.

4 IMPORTANCE AND CONNECTION OF THE FEATURES OF THE FINCH LANDS TO THE ADIRONDACKS AS A WHOLE

I was asked to evaluate the contribution of the Finch lands to the biological and scenic resources of the Adirondacks as a whole and the extent to which the Finch lands are connected biologically to the state and other private lands around them.

The first is difficult because we do not have good inventories, and in some cases not even bad inventories, of any important feature of Adirondack biology except birds. But I have been able to do it in a relative way by creating a four-category scale of importance.

The second proved impossible, because I could think of no realistic way to measure biological connection or the lack of it from the information on hand.

To rate the contribution of the Finch Lands to the Adirondacks as a whole I divided the most important biological and landscape resources into 18 categories. I then compared the *total* of the features in each category – say all the beaver flows – on the Finch lands to what I know of the rest of the Adirondacks and then rated

the them as either:

Unique, if there were no other comparable places in the Adirondacks

Tops, if they were as good as the very best anywhere else in the Adirondacks, and better than most of the rest.

Highly Significant to the Park if the resource was relatively better represented here than on average, or if the Finch Lands probably hold 10% or more of the total resource in the Park.

Locally Significant Only if the resource, while important here, is no better represented here than on most other lands of comparable size in the Park, and if the Finch Lands probably hold 5% or less of the total resource in the Park.

The percentages are only a conceptual tool; lacking park-wide inventories, no exact comparisons are possible.

Using those categories, my ratings of the 18 features of the Finch lands that I judge most important are:

Unique

- Hudson River corridor
- Rare limestone vascular plants
- Rare limestone mosses
- High-diversity limy ledge moss communities

Tops

- Large floodplain wetlands
- OK-Slip fertile ravine community
- Gooley Club rich woods & ledge community
- Cedar Glade Fen community & rare fen vascular plants

Highly Significant to Park

- Corridors of Opalescent & Cedar Rivers
- Alluvial woods along Sand Brook
- Boreal plant communities of undisturbed bogs and bog ponds
- Ensemble of lowland boreal forest around ponds and along rivers
- Ensemble of undeveloped ponds with views of hills
- Small fertile ravines and pockets near Hudson

Locally Significant Only

- Flooded bog bonds
- Beaver flows and ponds
- Larger older trees near Hudson
- Mid-elevation conifer woods

5 SUMMARY OF FINDINGS

Our conclusions, after two years of fascinating work on a very impressive property, are that:

1 The Finch property, so far as can be determined from a brief examination, is in good shape. The natural vegetation of essentially all the wetlands and waterbodies is intact; past cutting has been widespread but not exceptionally intense; the upland forest canopies are largely continuous and contain trees of medium ages; and clearing and development has been confined to a few areas, leaving most of the property undeveloped.

2 There are major areas of great natural beauty and scenic value. The most important, at least to me, are the corridors of the Hudson, Cedar and Opalescent Rivers, some of the large open wetlands like those along the Goodnow River

and Fishing Creek, and a number of the ponds, which are both beautiful in themselves and afford spectacular views of nearby mountains.

3 The Finch property contains examples of all major types of Adirondack wetlands except large sphagnum bogs.

34The commonest and largest wetlands are forested spruce-fir swamps and open shrub-coarse sedge-sphagnum meadows. These two types together make up what has been called the lowland boreal biome or lowland boreal forest. They are home to a number of plants and animals, particularly the bog plants and boreal birds, which are common farther north but local and very much Adirondack specialties this far south.

5 Prior to this survey it was generally assumed that significant lowland boreal forest communities were restricted to the northern and western Adirondacks. Their presence here in the east-central Adirondacks, in substantial amounts, indicates that they are more widely distributed than previously thought, and that Finch and neighboring landowners hold a significant amount of the total Adirondack habitat.

6 Our examination of these examples of lowland boreal habitats indicates that while they differ from the northern and western Adirondack examples in several ways, particularly in absence of large bogs and the smaller amounts of spruce-tamarack bog forest, they still contain almost all the standard boreal birds and boreal plants, and so are biologically equivalent to the communities of the west and north.

7 The largest concentration of lowland boreal habitat is around the Boreas Ponds and in the floodplains of the upper Hudson and Opalescent Rivers, above the Tahawus Club. Smaller but sill quite significant amounts occur westward to Long Lake and south to Blue Mt Lake.

8 The commonest types of waterbodies on the Finch property are steep-gradient wooded streams; low-gradient streams with boggy, floating margins; major rivers with wooded banks; beaver ponds; and natural ponds whose levels have been altered by beaver or humans. Streams with broad, continuously open floodplains, common in the northwestern Adirondacks, do not occur here. But there are streams with shorter segments of open floodplain, as well as two other uncommon types of waterbody: large bog ponds with stable water levels, and large, meandering rivers with broad floodplains containing alluvial conifer glades and large open wetlands.

9 Precambrian Grenville marbles underlie a substantial part of the upper Hudson valley between Tahawus and Warrensburg. Where these outcrop or influence the chemistry of the groundwater they produce distinctive plant communities that are unusual in the Adirondacks. The Finch lands contain a number of examples of such communities.

10 The most spectacular of these are tall ledges at Blue Ledge, which have seven rare or uncommon vascular plants and some 35 rare or uncommon mosses. But the smaller outcrops along the Cedar River, near the Gooley Club, at the mouth of the Indian, and on the west side of OK Slip Ravine are also of great biological significance and have many rare species as well. In addition a number of the wetlands show the influence of lime, and one, which we call the Cedar Glade Fen, is quite unusual and has a number of rare species.

11 We have seen 33 significant vascular plants. We estimate that 7-8 are rare in New York, 8-9 uncommon in New York, and an additional 11 rare or uncommon in the Adirondacks. There are also 7 additional Adirondack specialties (species widespread here but rare elsewhere).

12 Five of the significant vascular plants are listed as S1 species (highly rare) by the New York Natural Heritage Program, and are legally protected as New York endangered species. One is listed as an S2 species (moderately rare) by the New York Natural Heritage Program, and legally protected as New York threatened species. Five are listed as S3 (somewhat rare, which I call uncommon) species by the New York Natural Heritage Program, but do not have legal protection.

13 We saw what we think is a remarkable total of 62

significant mosses and liverworts. The relative abundance ofbryophytes in New York is very poorly known. My best, but still provisional, estimate of their status is that at least 30 are rare in New York, 12-14 uncommon in New York, and additional 16-18 rare in the Adirondacks, and one additional species uncommon in the Adirondacks. At least one species, while not uncommon or rare is clearly and Adirondack specialty.

14 So far as we know, our records of the majority of the significant species are new discoveries. Five of the vascular plants have been previously reported on or near the Finch lands, and about four of the mosses have been previously reported from elsewhere in the Hudson River Gorge.

15 Shamefully but perhaps for the better in the long run, mosses and liverworts are not interesting to New York biobureaucrats, and are not officially listed Heritage Program nor protected in New York. There was a Heritage provisional moss list in 1993, but it omitted many rare species and has not been updated.

16 With the exception of one or two mosses on tree bark, all our significant plant species were found in wetlands or on river shores or on limestone outcrops.

17 While many sites had one or two significant species, the majority of our significant species and almost all the real rarities were concentrated at a few limy sites. Our best sites for rare vascular plants were Blue Ledge and the Cedar Bog on the upper Hudson; our best sites for rare mosses and liverworts were Blue Ledge, OK Slip Falls, the limy cobble near the Gooley Club and the river ledges along the Cedar and at the mouth of the Indian. The ledges at the mouth of the Cedar, just off Finch property, were also very good, and it is quite possible that some of the species here extend upstream onto finch land.

18 These last five sites taken together probably have a greater number of rare bryophytes than any other group of sites in a comparable area I know in New York; indeed they are more than comparable to Smugglers Notch (northern Vermont), which is probably the most famous site for northern, limy mosses and liverworts in the northeast U.S.

19 In our breeding bird work we found a total of 91 species in two years, 75 in 2000 and 81 in 2001; these included all the usual northern forest and wetland species, plus 12 more specialized boreal forest species, plus the merlin, a rare species that was seen only once.

20 Nine of the twelve boreal birds were moderately widespread, and observed several times or more, in different parts of the property. Three - rusty blackbird, bay-breasted warbler, and Bicknell's thrush, are apparently rare and were observed once each.

21 Every suitable habitat we examined in the property had at least one species of boreal bird. The greatest concentrations of species that we saw were in the northeastern unit, where we had nine species at the Boreas Ponds, 6 along the upper Hudson, and 5 along the Opalescent. None of the other areas to the south and west had more than four. This may be because the spruce stands are larger or more continuous in the northeast, or because, since they were the best habitat, we spent more time there.

22 We found breeding waterfowl at every on of the larger ponds we visited. The most diverse sites were the Boreas Ponds with five species and O'Neill Flow with four.

23 In a very approximate evaluation of the significance of the features of the Finch lands relative to the Adirondack Park as a whole, four groups of features (the Hudson River corridor, rare limestone vascular plants, rare limestone mosses, and the high-diversity limy ledge moss communities) were rated as unique in the Adirondacks.

24 Another four (the large floodplain wetlands along the Hudson, the OK-Slip fertile ravine community, the Gooley Club rich woods & ledge community, and the Cedar Glade Fen community & rare fen vascular plants) were rated as good as any similar features in the Park.

25 In addition, six groups of features (the corridors of Opalescent & Cedar Rivers, the alluvial woods along Sand Brook, boreal plant communities of undisturbed bogs and bog ponds, the ensemble of lowland boreal forest around ponds and along rivers, the ensemble of undeveloped ponds with views of hills, and the small fertile ravines and pockets near Hudson) were rated highly significant to the Park as a whole, though neither unique, nor as good or as extensive as the best Adirondack examples in their categories.

26 While I have not rated other Adirondack properties using this scale, a quick survey of the park suggests that, except for the High Peaks, there may be no other Adirondack property with this many unique and good-as-the-best features.

27 So far as we know, alien plants and animals are not affecting the natural communities on the Finch lands. Alien plants are common in settled areas and follow all the summer roads, but are scarce on trails and winter roads and essentially absent from forest interiors, waterbodies, outcrops, shores, and wetlands. Starlings and English sparrows certainly occur near the towns, but were not seen in our survey
28 The lack of alien plants and animals noted on the Finch property is generally true in much of the Adirondacks outside the Champlain Valley and reflects the low nutrient status of many communities and the lack of an agricultural history. It contrasts sharply with the situation in much of the rest of the New York, where the invasion of native communities by alien plants and animals is a major conservation problem.

29 With the exception of some ruts from an ATV in the bog at Goodnow Pond in August 2000, no damage to any unusual habitat or significant species from human activity was observed.

30 My summary of these findings is that the Finch property contains remarkable biological resources. The resources are currently in excellent condition, and are important not only locally but at the Adirondack and New York State scales. In two respects, the uniformly high quality of the forest management and the remarkable scenic assets it exceeds any other commercial forest lands (now totaling, with the Finch property, some 400,000 acres) that I have examined. In another two respects, the presence of numerous rare plant species and unusual high diversity plant communities, it exceeds any other Adirondack property, public or private, that I have examined.

APPENDIX D

PREALL, L. DEC FISHERIES. SEPTEMBER 26, 2012. FISHERIES RECREATION FOR THE FORMER FINCH-PRUYN LANDS. RAY BROOK, NY.

New York State Department of Environmental Conservation
Division of Fish, Wildlife and Marine Resources, Region 5
Bureau of Fisheries
1115 NYS Route 86, PO Box 296, Ray Brook, New York 12977
Phone: (518) 897-1333 · FAX: (518) 897-1370
Website: www.dec.ny.gov

Joe Martens
Commissioner

Fisheries Recreation Plan for Former Finch & Pruyn Lands

New York State's planned acquisition of over 65,000 acres of land in fee title from The Nature Conservancy in the next five years includes a number of high quality waters long privately managed/stocked for fishing. This recreation plan attempts to: continue prior stocking practices for public benefit; identify waters needing further survey work; identify waters having unique fisheries or those which may require special regulations to protect existing fish populations; suggest new recreational opportunities via stocking or adding access facilities. All the fee title land parcels identified in the DEC GIS layer named "Entire_disposition_Sept4.shp" were reviewed for this plan. Tract names, parcel numbers and FID numbers appearing below were obtained from the attribute table associated with that shape file.

1. FID 176, Parcel 5, Chain Lakes Tract – 12,982 acres – includes the Essex Chain Lakes, Jackson Pond, Deer Pond, Cedar Pond. Stocking Recommendations: Third Lake Essex Chain- 300 Landlocked Salmon spring yearlings (7"), 2,000 rainbow trout spring yearlings (7-9"); Fifth Lake Essex Chain- 100 landlocked salmon yearlings, 1,100 rainbow trout yearlings; Eighth Lake Essex Chain – 600 Temiscamie hybrid brook trout fall fingerlings (4"); Jackson Pond – 850 Tem Hyb fall fingerlings; Deer Pond – 1,400 Tem Hyb fall fingerlings. Survey Recommendations: Biological surveys of all the stocked waters listed above (water chemistry work done in 2012); survey Cheney Pond on east side of Hudson River (no data on file). Special Management: Do not publicize access to Cedar (Roundtop) Pond which has a wild population of Windfall strain heritage brook trout. Prohibit public vehicle use of the road to Cedar Pond, but maintain administrative access for DEC. Permit float planes to land on Third Lake Essex Chain if this can be controlled via permit.
2. FID 156, Parcel 5, Chain Lakes Tract – 5,417 acres – includes Clear Pond, Pine Lake, Deer and Mud Ponds (not the same ponds as those in FID 176). Stocking Recommendation: Clear Pond- 400 rainbow trout spring yearlings; continue existing policies for Pine Lake. Survey Recommendations: None for 2013, survey Clear Pond again (was surveyed in 2012) by 2016 to see how native lake trout population and stocked rainbows are faring. Special Management: Improve and mark trail to Clear Pond; designate/mark road/trails to Pine Lake; Continue to allow float plane access to Pine Lake with planes now allowed to land on entire lake. Consider special regulations to protect the native lake trout population in Clear Pond if increased fishing pressure causes negative impacts.
3. FID 157, Parcel 5, Indian River Tract – 706 acres – No ponded waters, but this parcel can provide improved ingress and egress to the Hudson and Indian Rivers near their confluence. This section of the Hudson River can provide very good fly fishing and spin fishing for stocked trout and smallmouth bass in the late spring and early summer. Will be popular rafting and watercraft access site. Could be a site to stock trout from shore versus air stocking now being done.
4. FID 114, Parcel 10, OK Slip Falls Tract – 2,783 acres – includes OK Slip Pond, Blue Ledge Pond, Upper and Lower Carter Ponds. Stocking Recommendations: Transfer Nate Pond brook trout (a heritage strain) to Blue Ledge Pond – done once before in 1990's. Survey Recommendations: Survey Blue Ledge Pond to confirm still fishless prior to Nate Pond transfer; and Carter Ponds need surveys. Special Management: Carter Ponds may have a summer sucker population. Blue Ledge Pond could be developed as a refuge/brood stock pond for the Nate Pond strain of brook trout – Nate

Pond is located due north of this parcel near the Boreas River. There are no other refuge ponds for this threatened strain of native brook trout.

5. FID 190, Parcel 3, Boreas Ponds Tract – 16,966 acres – includes the Boreas Ponds and White Lily Pond, portions the Boreas River and The Branch. Stocking Recommendations: None until survey work can be done. Survey Recommendations: Boreas Ponds to evaluate the existing brook trout fishery – this is not a heritage water because private records indicate at least three strains of brook trout have been stocked historically. Status of other fish species is unknown. Great recreational opportunity. Brook trout stocking policies should be considered for newly accessible portions of the Boreas River and The Branch. Continue stocking landlocked salmon fry in upper sections of The Branch to support the existing salmon fishery in Schroon Lake. Survey White Lily Pond – no existing data.
6. FID 168, Parcel 1, MacIntyre's Works Tract – 4,909 acres - includes Lake Andrew, portions of Hudson River and Opalescent River. Also FID 162, Parcel 1 – more sections of Opalescent on MacIntyre's Works Tract: Stocking Recommendations: None at this time. Survey Recommendations: Need information from leasees on recent river fishing conditions, electrofishing survey work will be difficult due to size of rivers. Have heard brook trout fishing has diminished. Lake Arnold needs a survey – it is an isolated, high elevation lake which historically supported brook trout – could be a heritage water or a potential brood stock pond if reclaimed.
7. FID 243, Parcel 6, Dolph Pond Tract, 726 acres in Town of Whitehall, Warren county - Survey Recommendations: Survey Spruce Pond which was reportedly a brook trout water in 1954 – no modern data. Spruce Pond is another high elevation, isolated pond with either heritage or brood stock possibilities.
8. FID 80, Parcel 8, Pennyork Lumber Tract – 445 acres, Town of Wilton, Saratoga county – Survey Recommendations: Contains the headwaters of the Little Snook Kill which is a decent brown trout stream a little ways downstream. This may be a wild trout section that should receive PFR posting.
9. FID 144, Parcel 3, Benson Road Tract, Town of Benson, Hamilton county – 1,609 acres adjacent to Tannery Road – Survey Recommendation: Contains a long section of West Stony Creek which historical survey data shows has a diverse warmwater fishery for smallmouth bass, chain pickerel and panfish species. May be a good site to develop a fishing access/day use picnic spot. Should be resurveyed to confirm this impression.

Developed by: Rich Preall, Senior Aquatic Biologist, Ray Brook – November 15, 2012

Essex Chain – Gooley Club waters - Fisheries Management Highlights

Background

1. Pre-1948 – individual camps and homes – timbering, agriculture, some recreation
2. 1948 - Outer Gooley Club formed (includes Clear, Mud, Corner Ponds)
3. 1950 - Essex Chain waters (Inner Gooley) added
4. 1952 - First DEC surveys – first bass stocking request denied
5. 1960's-today – Private management and studies – Flick (Cornell), Simkins, Field

Past Fisheries Management Actions

1. Deer Pond reclaimed 1973 – barrier built – restocked with a British Columbian strain of brook trout and later Temiscamie Hybrids. Barrier failed by 1977. Gill lice an issue.
2. Cedar (Roundtop) Pond – likely reclaimed sometime between 1988-1995. Restocked by DEC with Windfall strain (heritage) brook trout. Now a self-sustaining monoculture.
3. Jackson Pond and Mud Pond have been suggested for reclamation, but never done. DEC surveys of 2012 - no good barrier sites on Deer, Jackson and Mud.
4. Essex Chain Lakes – mainly Third and Fifth have been heavily and variously stocked with brook trout, Atlantic salmon, rainbow trout and perhaps Arctic Char. Rainbow smelt stocked 1973.
5. DEC and Finch Pruyn denied second request to stock bass in the 1970's.
6. Lake trout size limit was 15" in 1950's. Later increased to 18".
7. Lake trout eggs (40,000/year) taken from 1977-1981 – No record of what was done with these eggs.

Fisheries Community and Water Quality

1. Native lake trout in Essex Chain waters and Clear Pond – no known stocking history. These behave like Raquette strain (spawn mid-October on shallow, rocky shoals). Lake trout growth slow in Essex Chain – good in Clear Pond.
2. Brook trout non-heritage (except for Cedar) due to stocking. Brook trout growth and survival poor in Essex Chain, Clear and Deer Ponds. Jackson Pond average growth.
3. No acid precipitation problems. pH >7.5 in all ponds, over 8 in Cedar and Mud.
4. Long term trout survival possible in Third, Fourth, Fifth, Eighth, Jackson, Clear, Deer and Cedar Ponds.
5. Wild brook trout in several tribs to Essex Chain. Cedar River stocked with brown trout, some wild brook trout present.
6. First Lake and Pine Lake already half-owned by State and have long stocking histories. Both are very popular float plane destinations.

Management Recommendations

1. Statewide lake trout and trout regulations.
2. Stock rainbow trout in Essex Chain, Clear Pond.
3. Survey/monitor lake trout population in Essex Chain.
4. Limit access to Cedar Pond via long hike-in, but retain administrative drive access.
5. Improve trail to Clear Pond, Pine Lake.

Prepared by R. Preall – 9/26/2012 – DEC Fisheries Ray Brook

APPENDIX E

NATURAL RESOURCE CONSERVATION SERVICES, SOIL DESCRIPTIONS.

Appendix A: Soil Descriptions

The Natural Resource Conservation Services, in its soil surveys of Essex and Hamilton Counties, has identified 53 soil types series with the subject area. These soils have been mapped by soil unit, many of which contain several soil types. Map 1 shows the soils in the subject area. A more detailed map of the soil units, as well as a description of each is found in this Appendix.

10A Pleasant Lake-Burnt Vly complex, 0 to 2 percent slopes. The Pleasant Lake component makes up 45 percent of the map unit. Slopes are 0 to 2 percent. This component is on bogs. The parent material consists of organic material. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 80 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria.

The Burnt Vly component makes up 30 percent of the map unit. Slopes are 0 to 1 percent. This component is on bogs. The parent material consists of organic material over sandy glaciofluvial deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, September, October, November, December. Organic matter content in the surface horizon is about 80 percent. Nonirrigated land capability classification is 5w. This soil does not meet hydric criteria.

13A Burnt Vly-Rumney-Pleasant Lake complex, 0 to 2 percent slopes. The Pleasant Lake component makes up 40 percent of the map unit. Slopes are 0 to 2 percent. This component is on bogs. The parent material consists of organic material. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 80 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria.

The Burnt Vly component makes up 20 percent of the map unit. Slopes are 0 to 2 percent. This component is on bogs. The parent material consists of organic material over sandy glaciofluvial deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is

very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, September, October, November, December. Organic matter content in the surface horizon is about 80 percent. Nonirrigated land capability classification is 5w. This soil does not meet hydric criteria.

The Rumney component makes up 30 percent of the map unit. Slopes are 0 to 3 percent. This component is on flood plains. The parent material consists of loamy alluvium derived from gneiss. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 8 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria.

26A Wonsqueak-Rumney-Bucksport complex. The Wonsqueak series consists of very deep, very poorly drained soils in depressions. They formed in a mantle of organic soil material over loamy mineral material. Typically, the surface layer, 8 inches thick, is very dark gray muck. The subsurface layer, to 32 inches, is black muck. The substratum to 65 inches is gray silt loam. Slopes range from 0 to 2 percent.

The Rumney series consists of very deep, poorly drained soils on flood plains. They formed in recent alluvial material. Typically, these soils have a very dark grayish brown fine sandy loam surface layer, 9 inches thick. The mottled subsoil from 9 to 30 inches is dark grayish brown fine sandy loam and grayish brown sandy loam. The substratum from 30 to 65 inches is olive gray loamy sand. Slopes range from 0 to 3 percent.

The Bucksport series consists of very deep, very poorly drained soils in depressions. They formed in decomposed organic material in glacial ground moraines, shallow till ridges, and outwash plains. Typically, the surface layer is black muck 12 inches thick. The subsurface layer, from 12 to 25 inches, is dark reddish brown muck. The bottom layer, from 25 to 65 inches, is black muck. Slopes range from 0 to 1 percent.

363B Adams loamy sand, 3 to 15 percent slopes. The Adams component makes up 75 percent of the map unit. Slopes are 3 to 15 percent. This component is on deltas. The parent material consists of sandy glaciofluvial deposits derived from gneiss. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface

horizon is about 70 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.

365A Naumburg-Croghan complex, 0 to 3 percent slopes. The Naumburg component makes up 45 percent of the map unit. Slopes are 0 to 3 percent. This component is on deltas. The parent material consists of sandy glaciolacustrine deposits derived from gneiss. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 7 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 60 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria.

The Croghan component makes up 30 percent of the map unit. Slopes are 0 to 3 percent. This component is on deltas. The parent material consists of sandy glaciolacustrine deposits derived from gneiss. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 23 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

375C Colton-Adams complex, 3 to 15 percent slopes. The Adams component makes up 30 percent of the map unit. Slopes are 3 to 15 percent. This component is on outwash plains. The parent material consists of sandy glaciofluvial deposits derived from gneiss. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 70 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.

The Colton component makes up 45 percent of the map unit. Slopes are 3 to 15 percent. This component is on kame terraces. The parent material consists of gravelly outwash derived from gneiss. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.

649C Monadnock-Tunbridge-Tahawus complex, 0 to 15 percent slopes, rocky, very bouldery. The Monadnock, rocky, very bouldery component makes up 40 percent of the map unit. Slopes are 3 to 15 percent. This component is on hillsides or mountainsides. The parent material consists of loamy ablation till over sandy ablation till derived from gneiss. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 70 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

The Tahawus, very bouldery component makes up 20 percent of the map unit. Slopes are 0 to 5 percent. This component is on hillsides or mountainsides. The parent material consists of sandy till derived from gneiss. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 80 percent. Nonirrigated land capability classification is 6s. This soil meets hydric criteria.

The Tunbridge, rocky, very bouldery component makes up 30 percent of the map unit. Slopes are 3 to 15 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

651D Monadnock-Tunbridge complex, 15 to 35 percent slopes, rocky, very bouldery. The Monadnock, rocky, very bouldery component makes up 45 percent of the map unit. Slopes are 15 to 35 percent. This component is on hillsides or mountainsides. The parent material consists of loamy ablation till over sandy ablation till derived from gneiss. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 70 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

The Tunbridge, rocky, very bouldery component makes up 30 percent of the map unit. Slopes are 15 to 35 percent. This component is on hillsides or mountainsides. The parent material consists

of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

705B Adirondack-Tahawus complex, 0 to 8 percent slopes, very bouldery. The Adirondack, very bouldery component makes up 40 percent of the map unit. Slopes are 0 to 8 percent. This component is on hillsides or mountainsides. The parent material consists of loamy lodgement till derived from gneiss. Depth to a root restrictive layer, densic material, is 20 to 38 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, May, September, October, November, December. Organic matter content in the surface horizon is about 90 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

The Tahawus, very bouldery component makes up 35 percent of the map unit. Slopes are 0 to 5 percent. This component is on hillsides or mountainsides. The parent material consists of sandy till derived from gneiss. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 80 percent. Nonirrigated land capability classification is 6s. This soil meets hydric criteria.

708B Adirondack-Sabattis-Tughill complex, 0 to 8 percent slopes, very bouldery. The Adirondack series consist of very deep, somewhat poorly drained soils, formed in compact glacial till. Typically, they have a 8-inch thick surface layer. The upper part is black muck. The lower part is black fine sandy loam. Boulders are on the surface in varying amounts, the subsurface layer, to a depth of 10 inches, is gray fine sandy loam the subsoil, from 10 to 22 inches, is dark reddish brown and reddish brown stony fine sandy loam and stony loam. The substratum, from 22 to 72 inches, is dark grayish brown stony sandy loam. Slopes range from 0 to 15 percent.

The Sabattis series consists of very deep, poorly and very poorly drained soils formed in low areas on upland till plains. typically these soils have a black mucky surface layer, 8 in. thick overlying a dark grayish brown and brown loam subsurface layer, 2 in. thick. the subsoil, from 11 to 21 in. is mottled, light brownish gray fine sandy loam. the substratum, from 21 to 72

inches, is brownish yellow sandy loam in the upper part, grayish brown very fine sandy loam in the mid-part, and brown gravelly sandy loam in the lower part. slope ranges from 0 to 6 percent.

The Tughill series consists of very deep, very poorly drained soils on uplands. they formed in glacail till. typically, these soils have a black to very dark gray mucky, gravelly fine sandy loam surface layer, 9 inches thick. the subsurface layer, from 9 to 13 inches, is mottled gray gravelly fine sandy loam. the subsoil, from 13 to 36 inches, is mottled light brownish gray very gravelly fine sandy loam. the substratum, from 36 to 72 inches, is gray very gravelly fine sandy loam. slopes range from 0 to 5 percent.

721C Becket-Tunbridge-Skerry complex, 3 to 15 percent slopes, rocky, very bouldery. The Becket, rocky, very bouldery component makes up 40 percent of the map unit. Slopes are 3 to 15 percent. This component is on hillsides or mountainsides. The parent material consists of loamy lodgement till derived from gneiss. Depth to a root restrictive layer, densic material, is 20 to 36 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during March, April. Organic matter content in the surface horizon is about 70 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

The Tunbridge, rocky, very bouldery component makes up 30 percent of the map unit. Slopes are 3 to 15 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

The Skerry, rocky, very bouldery component makes up 20 percent of the map unit. Slopes are 3 to 15 percent. This component is on hillsides or mountainsides. The parent material consists of loamy lodgement till derived from gneiss. Depth to a root restrictive layer, densic material, is 20 to 38 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 22 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

721D Becket-Tunbridge complex, 15 to 35 percent slopes, rocky, very bouldery. The Becket, rocky, very bouldery component makes up 45 percent of the map unit. Slopes are 15 to 35 percent. This component is on hillsides or mountainsides. The parent material consists of

loamy lodgement till derived from gneiss. Depth to a root restrictive layer, densic material, is 20 to 36 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during March, April. Organic matter content in the surface horizon is about 70 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

The Tunbridge, rocky, very bouldery component makes up 30 percent of the map unit. Slopes are 15 to 35 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

723C Becket fine sandy loam, 3 to 15 percent slopes, very bouldery. The Becket, very bouldery component makes up 85 percent of the map unit. Slopes are 3 to 15 percent. This component is on hillsides or mountainsides. The parent material consists of loamy lodgement till derived from gneiss. Depth to a root restrictive layer, densic material, is 20 to 36 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during March, April. Organic matter content in the surface horizon is about 70 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

723D Becket fine sandy loam, 15 to 35 percent slopes, very bouldery. The Becket, very bouldery component makes up 85 percent of the map unit. Slopes are 15 to 35 percent. This component is on hillsides or mountainsides. The parent material consists of loamy lodgement till derived from gneiss. Depth to a root restrictive layer, densic material, is 20 to 36 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during March, April. Organic matter content in the surface horizon is about 70 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

725B Skerry-Becket complex, 3 to 15 percent slopes, very bouldery. The Becket, very bouldery component makes up 30 percent of the map unit. Slopes are 3 to 15 percent. This component is on hillsides or mountainsides. The parent material consists of loamy lodgement till derived from gneiss. Depth to a root restrictive layer, densic material, is 20 to 36 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low.

This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during March, April. Organic matter content in the surface horizon is about 70 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

The Skerry, very bouldery component makes up 45 percent of the map unit. Slopes are 3 to 15 percent. This component is on hillsides or mountainsides. The parent material consists of loamy lodgement till derived from gneiss. Depth to a root restrictive layer, densic material, is 20 to 38 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 22 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

727B Skerry-Adirondack complex, 0 to 8 percent slopes, very bouldery. The Adirondack, very bouldery component makes up 30 percent of the map unit. Slopes are 0 to 8 percent. This component is on hillsides or mountainsides. The parent material consists of loamy lodgement till derived from gneiss. Depth to a root restrictive layer, densic material, is 20 to 38 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, May, September, October, November, December. Organic matter content in the surface horizon is about 90 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

The Skerry, very bouldery component makes up 45 percent of the map unit. Slopes are 0 to 8 percent. This component is on hillsides or mountainsides. The parent material consists of loamy lodgement till derived from gneiss. Depth to a root restrictive layer, densic material, is 20 to 38 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 22 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

831D Tunbridge-Lyman complex, 15 to 35 percent slopes, very rocky, very bouldery. The Tunbridge, very rocky, very bouldery component makes up 45 percent of the map unit. Slopes are 15 to 35 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth

of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

The Lyman, very rocky, very bouldery component makes up 30 percent of the map unit. Slopes are 15 to 35 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 10 to 20 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

831F Tunbridge-Lyman complex, 35 to 60 percent slopes, very rocky, very bouldery. The Tunbridge, very rocky, very bouldery component makes up 45 percent of the map unit. Slopes are 35 to 60 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

The Lyman, very rocky, very bouldery component makes up 30 percent of the map unit. Slopes are 35 to 60 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 10 to 20 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

833C Tunbridge-Adirondack-Lyman complex, rolling, very bouldery. The tunbridge bouldery phases consists of moderately deep, well drained soils that formed in loamy glacial till. Boulders cover 0.1 to 3 percent of the surface. Typically, these soils have a fine sandy loam surface layer, 2 inches thick. The subsurface layer is fine sandy loam, 1 inch thick. The subsoil is 11 inches thick. The upper part is loam. The lower part is silt loam. The substratum is fine sandy loam, 14 inches thick. Mica schist and gneiss bedrock is at 28 inches. Slopes range from 0 to 75 percent.

The Adirondack series consist of very deep, somewhat poorly drained soils, formed in compact glacial till. Typically, they have a 8-inch thick surface layer. The upper part is black muck. The lower part is black fine sandy loam. Boulders are on the surface in varying amounts, the

subsurface layer, to a depth of 10 inches, is gray fine sandy loam the subsoil, from 10 to 22 inches, is dark reddish brown and reddish brown stony fine sandy loam and stony loam. The substratum, from 22 to 72 inches, is dark grayish brown stony sandy loam. Slopes range from 0 to 15 percent.

The Lyman series consists of shallow, somewhat excessively-drained soils on uplands. They formed in glacial till. Typically, these soils have a black very stony loam surface layer 2 inches thick and a reddish gray fine sandy loam subsurface layer from 2 to 4 inches. The subsoils, from 4 to 6 inches are very dusky red loam, from 6 to 12 inches are dark red loam, and from 10 to 17 inches are dark brown loam. Bedrock is at a depth of 17 inches. Slopes range from 3 to 80 percent.

851F Lyman-Knob Lock complex, 35 to 60 percent slopes, very rocky, very bouldery. The Lyman, very rocky, very bouldery component makes up 45 percent of the map unit. Slopes are 35 to 60 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 10 to 20 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

The Knob Lock, very rocky, very bouldery component makes up 30 percent of the map unit. Slopes are 35 to 60 percent. This component is on hillsides or mountainsides. Depth to a root restrictive layer, bedrock (lithic), is 2 to 26 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 70 percent. Nonirrigated land capability classification is 7s.

861F Lyman-Ricker complex, 35 to 60 percent slopes, very rocky. The lyman series consists of shallow, somewhat excessively-drained soils on uplands. They formed in glacial till. Typically, these soils have a black very stony loam surface layer 2 inches thick and a reddish gray fine sandy loam subsurface layer from 2 to 4 inches. The subsoils, from 4 to 6 inches are very dusky red loam, from 6 to 12 inches are dark red loam, and from 10 to 17 inches are dark brown loam. Bedrock is at a depth of 17 inches. Slopes range from 3 to 80 percent.

The Ricker series consists of very shallow or shallow to bedrock. Well drained to excessively drained soils on mountains and hills. They formed in organic material over thin mineral horizons over bedrock. Typically, these soils have a 4 inch thick organic mat of peat and mucky peat over

a 3 inch thick muck layer. Dark bluish gray channery silt loam is from 3 to 5 inches and micaceous. Schist bedrock is at 5 inches. Slopes range from 3 to 80 percent.

931D Mundalite-Rawsonville complex, 15 to 35 percent slopes, rocky, very bouldery. The Mundalite, rocky, very bouldery component makes up 45 percent of the map unit. Slopes are 15 to 35 percent. This component is on hillsides or mountainsides. The parent material consists of loamy lodgement till derived from gneiss. Depth to a root restrictive layer, densic material, is 25 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 36 inches during March, April. Organic matter content in the surface horizon is about 60 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

The Rawsonville, rocky, very bouldery component makes up 30 percent of the map unit. Slopes are 15 to 35 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 85 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

931F Mundalite-Rawsonville complex, 35 to 60 percent slopes, rocky, very bouldery. The Mundalite, rocky, very bouldery component makes up 45 percent of the map unit. Slopes are 35 to 60 percent. This component is on hillsides or mountainsides. The parent material consists of loamy lodgement till derived from gneiss. Depth to a root restrictive layer, densic material, is 25 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 36 inches during March, April. Organic matter content in the surface horizon is about 60 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

The Rawsonville, rocky, very bouldery component makes up 30 percent of the map unit. Slopes are 35 to 60 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 85 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

932D Mundalite-Ampersand complex, 15 to 35 percent slopes, very bouldery. The Mundalite, very bouldery component makes up 45 percent of the map unit. Slopes are 15 to 35 percent. This component is on hillsides or mountainsides. The parent material consists of loamy lodgement till derived from gneiss. Depth to a root restrictive layer, densic material, is 25 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 36 inches during March, April. Organic matter content in the surface horizon is about 60 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

The Ampersand, very bouldery component makes up 30 percent of the map unit. Slopes are 15 to 35 percent. This component is on hillsides or mountainsides. The parent material consists of loamy lodgment till derived from gneiss. Depth to a root restrictive layer, densic material, is 20 to 40 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 13 inches during January, February, March, April, May, September, October, November, December. Organic matter content in the surface horizon is about 80 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

934C Ampersand-Wilmington complex, 0 to 15 percent slopes, very bouldery. The Ampersand, very bouldery component makes up 45 percent of the map unit. Slopes are 0 to 15 percent. This component is on hillsides or mountainsides. The parent material consists of loamy lodgment till derived from gneiss. Depth to a root restrictive layer, densic material, is 20 to 40 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 13 inches during January, February, March, April, May, September, October, November, December. Organic matter content in the surface horizon is about 80 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

The Wilmington, very bouldery component makes up 30 percent of the map unit. Slopes are 0 to 10 percent. This component is on hillsides or mountainsides. The parent material consists of loamy lodgement till derived from gneiss. Depth to a root restrictive layer, densic material, is 12 to 28 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, September, October, November, and December. Organic matter content in the surface horizon is about 80 percent. Nonirrigated land capability classification is 6s. This soil meets hydric criteria.

941F Rawsonville-Hogback complex, 35 to 60 percent slopes, very rocky, very bouldery. The Hogback, very rocky, very bouldery component makes up 30 percent of the map unit. Slopes are 35 to 60 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 10 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 80 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

The Rawsonville, very rocky, very bouldery component makes up 45 percent of the map unit. Slopes are 35 to 60 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 85 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

944F Hogback-Knob Lock complex, 35 to 60 percent slopes, very rocky, very bouldery. The Hogback, very rocky, very bouldery component makes up 45 percent of the map unit. Slopes are 35 to 60 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 10 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 80 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

The Knob Lock, very rocky, very bouldery component makes up 30 percent of the map unit. Slopes are 35 to 60 percent. This component is on hillsides or mountainsides. The parent material consists of non-saturated organic material over loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 2 to 20 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 80 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

945F Hogback-Ricker complex, 35 to 60 percent slopes, very rocky. The hogback stv and stx phases consists of shallow, well drained soils that formed in loamy glacial till on bedrock controlled uplands. Stones cover 0.1 to 15 percent of the surface. Typically, these soils have a 2

inch organic mat over a 2 inch thick dark reddish brown fine sandy loam surface layer. The subsoil is dark reddish brown fine sandy loam, 13 inches thick. Schist bedrock is at a depth of 15 inches. Slopes range from 3 to 70 percent.

The Ricker series consists of very shallow or shallow to bedrock. Well drained to excessively drained soils on mountains and hills. They formed in organic material over thin mineral horizons over bedrock. Typically, these soils have a 4 inch thick organic mat of peat and mucky peat over a 3 inch thick muck layer. Dark bluish gray channery silt loam is from 3 to 5 inches and micaceous. Schist bedrock is at 5 inches. Slopes range from 3 to 80 percent.

AdB Adams loamy sand, 3 to 8 percent slopes. The Adams component makes up 85 percent of the map unit. Slopes are 3 to 8 percent. This component is on deltas. The parent material consists of sandy glaciofluvial deposits derived from gneiss. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 70 percent. Nonirrigated land capability classification is 3s. This soil does not meet hydric criteria.

AdC Adams loamy sand, 8 to 15 percent slopes. The Adams component makes up 85 percent of the map unit. Slopes are 8 to 15 percent. This component is on deltas. The parent material consists of sandy glaciofluvial deposits derived from gneiss. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 70 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.

AkB Adirondack fine sandy loam, 3 to 8 percent slopes, very bouldery. The Adirondack, very bouldery component makes up 85 percent of the map unit. Slopes are 3 to 8 percent. This component is on hillsides or mountainsides. The parent material consists of loamy lodgement till derived from gneiss. Depth to a root restrictive layer, densic material, is 20 to 38 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, May, September, October, November, December. Organic matter content in the surface horizon is about 90 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

BeC Becket fine sandy loam, 8 to 15 percent slopes, very bouldery. The Becket, very bouldery component makes up 85 percent of the map unit. Slopes are 8 to 15 percent. This component is on hillsides or mountainsides. The parent material consists of loamy lodgement till derived from gneiss. Depth to a root restrictive layer, densic material, is 20 to 36 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during March, April. Organic matter content in the surface horizon is about 70 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

BeD Becket fine sandy loam, 15 to 35 percent slopes, very bouldery. The Becket, very bouldery component makes up 85 percent of the map unit. Slopes are 15 to 35 percent. This component is on hillsides or mountainsides. The parent material consists of loamy lodgement till derived from gneiss. Depth to a root restrictive layer, densic material, is 20 to 36 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during March, April. Organic matter content in the surface horizon is about 70 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

BkC Becket-Tunbridge complex, 8 to 15 percent slopes, rocky, very bouldery. The Becket, rocky, very bouldery component makes up 45 percent of the map unit. Slopes are 8 to 15 percent. This component is on hillsides or mountainsides. The parent material consists of loamy lodgement till derived from gneiss. Depth to a root restrictive layer, densic material, is 20 to 36 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during March, April. Organic matter content in the surface horizon is about 70 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

The Tunbridge, rocky, very bouldery component makes up 30 percent of the map unit. Slopes are 8 to 15 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

BkD Becket-Tunbridge complex, 15 to 35 percent slopes, rocky, very bouldery. The Becket, rocky, very bouldery component makes up 45 percent of the map unit. Slopes are 15 to 35 percent. This component is on hillsides or mountainsides. The parent material consists of

loamy lodgement till derived from gneiss. Depth to a root restrictive layer, densic material, is 20 to 36 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during March, April. Organic matter content in the surface horizon is about 70 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

The Tunbridge, rocky, very bouldery component makes up 30 percent of the map unit. Slopes are 15 to 35 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

BvA Burnt Vly peat, 0 to 1 percent slopes. The Burnt Vly component makes up 85 percent of the map unit. Slopes are 0 to 1 percent. This component is on bogs. The parent material consists of organic material over sandy glaciofluvial deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, September, October, November, December. Organic matter content in the surface horizon is about 80 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria.

CwA Croghan fine sand, 0 to 3 percent slopes. The Croghan component makes up 85 percent of the map unit. Slopes are 0 to 3 percent. This component is on deltas. The parent material consists of sandy glaciolacustrine deposits derived from gneiss. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 23 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

HrF Hogback-Knob Lock complex, 35 to 60 percent slopes, very rocky, very bouldery. The Hogback, very rocky, very bouldery component makes up 45 percent of the map unit. Slopes are 35 to 60 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 10

to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 80 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

The Knob Lock, very rocky, very bouldery component makes up 30 percent of the map unit. Slopes are 35 to 60 percent. This component is on hillsides or mountainsides. The parent material consists of non-saturated organic material over loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 2 to 20 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 80 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

Lyf Lyman-Knob Lock complex, 35 to 60 percent slopes, very rocky, very bouldery. The Lyman, very rocky, very bouldery component makes up 45 percent of the map unit. Slopes are 35 to 60 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 10 to 20 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

The Knob Lock, very rocky, very bouldery component makes up 30 percent of the map unit. Slopes are 35 to 60 percent. This component is on hillsides or mountainsides. Depth to a root restrictive layer, bedrock (lithic), is 2 to 26 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 70 percent. Nonirrigated land capability classification is 7s.

MkB Monadnock fine sandy loam, 3 to 8 percent slopes, very bouldery. The Monadnock, very bouldery component makes up 85 percent of the map unit. Slopes are 3 to 8 percent. This component is on hillsides or mountainsides. The parent material consists of loamy ablation till over sandy ablation till derived from gneiss. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth

of 72 inches. Organic matter content in the surface horizon is about 70 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

MkC Monadnock fine sandy loam, 8 to 15 percent slopes, very bouldery. The Monadnock, very bouldery component makes up 85 percent of the map unit. Slopes are 8 to 15 percent. This component is on hillsides or mountainsides. The parent material consists of loamy ablation till over sandy ablation till derived from gneiss. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 70 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

MnC Monadnock-Tunbridge complex, 8 to 15 percent slopes, rocky, very bouldery. The Monadnock, rocky, very bouldery component makes up 45 percent of the map unit. Slopes are 8 to 15 percent. This component is on hillsides or mountainsides. The parent material consists of loamy ablation till over sandy ablation till derived from gneiss. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 70 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

The Tunbridge, rocky, very bouldery component makes up 30 percent of the map unit. Slopes are 8 to 15 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

MnF Monadnock-Tunbridge complex, 35 to 60 percent slopes, rocky, very bouldery. The Monadnock, rocky, very bouldery component makes up 45 percent of the map unit. Slopes are 35 to 60 percent. This component is on hillsides or mountainsides. The parent material consists of loamy ablation till over sandy ablation till derived from gneiss. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water

saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 70 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

The Tunbridge, rocky, very bouldery component makes up 30 percent of the map unit. Slopes are 35 to 60 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

NaA Naumburg loamy fine sand, 0 to 3 percent slopes. The Naumburg component makes up 85 percent of the map unit. Slopes are 0 to 3 percent. This component is on deltas. The parent material consists of sandy glaciolacustrine deposits derived from gneiss. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 7 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 60 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria.

PkA Pleasant Lake peat, 0 to 2 percent slopes. The Pleasant Lake component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on bogs. The parent material consists of organic material. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, November, and December. Organic matter content in the surface horizon is about 80 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria.

PoA Podunk very fine sandy loam, 0 to 3 percent slopes. The Podunk component makes up 85 percent of the map unit. Slopes are 0 to 3 percent. This component is on flood plains. The parent material consists of loamy alluvium derived from gneiss. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria

RaD Rawsonville-Hogback complex, 15 to 35 percent slopes, very rocky, very bouldery.
The Hogback, very rocky, very bouldery component makes up 30 percent of the map unit. Slopes are 15 to 35 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 10 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 80 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

The Rawsonville, very rocky, very bouldery component makes up 45 percent of the map unit. Slopes are 15 to 35 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 85 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

RpF Rock outcrop-Knob Lock-Lyman complex, 35 to 60 percent slopes, very bouldery.
Generated brief soil descriptions are created for major soil components. The Rock outcrop is a miscellaneous area.

The Lyman, very rocky, very bouldery component makes up 20 percent of the map unit. Slopes are 35 to 60 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 10 to 20 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

The Knob Lock, very rocky, very bouldery component makes up 30 percent of the map unit. Slopes are 35 to 60 percent. This component is on hillsides or mountainsides. Depth to a root restrictive layer, bedrock (lithic), is 2 to 26 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 70 percent. Nonirrigated land capability classification is 7s.

RyA Rumney-Burnt Vly complex, 0 to 3 percent slopes. The Burnt Vly component makes up 30 percent of the map unit. Slopes are 0 to 1 percent. This component is on flood plains. The parent material consists of organic material over sandy glaciofluvial deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, September, October, November, December. Organic matter content in the surface horizon is about 80 percent. Nonirrigated land capability classification is 5w. This soil does not meet hydric criteria.

The Rumney component makes up 45 percent of the map unit. Slopes are 0 to 3 percent. This component is on flood plains. The parent material consists of loamy alluvium derived from gneiss. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, May, November, and December. Organic matter content in the surface horizon is about 8 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria.

SrC Skerry loam, 8 to 15 percent slopes, very bouldery. The Skerry, very bouldery component makes up 85 percent of the map unit. Slopes are 8 to 15 percent. This component is on hillsides or mountainsides. The parent material consists of loamy lodgement till derived from gneiss. Depth to a root restrictive layer, densic material, is 20 to 38 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 22 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

TaA Tahawus peat, 0 to 5 percent slopes, very bouldery. The Tahawus, very bouldery component makes up 85 percent of the map unit. Slopes are 0 to 5 percent. This component is on till plains. The parent material consists of sandy till derived from gneiss. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May,

November, December. Organic matter content in the surface horizon is about 80 percent. Nonirrigated land capability classification is 6s. This soil meets hydric criteria.

TuD Tunbridge-Lyman complex, 15 to 35 percent slopes, very rocky, very bouldery. The Tunbridge, very rocky, very bouldery component makes up 45 percent of the map unit. Slopes are 15 to 35 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

The Lyman, very rocky, very bouldery component makes up 30 percent of the map unit. Slopes are 15 to 35 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 10 to 20 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

TuF Tunbridge-Lyman complex, 35 to 60 percent slopes, very rocky, very bouldery. The Tunbridge, very rocky, very bouldery component makes up 45 percent of the map unit. Slopes are 35 to 60 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

The Lyman, very rocky, very bouldery component makes up 30 percent of the map unit. Slopes are 35 to 60 percent. This component is on hillsides or mountainsides. The parent material consists of loamy till derived from gneiss. Depth to a root restrictive layer, bedrock (lithic), is 10 to 20 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

W Water

APPENDIX F

DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT (MAY 22, 2013) COMPARISON (REDLINE SHOWING CHANGES FROM DSEIS TO FSEIS)

COVER SHEET
and
NOTICE OF COMPLETION
of
~~DRAFT~~FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT

PROJECT TITLE:

2013 Amendments to the Adirondack Park State Land Master Plan involving the Classification and Reclassification of State Lands in the Adirondack Park, which include the following:

- Essex Chain Lakes Tract
- Indian River Tract
- OK Slip Falls Tract
- Open Space Conservancy (OSC) Tract
- Hudson Gorge Primitive Area
- Blue Mountain Wild Forest (portion)
- Vanderwhacker Mountain Wild Forest (portion)

NAME OF LEAD AGENCY AND PREPARER OF ~~DSEIS~~FSEIS:

NYS Adirondack Park Agency
Post Office Box 99
Ray Brook, NY 12977

PROJECT LOCATION:

The classification proposals involve lands in the Town of Indian Lake, Hamilton County, and Towns of Minerva and Newcomb, Essex County.

PROPOSED ACTION:

Amendments to the Adirondack Park State Land Master Plan (APSLMP) involving the classification of four (4) recently acquired State land parcels ~~totaling~~of approximately ~~21,185~~22,136 acres and ~~three (3~~two (2) State land reclassification proposals ranging from an estimated 19,~~483~~868 to ~~24,183~~19,943 acres. Total acreage involved in the action covered by this Final Supplemental Environmental Impact Statement (FSEIS) ranges from approximately ~~40,668~~42, 044 to ~~45,368~~42,314 acres. The proposed action involves

only the classification or reclassification of State lands according to the provisions of the APSLMP.

AGENCY CONTACT FOR INFORMATION, COPIES OF ~~DSEIS~~FSEIS, OR WRITTEN COMMENTS:

~~James E. Connolly, Deputy~~Executive Director~~, Planning~~
Adirondack Park Agency
Post Office Box 99
1133 State Route 86
Ray Brook, NY 12977
Phone: (518) 891-4050
Fax: (518) 891-3938
Email: apa_slmp@gw.dec.state.ny.us

DATE OF ACCEPTANCE OF ~~DSEIS~~FSEIS BY LEAD AGENCY: ~~May 10~~December 13, 2013

~~**DATES OF**~~

PUBLIC ~~HEARING~~HEARINGS ON THE PROPOSED AMENDMENTS TO APSLMP WERE HELD AT THE FOLLOWING LOCATIONS AND DATES:
~~(UPDATED 5/31/13):~~

June 12, 2013
6:00 pm
Adirondack Park Agency
1133 NYS Route 86
Ray Brook

June 17, 2013
1:00 pm
Minerva Central School
1466 County Route 29
Olmstedville

June 17, 2013
7:00 pm
Newcomb Central School
5535 NYS Route 28N
Newcomb

June 19, 2013
6:00 pm
Downtown Conference Center
Pace University
163 William Street (18th floor)
Between Beekman and Ann Streets
NYC

June 25, 2013
6:00 pm
Indian Lake Central School
6345 NYS Route 30
Indian Lake

July 1, 2013
7:00 pm
The Harley School
1981 Clover Street
Rochester

July 2, 2013
1:00 pm
NYS DEC Offices
625 Broadway
Albany

July 2, 2013
7:00 pm
Warren County Offices
1340 NY State Route 9
Lake George

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EXECUTIVE SUMMARY

The New York State Adirondack Park Agency (APA or Agency) has proposed a series of alternatives for amending the Adirondack Park State Land Master Plan (APSLMP) involving the classification of certain lands recently acquired by the State of New York and the reclassification of nearby State Forest Preserve. The lands subject to these classification actions are located in the Hamilton County Town of Indian Lake, and the Essex County Towns of Minerva and Newcomb.

The area subject to this classification action (the "subject area") consists of the recently acquired Essex Chain Lakes Tract (~~17,320~~18,230 acres), Indian River Tract (~~925~~923 acres), OK Slip Falls Tract (2,~~780~~823 acres), and OSC Tract (160 acres), as well as certain Forest Preserve lands adjacent to these tracts that are being considered for potential reclassification. The lands considered for reclassification are located within the existing Vanderwhacker Mountain Wild Forest, the Blue Mountain Wild Forest and the Hudson Gorge Primitive Area.

The APSLMP and the Final Programmatic Environmental Impact Statement contain standards and guidelines for amending the APSLMP. Agency staff have prepared this ~~Draft~~Final Supplemental Environmental Impact Statement (~~DSEIS~~FSEIS) in consultation with the Department of Environmental Conservation (Department or DEC~~),~~). A Draft Supplemental Environmental Impact Statement (DSEIS) was published on May 22, 2013 and ~~will seek authorization from~~ the Agency authorized the staff to hold combined public hearings on the DSEIS and the proposed amendments to the APSLMP. ~~Hearings are proposed to be~~Eight hearings were held over the course of two months, both inside and outside the Park.~~–~~

The public ~~will have~~had an opportunity to ~~comment~~ provide oral comments at the public hearings and to submit written comments throughout the comment period. ~~–~~Approximately 650 people attended these hearings and 250 spoke publicly at the hearings. The Agency received 3,749 letters and emails and 5 petitions (2,380 signatures) during the public comment period which ended on July 19, 2013. Appendix A provides the Response to Public Comment on the Draft Supplemental Environmental Impact Statement. During the public comment period there was strong support for resource protection, community connectivity and recreational access. The preferred alternative addresses these public interests.

Staff ~~will incorporate~~have incorporated all comments on the proposed alternatives ~~into a Final Supplemental Impact Environmental Statement (FSEIS)~~ specific to the classification and reclassification actions into this FSEIS. The FSEIS ~~will~~ also ~~include~~includes a written response to public comments and ~~will present~~presents final alternatives and a staff recommendation for a ~~preferred alternative. The FSEIS will be brought to the Agency Board after the close of the public comment period.~~Preferred Alternative. The Agency Board will ~~then~~ decide (a) whether to accept the FSEIS and (b) whether to recommend the APSLMP amendments to the Governor.~~—~~ If the APSLMP amendments are authorized by the Agency, a Board resolution recommending an alternative ~~is~~will be forwarded to the Governor for approval.

The action only involves the classification or reclassification of State lands according to the provisions of the APSLMP. The action does not authorize the development of new uses, structures or improvements without prior Unit Management Plan (UMP) review and SEQRA assessment by the Department and the Agency.

The APSLMP lists seven classifications: Wilderness, Primitive, Canoe, Wild Forest, State Administrative, Historic, and Intensive Use. which were considered in the process of developing this FSEIS. The Adirondack Park Agency Act requires the Agency to classify the State lands in the Park according to "their characteristics and capacity to withstand use." [1] Characteristics that determine a land's capacity to withstand use include physical, biological and, social and intangible characteristics.

The APSLMP states that the protection and preservation of the natural resources of the state lands within the Park must be paramount. Human use and enjoyment of those lands should be permitted and encouraged, so long as the resources in their physical and biological context, as well as their social or psychological aspects, are not degraded.

The APSLMP prescribes types of permissible uses in each category but it does not specifically control the levels of use beyond providing general management guidelines. Careful application of guidelines in the APSLMP, through this classification process and as applied through the Unit Management Planning (UMP) process, should avoid significant adverse environmental impacts caused by types or levels of use. Careful consideration must be given to the levels of recreational use upon the natural resources of these lands.

The area subject to this classification action (the "subject area") consists of the recently acquired Essex Chain Lakes Tract, Indian River Tract, OK Slip Falls Tract, and OSC Tract, as well as certain Forest Preserve lands adjacent to these tracts which are being considered for potential reclassification. The lands considered for reclassification in the DSEIS are located within the existing Vanderwhacker Mountain Wild Forest (Reclassification Area 1), the Blue Mountain Wild Forest (Reclassification Area 2) and the reclassification of the Hudson Gorge Primitive Area (Reclassification Area 3) to Wilderness.

Eight classification alternatives have beenwere identified. in the DSEIS. The classification alternatives includeincluded Wilderness, Primitive, Canoe, Wild Forest, and State Administrative in various configurations.

It should be understoodwas emphasized that the alternatives and their boundaries, as described in the DSEIS, arewere not final. Final proposed boundaries will beare described in a preferred alternativethe Preferred Alternative and staff recommendation, which will be included as part of the Final Supplemental EIS for submission; this Preferred Alternative was developed by APA staff to the APA Board afterfollowing the public hearing and comment period.

[1] Former Executive Law § 807, added L. 1971 c. 706, section 1 renumbered 816 and amended L. 1973, c. 348, section 1., as quoted in APSLMP at 13.

Common to all alternatives presented ~~is~~in the DSEIS was the reclassification of the majority of the existing Hudson Gorge Primitive Area to Wilderness and the classification of OK Slip Falls Tract and a portion, or the entire, Indian River Tract to Wilderness. The ~~majority of~~significant differences among the classification alternatives ~~focus~~focused on the lands in the Essex Chain Lakes and Indian River Tracts and the neighboring Blue Mountain Wild Forest and Vanderwhacker Mountain Wild Forest Areas.

~~The alternatives are presented in the order the classification categories are listed in the APSLMP.~~

~~ALTERNATIVE 1A: NEW STATE LANDS CLASSIFIED PRIMARILY AS~~Through deliberation of the eight alternatives, consideration of public commentary, and in consultation with DEC, Agency staff developed a ninth, Preferred Alternative 2A that is presented in Map 7A. The Preferred Alternative has a core Primitive Area that allows for resource protection and non-motorized use of the Essex Chain Lakes. The final southern boundary will be determined through the selection of a Wild Forest corridor following additional resource and regulatory review. The Preferred Alternative combines the important attributes of resource protection, recreational access and community connectivity. The alternative opens the door for future Unit Management Planning actions by DEC and ensures that all New Yorkers will share in the opportunities afforded through this historic acquisition and classification.

The following descriptions provide an overview of the alternatives, including a more detailed description of the Preferred Alternative.

ALTERNATIVE 1A: NEW STATE LANDS CLASSIFIED PRIMARILY A WILDERNESS, WITH WILD FOREST NORTH OF ESSEX CHAIN LAKES – Map 5

This alternative would create a large Hudson Gorge Wilderness Area comprised of contiguous, State-owned lands on both sides of the Hudson River. As in most of the alternatives presented, the corridor of the Hudson River would offer a wilderness rafting, paddling and camping opportunity, free of significant man-made structures and motorized uses for nearly 7.6 miles. The Essex Chain Lakes, although they would occupy a relatively small portion of this proposed Hudson ~~River~~Gorge Wilderness Area, would also offer a unique wilderness paddling and camping opportunity. The lake experience would not be as rigorous or challenging as the Hudson River trip, but still remote and wild.

The network of private, lease club roads in the newly acquired lands would be closed to motor vehicle and mountain-bike use in this alternative. However, these lands would provide an opportunity for alternative forms of outdoor recreation that conform to wilderness standards, including: hiking, skiing, snowshoeing, horseback riding, and horse and wagon riding.

The Wilderness Area would not include First and Pine Lakes. The beds and waters of these lakes would be classified as Wild Forest, thus enabling commercial float plane access to continue, under DEC permit.

ALTERNATIVE 1B: NEW STATE LANDS CLASSIFIED AS WILDERNESS – Map 6

This alternative would create a larger Hudson Gorge Wilderness Area. This alternative would classify almost the entirety of the Essex Chain Lakes Tract as Wilderness (~~excepting~~except a small ~~primitive~~Primitive area to accommodate a short ROW on Ord and First Left Roads) and extend the boundary southwest to include the entire Indian River Tract and the reclassification of additional land (2,873 acres) from the Blue Mountain Wild Forest, following natural boundaries.

This Wilderness alternative would result in Wilderness fisheries guidelines being applied to three additional ponds (Mud, Clear and Corner), but the boundary would not include the beds and waters of First or Pine Lakes, thus enabling float plane access to remain.

ALTERNATIVE 2: NEW STATE LANDS CLASSIFIED PRIMARILY AS PRIMITIVE, WITH WILDERNESS CORRIDOR ALONG THE HUDSON RIVER – Map 7

Alternative 2 would establish one large Primitive Area and two Primitive Area Corridors. The proposed Essex Chain Lakes Primitive Area would be essentially permanent, not likely to become Wilderness or Canoe due to the non-conforming use of float plane landings on First and Pine Lakes. It would encompass all the Essex Chain Lakes and most lands immediately surrounding them. Two lengths of roadways would be classified as Primitive in order to allow for their use by adjacent landowners. A large Wilderness Area would be created that would include most of the Hudson Gorge Primitive Area as well as all of the OK Slip Falls and OSC Tracts. A possible variation of this alternative would establish two Primitive Areas with some Wild Forest lands – primarily a corridor – between them.

The majority of the network of private, lease-club roads in the newly acquired lands would remain closed to public motor vehicle use in this alternative, to be abandoned or converted to trails. Mountain bikes would be allowed on State ~~Administrative Roads,~~Truck Trails designated in an approved UMP. In this alternative, commercial float plane operators would continue, under permit from DEC, to provide float plane access for the public to First Lake and Pine Lake.

ALTERNATIVE 2A: NEW STATE LANDS CLASSIFIED PRIMARILY AS PRIMITIVE, WITH WILD FOREST AND WILDERNESS AREAS ALONG THE HUDSON RIVER AND WILD FOREST BUFFERS BETWEEN THE PRIMITIVE AND WILDERNESS AREAS. (PREERRED ALTERNATIVE) - MAP 7A (Variation of Map 7) – Preferred Alternative

The staff recommendation for a Preferred Alternative is a variation of Alternative 2. The boundaries were modified from the DSEIS and the area of reclassification was reduced based on information obtained from additional research and public comment. The Preferred Alternative recommends classification of a portion of the Essex Chain Lakes Tract as Primitive, the northern portion between the Boots to Cornell Road and the Hudson River north of the Iron (Polaris) Bridge as Wild Forest and provides a buffer between the Wilderness and Primitive Areas as Wild Forest. The Indian River Tract would be split among Wilderness and Wild Forest classifications. As in all alternatives, the OK Slip Tract would be classified Wilderness along with the reclassification of the Hudson Gorge Primitive Area. A portion of the Blue Mountain Wild

Forest would be reclassified to Primitive. None of the Vanderwhacker Mountain Wild Forest would be reclassified in the Preferred Alternative.

One-acre State Administrative Areas would be established where the Towns have an easement to extract gravel (only for the purpose of road, trail and infrastructure maintenance on this tract, with a permit from the NYSDEC, "subject to all laws, rules and regulations in effect at the time of issuance of the DEC permit".[2])

The majority of the network of private, lease-club roads in the newly acquired lands would remain closed to public motor vehicle use in this alternative, to be abandoned or converted to trails. Mountain bikes would be allowed on State Truck Trails designated in an approved UMP.

ALTERNATIVE 3A: NEW STATE LANDS CLASSIFIED AS CANOE WITH WILD FOREST TO THE NORTH OF ESSEX CHAIN LAKES AND WILDERNESS CORRIDOR ALONG THE HUDSON RIVER– Map 8

This alternative would create a new Canoe Area– only the second Canoe Area in the Adirondack Park. Primarily, it would feature the Essex Chain Lakes, excluding the bed and waters of First Lake where landings and take-offs by float planes would be expected to occur under DEC permit. The Essex Chain Lakes are interconnected or within portaging distance of each other and provide an opportunity for a six- to seven- mile canoe route.

This alternative would also feature a Wilderness Area that would include the Hudson Gorge Primitive Area, OK Slip Falls Tract and OSC Tract. Portions of newly acquired lands would be classified Wild Forest. This alternative includes two road sections which would remain open to adjacent landowners and therefore need to be designated as Primitive. One-~~-~~acre State Administrative Areas would be established where the Towns have an easement to extract gravel (only for the purpose of road, trail and infrastructure maintenance on this tract, with a permit from the NYSDEC, "subject to all laws, rules and regulations in effect at the time of issuance of the DEC permit".[3])

The majority of the network of private, lease-club roads in the newly acquired lands would remain closed to public motor vehicle use in this alternative, to be abandoned or converted to trails. Mountain bikes would be allowed on State ~~Administrative Roads,~~Truck Trails designated in an approved UMP.

[2] Grant of Conservation Easement Pursuant to ECL Article 49 Over Portions of the Chain Lakes Tract, from The Nature Conservancy to the Town of Minerva and Town of Newcomb, dated December 13, 2012 and recorded in Essex County, NY December 20, 2012 at B. 1718, P.264, Section 3(c) at page 3.

~~3~~[3] Grant of Conservation Easement Pursuant to ECL Article 49 Over Portions of the Chain Lakes Tract, from The Nature Conservancy to the Town of Minerva and Town of Newcomb, dated December 13, 2012 and recorded in Essex County, NY December 20, 2012 at B. 1718, P.264, Section 3(c) at page 3.

ALTERNATIVE 3B: NEW STATE LANDS CLASSIFIED PRIMARILY AS CANOE WITH WILD FOREST NORTH OF ESSEX CHAIN LAKES – Map 9

Alternative 3B would create a larger Canoe ~~area~~Area (15,067 acres), extending the boundary southwest to include more of the Cedar River, the Indian River Tract and the reclassification of additional land (2,083 acres) from the Blue Mountain Wild Forest to the Canoe ~~area~~Area.

This alternative would also extend the Canoe ~~area~~Area boundary further north to include a ¼ to ½ mile setback from each bank of the Hudson River in both the Essex Chain Lakes Tract and the Vanderwhacker Mountain Wild Forest. The lands to the east and west of the Canoe ~~area~~Area boundary would be classified as Wild Forest.

ALTERNATIVE 4A: NEW STATE LANDS CLASSIFIED PRIMARILY WILD FOREST WITH WILDERNESS CORRIDOR ALONG THE HUDSON RIVER – Map 10

This alternative would significantly expand Blue Mountain Wild Forest to include the Essex Chain Lakes and Pine Lake. Throughout the area of the Essex Chain Lakes, motor-boating, snowmobiling and float plane use could be allowed, subject to an approved UMP, and a much greater portion of the existing road system could be retained for various public motorized and mechanical means of travel and recreation that ~~does~~do not conform to Wilderness, Primitive or Canoe ~~Area~~area guidelines. This alternative would have the same Primitive Area Corridors as described for the Canoe Areas. This alternative includes a Wilderness Area and three State Administrative Areas.

ALTERNATIVE 4B: SAME AS 4A WITH A SPECIAL MANAGEMENT AREA FOR THE WILD FOREST – Map 11

This alternative would include a Special Management Area within the Blue Mountain Wild Forest. Recreational opportunities potentially allowable throughout Wild Forest would be limited in this Special Management Area. The Essex Chain Lakes area is fairly remote and pristine, and some of its resources are sensitive enough – particularly its waters and fisheries – to call for special management guidelines that would prohibit or limit certain uses. Examples could include prohibiting motorized access on the lakes or limiting motorized access on some roads to big game season only and allowing camping at designated sites only.

Some prohibitions or limits considered critical could be effected or partially effected via this classification action. ~~If this alternative is identified as the preferred alternative, specific~~ Specific protective management guidelines would be developed through the public comment and hearing process and included in the Final Supplemental Environmental Impact Statement. These guidelines would then be included in prescriptive language for the area description included in the APSLMP. This protective management approach would then need to be implemented through the unit management planning process for the area and the promulgation of special regulations.

ALTERNATIVE 5: NO ACTION

The No Action Alternative is not being considered for the new acquisitions because the APSLMP requires classification of newly acquired lands as promptly as possible following acquisition. The No Action Alternative for the lands presently in the Blue Mountain Wild Forest, the Vanderwhacker Mountain Wild Forest, and the Hudson ~~River~~ Gorge Primitive Area is to leave those lands classified in their current classifications, as described in the current APSLMP.

Below is a table showing the classification acreage of each alternative discussed in this ~~DSEIS~~FSEIS:

~~-~~ Alternative	Wilderness	Primitive	Canoe	Wild Forest	State Admin
	Total Acres* *(Acres of New Classification/ Acres of Reclassification)*				
1A	**38,563** *(15,850/22,713)*	**17** *(17/0)*	**0** *(0/0)*	**7,032** *(5,317/0)*	**3** *(3/0)*
1B	**45,347** *(21,164/24,183)*	**17** *(17/0)*	**0** *(0/0)*	**251** *(6/0)*	**0** *(0/0)*
2	**32,234** *(10,800/21,434)*	**11,743** *(9,658/2,085)*	**0** *(0/0)*	**1,637** *(728/0)*	**1** *(1/0)*
2A(1)	**23573** *(6,166,/17407)*	**10592** *(8,101/2,491)*	**0** *(0/0)*	***8,101*** *(*	*###*
2A(2)	*###`*	*###*	**0** *(0/0)*	*###*	*###*
3A	**31,939** *(9,226/22,713)*	**17** *(17/0)*	**6,624** *(6,624/0)*	**7,032** *(5,317/0)*	**3** *(3/0)*
3B	**18,829** *(3,074/15,755)*	**15** *(15/0)*	**15,067** *(11,338/3,728)*	**11,702** *(6,757/0)*	**2** *(2/0)*
4A	**33,942** *(11,229/22,713)*	**17** *(17/0)*	**0** *(0/0)*	**11,653** *(9,938/0)*	**3** *(3/0)*
4B	**33,942** *(11,229/22,713)*	**17** *(17/0)*	**0** *(0/0)*	**11,653** *(9,938/0)*	**3** *(3/0)*

* Acreages are approximate

Through an extensive public process that began with Agency Board authorization to release the DSEIS in May of 2013, followed by eight public hearings through the summer, both in and outside the Park, and the receipt of more than 3700 public comments, and in consultation with DEC, staff developed a Preferred Alternative. The Preferred Alternative offers resources protection while allowing for recreational access and community connectivity.

Summary of Proposed Action

The New York State Adirondack Park Agency (APA or Agency) has proposed ~~a series of alternatives for amending~~an amendment to the Adirondack Park State Land Master Plan (APSLMP) involving the classification of certain lands recently acquired by the State of New York and the reclassification of nearby State Forest Preserve. The lands subject to these classification actions are located in the Hamilton County Town of Indian Lake and the Essex County Towns of Minerva and Newcomb.

On May 10, 2013, the Agency accepted a Draft Supplemental Environmental Impact Statement (DSEIS). The DSEIS contained seven classification alternatives which demonstrated a range of alternatives that could be considered.

The Agency conducted eight public hearings on the classification action between June 12 and July 2, 2013. The public had an opportunity to provide oral comments at the public hearings and to submit written comments throughout the comment period. Approximately 650 people attended these hearings and 250 spoke publicly at the hearings. The Agency received 3,749 letters and emails and 5 petitions (2,380 signatures) during the public comment period which ended on July 19, 2013. Appendix A provides the Response to Public Comment on the Draft Supplemental Environmental Impact Statement. During the public comment period there was strong support for resource protection, community connectivity and recreational access. The preferred alternative addresses these public interests.

Agency staff have reviewed information on the physical and biological resources, together with information provided during the public comment process. Based on this information, the Preferred Alternative recommends classification of a large portion of the Essex Chain Lakes Tract as Primitive, the northern portion along the Hudson River north of the Iron (Polaris) Bridge as Wild Forest and provides a buffer between the Wilderness and Primitive areas as Wild Forest. The Indian River Tract would be split among Wild forest and Primitive classifications. As in all alternatives, the OK Slip Tract would be classified Wilderness along with the reclassification of the Hudson Gorge Primitive Area. A portion of the Blue Mountain Wild Forest area would be reclassified to Primitive. A discussion of the Preferred Alternative can be found starting on Page 70 of the FSEIS. The Agency must then decide (a) whether to accept the FSEIS and (b) whether to recommend the APSLMP amendments to the Governor. If the APSLMP amendments are approved by the Agency, the resolution approving them will be forwarded to the Governor for approval.

Background

In 1885, the New York State legislature established the Forest Preserve, stating that the Preserve "shall be forever kept as wild forest lands." In 1892 the Adirondack Park (Park) was established through an act of the legislature, which delineated where State acquisition of private inholdings was to be concentrated. At the Constitutional Convention of 1894, Article VII of the New York

State Constitution (now Article XIV) was adopted and soon after was approved by the people of the State. It read:

> *"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, nor shall the timber thereon be sold, removed or destroyed."*

In 1971, the Adirondack Park Agency was created by the legislature with essentially two mandates. The Agency was directed to create a State Land Master Plan to classify and provide guidelines for the management and use of State lands within the Park, and a Private Land Use and Development Plan designed to control and channel development on non-State lands to minimize the adverse impacts upon the natural resource quality of the Park. The APSLMP was developed by the Agency and adopted by Governor Rockefeller in 1972. The Private Land Use and Development Plan was approved by the Legislature in 1973. Through these plans, the Agency performs long-range planning for the Park. The Department of Environmental Conservation (DEC) is responsible for the care, custody, and management of the State land in the Park; in carrying out this responsibility DEC drafts the Unit Management Plans (UMPs) for managing publically owned lands within the Park consistent with the APSLMP. As of 2013, there are approximately 2,547,265 acres of Forest Preserve, currently classified as follows:

Classification	Acres
Wilderness	1,138,423
Primitive	45,756
Canoe	17,646
Wild Forest	1,293,721
Intensive Use	22,705
Historic	531
State Administrative	2,067
Pending	26,415

In 2007, the Nature Conservancy purchased 161,000 acres of land from Finch, Pruyn & Company (Figure 1). These lands, called by some the "jewel in the Adirondack crown," are remarkable for their ecological diversity, astounding beauty and the recreational opportunities they may provide ~~for drawing~~to residents and visitors ~~to the heart of the Adirondack Park.~~ alike.

Following the 2007 purchase, The Nature Conservancy worked with the DEC, elected officials and other stakeholders regarding the future of these lands. The Nature Conservancy conducted an assessment of the land, which includes timber productivity, ecological value and recreation value, and developed a plan for the 161,000 acres. The plan included 89,036 acres to continue as working commercial forests, protected by a conservation easement; 65,000 acres to be acquired

by the State of New York from The Nature Conservancy as new public lands; and 1,170 acres set aside for community purposes in Newcomb, Long Lake and Indian Lake.

In 2011, conservation easements were acquired by New York State on the 89,036 acres. The easements allow for forest products to be harvested from these lands, while providing some opportunities for public recreation. In 2012 New York State announced a plan for the fee acquisition of the remaining 65,000 acres of land, to be included in the Adirondack Forest Preserve, beginning in 2012 and continuing over a five year period. Each annual fee acquisition is a separate, distinct action, independent of other acquisitions at other locations.

Within the entire 65,000 acres of fee acquisition lands (Figure 1), there are 180 miles of rivers and streams, 175 lakes and ponds, 465 miles of undeveloped shoreline (rivers, streams, lakes, ponds), six mountains taller than 2,000 feet and countless smaller hills. There are a variety of mountains, cliffs, wilderness lakes, ponds, bogs, fens, swamps, alluvial forests, and flat and white-water rivers. Habitat exists for mammals such as moose, bobcat, and black bear and aquatic habitat for brook trout, landlocked salmon, and small and largemouth bass.

Sixty-four New York Natural Heritage Program (NYNHP) elements (rare species and natural communities) were located on these 65,000 acres during field work conducted by biologists. These elements include plant and animal species, as well as natural communities. Of these, 13 are ranked as globally significant and 37 are significant within New York State. Examples include rich graminoid fen, medium fens, Hill's pondweed, and the Pygmy Snaketail (a dragonfly).

Parcels slated for acquisition will be classified pursuant to the APSLMP after they are acquired by the State of New York. Key parcels slated for acquisition in fee over a five year time period include the Essex Chain Lakes, Boreas Ponds, portions of the Hudson Gorge, Blue Ledges and Opalescent River headwaters.

The classification action that is the subject of this ~~DSEIS~~FSEIS is the Essex Chain Lakes Tract (~~17,320~~18,230 acres), Indian River Tract (~~925~~923 acres), the OK Slip Falls Tract (2,~~780~~823 acres), and OSC Tract (160 acres). The reclassification action described within this ~~DSEIS~~FSEIS includes portions of the Hudson Gorge Primitive Area, Blue Mountain Wild Forest and Vanderwhacker Mountain Wild Forest.

Figure 1
: Map showing Finch lands purchased by The Nature Conservancy

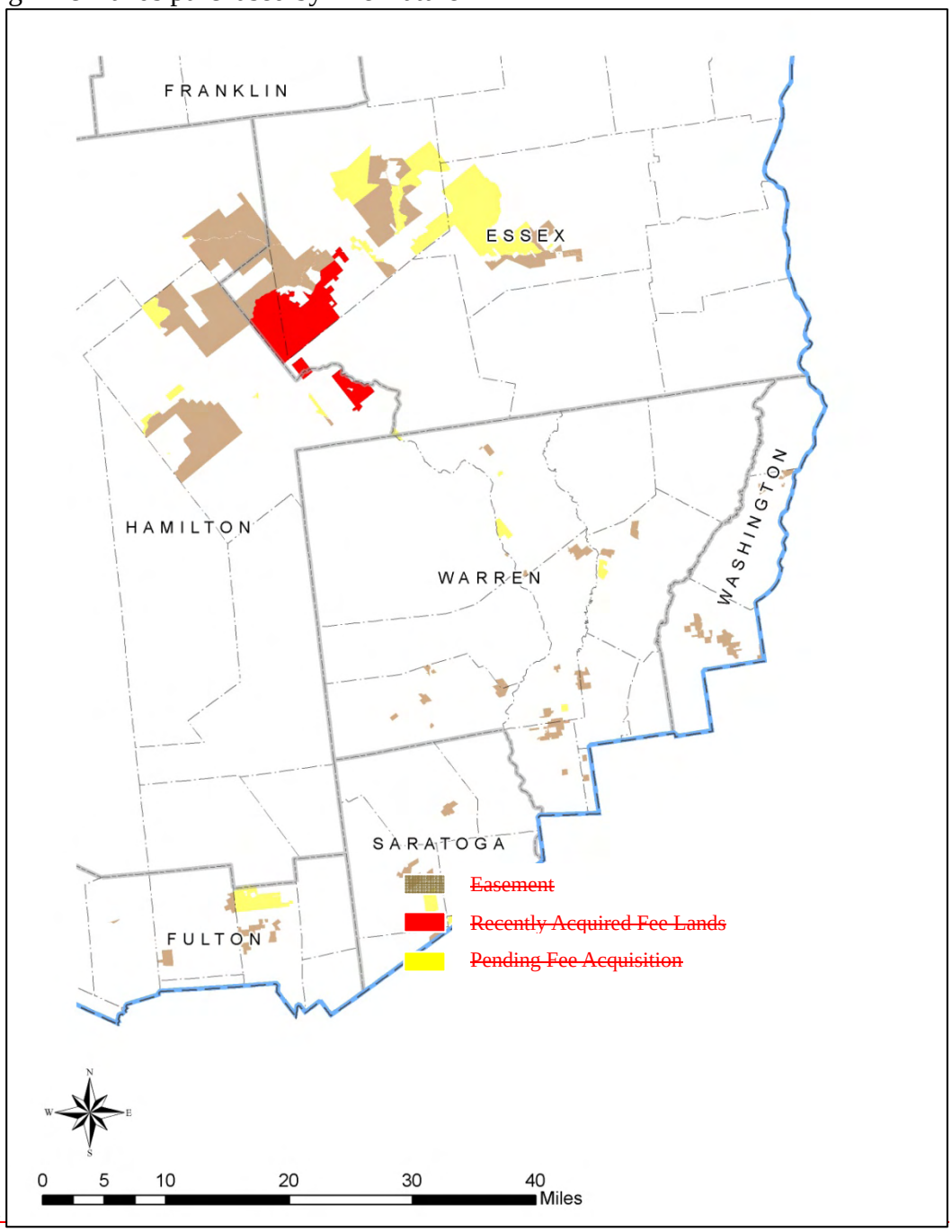
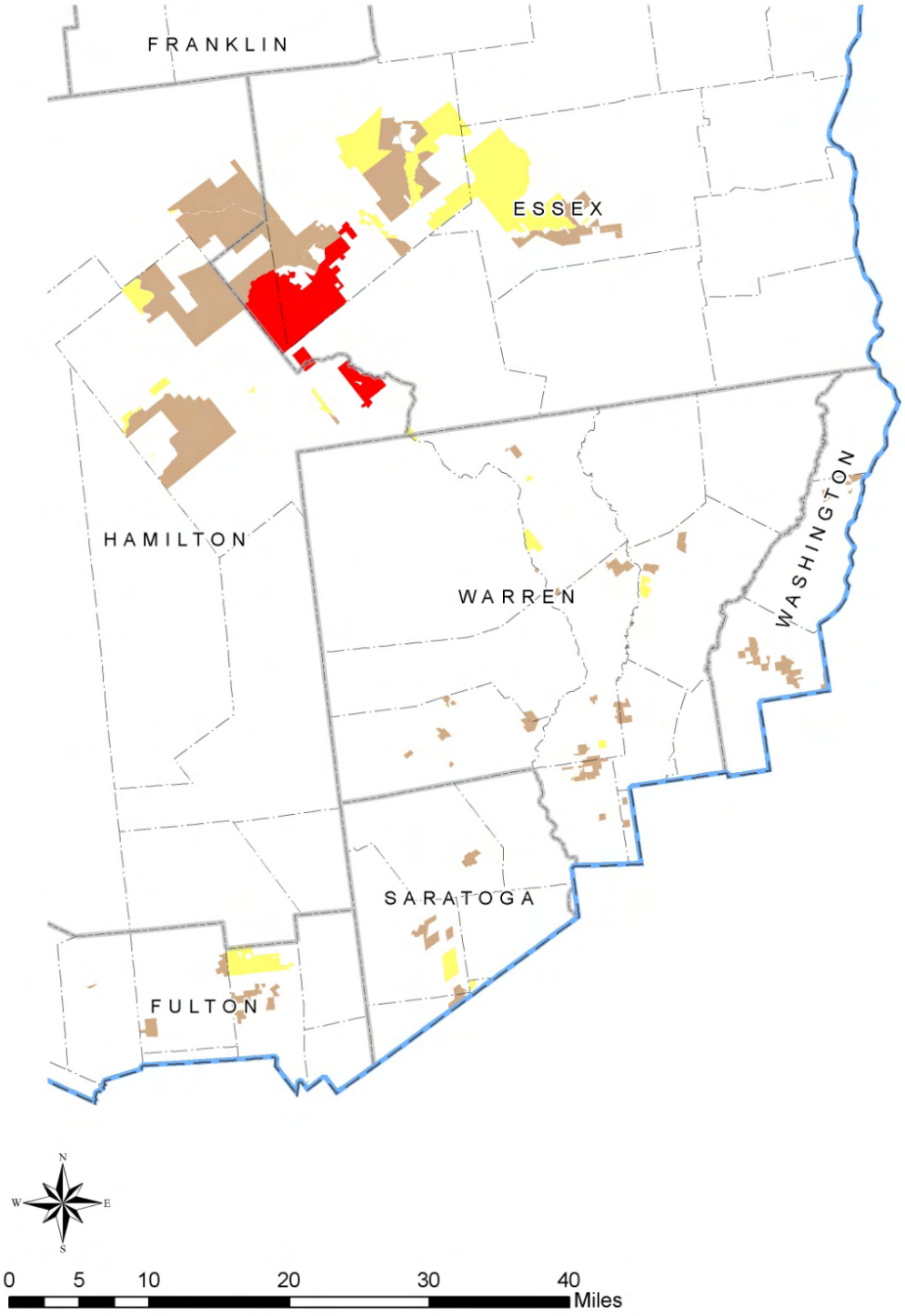


Figure 1


FRANKLIN
ESSEX
HAMILTON
WARREN
WASHINGTON
SARATOGA
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N
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S
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20
30
40
Miles

STANDARDS FOR AGENCY DECISION

The Adirondack Park State Land Master Plan (APSLMP) ~~and the Final Programmatic Environmental Impact Statement contain standards and guidelines for amending the APSLMP.~~

~~The APSLMP~~ sets forth ~~a~~ in clear terms the fundamental principles governing the classification ~~system~~considerations and the Agency's responsibilities for the long range planning for ~~Forest Preserve~~the State lands ~~in~~within the ~~Adirondack~~ Park. ~~The APSLMP states~~
In Part I, INTRODUCTION, the Master Plan sets forth the fundamental principles and states:

> If there is a unifying theme to the master plan, it is that the protection and preservation of the natural resources of the state lands within the Park must be paramount. Human use and enjoyment of those lands should be permitted and encouraged, so long as the resources in their physical and biological context~~,~~ as well as their social or psychological aspects~~,~~ are not degraded. (APSLMP at p. 1.)

The APSLMP was adopted in 1972 following the requirement of the Adirondack Park Agency Act to "classify [state lands] lands according to their characteristics and capacity to withstand use… ." (APA Act § 807.)

Part II of the Master Plan entitled, "CLASSIFICATION SYSTEM AND GUIDELINES" sets forth three "determinants" and an additional consideration.

The first determinant is "the physical characteristics of the land or water which have a direct bearing upon the capacity of the land to accept human use." After listing several characteristics, the discussion of physical characteristics concludes, "[T]hese factors highlight the essential fragility of significant portions of the state lands within the Park. These fragile areas include most lands above 2,500 feet in altitude, particularly the boreal (spruce-fir), sub-alpine and alpine zones, as well as low-lying areas such as swamps, marshes and other wetlands. In addition, rivers, streams, lakes and ponds and their environs often present special physical problems. (APSLMP at p. 13).

The second determinant is biological considerations which are related to the physical characteristics including deer wintering yards and nesting habitat of rare, threatened or endangered species. This determinant also recognizes that, "Wetland ecosystems frequently are finely balanced and incapable of absorbing material changes resulting from construction or intensive human use." (APSLMP at p. 13).

The third determinant involves "certain intangible considerations that have an inevitable impact on the character of land." These include "a sense of remoteness and degree of wildness available to users of a particular area, which may result from the size of an area, the type and density of its forest cover, the ruggedness of the terrain or merely the views over other areas of the Park obtainable from some vantage point." (APSLMP at pp. 13, 14).

The final consideration is the presence of established public uses and facilities such as highways, ski areas or campgrounds; these uses are generally viewed as inconsistent with a Wilderness or Wild Forest setting.

The APSLMP contains ~~seven~~nine classifications, seven of which are briefly described below:

Wilderness - A ~~wilderness~~Wilderness area, in contrast with those areas where man and his own works dominate the landscape, is an area where the earth and its community of life are untrammeled by man--where man himself is a visitor who does not remain. A ~~wilderness area~~Wilderness Area is further defined to mean an area of ~~state~~State land or water having a primeval character, without significant improvement or permanent human habitation, which is protected and managed so as to preserve, enhance and restore, where necessary, its natural conditions, and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least ten thousand acres of contiguous land and water or is of sufficient size and character as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological or other features of scientific, educational, scenic or historical value.

Primitive - A ~~primitive~~Primitive area is an area of land or water that is either:

- Essentially wilderness in character but, (a) contains structures, improvements, or uses that are inconsistent with wilderness, as defined, and whose removal, though a long term objective, cannot be provided for by a fixed deadline, and/or, (b) contains, or is contiguous to, private lands that are of a size and influence to prevent wilderness designation; or,
- Of a size and character not meeting wilderness standards, but where the fragility of the resource, or other factors, requires wilderness management.

Canoe - A ~~canoe~~Canoe area is an area where the watercourses or the number and proximity of lakes and ponds make possible a remote and unconfined type of water-oriented recreation in an essentially wilderness setting.

Wild Forest - A ~~wild forest~~Wild Forest area is an area where the resources permit a somewhat higher degree of human use than in wilderness, primitive or canoe areas, while retaining an essentially wild character. A ~~wild forest~~Wild Forest area is further defined as an area that frequently lacks the sense of remoteness of ~~wilderness, primitive~~Wilderness, Primitive or ~~canoe~~Canoe areas and that permits a wide variety of outdoor recreation.

Intensive Use - An ~~intensive use~~Intensive Use area is an area where the State provides facilities for intensive forms of outdoor recreation by the public. There are two types of ~~intensive use~~Intensive Use areas: campgrounds and day use areas.

Historic - Historic areas are locations of buildings, structures or sites owned by the State (other than the Adirondack Forest Preserve itself) that are significant in the history, architecture, archeology or culture of the Adirondack Park, the State or the Nation; that fall into one of the following categories:

- ~~state~~State historic sites;
- properties listed on the National Register of Historic Places;

- properties recommended for nomination by the Committee on Registers of the New York State Board For Historic Preservation; and that are of a scale, character and location appropriate for designation as an historic area under this master plan and the state has committed resources to manage such ~~areas~~as primarily for historic objectives.

State Administrative -State Administrative areas are areas where the state provides facilities for a variety of specific state purposes that are not primarily designed to accommodate visitors to the Park.

Each of these classifications contains further statements setting forth basic guidelines and specific guidelines for improvements, uses and activities. These specific guidelines should be read for a detailed understanding of the APSLMP's structure and intent. One overarching practice is clear: the Wilderness classification sets the base line upon which each following classification then adds permitted structures or activities.

In addition to the nine classifications, the APSLMP also contains guidelines for areas deserving Special Management. Classifications reflect the minimum management constraints for the lands affected. "Certain parcels of land may require special management to reflect unusual resource or public land factors." (APSLMP, at p. 49). Special Management is not a classification category but rather provides specific protective measures which are more restrictive than the classification in which the area of special concern lies. Special Management Areas are developed after the classification process is complete and specific management protections are developed during the unit management planning process.

Hierarchy of Guidelines

The Guidelines for Management and Use are found in each land use classification establish an important emphasis on Wilderness guidelines. The structure of the management guidelines begins with Wilderness restrictions, which are listed first, and adds permitted activities for each subsequent category thus implying that each is subordinate to Wilderness. Primitive and Canoe Areas are very close to Wilderness, and all three have resource considerations and values that require similarly greater protection than Wild Forest areas. For example, in Primitive areas, "All structures and improvements that conform to wilderness guidelines will be acceptable in primitive areas." (APSLMP at p. 26); the motor vehicle, road and all terrain bicycles guidelines all begin with a statement that wilderness guidelines apply and add some possibilities for administrative use of some roads " to reach and maintain existing structures and improvements." (APSLMP at p. 27). No "structures and improvements" have been located or identified in the lands subject to this classification action. Thus, it is clear that the Master Plan guidelines and the requirements of the Final Programmatic EIS, discussed under the next heading, place an emphasis on resource protection, remoteness and self-sufficiency found in the Wilderness, Primitive and Canoe classifications.

PROCEDURES UNDER THE

STATE ENVIRONMENTAL QUALITY REVIEW ACT

~~**Final Programmatic Environmental Impact Statement (1979)**~~

~~The Draft~~
This Final Supplemental Environmental Impact Statement (~~DSEIS~~FSEIS) is ~~supplemental~~a supplement to the Final Programmatic Environmental Impact Statement ~~(1979) (FPEIS), which sets forth guidelines for amending the APSLMP. Any classification or reclassification of State lands in~~ Guidelines For Amending the Adirondack Park ~~is~~State Land Master Plan (1979) (FPEIS). The proposed classifications and reclassifications of the State lands in the Essex Chain

Lakes Tract, the Indian River Tract, the OK Slip Falls Tract, the OSI parcel and the Blue Mountain Wild Forest are an amendment to the APSLMP. The FPEIS lists classification of any ~~new acquisition of a~~newly acquired parcel greater than 5,000 acres to Wilderness, Primitive or Canoe as a Type 1 action. ~~This DSEIS describes the areas under consideration, outlines several classification alternatives (including alternatives for classification~~ This FSEIS proposes classifications of over 5,000 acres as Wilderness, Primitive or Canoe~~), and analyzes the environmental impacts that may result from proposed amendments to the APSLMP. Therefore~~; therefore this action is a Type 1 action under the FPEIS.

The FPEIS ~~notes that reclassification from Wild Forest to Wilderness, Primitive or Canoe would result in added protection of natural resources, and would result in the elimination of existing motorized access or aircraft landings on lakes. It states that: "Wild Forest areas which lie adjacent to existing Wilderness, Primitive or Canoe should be reclassified to the above land classifications: a) if substantial management problems are created by the Wild Forest classification; b) if only limited facilities such as open roads or snowmobile trails exist within the Wild Forest area; c) if the level of use of existing facilities is unusually slight; d) if the Wild Forest area has unusual natural resource or open space characteristics which require the protection offered by the Wilderness, Primitive or Canoe classification; or e) the reclassification from Wild Forest is required to protect the resources or character of existing, adjacent or nearby designated Wilderness, Primitive or Canoe areas."~~repeats and reaffirms the principles guiding the classification opportunities. Like the SLMP, the FPEIS begins with a foundation of Wilderness classification noting that opportunities for outdoor activities in large unconfined spaces like the Adirondack Park are rare in New York State. The FPEIS also notes that the constitutional protection for the Forest Preserve does not guide management; further actions are necessary so that areas can be upgraded to wilderness type protection. In particular the FPEIS encourages Primitive classification for:

~~On the other hand, the FPEIS notes that reclassification of lands presently classified as Wilderness, Primitive or Canoe to Wild Forest should only occur under "exceptional circumstances" and "only after it has been demonstrated that a highly unusual condition exists, such as the identification of a mapping error, or the existence of a previously unrecognized non-conforming use of a permanent nature."~~

> ~~The FPEIS states that "[r]eclassification~~Particularly remote or fragile tracts of land that require Wilderness management but do not meet the 10,000 acre size criterion for Wilderness designation and do not lie adjacent to existing Wilderness should be classified as Primitive. Also, lands which otherwise would receive a Wilderness classification but contain significant non-conforming uses, the removal of which cannot be scheduled, or lands which contain or lie contiguous to private lands that are of a size and influence to prevent Wilderness designation, will be classified as Primitive. (FPEIS at p. 25).

Examples of non-conforming uses leading to a Primitive Classification are reserved rights for private inholdings, float plane activity, access rights for timber or gravel removal.

The creation of additional Canoe areas is dependent upon the acquisition of large tracts of private land which surround substantial acreages of water suitable for canoeing. The FPEIS

states, “the canoe classification is given to an area where the watercourses or the number and proximity of lakes and ponds make possible a remote and unconfined type of water recreation in essentially a Wilderness setting.” (FPEIS at p. 19.) Factors such as the reserved rights of float plane access, private inholdings and gravel extraction must be considered in the pending classification process.

Wild Forest areas are described in the FPEIS as having “[r]esources which allow a somewhat higher level of human use which does not degrade resource quality while retaining a wild character....” Examples of such uses include snowmobiling “where such use will not adversely impact the natural resources quality and wild forest character of the area.”(FPEIS at p. 19.); these uses might be appropriate on an existing road network.

The FPEIS also contains a section governing the reclassification from one category to another. In general, the FPEIS strongly discourages reclassification from a more protective category to a less protective one. It also states, “The reclassification of Wilderness, Primitive, Wild Forest, or Intensive Use to Canoe should occur only if such a reclassification will aid in the consolidation of scattered tracts where the number and proximity of lakes and ponds makes possible a remote and unconfined type of water oriented recreation in an essentially wilderness setting~~. …. The creation of additional Canoe areas is dependent upon the acquisition of large tracts of private land which surround substantial acreages of water suitable for canoeing in a setting of wilderness character.”~~.” (FPEIS at p. 26). However, the reclassification from Wild Forest to Wilderness, Primitive or Canoe would result in added protection of natural resources.” (FPEIS at p. 27.) The FPEIS calls for reclassification from Wild Forest to Primitive if there are limited facilities, slight usage, or unusual natural resources requiring greater protection. Such reclassification is particularly appropriate where necessary “to protect the resources or character of existing, adjacent or nearby designated Wilderness, Primitive or Canoe areas.” (FPEIS at p. 28)

~~**Draft Supplemental Environmental Impact Statement (2013)**~~

~~Agency staff has prepared this Draft Supplemental Environmental Impact Statement in consultation with the Department of Environmental Conservation, and will seek authorization from the Agency to hold combined public hearings on the DSEIS and the proposed amendments to the APSLMP. Hearings will be held both inside and outside the Park. The public will have an opportunity to submit written comments and to make comments at the public hearings. Staff will incorporate all comments into a Final Supplemental Impact Environmental Statement (FSEIS). The FSEIS will also include a written response to public comments and will present final alternatives and a staff recommendation for a preferred alternative.~~

~~The Agency will then decide (a) whether to accept the FSEIS and (b) whether to recommend the APSLMP amendments to the Governor. If the APSLMP amendments are approved by the Agency, the resolution approving them is forwarded to the Governor for approval.~~

~~**Description of Action**~~

DESCRIPTION OF ACTION

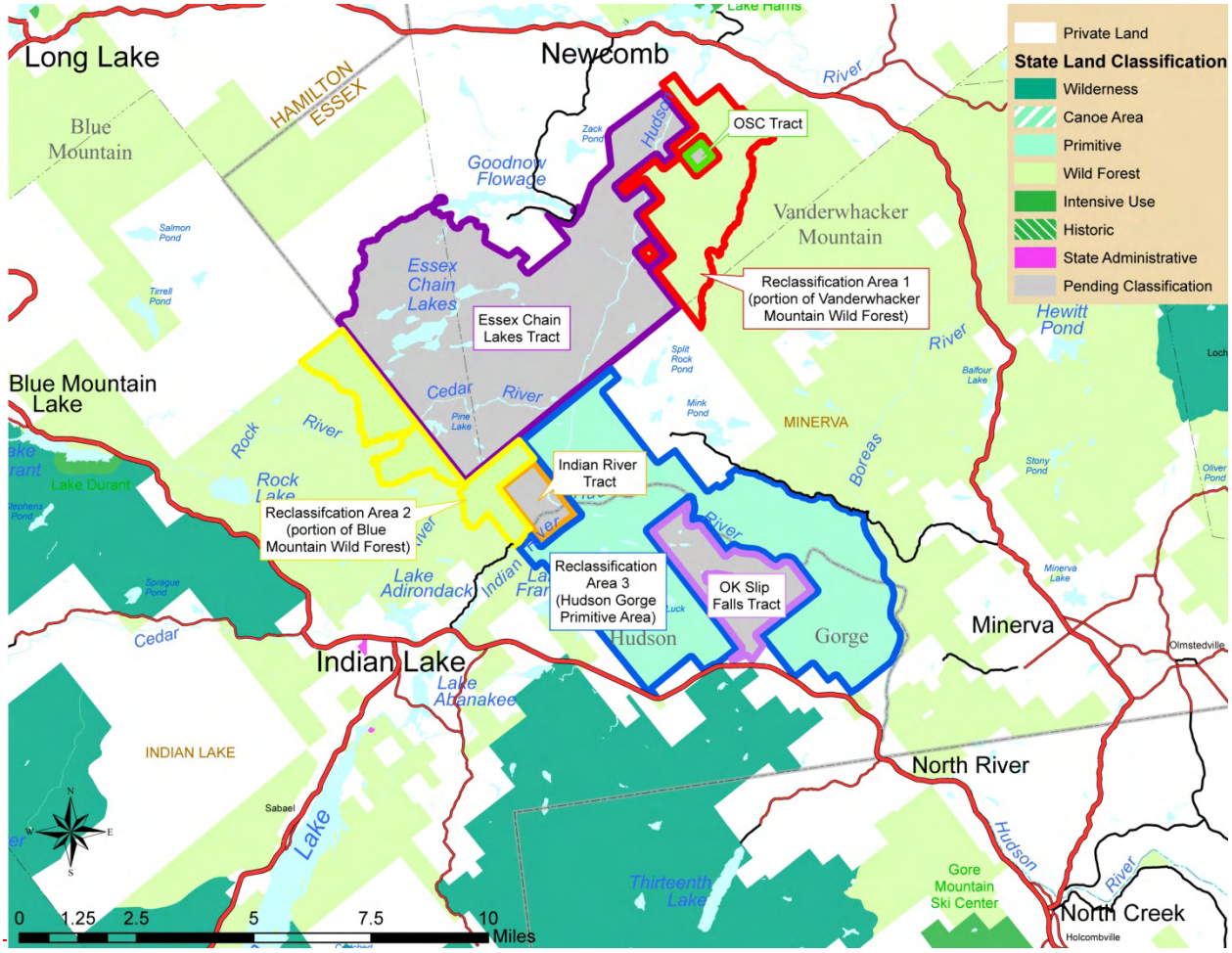
The area subject to this classification action (the "subject area") consists of the recently acquired Essex Chain Lakes Tract, Indian River Tract, ~~-~~OK Slip Falls Tract, and OSC Tract, as well as certain Forest Preserve lands adjacent to these tracts which are being considered for potential reclassification. The lands considered for reclassification are located within the existing Vanderwhacker Mountain Wild Forest (Reclassification Area 1), the Blue Mountain Wild Forest (Reclassification Area 2) and the reclassification of the Hudson Gorge Primitive Area (Reclassification Area 3) to Wilderness. Figure 2 is a map showing these four areas and their current classifications. Discussion of the range of alternative classifications can be found in the Alternatives section of this document.

The Essex Chain Lakes Tract is an approximately ~~17,320~~18,230 acres in size and is located within the Towns of Newcomb and Minerva, Essex County. This tract has a northern portion and a southern portion, with the Cedar River dividing the two. A bridge over the Cedar River, which used to connect the two portions, no longer exists. The northern portion, which contains the Essex Chain Lakes, is accessible from the north from Newcomb on Route 28N via the North Chain Lakes Road. The southern portion of this tract is accessible from the south from Indian Lake on Route 28/30 via the South Chain Lakes Road. The Chain Lakes Roads are two separate roads; travel from one end to the other is not possible.

The Indian River Tract is an approximately ~~925~~923 acre tract of land in the Towns of Minerva, Essex County and Indian Lake, Hamilton County. This tract is accessible from the south from Indian Lake on Route 28/30 via the ~~South~~ Chain Lakes Road~~.~~ (South).

The OK Slip Falls Tract is an approximately 2,~~780~~823 acre tract of land in the Town of Indian Lake, Hamilton County. There is a privately owned inholding within this tract of land. The OK Slip Falls Tract is accessible from the south from Route 28.

The OSC Tract is approximately 160 acres, located in the Town of Newcomb, Essex County. This tract is an inholding in the Vanderwhacker Mountain Wild Forest.


Private Land
State Land Classification
Wilderness
Canoe Area
Primitive
Wild Forest
Intensive Use
Historic
State Administrative
Pending Classification
Long Lake
Newcomb
Blue Mountain
HAMILTON
ESSEX
OSC Tract
Goodnow Flowage
Vanderwhacker Mountain
Essex Chain Lakes
Essex Chain Lakes Tract
Reclassification Area 1 (portion of Vanderwhacker Mountain Wild Forest)
Hewitt Pond
Blue Mountain Lake
Cedar River
Rock River
Split Rock Pond
Mink Pond
MINERVA
Boreas River
Indian River Tract
Lake Durant
Reclassifcation Area 2 (portion of Blue Mountain Wild Forest)
Lake Adirondack
Reclassification Area 3 (Hudson Gorge Primitive Area)
OK Slip Falls Tract
Hudson
Gorge
Minerva
Indian Lake
Lake Abanakee
INDIAN LAKE
North River
Sabael
Lake
Thirteenth Lake
Gore Mountain Ski Center
North Creek
Holcombville
0 1.25 2.5 5 7.5 10 Miles

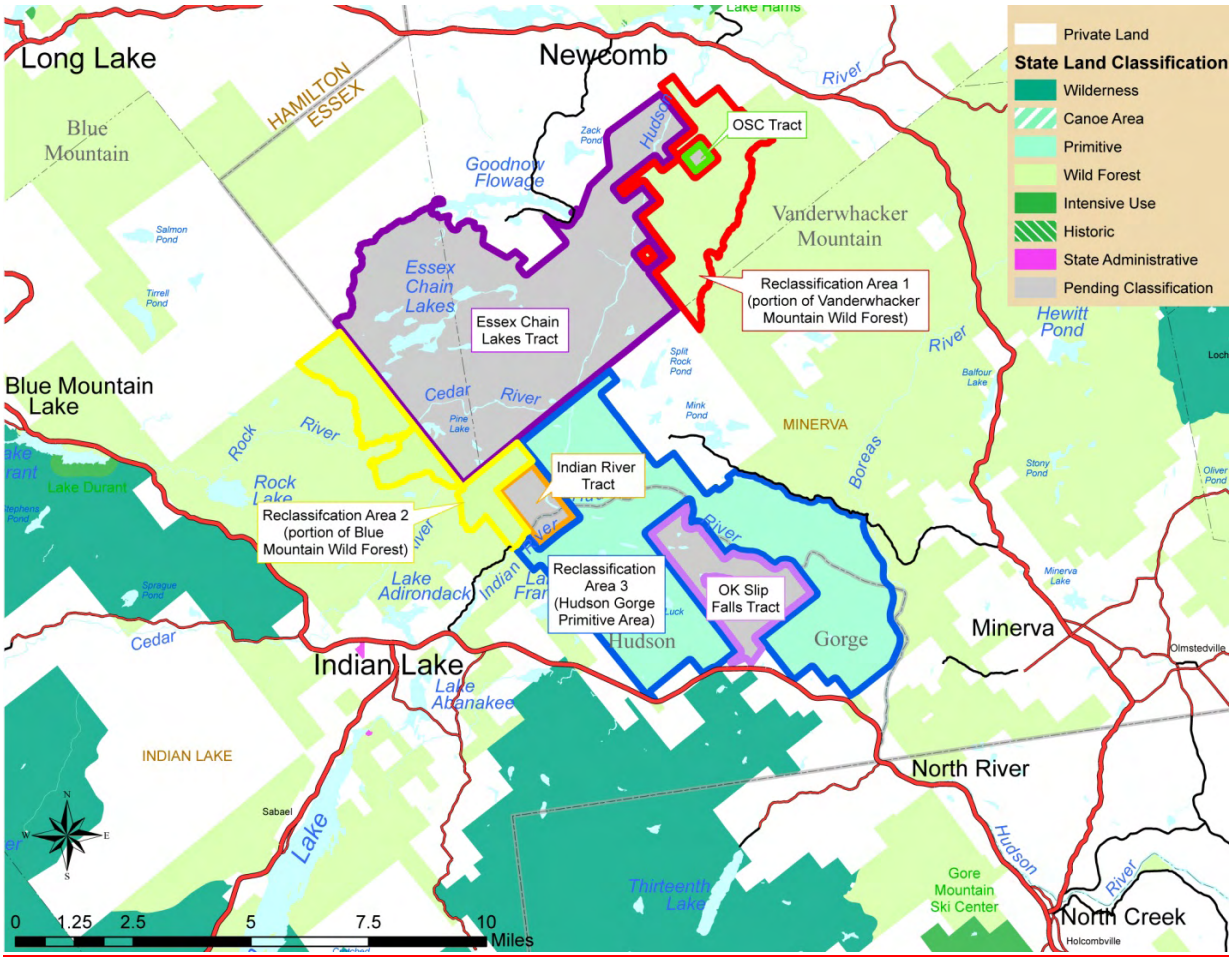


Figure 2: Map of the Subject Area

BASIS OF

CLASSIFICATION CONSIDERATIONS

TheAs discussed in "Standards for Agency Decision" (pp. 17-19), the Adirondack Park Agency Act requires the Agency to classify the state lands in the Park according to "their characteristics and capacity to withstand use." [4] Characteristics that determine a land's capacity to withstand use include physical, biological and social characteristics. The characteristics specific to the area under consideration for this action can be found in the Environmental Setting section of this DSEISFSEIS.

A fundamental determinant of land classification is the **physical characteristics** of the land or water which have a direct bearing upon the capacity of the land to accept human use. Soil, slope, elevation and water are the primary elements of these physical characteristics. These characteristics affect the carrying capacity of the land or water both from the standpoint of the construction of facilities and the amount of human use the land or water itself can absorb. These factors highlight the essential fragility of significant portions of the State lands including most lands above 2,500 feet in altitude, as well as low-lying areas such as swamps, marshes and other wetlands. In addition, rivers, streams, lakes and ponds and their environs often present special physical limitations.

Biological considerations also play an important role in the structuring of the classification system. Many of these are associated with the physical limitations just described. Wetland ecosystems, habitats of rare, threatened or endangered species and sensitive wildlife habitats are relevant to the characteristics of the land and sometimessometimes determine whether a particular kind of human use should be encouragedpermitted or prohibited.

Another significant determinant of land classification involves certain **intangible considerations** that have an inevitable impact on the character of land. Some of these are social or psychological, such as the sense of remoteness and degree of wildness.

Finally, the classification system takes into account the **established facilities** on the land, the uses now being made by the public and the policies followed by the various administering agencies. Examples of this would be the presence of an existing campground or ski area which would require the classification of intensive use.

Physical Characteristics

Geology/Soil**:**

[4] 4 Former Executive Law § 807, added L. 1971 c. 706, section 1 renumbered 816 and amended L. 1973, c. 348, section 1., as quoted in APSLMP at 13.

Soils are an important factor that relate to the capacity of land to withstand a certain level of use. Soil properties such as texture, permeability, water table depth and slope are important considerations in understanding the potential impacts of land use.

The Natural Resource Conservation Services, (NRCS), in its soil surveys of Essex and Hamilton Counties, has identified 53 soil types series with the subject area. These soils have been mapped by soil unit, many of which contain several soil types. Map 1 shows the soils in the subject area. A more detailed map of the soil units, as well as a description of each is found in Appendix A. Soils are an important factor that determines the capacity of land to withstand a certain level of use. Generally, well drained soils and permeable soils can withstand a higher level of use than poorly drained soils because they resist compaction. Compacted soils can limit vegetation growth and lead to erosionE.

Several limestone outcrops occur along the Cedar and Hudson Rivers. The rock constituting these outcrops is Grenville Marble. The longest and highest exposures of this substrate are along the Hudson River or near the Hudson Gorge.

Topography:

The subject area contains varied terrain, ranging from lower-lying river valleys of the Cedar, Goodnow, Hudson and Indian Rivers to mountain peaks. Prominent topographical features include five named mountains with peaks over 2,000 feet; four are located in the Essex Chain Lakes Tract and one in the OK Slip Falls Tract. The five named mountains are: Cedar Mountain (2,554 feet), Little Pisgah Mountain (2,020 feet), Polaris Mountain (2,515 feet), Sixth Lake Mountain (2,396 feet), and P. Gay Mountain (2,340 feet). Within the portion of the Blue Mountain Wild Forest (Reclassification Area 2) being considered for reclassification are the western slopes of Big Pisgah Mountain (2,102 feet). Total acreage of lands over 2500 feet is approximately 15 acres.

Another prominent feature is an approximately four-mile long ridge that runs in east-west direction south of the Essex Chain Lakes that includes five peaks over 2000 feet. Distinct valleys exist along the Hudson and Cedars Rivers.

The OK Slip Falls Tract of land contains OK Slip Falls (250 feet), the Adirondack's highest falls and one of the tallest waterfalls in the State. (250 feet).

The Cedar and Hudson Rivers divide the Essex Chain Lakes Tract into three separate areas. Current access to the eastern section is available over a major bridge which crosses the Hudson River. Access between the two sections separated by the Cedar River is more difficult. A bridge that connected these two sections was destroyed in a storm in 1968.

Slopes within the subject area varied from gentle to severely steep. Generally these steep slopes are problematic for certain recreational improvements such as campsites. These areas can also be problematic for trail development because of the high risk of erosion. Map 2 shows the subject area topography.

Water Resources:

The Introduction section of the Master Plan states:

> *The water resources of the Adirondacks are critical to the integrity of the Park. The protection of the major watersheds of the state was a major reason for the creation of the Forest Preserve and continues to be of significant importance. Waters, particularly lakes and ponds, have their carrying capacity from a physical, biological and social standpoint just as do tracts of public or private land. The use made of state waters also has a direct impact on adjacent land holdings.*
> (APSLMP at p. 3).

The Essex Chain Lakes, Indian River, and OK Slip Falls Tracts lie within the Hudson River watershed.

There are 18 lakes and ponds in the Essex Chain lakes parcel. A dominant feature of the landscape is the Essex Chain Lakes, a series of eight interconnected lakes. Together with nearby ponds, this tract has eleven lakes and ponds that are interconnected or within portaging distance of each other to provide a six- to seven- mile canoe route. Together with this canoe route, there are a total of 18 ponds and lakes in this tract. The following is a list of the lakelakes and ponds in the Essex Chain Lakes Tract with their acreage:

- Cedar Pond – 8ac.
- Chain Lakes
  - 1st Lake – 51 ac.
  - 2ndLake - 23 ac.
  - 3rd Lake – 262 ac.
  - 4th Lake – 27 ac.
  - 5th Lake – 71 ac.
  - 6th Lake – 36 ac.
  - 7th Lake – 9 ac.
  - 8th Lake – 17 ac.
- Clear Pond –23 ac.
- Cheney Pond – 18ac.
- Corner Pond –20 ac.
- Deer Pond – 48ac.
- Jackson Pond – 29ac.
- Mud Pond (near Chain) – 22ac.
- Mud Pond (near Pine) – 15ac.
- Pine Lake –91ac.
- Shadow Pond – 51ac.

The Indian River Tract does not have any lakes or ponds. The OK Slip Falls Tract has two ponds, ranging in size fromone, 4 toacres and the other, 8 acres. OK Slip Pond is located on private property and is not included in this tract.

Rivers in these tracts include the Goodnow, Cedar, Hudson, and Indian Rivers. The tracts include. This includes approximately 14 miles of the Hudson River and 7.6 miles of the Cedar River. The Indian River borders approximately one mile of the Indian River Tract (on one side of the river). The Essex Chain Tract contains an approximate 1 mile stretch of the Goodnow River, an unclassified river, which flows from the Goodnow Flow, a 438 acre impoundment, into the Hudson River. Each of these rivers is important from a biological, recreational and scenic perspective. These rivers and several smaller streams are also associated with significant wetland complexes.

The Hudson, Cedar, and Indian Rivers are designated (Map 2) pursuant to the Wild, Scenic and Recreational River ACT, ECL Article 15, Title 27 (Rivers Act). The Hudson River is designated as a Wild River south of the confluence with the Cedar River and as a Scenic River north of that

confluence. The Indian River is designated as a Recreational River, and the Cedar River is designated as a Scenic River within the Essex Chain Lakes Tract and a Wild River within the Blue Mountain Wild Forest. DEC Regulations established ~~through~~under the Rivers Act restrict certain management actions on lands adjacent to these rivers regardless of the land's final classification (6 NYCRR 666.4). The State Land Master Plan also provides guidelines for management and use of Wild, Scenic, and Recreational Rivers and adjacent lands.

Biological Characteristics

Temperate Deciduous Forest:

In the United States, there are five areas of Temperate Deciduous Forest identified for restoration or protection. The largest area of unbroken forests greater than 100, 000 acres is in the Adirondacks. The temperate deciduous forest represents the most fragmented and degraded closed forest habitat on the planet. Approximately 50% of what had once occurred has been lost to agriculture and development. What remains of this forest type is widely scattered with less than 10% secured in ecological reserves. Those forests that are protected tend to be in patches of a few thousand acres, making them too small to support viable populations of wide-ranging species or able to maintain ecosystem processes that shape natural features[5].

Within the Adirondacks are areas referred to as "matrix blocks", or intact forests. These blocks are significant due to their diverse underlying abiotic factors (elevation, land form and geology), the overall condition of the forest, and by being less fragmented by roads. Ten of these matrix blocks intersect with TNC/Finch lands, four in the Essex Chain Lakes, Indian River, OSC and OK Slip Falls Tracts.

Matrix blocks are important for habitat and species resilience. Resilience concerns the ability of a living system to adjust to climate change, to moderate potential damages, to take advantage of opportunities, or to cope with consequences; in short, its capacity to adapt. The Essex Chain Lakes, Indian River, OK Slip Falls, and OSC Tracts add to these matrix blocks and enhance the resiliency of the Park's Temperate Deciduous Forest.

The majority of forest cover on these tracts of land is northern hardwood forests, but there are also numerous less common forests types which provide habitat for unique species. The intact forest here provides high connectivity and a functional landscape, which can combat habitat fragmentation, protect water quality, provide habitat for numerous species, enable natural disturbance regimes to operate and buffer against detrimental effects of large environmental changes.

It is unlikely that there are any old growth forests on these tracts of land. These forests have been logged by previous ~~owner(s).~~owners. Larger, and presumably older, trees occur in the Hudson Gorge Primitive Area on the trail to Blue Ledge and along the shore of the Hudson River between Blue Ledge and OK Slip Falls.

In addition to deciduous forests, there are conifer and alluvial forests. Alluvial forests are forests on river-deposited soils which are subject to a flooding regime. Alluvial forests provide valuable wildlife habitat and contribute to the scenic qualities of the streams on which they occur.

[5] http://conserveonline.org/workspaces/ecs/documents/resilient-sites-for-terrestrial-conservation-1

Species diversity will change as these forests mature. Species which require open or edge habitats are likely to migrate to the adjacent easement lands, which are being managed for timber. Conversely, the mature forest will attract a range of species that is not likely to occur on the land today.

Wetlands:

There are approximately 1800 acres of wetlands in the four tracts of land being classified. Many of these wetlands are associated with streams and other waterbodies. Map 2 shows the locations of wetlands in the four tracts.~~–~~ This wetland mapping uses the Cowardin classification system[6] which does not specifically identify or differentiate among peatlands, wet meadows or emergent marsh.

There are numerous wetland types on these tracts of land ranging from coniferous swamps, to alluvial forests, to sphagnum- shrub bogs, to beaver flows and other open wetlands. The substrate of these tracts ~~varies~~ and ~~so does~~ the species diversity within these wetlands varies from location to location. Regardless of species diversity, wetlands are significant. Wetlands play a critical role in modulating the flow of water in any watershed, reducing flooding and erosion. ~~They~~Wetlands filter pollutants and purify water~~;~~ and they provide critical habitat for many species of plants and animals.
Table 1 lists acreage of common wetland types in the four tracts being classified.

Acreage of Common Wetland Cover Types

	FO1	FO4	SS1	SS3	EM1	Total*
Chain Lakes	24	569	360	61	254	1460
OK Slip Falls	5	81	39	3	47	212
Indian River	10	15	9	0	25	67
OSC	0	20	7	0	46	74
Total	39	685	415	64	372	1813

*Total of all wetlands, including cover types not included in this table.

Following is a description of the cover types in Table 1:

FO1 – Hardwood swamp, usually dominated by Red or Silver Maple.

FO4 – Conifer swamp, dominated by Balsam Fir, Tamarack or Black Spruce.

SS1 – Shrub swamp, with alder and willow as dominant species.

SS3 – Shrubby peatland, characterized by Ericaceous shrubs and peat moss.

[6] Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of wetlands and deepwater habitats of the United States*. U.S. Fish and Wildlife Service FWS/OBS-79/31, Washington, D.C., 103 pp.

EM1 – Either wet meadows or emergent marsh, or a combination of the two.

~~The wetland mapping uses the Cowardin classification system[7] which does not specifically identify peatlands, wet meadows or emergent marsh.~~

Wetlands associated with the Essex Chain Lakes:

The channels connecting Third Lake to Fourth Lake, Fourth Lake to Fifth Lake, and Fifth Lake to Sixth are large (greater than 20 acres) emergent marsh and deepwater marsh wetlands. Due to their size, wetland covertypes present, diversity and abundance of aquatic macrophytes, and hydraulic connection to the main waterbodies, they have the highest value rating of 1 as defined in 9 NYCRR Part 578. Emergent marsh is the most valuable individual covertype and one of the highest in biological productivity. These wetlands provide nesting habitat, food and cover for wildlife, and the capacity to stabilize lake sediment, and cycle large quantities of nutrients. Deepwater marsh wetlands provide valuable fish spawning and nursery habitat and are a food source for waterfowl and other wildlife.

Agency staff and Adirondack Park Invasive Plant Program staff completed site visits on July 11 and September 18, 2013. A total of 15 emergent and deepwater marsh wetland plant species were identified during the two site visits. This diverse wetland community is represented by the following species: watershield *(Brasenia schreberi)*, bladderwort (*Utricularia spp.*), naiad (*najas spp.*), Farwell's milfoil (*Myriophyllum farwellii)*, Robbins pondweed (*Potamogeton robinsii*),Largeleaf pondweed (*Potamogeton amplifolius)*, water marigold (*Bidens beckii*), white-stemmed *pondweed (Potamogeton praelongus)*, bur reed (*Sparganium sp*), pickerelweed (*Pontederia cordata*), white water lily (*Nymphaea odorata*), yellow-lily (*Nuphar variegata*), pipewort (*Eriocaulon aquaticum*), threeway sedge *(Dulichium arundinaceum*),and rush *(Juncus spp.)*. The species list was developed from two cursory Agency site visits and a more thorough quantitative aquatic plant assessment by the Adirondack Park Invasive Plant Program or one of their partners will provide more detailed information. A quantitative assessment will identify additional species in order to understand the full extent and value of the aquatic plants found in these critical wetland habitats.

Rare, Threatened or Endangered Species and Natural Communities:

The Adirondack landscape is largely acidic--granitic. The underlying geology of much of the Essex Chain Lakes and Indian River Tracts are calcareous, yielding numerous rare plants and bryophytes (mosses and lichens). Many of these species are considered uncommon or unusual in

~~[7] Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification* of wetlands and deepwater habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31, Washington, D.C., 103 pp.~~

the Adirondacks, but are not considered to be State rare species. Some rare plant species are protected in New York State. Bryophytes have no legislative protection.

Within the Essex Chain Lakes, Indian River, and OK Slip Falls Tracts, and along portions of the Hudson River in the Hudson Gorge Primitive Area, ~~the following~~ten rare, threatened or endangered species (vascular plants and animals) occur~~:~~, some with multiple populations. In addition to these ten known occurrences of rare species, two species, the Golden Eagle (*Aquila chryseatos)* and the Bald Eagle (*Haliaeetus leucocephalus*), were known to occur historically but not reported since the early to mid 1900's.

Listed below are the rare, threatened and endangered species reported from the properties:

Name	US Listed	NY Listed	NYNHP Rank[8]
~~*Aquila chryseatos* (Golden Eagle)~~		~~E~~	~~G5SHB, SN1~~
Calamagrostis stricta (Northern Reedgrass)		T	G5S2
Carex capillaries (Hair-like Sedge)		E	G5S1
Draba arabisans (Rock-cress)		T	G4S2
Erigeron hyssopifolius (Daisy Fleabane)		E	G5S1
Gavia immer (Common Loon)		SC	G5S4
Halenia deflexa (Spurred Gentian)		E	G5S1
~~*Haliaeetus leucocephalus* (Bald Eagle)~~	~~LT, PDL~~	~~T~~	~~G5S2S3B,S2N~~
Prunus pumila var. *depressa* (Dwarf Sand-cherry)		T	G5T5S2
Saxifraga oppositifolia ssp. *oppositifolia* (Purple Mountain-saxifrage)		E	G4G5T4T5S1
Trisetum melicoides (Melic-oats)		E	G4S1
Woodsia glabella (Smooth Cliff Fern)		E	G5S1

Field work conducted during the summer of 2013 located two NYS protected species aquatic plant species: Farwell's milfoil (*Myriophyllum farwellii*) was identified in Third Lake and in the channel between Third and Fourth Lake. It is listed as threatened in Environmental Conservation Law, Section 193.3. Plants listed as threatened are likely to become endangered within the foreseeable future throughout all or a significant portion of their ranges within the State. Water marigold (*Bidens beckii*) was found in Third Lake and in the channel between Third and Fourth Lake. It is listed in the 2010 New York Natural Heritage Program (NHP) rare plant watch list as threatened. The NHP watch list contains native species that are considered rare, uncommon, or declining in numbers and need continued periodic monitoring to determine if they should be removed from the list.

Myriophyllum farwelli (Farwells' Water Milfoil)	T	G5S2
Bidens beckii (Water Marigold)	R	G4G5S3

Agency staff observations during these site visits describe the wetlands in the lake channels as consisting of a diverse assemblage of healthy native aquatic macrophytes with some areas exhibiting moderately dense pockets of Farwell's milfoil and Water marigold.

[8] www.acris.nynhp.org/ranks.php

Additionally, several significant natural community types are documented:

Name	NY Listed	NYNHP Rank
Calcareous Cliff Community	U	G4S3
Calcareous Shoreline Outcrop	U	G3G4S2
Calcareous Talus Slop Woodland	U	G3G4S3
Northern White Cedar Rocky Summit	U	G3G4S2
Riverside Ice Meadow	U	G2G3S1

Natural Communities, like bryophytes, have no legislative protection.

Botanist Jerry Jenkins conducted biological surveys of the entire TNC/Finch acquisition lands, including the tracts being classified in this action, tracts scheduled to be purchased by the State over the next five years, and tracts that have been protected by conservation easements and are currently privately owned. Jenkins' summary of biological significance does not always follow the NYNHP ranking system and includes regional specialties in addition to State, Global and Federal rankings. Although his summary is not as easily quantifiable as NYNHP surveys, his information is included for a more comprehensive understanding of these lands. (Appendix C).

Jenkins also documents bryophytes that the NYNHP does not document. The limey outcrops along the Hudson and Cedar Rivers, along with additional limey cliffs and wetlands, represent one of the largest diversities of bryophytes and vascular plants that he has ever seen in the Adirondacks.[9]

[9] Jenkins, Jerry. 2001. Finch-Pruyn Biological Survey 2000-2001 Summary of Results. Unpublished paper, Attached as Appendix C.

Fisheries:

Data shared with the DEC by the previous owners and lessees, along with data collected by the DEC on some lakes and ponds during 2012, have provided background information on fisheries management for the Essex Chain Lakes and Indian River Tracts[10]. Many lakes and ponds have been stocked historically. These bodies of water are neutral in pH due to the underlying calcareous bedrock. Third, Fourth, Fifth, and Eighth Lakes and Jackson, Clear, Cedar and Deer Ponds have the temperatures necessary for long-term trout survival. Cedar Pond has a self-sustaining population of Windfall strain brook trout (heritage) introduced by the DEC in the 1990's.

The Department has also noted that the Redbreast Sunfish (*Lepomis auritus*) is more common in some of these lakes and ponds than in other parts of the State. Although not endangered, anecdotal evidence suggests that the species is less common than once believed and disappearing from other lakes.

The Essex Chain Lakes, Indian River and OK Slip Falls Tracts, along with existing ~~Forest Preserve~~Hudson Gorge Primitive Area, contain approximately 14 miles of the Hudson River. The portion of the Hudson River that is north of the confluence with the Cedar River contains warm water fisheries, primarily pike and bass. From the confluence of the Cedar River south to North Creek, the Hudson River is considered to be a cold water fishery. That section is stocked with brown trout and rainbow trout. Smallmouth bass and northern pike occur in some of the pools and runs, but are less abundant than upstream of the Cedar.

A comprehensive study was conducted to determine if white water releases from Lake Abanakee, down the Indian River to the Hudson River, affected trout fisheries[11]. The study ~~identified~~found that in hot dry summers, water temperatures in this section can hit 80+ Fahrenheit - killing all the stocked trout. During cool, wet summers the trout survive, leading to good fishing the next spring for larger fish. Lately, there have been a lot of hot, dry summers. There are almost no thermal refugia is this section of the Hudson River to sustain trout during these hot spells.

~~Downstream of North Creek, south of the tracts being classified, the Hudson is back to being a warm water fishery.~~

The approximately 3.8 mile stretch of the Cedar River that is located in the subject area contains brown and brook trout. The approximately 2 miles of the Goodnow River shoreline located in the subject area is likely to contain bass, which are found in Goodnow Lake.

[10] Preall, L. DEC Fisheries. September 26, 2012. Fisheries Recreation for former Finch-Pruyn Lands. RayBrook. Attached as Appendix D.

[11] http://ny.cf.er.usgs.gov/nyprojectsearch/projects/2457-BI7-1.html

Bird Studies:

A limited amount of work was conducted to inventory birds. NYNHP has records of Common Loons, Golden Eagles (historical) and Bald Eagles. (historical). Boreal bird species were concentrated on tracts north of the three being classified. The common birds of mixed woods (Hermit Thrush, Solitary Vireo, Black-throated Green Warbler and the like) were found in the Essex Chain Lakes, Indian River, and OK Slip Falls Tracts. during field work conducted by Jenkins.

In total, over 100 bird species were documented in the blocks covering the majority of the Essex Chain lakes tract during the NY Breeding Bird Atlas survey[12]. Of them, 16 are designated as Species of Greatest Conservation Need by the DEC.

Invasive Species:

Invasive species are defined as non native species which pose serious threats to our native species and ecosystems.

One terrestrial invasive species, Japanese Knotweed (*Fallopia japonica*), occurswas found on the Essex Chain Lakes Tract. along one of the interior roads and is believed to have been brought in with fill during road construction.. This small population has been treated once by The Nature Conservancy and is scheduled for a second treatment.

Beech scale (*Cryptococcus fagisuga*) was first reported in 1969. No other forest pest species have been reported.

No aquatic invasive species were found during field work conducted by both The Nature Conservancy and the DEC.NYS DEC. A review of current literature concerning the transport of aquatic invasive species from infested waterbody to uninfected waterbodies indicates that "Much of the ongoing spread of AIS to inland waters throughout North America can be attributed to the overland movement of small-craft boats[13] [14] [15] [16]."

[12] McGowen, K.J., and K. Corwin, eds. *The second atlas of breeding birds in New York State*. Comstock Publishing Associates: 2008. .

[13] Bossenbroek, Jonathan M., Clifford E. Kraft, and Jeffrey C. Nekola. "Prediction Of Long-Distance Dispersal Using Gravity Models: Zebra Mussel Invasion Of Inland Lakes." *Ecological Applications* 11.6 (2001): 1778–1788.

[14] Johnson, Ladd E., Anthony Ricciardi, and James T. Carlton. "Overland Dispersal Of Aquatic Invasive Species: A Risk Assessment Of Transient Recreational Boating." *Ecological Applications* 11.6 (2001): 1789–1799.

[15] Leung, Brian, Jonathan M. Bossenbroek, and David M. Lodge. "Boats, Pathways, and Aquatic Biological Invasions: Estimating Dispersal Potential with Gravity Models." *Biological Invasions* 8.2 (2006): 241–254.

Furthermore, "Translocation of organisms by boaters can be intentional (e.g. as bait[17]), but is often unintentional, with organisms inadvertently carried in bilge water, live wells, and bait buckets. Organisms can also be entrained on boat exteriors, e.g., entangled on propellers and trailers, attached to other entangled organisms[18] [19]."

Float planes are recognized as potential vectors for spreading AIS. In 1998 the Great Lakes Panel of the national Aquatic Nuisance Species Task Force (ANSTF) developed "generic" voluntary guidelines for float planes that were adopted by the ANSTF as national guidelines in April of 1999. Those guidelines still serve as the national standard even though some local jurisdictions have recently expanded on them, and, in a couple of cases, made them mandatory.

Float planes are currently allowed to land on First Lake, and this practice should not be affected by this classification. Since First Lake is downstream of the other Chain Lakes and is connected to Second Lake by a shallow unnavigable channel, the probability of transporting AIS (via watercraft to the other Essex Chain Lakes), which may be introduced to First Lake by float planes is greatly reduced.

Float planes can also damage fragile wetlands and shoreline vegetation by wave action and repeated drop-offs and pickups from the same shoreline locations.

Intangible Characteristics

The addition of slightly more than 21,000 acres of land adjacent to existing Forest Preserve provides the public with new opportunities for remoteness. There are five mountains with summits over two thousand feet in elevation, ~~twenty-four~~numerous ponds ranging from 4 to 264 acres in size, and close to twenty miles of rivers including the Hudson, Indian, Cedar, Rock and Goodnow Rivers. The Goodnow, Cedar, Indian and Hudson River corridors have beautiful, undeveloped shorelines. The Hudson Gorge is considered by many to be the most beautiful part of the river. Along the Hudson are two areas with high ledges that are biologically rich and also provide spectacular views of the river. The vast beauty of this area, along with numerous opportunities for solitude and remoteness can provide the public with an extraordinary experience.

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[16] Rothlisberger, John D. et al. "Aquatic Invasive Species Transport via Trailered Boats: What Is Being Moved, Who Is Moving It, and What Can Be Done." *Fisheries* 35.3 (2010): 121–132.

[17] ºKeller,R.P., A.N.Cox, C. Van Loon, D.M. Lodge, L.M. Herbor, and J. Rothlisberger. 2007. From bait shops to the forest floor: earthworm use and disposal by angler. American Midland Naturalist 158:321-328.

[18] Johnson, Ladd E., Anthony Ricciardi, and James T. Carlton. "Overland Dispersal Of Aquatic Invasive Species: A Risk Assessment Of Transient Recreational Boating." *Ecological Applications* 11.6 (2001): 1789–1799.

[19] Puth, Linda M., and David M. Post. "Studying Invasion: Have We Missed the Boat?" *Ecology Letters* 8.7 (2005): 715–721.

Additionally, one can find a variety of natural community types including marble ledges, bogs, fens, and alluvial forests. There is extensive habitat for mammals such as moose, bobcat, and black bear and aquatic habitat for brook trout, landlocked salmon, and small and largemouth bass. Access to this land affords paddling opportunities on some of the wildest stretches of rivers in the eastern United States.

Established Facilities and Retained Rights

Structures and Improvements~~:~~

The Essex Chain Lakes and Indian River Tracts contain unpaved forest management roads. There is a bridge on the Essex Chain Lakes Tract ~~that~~known as the Iron (Polaris) bridge; this bridge spans the Hudson and allows access to the eastern portion of the Essex Chain Lakes Tract including the area leases to the Polaris Club. There is also a road ~~accessing~~providing access to a private inholding on the OK Slip Falls Tract.

There are several camps located on the Essex Chain Lakes and Indian River Tracts associated with the Gooley Club and Polaris Club. The State did not purchase these structures with the land and according to the terms of the respective leases, they will be removed by the previous owner or lessees~~, according to the terms of the respective leases, described below~~.

Map 3 shows the location of snowmobile trails, roads, bridges, gravel pits, and rights of way.

Historic Structures~~:~~

The ~~Adirondack Forest Preserve is listed~~State did not acquire the structures on the ~~National Historic Register~~Essex Chain parcel as part of the land acquisition; however, the State is responsible for the structures now that the lands have changed from private to public ownership. All buildings and ~~is a National Historic Landmark.~~ structures on the property are scheduled to be moved, removed, after the leases expire in 2018. A bond has been established to insure that the structures are removed. Staff at the NYS Office of Parks Recreation and Historic Preservation (OPRHP) have indicated that camp ~~structures~~structure at the Outer Gooley Club on the Indian River Tract may be eligible for listing on the State Register of Historic Places. ~~These buildings are not being used and are scheduled to be removed or moved prior to July 31, 2013.~~ Information supplied to OPRHP by the Outer Gooley Historical Association indicates the possible presence of a dugout canoe in or near Pine Lake.

A determination on whether the Outer Gooley Club buildings should remain or be moved to a nearby location will need to be made as part of the Unit Management Planning process. Historic classification under the Adirondack Park State Land Master Plan was not considered for the Outer Gooley Club because one of the requirements for this classification is that the structure must already be either on the National Register of Historic Places or be recommended for listing by the NYS Board for Historic Preservation. Neither of these requirements has occurred. In addition, the State must make a commitment of resources to manage the location primarily for historic objectives (APSLMP at p. 41).

The DEC submitted Building-Structure Inventory Forms to the NYS Office of Parks, Recreation and Historic Preservation (OPRHP) for the main camp building and 8 cabins at the Inner Gooley Club located on Third Lake. On September 25, 2013, the OPRHP found that the main camp and six of the cabins met the eligibility criteria for inclusion in the National Register of Historic Places, based on the limited information provided. According to the inventory forms submitted by DEC, the camp was constructed in 1890, the cabins were constructed between 1946 and 1955, and the bath house and a shed were constructed in 1994.

The Inner Gooley Club is also not being considered for classification as Historic Use under the APSLMP. Similar to the Outer Gooley Club, the structures are not on the National Register of Historic Places and have not been recommended for listing by the NYS Board for Historic Preservation as required by the APSLMP for Historic Use classification.

Deeded and Other Rights~~:~~

The Towns of Minerva and Newcomb have an easement over portions of the Essex Chain Lakes Tract which will allow, as determined by the Department, for: (1) float plane access to First Lake and Pine Lake. and (2) access to, and use of materials from, two gravel pits located on the periphery of the property in order to provide gravel to maintain roads, trails and other infrastructure on this tract that may be open for motorized use. The Towns also have non-exclusive rights-of-way on roads to be designated by DEC for administrative and emergency purposes.

The Towns may allow others non-exclusive float plane access as well, which is subject to any limitations in a permit issued by DEC. The stated purpose of the float plane easement is to load and unload passengers to facilitate access for non-motorized public recreational use. The gravel pits will not exceed one acre in size and the use of these pits will be extinguished once the pits are deemed exhausted. These rights have been considered in development of the ~~proposed alternatives~~preferred alternative for classification.

There is a non-exclusive right-of-way on Ords Road/ Ords Fall Road and First Left Road held by Upper Hudson Woodlands ATP, LP in a northern corner of the Essex Chain Lakes Tract, which is designated as a primitive corridor in the Wilderness and Canoe alternatives considered in ~~this~~the DSEIS.

On the Indian River Tract, the Towns of Minerva and Indian Lake have a non-exclusive right to provide for public motorized access on the South Chain Lakes Road and to mine gravel from a gravel pit known as the Outer Gooley Pit for the purpose of maintaining the road and other infrastructure, subject to a Department permit and all applicable laws, rules and regulations. The easement does not convey a fee interest to the Town and states that it does not create a public highway.

A substantial section of ~~South~~ Chain Lakes Road (South) and the parking area at the Outer Gooley Club is within one-half mile of a section of the Hudson River that has been designated as

a wild river under the NYS Wild, Scenic and Recreational Rivers Act (WSRRA). The WSRRA provides that "[i]n wild river areas, no new structures or improvements, no development of any kind and no access by motor vehicles shall be permitted other than forest management pursuant to forest management standards duly promulgated by regulations."[2021] It further provides: "In general, the minimum distance from the river shore to a public highway or a private road open to the public for motor vehicle use, shall be one-half mile except where a physical barrier exists which effectively screens the sight and sound of motor vehicles."[2223] The interpretation and enforcement of these provisions is given to DEC. Neither this FSEIS nor the Preferred Alternative affects DEC's responsibilities regarding the WSRRA. Likewise, the Preferred Alternative does not direct DEC to take any particular action.

The APSLMP provides that no river area shall be managed in a way that would be less restrictive than the WSRRA requirements and specifically provides that wild river areas be managed in accordance with the guidelines for wilderness areas. The only new or reconstructed improvements allowed in a wild river area under the APSLMP are foot and horse trails, foot trail bridges constructed with natural materials, primitive tent sites and pit privies.

When The Nature Conservancy acquired the Essex Chain Lakes and Indian River Tracts in 2007, there were several outdoor recreation leases on the properties. The Nature Conservancy has continued those outdoor recreation leases and preserved two of the leasehold estates until September 30, 2018. The Gooley Club, Inc. has a lease ("Gooley sublease") for land on the Essex Chain Lakes Tract, on the south shore of Third Lake ("Inner Gooley"), with a term of October 1, 2012 to September 30, 2013, and for land on the Indian River Tract, west of the confluence of the Hudson River and the Indian River ("Outer Gooley") with a term of September 1, 2012 to December 15, 2012. After October 1, 2013, the State may enter into additional one-year leases for the Inner Gooley camps until September 30, 2018, leasing exclusive use of a one-acre envelope surrounding each club house and/or cabin. The remainder of the lands outside the one-acre envelopes will beis available for public use shared with the sublessees. All clubhouses, cabins, structures and seasonal trailers are to be removed by the end of the lease and no later than September 30, 2018.

The Outer Gooley portion of the sublease expired on December 15, 2012 and cannot bewas extended. The sublease requires all buildings and improvements be removed by July 31, 2013. If The DEC released the Gooley Club does not remove from that obligation as to the Outer Gooley structures (clubhouses, cabins, structures and seasonal trailers) by that date,main camp

[20] N.Y. Envtl. Conserv. Law § 15-2709 (McKinney)

[21] N.Y. Envtl. Conserv. Law § 15-2709 (McKinney).

[22] N.Y. Envtl. Conserv. Law § 15-2707 (McKinney).

[23] N.Y. Envtl. Conserv. Law § 15-2707 (McKinney).

building, which now stands on the ~~sublease provides that the Gooley Club will not be allowed to lease the Inner Gooley portion of the leased lands for the 2013-2014 season.~~tract.

The Polaris Mountain Club, Inc. has a lease for land east of the Hudson River in the Essex Chain Lakes Tract with a term of October 1, 2012 to September 30, 2013 ("Polaris Sublease"). The Polaris Mountain Club may also lease a one-acre envelope surrounding each "club house ~~and/or~~/ cabin/ structure /seasonal trailer" for additional one-year terms until September 30, 2018. All clubhouses, cabins, structures and seasonal trailers are to be removed by the end of the lease term.

The Nature Conservancy has provided a performance bond for the removal of all structures as required by the leases and the purchase agreement between DEC and The Nature Conservancy. During the term of the extended leases for Inner Gooley and Polaris, the sublessees also have a right to access the camps by vehicles and snowmobiles on roads designated by DEC, to use ATVs during mud season to access the camps on roads designated by DEC and to use motorboats on waters designated by DEC if such waters border the camps. The Nature Conservancy has a reserved right to motorized access to the Essex Chain Lakes Tract until October 1, 2019 to manage and police the leasehold estate, and to remove any remaining structures.

On the OK Slip Pond Tract, the Northern Frontier Brigade Camp has a private inholding, which includes the pond itself and the shoreline of the pond. The Camp also has a right of way on the existing road for motorized access to the inholding. ~~Another private club holds a recreational lease for 147 acres in the vicinity of Casey Mountain, which will expire on September 30, 2013. There are no structures associated with the Casey Mountain lease.~~
~~The Department anticipates acquiring the~~
The OSC Tract within the existing Vanderwhacker Mountain Wild Forest ~~in 2013. If it is~~was acquired ~~prior to the preparation~~in September of ~~the Final SEIS, it may be classified with the surrounding lands.~~ 2013, and has no easements or leases encumbering it.

This summary of easements, leases and other rights is not intended to be a full description of the rights and encumbrances on these lands. For complete descriptions, one should refer to the deeds recorded in the offices of the Hamilton County Clerk and the Essex County Clerk.

Community Connector Snowmobile Trails

Determinations on the siting and construction of snowmobile trails is guided by Article XIV, the Adirondack Park State Land Master Plan, the Snowmobile Plan for the Adirondacks, the 2009 Management Guidance, and individual Unit Management Plans (UMPs). The trails are designated once the classification process is completed. Only after the Governor approves the Agency classification recommendations for amending the Master Plan would DEC, as lead agency, initiate its unit management planning for the newly classified areas. A DEC UMP would then propose a range of recreational activities consistent with the classification of the unit. These activities might include trails for snowmobiles, bicycles, horses and wagons; other improvements might be trailhead parking and campsites.

In 2006, the "Snowmobile Plan for the Adirondack Park" ("Snowmobile Plan") was developed by DEC and OPRHP as co-lead agencies, in consultation with the Adirondack Park Agency as an involved agency under SEQRA. The Snowmobile Plan was developed with considerable input from the public and public interest groups. This plan recognizes the snowmobile community's goal of completing a network of snowmobile trails across the Park that will provide a trail system which will connect communities using both public and private lands under easements and landowner agreements. The Agency supports this objective and the DEC includes community connector trail planning in the management of any area where it has been determined public motor-vehicle recreational uses may be permitted.

The Snowmobile Plan identified a need to connect Indian Lake to Newcomb and Newcomb to Minerva. The land classification alternatives developed for this action do not preclude DEC from constructing the community connector snowmobile trail system called for by the plan.

In 2009, the Management Guidance for Snowmobile Trail Design and Placement was developed and included as an appendix to the "Memorandum of Understanding between the Adirondack Park Agency and the Department of Environmental Conservation Concerning Implementation of the State Land Master Plan for the Adirondack Park (Revised March, 2010)." This guidance had the support of most user groups. The Management Guidance addresses snowmobile trail siting, construction and maintenance. Siting requirements include placing Community Connector trails, known as Class II trails, at the periphery of Wild Forest or other Forest Preserve areas, as close as possible to motorized travel corridors. The guidance also allows for other trails, known as Class I trails, which are to be groomed with snowmobiles and can be located further from motorized travel corridors in Wild Forest areas.

DEC's 2005 UMP for Vanderwhacker Mountain Wild Forest was adopted prior to both the 2006 plan and the 2009 guidance. The UMP identifies multiple snowmobile trail alternative routes for connecting Minerva to Newcomb, plus other alternative trail routes for connecting Minerva to Pottersville and Schroon Lake (now completed). Although the routes identified in the UMP all are possible as the preferred alternative for an amendment to the Vandewhacker Mountain UMP,

DEC is continuing to review the proposed routes and develop an alternative route for the connection from Newcomb to Minerva. The UMP amendment has not been brought to the Agency to date, but the proposed route would also not be precluded by the Preferred Alternative contained in this FSEIS.

In 2010, a critical community connector trail between Newcomb and Indian Lake was established over the former Finch Paper, and now easement lands immediately adjacent to the Essex Chain Lakes tract under an easement purchased by New York State. Snowmobilers can now ride between these Indian Lake and Newcomb. Once the snowmobile trail that connects Newcomb to Minerva is built, snowmobilers will be able to ride from Indian Lake to Minerva, through Newcomb.

ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION

Physical, biological and ~~social~~intangible impacts may result from the proposed classification action. The FPEIS lists general impacts associated with amendments to the APSLMP:

A. Changes in existing use or levels of use which exceed the physical, biological or social carrying capacity of State lands could result in significant adverse impacts on the natural resources and open space character of State lands.

The proposed action involves the classification of recently acquired lands and reclassification of existing State lands classified as Primitive and Wild Forest. The existing use on the unclassified State lands consists of private hunting camps that will no longer be used and should be removed at the end of the leases or October 1, 2018, whichever is sooner. Regardless of which alternative classification for these lands is selected, the level of public use will increase. ~~-~~ DEC ~~will develop~~has developed a public access plan for the Essex Chain Lakes ~~and~~ the Indian River Tracts detailing uses allowed prior to classification of these lands. This access plan should not foreclose any of the options for eventual classification under consideration in this FSEIS .

The APSLMP prescribes types of permissible uses in each category but it does not specifically control the levels of use beyond providing very general management guidelines. Careful application of guidelines in the APSLMP, through this classification process and as applied through the UMP process, should avoid significant adverse environmental impacts caused by types or levels of use.

Careful consideration must be given to the levels of recreational use, both motorized and non-motorized, in relation to the potential carrying capacity of an area. Under Wilderness, Primitive or Canoe ~~Area~~area designations, public use of motor vehicles and aircraft are prohibited. Limited use of motor vehicles may be allowed for emergency and administrative purposes under these classifications. Mountain biking on specific administrative roads, designated for fisheries management or water protection, may be allowed under a Canoe ~~Area~~area classification, subject to their designation in an adopted UMP. ~~-~~ In a Primitive area,

bicycles are allowed on DEC truck trails designated in an adopted UMP. There are no administrative roads or State truck trails, or uses and improvements requiring such roads, currently open in any of the lands subject to this action. Administrative roads and State truck trails would be identified through the UMP planning process. Mountain biking may also be allowed in Wild Forest areas on designated roads and trails, as specified in a UMP. Under a Wild Forest classification, public motorized use may be allowed on roads, rivers, lakes and ponds, and by snowmobiles on designated trails during the winter season.

Development of snowmobile trails and roads open to public use are subject to the "no material increase" provision of the State Land Master Plan ~~that places limits on~~(Guideline 4 under Wild Forest). This guideline limits the total mileage of snowmobile trails and roads that can be designated for public motorized use on Forest Preserve Wild Forest lands~~.~~ above which any increase will be considered a material increase. Through consultation with DEC, the Agency has interpreted the Master Plan mileage guideline to be 848.88 miles; above that number any increase will be considered material. Even under a Wild Forest classification, the Department of Environmental Conservation may restrict use of motor vehicles and aircraft by the public and by administrative personnel where in its judgment the character of the natural resources of the area make additional restrictions desirable or necessary.[24]

An Intensive Use ~~Area~~area is an area of State land where facilities are provided for more intensive public uses such as campgrounds, downhill and cross-country ski areas, motor boat launches or intensive day use areas. Major commitments to facility development and mitigation of impacts from higher levels of public use are required. The FPEIS states that "the resource characteristics must be unusually capable of withstanding such intensive use with little or no degradation in natural or scenic resource quality." FPEIS at 25. The overriding consideration when classifying newly acquired lands adjacent to state lands with two or more classifications is a "determination that any use allowed by classification should not exceed the physical, biological, or social carrying capacity of the land's resources." FPEIS at 24. The sensitive water bodies in the Essex Chain tract have had relatively restricted past recreational use by hunting camp lessees ~~with~~. There has been no general public access~~, resulting in~~ and as a result the lakes and ponds have retained their pristine condition~~, which~~. The present condition is not compatible with more intensive recreational use. In addition, an existing DEC Intensive Use campground facility already exists nearby at Lake Harris in the Town of Newcomb which provides a more intensive recreational experience in a more developed setting. For these reasons, a separate alternative for an Intensive Use ~~area~~Area for the Essex Chain Lakes is not proposed in the Alternatives section of this ~~DSEIS~~FSEIS.

B. **Diminishment in quality of recreational opportunities requiring vast acreages of open space, such as hunting, backpacking and wilderness canoeing, could cause significant adverse economic impacts.**

~~24~~24 See APSLMP at p. 49. Also see DEC Proposal for "Essex Chain Canoe Recreation Area" in Public Access and State Land Classification of the Former Finch Pruyn Lands, December, 2012, pages 4 - 6, proposing Special Management Area. http://www.dec.ny.gov/docs/lands_forests_pdf/finchrecfull.pdf (last accessed December 2, 2013).

None of the alternatives proposed in this document consider the reclassification of existing Forest Preserve lands from a more restrictive classification to a less restrictive classification; therefore there will be no diminishment in quality of recreational opportunities requiring vast acreages of open space.

C. **Diminishment in area of lands designated Wilderness, Primitive or Canoe would significantly decrease the availability of primitive recreational opportunities which are at present extremely limited in New York State and rare in the Northeastern United States.**

None of the alternatives proposed in this document considers the reclassification of existing Forest Preserve lands from a more restrictive classification to a less restrictive classification; therefore there will be no diminishment in area of lands currently designated as Wilderness, Primitive or Canoe.

D. The designation of large tracts of State land as Wilderness, Primitive or Canoe provides the unusual opportunity for the reintroduction of extirpated species of wildlife which require significant acreages of habitat essentially undisturbed by man.

The alternatives described in this document include classifying large tracts of land as Wilderness, Primitive, or Canoe. The reintroduction of extirpated species is possible, but the feasibility needs to be analyzed through the UMP process. The reintroduction of certain extirpated species may not be limited to Wilderness, Primitive~~,~~ or Canoe classifications, but may also be possible with Wild Forest classification.

E. **Deterioration of the quality or character of Wilderness, Primitive or Canoe area resources could adversely impact the educational and research values of those areas.**

None of the alternative proposals in this document consider the reclassification of existing Forest Preserve lands from a more restrictive classification to a less restrictive classification; therefore there are no adverse impacts to the educational and research values for these areas.

F. Deterioration in the quality of the natural or scenic resources of State lands could adversely affect the Park economy.

This area includes several natural and scenic resources, including lakes and ponds with high quality fisheries, mountains, a significant waterfall, and several miles of undeveloped rivers. The extent of the impacts to these resources on the Park economy will depend on the level and type of use of the land, which may be controlled through both the classification and UMP process.

Threats to the fisheries in these waters include the release of non-native and invasive species. Vectors for these species include fishing waders, trailers, boats~~, seaplanes~~ (with and without motors), floatplanes, and man himself. Deterioration of the natural resources could directly impact tourism and the local economy.

G. Potential Impacts Of Classification Options

The Department is bound to guidelines of each classification when developing UMPs as defined in the APSLMP. These guidelines vary from one classification category to another and may prescribe the types of recreational opportunities available in conformance with the APSLMP's unifying theme that "the protection and preservation of the natural resources of the state lands within the Park must be paramount. Human use and enjoyment of those lands should be permitted and encouraged, so long as the resources in their physical and biological context as well as their social or psychological aspects are not degraded~~.~~." (APSLMP at ~~page 1~~p. 1).

Classification of these lands could result in management actions that could diminish the overall quality of the natural resources. ~~Although the APLSMP also states that *nothing in the guidelines for lands falling within each major*~~ The classification ~~*shall be deemed to prevent the Department of Environmental Conservation, or any other state agency administering such lands, from providing for more restrictive management where necessary to comply with constitutional requirements or to protect the natural resources of such lands* (APSLMP at page 15), the classification~~hierarchy establishes strong guidelines that are incorporated into ~~UMPs~~Ump's and direct DEC's management planning.

The principal difference between the Wilderness, Primitive and Canoe classifications involves the degree to which motor vehicles may be used for administrative purposes.

In Wilderness areas, the use of motor vehicles is prohibited except for sudden, actual on-going emergencies involving the protection or the preservation of human life or intrinsic resource values.

In Primitive areas, the use of motor vehicles is subject to Wilderness guidelines except that existing roads and snowmobile trails may be used by administrative personnel to the extent necessary to reach and maintain ~~structures and improvements whose removal, while anticipated, cannot be accomplished by a fixed deadline, or in Primitive Areas not destined to become Wilderness, structures or improvements of an essentially permanent character. To the extent roads and snowmobiles are legally open to the public, the public may continue to use them at the discretion of the DEC pending Wilderness classification, if their use would not adversely affect the character of the resources.~~existing structures and improvements. Currently, there are no existing roads open to the public, nor are there any structures and improvements requiring maintenance; thus there are no truck trails available for public use under this guideline.

In Canoe areas, the use of motor vehicles is also subject to Wilderness guidelines except that

motor vehicles may (along with aircraft and motorized equipment) be used by administrative personnel, for purposes designed to protect or enhance the water or fisheries resources as specified in a duly adopted UMP.

Another significant difference between the three classifications involves the use of all terrain bicycles~~.~~, often referred to as mountain bikes. The use of all terrain bicycles is prohibited in all Wilderness areas. In Primitive and Canoe areas all terrain bicycles are allowed on roads legally open to the public and on State truck trails designated by DEC in an adopted UMP. However, as stated above, there are no roads that meet this guideline; mountain bikes would not be allowed in this area without an amendment to the Master Plan's guidelines.

A Wild Forest classification would broaden the range of conforming structures and improvements and allow bicycles on all trails where they are not explicitly prohibited. The Wild Forest classification would also allow use of motor vehicles by administrative personnel where necessary to reach, maintain, or construct permitted structures and improvements, for appropriate law enforcement and general supervision of the public or appropriate purposes, including research to preserve fish and wildlife and other natural resources. Public use of motor vehicles is allowed on a limited and regulated basis that will not materially increase motorized uses that conformed to the Master Plan at the time of its adoption in 1972 and will not adversely affect the essentially wild character of the land. Snowmobile use is limited to snowmobile trails designated by DEC, and ATV use is restricted to public roads and DEC roads open to such use.

UNAVOIDABLE ADVERSE ENVIRONMENTAL EFFECTS

Most adverse impacts upon the resource quality and character of State lands within the Park as the result of land classification are avoidable. Strong guidelines for the classification of State lands protect resource quality and character from overuse and degradation while still providing public recreational use opportunities. Further protection of these resources will be addressed in the UMP process.

MEASURES TO MITIGATE POTENTIAL ADVERSE ENVIRONMENTAL EFFECTS

The APSLMP is designed to allow only those uses of State land that will not degrade resource quality or character. The discussion of alternatives in this ~~DSEIS~~FSEIS allows the Agency to evaluate the various classifications and the potential adverse impacts of those classifications. The only means of mitigating impacts is the selection of more restrictive classifications. Therefore the discussion of alternatives is the discussion of mitigation.

~~The NYSDEC~~DEC can manage land more restrictively than the guidelines in the APSLMP prescribe. The UMPs for these areas should address potential impacts and prescribe management that would mitigate impacts to the greatest extent possible~~.~~ to specific areas deserving of special protection.

EFFECTS ON THE USE AND CONSERVATION OF ENERGY RESOURCES

The proposed classification alternatives have no measureable effect on the use or conservation of energy resources.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

The classification of these lands itself does not provide irreversible or irretrievable commitments to the resources.

GROWTH INDUCING ASPECTS OF PROPOSED ACTION

The APSLMP provides alternatives for a diversity of recreation opportunities within the Park, which can have a positive impact on the local economy while also having a potential increase in demand for local services. The number of visitors is affected by various factors including tourism marketing programs, and tourist accommodations. Recreational visitors have an insignificant demand for most public services from local governments but may increase demand on emergency services and increase wear on roads.

The recreation and tourism industry is the backbone of the Adirondack economy. Lodging, food and automobile service provides the primary source of income from this industry. Recreational equipment supply stores also benefit significantly from the recreational opportunities available on State lands. These expenditures result in jobs and have a multiplier effect when the original expenditure is used to buy additional goods and services within the Park. Recreationists and tourists tend to be transient visitors in the Park and therefore have an insignificant demand for public services from local governments.

Due to the scarcity of designated Wilderness in the Eastern United States and due to the existence of private land adjacent to such Wilderness, ~~it~~individuals may ~~become~~find it desirable to purchase property for residential purposes adjacent to Wilderness. An increase in home construction would increase the demand for certain public services, such as police and fire protection, sewer service and water service, and may increase the tax base a community may use to pay for these services.

ECONOMIC IMPACTS OF THE PROPOSED ACTION

SEQRA demands that the Agency's action find a "suitable balance of social, economic and environmental factors be incorporated into the planning and decision-making processes of State, regional and local agencies."

Visitation to the Adirondack Park is critical to the local, regional and State economies. Visitors are attracted by a number of factors including outdoor recreation, shopping and dining, relaxation, and scenery viewing. Publicly available professional and scholarly studies using a quantitative and qualitative analysis of the impacts associated with outdoor recreation on the Forest Preserve and provide insights about the potential impacts of land classification on the local, regional, and State economies, assess the Park's visitation economy, visitor attraction factors, outdoor activity participation, winter recreation economy, visitor spending habits, and visitor originations. The future programming and marketing of the affected lands' potential recreation opportunities are also addressed. Business and resident attraction factors, as well as any differentiation in impact between existing land classifications, are also examined in these studies.

Agency staff also conducted an extensive literature review and obtained information providing the available data regarding visitation and spending in the Adirondacks. This information is limited, however, and additional research, including market analyses, must be undertaken to provide for quantitative predictions of total economic impacts related to the addition of new recreation opportunities on the land being considered for classification. Such research should take into account shifts of economic activity from one Park or State community to another to better estimate total impacts to the State and regional economies.

The Adirondack Park Visitation Economy

Tourism is a major driver of the Park's economies. More than 20,000 Adirondack jobs are supported by the industry and visitor attraction and spending are integral components of an economically sustainable region. The Park benefited from more than $1.1 billion in Adirondack region tourism spending in 2010. According to a report commissioned by New York State Empire State Development, and performed by the firm Tourism Economics, Hamilton and Essex counties, those counties most affected by this classification action, are the most tourism-reliant counties in the region. Forty-seven percent of labor income in Hamilton County and 32% of labor income in Essex County is directly related to tourism. In Hamilton County, 46% of its workforce is employed in a tourism-related industry and in Essex County, about 37% of workers are employed in the sector[25]. It should also be noted that these are the only two counties in New York State wholly located inside the Adirondack Park boundary.

[25] Tourism Economics, 2010. The Economic Impact of Tourism in New York: Calendar Year 2010, Adirondacks Focus. Albany, NY.

The tourism industry in the Adirondacks is highly seasonal. In 2006, 71% of Adirondack visitor spending occurred in the period of May through September. In Warren County, a county that shares many recreation resources with both Essex and Hamilton Counties and is also located mostly within the Park, 78% of tourism spending occurred during those months. In Essex County, 60% of expenditures occurred during those months and in Hamilton County, 82% occurred during that period[26]. These numbers correlate to strong seasonality trends in employment. From February to August of 2006, Essex County's unemployment rate dropped 3.2 percentage points, Warren County's dropped 3.9 percentage points, and Hamilton County's dropped 6.3 percentage points. By February 2007, each county's unemployment rate had risen nearly completely to its February 2006 level. Figure 3 highlights the seasonality of Adirondack employment in both 2006 and 2012.

Figure 3. County Unemployment Rate Fluctuations

	Feb-06	Aug-06	Feb-07
Essex County	7.4%	4.2%	7.6%
Hamilton County	8.9%	2.6%	8.2%
Warren County	6.3%	2.4%	5.9%

	Feb-12	Aug-12	Feb-13
Essex County	11.5%	8.7%	11.9%
Hamilton County	11.3%	5.2%	12.2%
Warren County	10.1%	7.3%	10.3%

Occupancy tax data from both Essex and Warren County also display the seasonality of visitation. In 2012, 58% of Essex County occupancy taxes were collected from May through October. In Warren County, most visitation occurs from July to September with the 3rd quarter bringing in between 51%-60% of the County's total occupancy tax revenues from 2004 to 2012; the 4th quarter (October-December) is the second highest occupancy tax generating quarter resulting in between 19% and 35% of the County's total for those same years.

The local towns most affected by this classification, Indian Lake, Long Lake, Minerva, Newcomb and North Hudson, are also highly dependent upon tourism for their tax base. As such, these five towns have resolved to work together as the Upper Hudson Recreation Hub to help realize the economic potential of all of former Finch lands and expand tourism and outdoor recreation-related business in the area.

In the five towns, a region whose combined population decreased 8.2% between 2000 and 2010 (compared to a 1.3% population decrease Park-wide), nearly 18% of the workforce is employed in the arts, entertainment, recreation, accommodation and food services sector, a percentage twice the amount of a typical New York region. An additional 14% of the workforce is

[26] Davidson-Peterson Associates and the Northern New York Travel and Tourism Research Center, SUNY Potsdam. 2006. 2006 Economic Impact of Expenditures by Tourists on Northern New York State. Potsdam, NY.

employed in the construction sector and 5% is employed in the retail sector. Both of these industries are also highly reliant upon tourism and second home development. Figure 4 outlines the employment characteristics of the five towns combined.

Figure 4. Employment by Industry in the Upper Hudson Recreation Hub

	2010		2000	Change 2000-2010
	Employees	%	Employees	%
Agriculture, forestry, fishing, hunting, mining	64	3.9%	51	25.5%
Construction	227	13.8%	228	-0.4%
Manufacturing	107	6.5%	91	17.6%
Wholesale trade	10	0.6%	12	-16.7%
Retail trade	97	5.9%	147	-34.0%
Transportation, warehousing, and utilities	74	4.5%	61	21.3%
Information	14	0.8%	13	7.7%
Finance, insurance, real estate, rental, leasing	32	1.9%	45	-28.9%
Professional, scientific, management, administrative, waste management services	82	5.0%	42	95.2%
Educational services, health care, social assistance	438	26.5%	376	16.5%
Arts, entertainment, recreation, accommodation, food services	296	17.9%	226	31.0%
Other services, except public administration	83	5.0%	96	-13.5%
Public administration	126	7.6%	196	-35.7%

Source: U.S. Census Bureau

Tourism plays a significant role in the State, regional, and local economies. The seasonal nature of tourism in the Adirondacks has led to large fluctuations in unemployment in Adirondack communities and the towns closest to the lands being classified are heavily reliant upon tourism-related employment. These facts highlight the imperative to examine what is attracting visitors to the Park.

Visitor Attraction Factors

Research indicates that outdoor recreation is the major driver of visitation to the Adirondack Park with a variety of activities being attractive to these visitors. According to a 2012 report by the firm Placemaking and commissioned by the Regional Office of Sustainable Tourism (ROOST), the largest draw to Essex County is "outdoor activities," with 77% of respondents indicating that this was an attractor[27]. Activities "relax/dine/shop" (67%) and "sightseeing" (55%) rounded out the top three. The significant overlap between outdoor activities and "relax/dine/shop" suggests recreation-oriented visitors seek to visit places that have a critical mass of commercial enterprises such as restaurants and stores in addition to recreation assets.

A national market segmentation analysis performed by the firm Longwoods International divides potential trips to the region into four primary groups, touring trips, country resort trips, special event trips, and outdoors trips. Each type of trip has different characteristics according to the firm[28]:

27 Placemaking and the Regional Office of Sustainable Tourism/Lake Placid Convention and Visitor's Bureau. 2012. Leisure Travel Study: 2012 Visitor Profile and Return on Investment- Conversion Rate Analysis. Essex County, NY. http://www.roostadk.com/files/2012LeisureTravelStudy.pdf

28 Longwoods International. 2008. Lake Placid Image Study and Regional Visitor/Market Opportunity Analysis. Lake Placid, New York http://www.roostadk.com/files/Final%20Presentation%20for%20May%2008%20Public%20Meetings%2005%205%

- A **Touring Trip** is a trip taken by car, bus, or train through areas of scenic beauty, cultural, or general interest. Visitors may have flown to a destination before beginning their trip.

- A **Country Resort Trip** is a trip taken to a resort to relax, enjoy sports, recreation, etc.

- A **Special Event Trip** is a trip taken primarily for the purpose of attending an event such as a fair, festival, pageant, race, sports meet, or a professional or college ball game.

- An **Outdoors Trip** is a trip whose main purpose is to experience the natural environment where a visitor may engage in outdoor activities such as camping, hunting, fishing, hiking or rafting.

Based upon Longwoods' analysis, the three groups most likely to participate in recreation on Forest Preserve lands are people on country resort trips, special event trips to various programmed activities on the Forest Preserve, and outdoors trips.

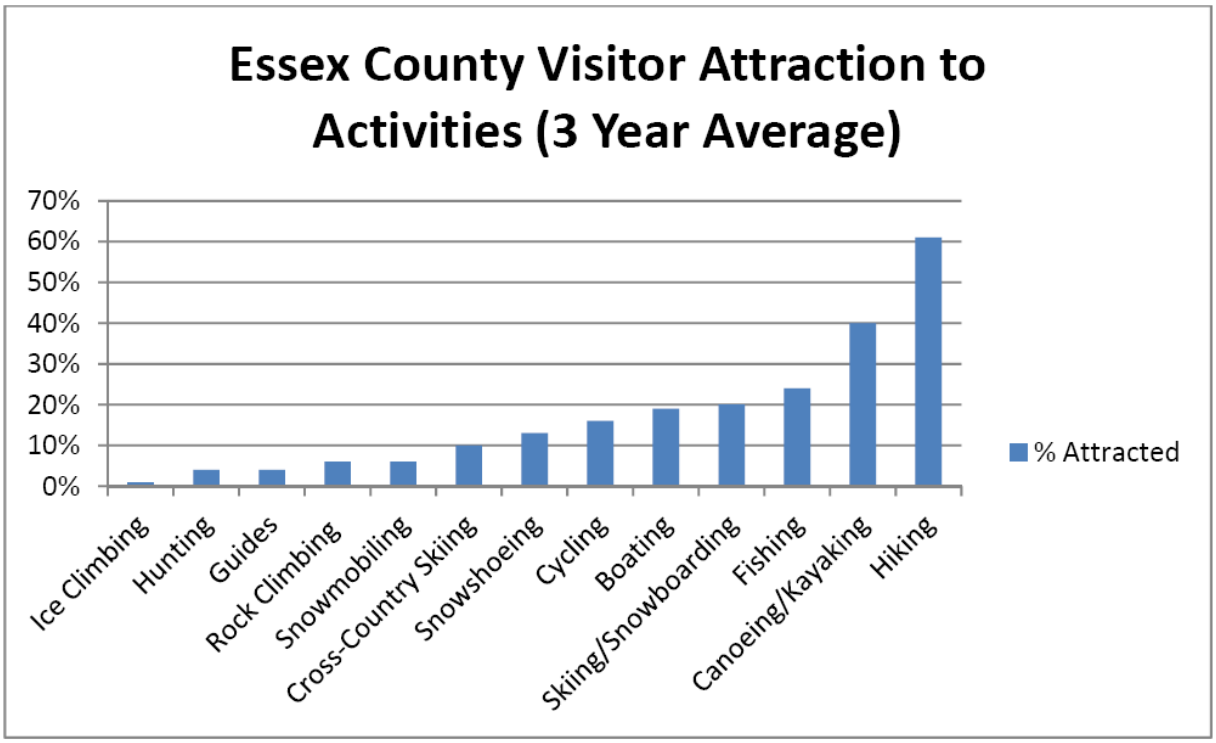
A diverse group of users participate in activities on the Forest Preserve and several studies have examined which activities are participated in on Forest Preserve lands. While future activity use on the subject lands cannot be determined based upon past or existing use patterns because of potential changes in interests, current outdoor activity participation provides the best overview of potential use patterns on the newly classified lands by visitors.

Outdoor Activity Participation

For the 77% of visitors to Essex County attracted by outdoor activities, the ROOST study found that, "hiking" was the greatest draw (62%), followed by "canoeing/kayaking" (41%), and "fishing" (24%). "Skiing" (22%), "boating" (20%), and "cycling" (16%), rounded out the top six. Figure 5 shows the full list of activities and their associated participation levels.

2008.pdf

Figure 5. Essex County Visitor Attraction to Activities (3 Year Average)



Research commissioned by the NYS Department of Environmental Conservation and conducted by the State University of New York College of Environmental Science and Forestry examined outdoor recreation patterns of Forest Preserve users throughout the Park. The data for this study was collected through more than 1,890 trailside interviews conducted at Forest Preserve access points in all four quadrants of the Park and 2,177 mail surveys. The study was conducted throughout all four seasons during the years of 2008-2011. The information gathered provides insights on which activities users of State Forest Preserve lands in the Adirondack Park participated in in recent years. While there were significant methodological differences from Essex County's tourism study, the two most popular activities common to both surveys were "hiking or walking" and "non-motorized water travel". Figure 6 shows which outdoor activities recreation users had participated in within the Park in recent years and Figure 7 examines the most popular outdoor activities that are common to both surveys[29].

[29] Dawson, Chad, P., SUNY College of Environmental Science and Forestry and New York State Department of Environmental Conservation. Adirondack Forest Preserve Visitor Study Summary. Syracuse, NY: 2012.

Figure 6. Forest Preserve Users' Participation in Recent Years

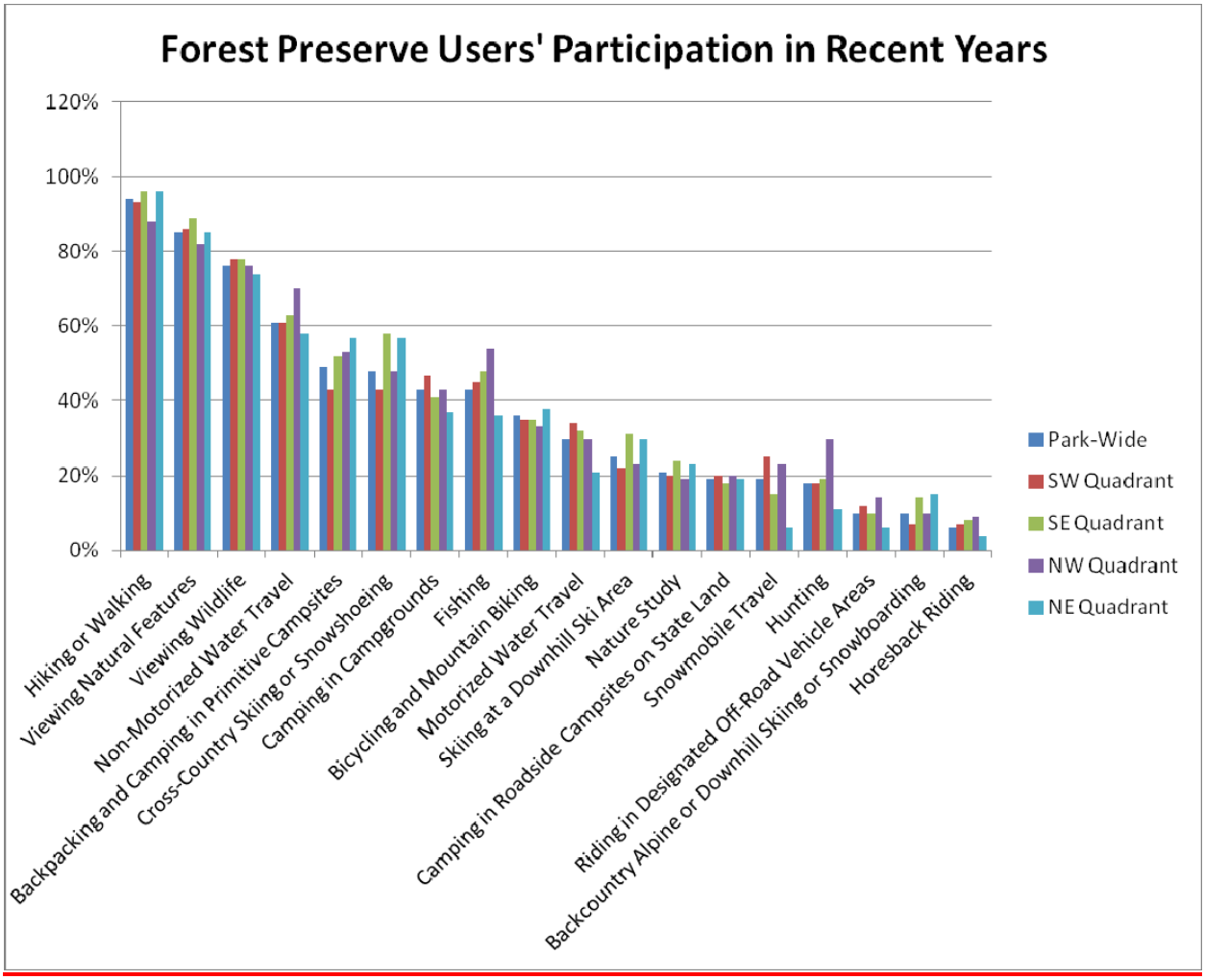
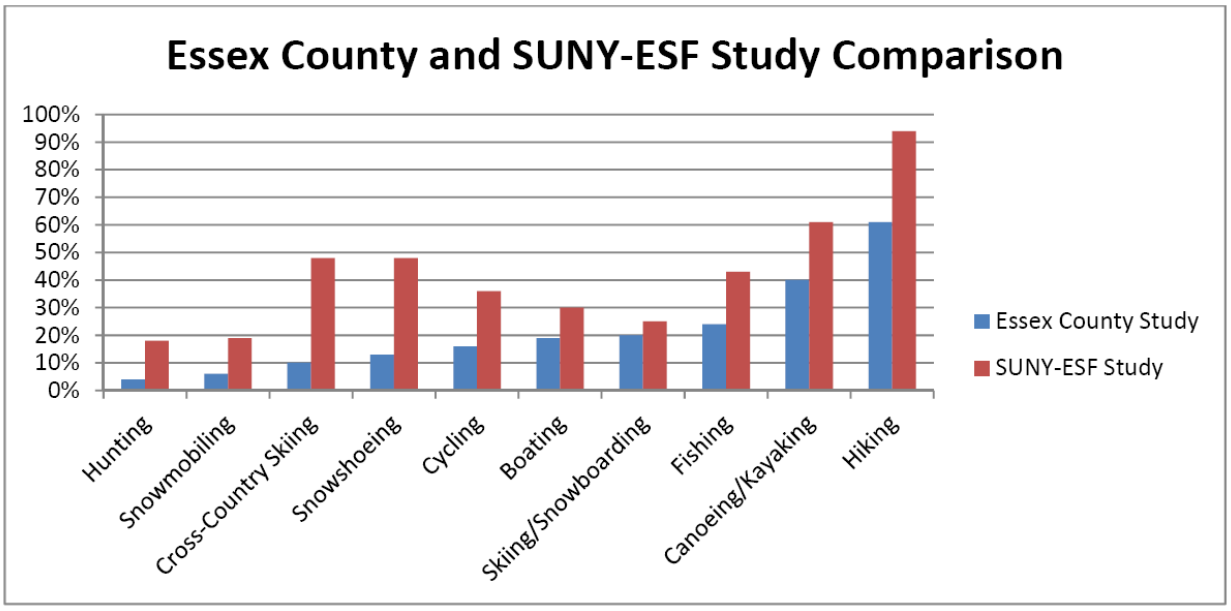


Figure 7. Essex County and SUNY-ESF Study Comparison



These surveys display a greater level of participation in three-season, spring-summer-fall, recreation than in winter sports. Data from both surveys are consistent with visitor spending, unemployment rate, and occupancy tax data discussed above. The surveys are also consistent with Outdoor Industry Foundation participation data and the New York Statewide Comprehensive Outdoor Recreation Plan. According to research commissioned by the Foundation, "cycling" (29%) is the most popular activity in New York State followed by "wildlife viewing" (23%) and "trail" sports (22%)[30]. Figure 8 highlights participation according to the Outdoor Industry Foundation and Figure 9 lists overall New York participation in outdoor activities according to the 2009-2013 Statewide Comprehensive Outdoor Recreation Plan.

Figure 8. New York Participation in Outdoor Activities

30 Southwick Associates Incorporated and the Outdoor Industry Foundation. 2005. The Active Outdoor Recreation Economy: A $730 Billion Contribution to the U.S. Economy. Boulder, CO.

Sport	Overall NY Participation
Bicycling (Paved and Off-Road)	29%
Wildlife Viewing (Bird Watching, Other)	23%
Trail (Trail Running, Day Hiking, Backpacking, Rock/Ice Climbing)	22%
Camping (RV, Tent, Rustic Lodging)	19%
Paddling (Kayaking, Rafting, Canoeing)	12%
Snow Sports (Downhill Skiing, Snowboarding, XC Skiing, Snowshoeing)	8%
Fishing (Fly and Non-Fly)	8%
Hunting (Shotgun, Rifle, Bow)	4%

Figure 9. New York Outdoor Activity Participation

Activity	2005 Statewide Participation Days
Cycling	51,482,470.00
Boating (Including Paddle Sports)	24,665,177.00
Hiking	20,821,392.00
Fishing	16,763,916.00
Hunting	7,702,896.00
Skiing/Snowboarding	6,400,664.00
XC Skiing/Snowshoeing	4,456,481.00
Snowmobiling	2,109,036.00

The recreation participation data highlight the sports that engage the greatest number of people. Additional data are required to determine the total number of user days of each recreation activity in the Park to better understand the impacts of each activity on the local economy. For example, one sport may be popular to a large percentage of the population but there may be more user days of another activity if individuals are participating in that other activity more frequently. The total number of participation days in the Adirondack Park would be the most informative indicator of economic impact for each respective Forest Preserve activity.

Winter Recreation Economy

The economic contribution of wintertime visitation resulting from recreation is an important economic driver in the Adirondacks because it represents a major source of "off-season" income to businesses that may otherwise close during the winter season. Overall, 15% of North Country visitor expenditures occur in the period of January-April. In Hamilton County, 9% of visitor expenditures occurred during that period, in Essex County, 20% occurred during that period, and in Warren County, 10% occurred during those months.

According to SUNY-ESF's visitor survey, "cross-country skiing or snowshoeing" is the most popular winter activity for Forest Preserve users with 48% of survey respondents indicating that they had participated in those activities in recent years. "Skiing at a downhill ski area" (25% of respondents), "snowmobile travel" (19% of respondents), and "backcountry alpine or downhill

skiing or snowboarding" (10% of respondents) rounded out winter activity participation. This trend is relatively consistent with the number of user days estimated in the New York Statewide Outdoor Recreation Plan 2009-2013. The plan estimated that in 2005 the overall user days were 6,400,664 for downhill skiing, 4,456,481 for cross-country skiing and snowshoeing, and 2,109,036 for snowmobiling[31].

While direct spending by visitors relating to each winter activity is not available, a 1999 study commissioned by the New York State Snowmobile Association and performed by Merwin Rural Services Institute found that snowmobiling brought approximately $23 million in direct spending to the Adirondack region in 1998[32]. Adjusted for inflation, that would equate to $33.3 million in direct spending in 2013. Additionally, there were 116,725 snowmobiles registered in New York State during the 2012-2013 snowmobile season and the New York State Snowmobile Association estimates a total direct spending amount of $434 million in New York State related to snowmobile activity[33]. The Study also estimated that 28.3% of all snowmobile activity days in New York State occurred in the Adirondack Park.

The combination of all winter sports helps to sustain an economy in which each county's unemployment rates fluctuate between three and six percentage points. Given that Adirondack Park communities are reliant on the winter economy, economic impact studies of all winter activities are necessary in order to determine the full value of winter recreation activities in the Adirondacks. The expansion and diversification of all winter activities will help to provide winter jobs to individuals with seasonal employment as well as provide revenue to businesses during a season in which they may otherwise be closed.

Visitor Spending

Visitor spending contributes to profits (proprietor income), jobs, tax revenues, and workforce income, with the most direct effects occurring within the lodging, restaurant, amusement, and retail trade sectors. Through secondary multiplier effects, visitor spending reaches most sectors of the economy. As such, increased visitor spending has the potential to help maintain and expand jobs, preserve community services, diversify existing retail offerings, attract new business enterprises, and broaden the tax base. The level and sectors of spending by Adirondack visitors has a significant impact on the tourism economy.

According to Longwoods International, users on different types of trips spend different amounts of money. The firm's market segmentation technique notes that visitors on "touring trips" spend $183 per-person, per day; people on "country resort trips" spend $164 per-person, per-day;

[31] New York State Office of Parks, Recreation and Historic Preservation, 2008. Statewide Comprehensive Outdoor Recreation Plan. Albany, NY. http://nysparks.com/recreation/trails/statewide-plans.aspx

32 Merwin Rural Services Institute,1999. Snowmobiling in New York State: An Analysis of Economic Impact and Overview of the Industry in the Empire State. Potsdam, NY.

33 New York State Snowmobile Association (NYSSA) and SUNY Potsdam Institute for Applied Research, 2012. 2011 Snowmobile Owners Survey. http://www.nysnowmobiler.com/images/pdf/2012/NYSSA-Economic-Study-Executive-Summary-And-Discussion-9-13-12.pdf.

people on “special event trips” spend $158 per-person, per-day; and people on “outdoors trips” spend $75 per-person, per-day[34].

Davidson-Peterson Associates estimates that the average per-person, per-day expenditure of the average Northern New York visitor was $139.16 for those staying at a hotel, motel or resort; $98.93 for those staying in a cabin or cottage; $81.23 for those staying with friends or relatives; $76.18 for campground guests; and $50.63 for “day-trippers.”[35] According to the study, 45% of visitors stayed at a hotel, motel or resort, 26% stayed in campgrounds, 21% stayed with relatives or friends, and 7% stayed in a cabin or cottage. This indicates that the visitors staying in hotels, motels, and resorts are both the highest spenders and the largest visitor group. The study found significant spending differences between day visitors and overnight visitors and also found spending differences between overnight visitors staying in a variety of types of accommodations.

According to the Regional Office of Sustainable Tourism, the average visitor party to Essex County (3.9 people) spends $436 per-day on per trip or $111.80 per-person, per-day. The ROOST study did not segment visitor spending by accommodation type but found that 37% of overnight visitors stayed in a hotel or resort, 18% stayed in a motel, 12% stayed in an recreational vehicle or tent, 12% stayed in a cottage or cabin, 6% stayed with family or friends, 6% stayed in a bed and breakfast, 6% rented a home, and 3% rented a condominium. Davidson-Peterson found that visitor expenditures in the entire Northern New York region were in the recreation (27%), shopping (23%), food (22%), lodging (19%) and transportation (9%) sectors. The Regional Office of Sustainable Tourism study presented a spending breakdown similar to the Davidson-Peterson study with visitors spending their money on events and attractions (7%), entertainment (7%), transportation (9%), lodging (37%), meals (18%), souvenirs/shopping (11%), and other (10%).

The SUNY-ESF study did not examine Forest Preserve user’s expenditures but did survey respondents about type of accommodations during their trip. The study found that 35% of users traveled from their place of residence, 17% stayed in a primitive campsite on state land, 10% rented a home, condominium, cabin or lodge, 9% stayed at a hotel or motel, 9% stayed with a friend or relative, 9% stayed at their second home, cabin, or condominium, 7% stayed at a New York State campground, and 4% stayed at another type of accommodation. The study also found that in recent years, 66% of Forest Preserve users had dined in the Park, 55% had visited museums or historic sites in the Park, 45% had shopped for “non-essential items” in the Park, 37% had attended festivals or cultural events in the Park, 21% had attended an art event or visited an gallery in the Park, and 21% had attended a musical or theater event in the Park.

A review of New York State user group visitation spending studies examined spending estimates for snowmobile users, anglers, and canoeists/kayakers. In 2011, the New York State Snowmobile Association (NYSSA) estimated that each snowmobile trip in New York State

34 Longwoods International. 2008. Lake Placid Image Study and Regional Visitor/Market Opportunity Analysis. Lake Placid, New York

35 Davidson-Peterson Associates and the Northern New York Travel and Tourism Research Center, SUNY Potsdam. 2006. 2006 Economic Impact of Expenditures by Tourists on Northern New York State. Potsdam, NY.

generates $106.94 per-snowmobile, per day[36]. The 2007 New York Statewide Angler Survey found that "out-of-county" anglers spent $42.27 and $24.62 per-person, per-day in Essex and Hamilton Counties respectively[37]. Additionally, a 2007 study of users of the Northern Forest Canoe Trail found that "non-local" paddlers using those recreation resources spend about $46 per-person, per day[38]. While the data in each of the New York specific surveys can be used to examine the individual user group's impacts, a comparison between user groups cannot be made due to the differentiation in methodology and metrics.

Additional research from the State of Minnesota presents a useful analysis of user groups' impacts[39]. In 2009, the University of Minnesota Tourism Center commissioned a survey of recreational trail users across Minnesota to determine their spending habits while on recreation-oriented trips. The study broke users into local users and users greater than 30 minutes from their home. Figure 10 outlines the results of the non-local users. The spending ranges are similar for all users although the study suggests that winter recreation users spend slightly more per-person than other user groups.

Figure 10. Spending by Non-Local Trail Users in Minnesota

Non-Local Activity Participants	Spending (Per-Person, Per-Day)
Walkers/Hikers	$26.70 - $39.08
Bicyclists	$30.82 - $43.87
Snowmobilers	$31.19 - $49.36
Horseback Riders	$19.69 - $43.03
Cross-Country Skiers	$43.04 - $53.66

The Minnesota study used a distance of 30 miles to define non-local users and does not differentiate between overnight visitors and day visitors and thus these numbers represent the average spending for both day and overnight users. It could be possible to further segment each user-group into day and overnight visitors, as well as into different overnight accommodation user groups (i.e. overnight horseback riders staying in campgrounds and cross-country skiers staying in hotels), but that information was not found after a significant literature review. The data presented in the University of Minnesota study does not suggest there would be a significant

[36] New York State Snowmobile Association (NYSSA) and SUNY Potsdam Institute for Applied Research, 2012. 2011 Snowmobile Owners Survey. http://www.nysnowmobiler.com/images/pdf/2012/NYSSA-Economic-Study-Executive-Summary-And-Discussion-9-13-12.pdf.

[37] New York State. Department of Environmental Conservation Bureau of Fisheries. 2009. New York Statewide Angler Survey 2007. Albany, NY, http://www.dec.ny.gov/docs/fish_marine_pdf/nyswarpt3.pdf.

[38] Pollock, Noah. University of Vermont Tourism Data Center. 2007. Economic Impact Assessment of Paddler Recreation in the Adirondacks. Albany, NY. http://www.uvm.edu/~snrvtdc/NFCT/NFCTAdirondackSummaryReport.pdf.

[39] Venegas, Ernesto C.. Minnesota Department of Employment and Economic Development, 2009. Economic Impact of Recreational Trail Use in Different Regions of Minnesota. http://www.tourism.umn.edu/prod/groups/cfans/@pub/@cfans/@tourism/documents/asset/cfans_asset_167538.pdf

difference between user group segments staying in the same type of accommodations (i.e. between day-use bicyclists and day-use snowmobilers).

Visitor Origination

The place of origin, or the area where a visitor resides, affects the flow of money between local, regional, state, and national economies and taxing jurisdictions. For example, if a person traveled from one town to another town and spent money in the visited town, the money spent would have a net impact to the visited town and a flow of capital away from that person's town of residence. If those two towns were in the same county, however, the net impact to the county would be the same as if that individual had spent the money in the town in which the individual resided. It is also possible for an individual to spend that same money in a neighboring county, causing money to flow out of both the individuals' town and county, highlighting the importance of both attracting out-of-jurisdiction visitors as well as retaining in-jurisdiction spending. These flows of capital through economies and taxing jurisdictions occur on a variety of scales, and, as such, the origination of visitors is an important component of impacts to local, regional, state, and national economies.

According to the Regional Office of Sustainable Tourism study, 73% of visitors to Essex County reside in New York State, 14% of visitors reside in Canada, and 13% reside in other U.S. states. The SUNY ESF study also found that 73% of Forest Preserve users reside in New York State, 7% of users reside in Canada and 20% reside in U.S. states other than New York. Data from both studies were consistent in finding that about 27% of users travel into the Park from out of New York State, suggesting that over 27% of visitor spending is brought in from outside of the State and 73% of spending is retained in-State.

This data highlights the importance and opportunity of marketing the Forest Preserve both regionally and State-wide to retain money in the regional and State economies, as well as marketing outside of these jurisdictions to bring new money into the communities, Park, and State.

The Forest Preserve as a Programmable and Marketable Asset

The Adirondack Park's 103 towns and villages serve as gateways to the Forest Preserve and link Forest Preserve users to services, leisure opportunities, and accommodations. The communities and Forest Preserve complement each other with the Forest Preserve providing a range of recreation opportunities that attract people to the local municipalities and the local municipalities providing recreation users with the services necessary to support Forest Preserve activities. Many communities take an active approach in utilizing the Forest Preserve to attract visitors and visitor spending to their local businesses. Events such as birding, rafting, and ice climbing festivals, mountain bike races, canoe competitions, and backcountry ski get-togethers are all co-sponsored and marketed by local Adirondack businesses and municipalities to provide stimulus to local enterprises. In Keene Valley, The Mountaineer outfitting company hosts trail runs, ski festivals, ice climbing festivals, and fly fishing festivals to attract customers into the region. In Old Forge, the Mountainman Outdoor Supply Company hosts whitewater, kayak, and stand-up paddle boarding events to attract potential consumers. Throughout the Park communities such as

Inlet, Wilmington, and Indian Lake all use Forest Preserve resources for events hosted during all seasons.

In addition to assisting in event development, local communities, regional organizations, and the State of New York all market Forest Preserve assets to attract both tourism and businesses to the area. For instance, communities such as the Village of Saranac Lake, the Towns of Clifton and Fine, and Hamilton County have developed incentive programs for visiting the Forest Preserve. In Saranac Lake, hikers of six local mountains surrounding the community can receive a "Saranac Lake 6'er" badge. A similar program, administered by a subcommittee of the Clifton-Fine Local Development Corporation, exists for people completing the "Cranberry Lake 50" hiking route in St. Lawrence County. In Hamilton County, visitors can earn a pin for finding various species of plants or animals, or a badge for climbing five mountains with firetowers, or traveling into the wild to view a certain number of waterfalls. All of these methods help attract visitors to the Forest Preserve as well as local businesses.

Nature tourism is also a growing and important sector of the visitor economy that occurs on the Forest Preserve. According to the US Fish and Wildlife Service, wildlife viewers spent $659,871,000 during visitation in New York State in 2010[40]. Fishing and hunting combined to bring an additional $1,868,035,000 in visitor spending during that period. The natural resources of the Forest Preserve are a major component of the recreation experience for all users, as the SUNY-ESF study found that 85% of all Forest Preserve users participated in viewing natural features and 76% of all users viewed wildlife. It is for these reasons that many states, including Texas, North Carolina, and Washington are investing in the promotion of nature tourism on their respective park lands.

Marketing the Park's assets to various media markets has proven successful in attracting visitors to the region. A conversion analysis of the 2003 Adirondack North Country Fall Scenic Byways Advertising Campaign found that 36,639 people responded to the Adirondack Regional Touring Council's promotions, resulting in over $30 million in direct visitor spending. The Council spent about $675,000 on the campaign, indicating a more than 44:1 return on investment[41]. An analysis of a 2002 New York State-wide Scenic Byways campaign found that over 30,500 households traveled New York's byways as a result of that year's marketing efforts, earning a 30:1 return on investment[42]. These studies indicate that marketing is an important component of attracting visitors to a recreation asset.

[40] United States Fish and Wildlife Service and United State Census Bureau, 2011. 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation—New York. Washington D.C. http://www.census.gov/prod/2013pubs/fhw11-ny.pdf

[41] Adirondack Regional Tourism Council, 2003. Conversion Survey Results: Adirondack North Country Fall Scenic Byways Advertising Campaign. Plattsburgh, NY

[42] Adirondack Regional Tourism Council, 2002. Conversion Survey Results: New York State Fall Scenic Byways Advertising Campaign. Plattsburgh, NY

The Adirondack Partnership's Adirondack Park Recreation Strategy provides communities with a potential guide on how to leverage New York State's Forest Preserve for economic advantage[43]. The Strategy outlines the availability of access for a full range of recreation activities and group of users, the expansion of tourism-related amenities and infrastructure, the growth of the outdoor recreation industry, and the marketing of the entire Park as opportunities for the expansion of the Park's economy. Communities can use these recommendations at the local level to attract additional visitors and investment to their local businesses.

Business and Resident Attraction

As visitation to a community or region increases, so too does the market potential for visitor-oriented businesses. If new businesses open, there is also greater potential for new residents to staff the ventures.

There are many existing businesses in the Park that directly benefit from Forest Preserve recreation amenities. In addition to the guides and outfitters that rely upon Forest Preserve recreation resources, businesses in the lodging and hospitality, entertainment, transportation, retail, and events businesses all benefit from recreation users. Through multiplier effects, visitor spending reaches all corners of the Adirondack and State economy. As the number of new visitors to the Park and its communities increases, the opportunities for existing and prospective ventures in all of these sectors also increase.

Additional research must be undertaken to allow for the quantitative prediction of new economic impacts related to the recreation opportunities on the land being considered for classification. The impending recreation assets on the classified lands offer potential for new users being attracted to the region and State thus helping to increase economic opportunities for businesses.

Economic Impacts of Different Land Classifications

Every land classification provides the potential for a range of recreation opportunities. The specific potential activities are detailed in an adopted DEC prepared UMP.. In addition to assessing the natural resources of a particular unit, UMPs manage recreation opportunities based upon environmental limitations and APSLMP land classification.

The economic impact resulting from a unit is dependent upon the total use of that unit and the spending of the users. A variety of factors influence the use of a unit including the appeal of the natural resource itself, available recreation infrastructure (including trails, camping sites, etc.), proximity to population centers and accommodations, access points, local event programming, and the marketing of the resource. The State University of New York College of Environmental Science and Forestry is currently tabulating use data for each the Park's units. A complete set of

[43] Adirondack Partnership Recreation Planning Workgroup, 2013. Adirondack Park Recreation Strategy: Capitalizing on the Economic Potential of our Natural Environment.

use data for the Forest Preserve is required in order to determine any accurate correlation between land classification and use.

Economic Impacts from Preferred Alternative

The diversity of classifications in the preferred alternative provides for a range of uses including hiking, kayaking, cross-country skiing, snowmobiling, hunting, fishing, bicycling, and other motorized and non-motorized uses. While market research would be required to project quantitative economic impacts related to the potential recreation opportunities on these lands, the variety of recreation options allowed under this classification scenario provides new assets which communities, local businesses, and the State can market and program to attract new visitors to their respective jurisdictions and market areas.

Conclusions

Visitation to the Adirondack Park is critical to the local, regional and State economies. Visitors are attracted by a number of factors including outdoor recreation, shopping and dining, relaxation, and scenery viewing. Those seeking outdoor recreation opportunities participate in a variety of activities ranging from hiking, canoeing/kayaking, and fishing in the warmer months to cross-country skiing, snowshoeing and snowmobiling in the winter. Each recreation activity is essential to a diversified Adirondack visitation economy. Data suggests that Forest Preserve users stay in a variety of accommodations during their stay. Within each user group there are different levels of spending; the data also shows similar spending amounts per-person, per day between user groups. About 27% of visitor spending potentially originates from states other than New York and about 73% of visitor spending is the retention of money in the State economy.

The presented data highlights the available information regarding visitation and spending in the Adirondacks but additional research, including market analyses, must be undertaken to provide for quantitative predictions of total economic impacts. Such research should take into account shifts of economic activity from one Park or State community to another to better estimate total impacts to the State and regional economies. The impending recreation opportunities on the classified lands provide each community and region, as well as the State, new assets that can be programmed and marketed to attract visitors. As visitation associated with the classified land increases, so too does the potential for visitor-oriented businesses and their employees to locate in the region.

Every land classification will provide for a range of new recreation opportunities. Specific facilities and activities will be contained in appropriate UMPs prepared by DEC. The diversity of classifications in the preferred alternative allows for a range of uses that can be marketed and programmed to attract visitors. To assure that adequate recreation amenities are included in UMPs, it is essential that local communities and constituents participate in the DEC's unit management planning process.

CLASSIFICATION ALTERNATIVES

Maps have been created for each alternative described ~~below~~in the DSEIS and the Preferred Alternative and are titled accordingly. These maps should be referred to as the alternatives are read and compared. ~~While the~~The maps depict precise boundaries; however, during the hearing and public comment process, it ~~should be understood~~was stressed that the ~~alternatives, as described, may not result in all~~ boundaries ~~for~~ shown in each alternative might be adjusted and that the final proposal for a preferred alternative would likely have different ~~areas being finalized exactly as shown. Final~~boundaries from those presented in the DSEIS. The final proposed boundaries ~~will be~~are described in ~~a preferred alternative and~~the staff recommendation~~, which will be included as part~~ of ~~the Final EIS for submission by APA staff to the APA Board after~~ a ~~public hearing and comment period.~~ preferred alternative.

On each map is a legend identifying each major land classification relevant to the alternative depicted. Provided beneath the name for each land classification is a list of sample recreational uses that are allowed, as per APSLMP guidelines and criteria, on lands so classified – subject to DEC regulations and UMPs. These are short lists not intended to be complete; they are intended only to help persons understand how each major land classification affects some of the most popular outdoor recreational activities pursued on State land in the Adirondacks.

Not depicted on the numbered alternative maps, due to their small scale, are the Inner and Outer Gooley Club lease camps and the Polaris Club lease camps. Instead, these clubs' existing features are depicted on three larger scale maps provided – one each for the Outer Gooley Club, the Inner Gooley Club and the Polaris Club (Map 3). The camp structures of all three clubs exist on State-owned lands and are nonconforming with the guidelines of the APSLMP~~, requiring their eventual removal regardless of how the lands are classified.~~. The area descriptions within the APSLMP will note the ~~legally~~ fixed deadlines by which these nonconforming structures and associated uses will cease to exist. ~~(For the Outer Gooley Club, this date is July 31, 2013. For the Inner Gooley Club and Polaris Club, this date is September 30, 2018.)~~ Consequently, many of the alternative descriptions provided below ~~ignore~~ignored the interim time periods during which the various nonconforming lease-club structures and uses ~~can~~could continue. The Preferred Alternative does recognize continuing uses and the presence of lease-club structures.

ALL ALTERNATIVES: HUDSON GORGE PRIMITIVE AREA RECLASSIFIED TO WILDERNESS OR CANOE AND SOME UNCLASSIFIED LANDS ADDED TO THIS WILDERNESS

Common to all alternatives presented below is the reclassification of the majority of the existing Hudson Gorge Primitive Area to Wilderness (approximately 17,000 acres) or Canoe (Alternative 3B) and the classification of the OK Slip Falls Tract and a portion~~, or~~ of the ~~entire,~~ Indian River tract to Wilderness. Other alternatives for the Hudson Gorge Primitive Area are not considered because the APSLMP directs this area to be so classified subsequent to these significant private inholdings being "acquired or their uses limited by conservation easement so as to be compatible

with the adjacent state lands" (~~page~~APSLMP at p. 82). The addition of these lands to Forest Preserve triggers this reclassification requirement. In each alternative presented below, therefore, a Hudson Gorge Wilderness Area is created. Within it, the wildest and most remote section of the Hudson River, along with the sensitive ecological communities of this unique area, can be afforded the highest degree of protection possible for State lands in the Adirondack Park.

ALTERNATIVE 1A: NEW STATE LANDS CLASSIFIED PRIMARILY AS WILDERNESS, WITH WILD FOREST NORTH OF ESSEX CHAIN LAKES

MAP 5

Wilderness

Alternative 1A would create a Hudson Gorge Wilderness Area of approximately 38,563 acres, comprised of a large expanse of contiguous, State-owned lands on both sides of the Hudson River, extending from just south of Newcomb to and through the "~~gorge~~Gorge" and Blue Ledges to the vicinity of the Boreas River confluence near North River. All newly acquired lands east of the Hudson would be classified Wilderness and existing State lands also east of the river to a naturally occurring boundary (a series of tributaries), now part of Vanderwhacker Mountain Wild Forest, would be reclassified to Wilderness. West of the river, all newly acquired lands north of the Goodnow River would receive Wilderness classification. South of the Goodnow Flow and Goodnow River, most of the newly acquired lands and waters of the Essex Chain Lakes, excluding the beds and waters of First and Pine Lakes, would also become part of this new Wilderness area. In addition, 1,403 acres of Blue Mountain Wild Forest located southwest of the Essex Chain Tract and east of the Cedar River would be reclassified as Wilderness.

Primitive Area

This alternative includes two road sections which will remain open to adjacent landowners and therefore need to be designated as Primitive. The first is a short section of Ord and First Left Roads, which provide access to neighboring easement lands and cross a 0.3 mile section of Forest Preserve in the northern section of the Essex Chain Lakes Tract. The second, OK Slip Road, crosses a 2.6 mile section of the OK Slip Falls Tract and provides access to the privately owned inholding. Neither of these roads is open to motorized vehicle use by the public.

Wild Forest

In two areas, portions of newly acquired lands would be classified Wild Forest. One would be the area generally north of the Essex Chain Lakes and south of Goodnow Flow, and the second would be the area just west of the South Chain Lakes Road, between the Indian River confluence and the vicinity of an unnamed tributary adjacent to the Outer Gooley Pit.

Due to the existence of deeded rights allowing float plane access to First and Pine Lakes, this alternative would place the beds and waters of the lakes entirely within the Blue Mountain Wild Forest.

State Administrative

The Towns of Newcomb, Minerva, and Indian Lake have been granted limited use to three gravel pits on these tracts of land through a conservation easement. The gravel pits, referred to as the Chain Lakes, Deer Pond and Outer Gooley Pits, are limited in size to a maximum of one acre. The Towns have an easement to extract gravel only for the purpose of road, trail and infrastructure maintenance on the parcels on which each pit is located, with a permit from the NYSDEC, "subject to all laws, rules and regulations in effect at the time of issuance of the DEC permit".[44] Each of these one-acre pits would be classified as State Administrative.

Discussion of Selected Recreational Opportunities

As in most of the alternatives presented, the corridor of the Hudson River would offer a wilderness rafting, paddling and camping opportunity, free of significant manmade structures and motorized uses for nearly fourteen miles. ~~(Eventually the bridge across the Hudson near the Polaris Club lease camps would be removed.)~~ Lands classified Wild Forest would be situated near the Hudson River in two critical locations to allow for public motor vehicle access to the general vicinity of important river take-outs and put-ins for visitors accessing the river. The Essex Chain Lakes, although they would occupy a relatively small portion of this proposed Hudson ~~River~~Gorge Wilderness Area, would also offer a unique wilderness paddling and camping opportunity. The lake experience would not be as rigorous or challenging as the Hudson River trip, but still remote and wild.

The network of private~~,~~ lease club roads in the newly acquired lands would be closed to motor vehicle and mountain-bike use in this alternative. However, these lands would provide an opportunity for alternative forms of outdoor recreation that conform to ~~wilderness~~Wilderness standards, including: hiking, skiing, snowshoeing, horseback riding, and horse and wagon riding.

The Towns of Newcomb and Minerva have a non-exclusive easement for float plane access to First Lake and Pine Lake, subject to permit from DEC. The Towns can allow others non-exclusive ~~-~~float plane access as well, which is also subject to any limitations in a permit duly issued by DEC. The purpose of the easement is to load and unload passengers to facilitate access for non-motorized public recreational use. Historically, the public has had float plane access to First and Pine Lakes, as both lakes were partially on public land (Blue Mountain Wild Forest).

In this alternative, commercial float plane operators could continue, under permit from DEC, to provide float plane access for the public to First Lake, the westernmost of the Essex Chain Lakes, and Pine Lake. For recreationists who arrive at First Lake by float planes and desire to explore the rest of the lakes in the Chain, a 1/6-mile carry could provide direct and relatively easy access to them.

~~44~~[44] Grant of Conservation Easement Pursuant to ECL Article 49 Over Portions of the Chain Lakes Tract, from The Nature Conservancy to the Town of Minerva and Town of Newcomb, dated December 13, 2012 and recorded in Essex County, NY December 20, 2012 at B. 1718,P.264, Section 3(c) at page 3.

In managing most of the sensitive fisheries of the Essex Chain Lakes in this alternative (excluding First Lake if appropriate), DEC would follow the Wilderness Fisheries Guidelines which state: ~~*Fish*~~*(f)ish species, other than indigenous species and species historically associated with the Adirondack Park, will not be stocked in waters of Wilderness, Primitive or Canoe Areas.*[45]

This policy would not apply to Pine and First Lakes, possibly allowing nonnative and warm water species to be introduced and stocked.[46]

~~This policy would not apply to Pine and First Lakes, possibly allowing nonnative and warm water species to be introduced and stocked.~~ The Department, however, strives to reintroduce a native species where a self-sustaining population can maintain itself ~~itself~~, although ~~here~~there is not a formal policy requiring this action in Wild Forest.

~~Alternative 1A~~

-	~~Wilderness~~	~~Primitive~~	~~Canoe~~	~~Wild Forest~~	~~State Admin~~

Alternative 1A

-	Wilderness	Primitive	Canoe	Wild Forest
New Acquisition	acres			
~~Essex Chain Lakes Tract~~	~~12,408~~	~~2~~	~~0~~	~~4,909~~	~~2~~
~~Indian River Tract~~	~~517~~	~~0~~	~~0~~	~~408~~	~~1~~
~~OK Slip Falls Tract~~	~~2,765~~	~~15~~	~~0~~	~~0~~	~~0~~
~~"OSC Tract"~~	~~160~~	~~0~~	~~0~~	~~0~~	~~0~~
Essex Chain Lakes Tract	12,408	2	0	4,909
Indian River Tract	517	0	0	408
OK Slip Falls Tract	2,765	15	0	0
"OSC Tract"	160	0	0	0
Reclassification				
~~Hudson Gorge Primitive Area~~	~~16,360~~	~~0~~	~~0~~	~~0~~	~~0~~
~~Blue Mountain Wild Forest (portion)~~	~~1,403~~	~~0~~	~~0~~	~~0~~	~~0~~
~~Vanderwhacker Mountain Wild Forest (portion)~~	~~4,950~~	~~0~~	~~0~~	~~0~~	~~0~~
Hudson Gorge Primitive Area	16,360	0	0	0
Blue Mountain Wild Forest (portion)	1,403	0	0	0
Vanderwhacker Mountain Wild Forest (portion)	4,950	0	0	0

[45]~~45~~ Guidelines for Fisheries Management in Wilderness, Primitive and Canoe Areas, adopted by the Adirondack Park Agency on April 26, 1990 and amended July 10, 1992.

[46]~~46~~ ~~Guidelines for Fisheries Management in Wilderness, Primitive and Canoe Areas, adopted by the Adirondack Park Agency on April 26, 1990 and amended July 10, 1992.~~

Analysis of Alternative 1A

Alternative 1A is not the preferred alternative.

Regarding classification of Wilderness, the APSLMP provides:

> In addition, another significant determinant of land classification involves certain intangible considerations that have an inevitable impact on the character of land. Some of these are social or psychological such as the sense of remoteness and degree of wildness available to users of a particular area, which may result from the size of an area, the type and density of its forest cover, the ruggedness of the terrain or merely the views over other areas of the Park obtainable from some vantage point. Without these elements an area should not be classified as wilderness, even though the physical and biological factors would dictate that the limitations of wilderness management are essential.

(APSLMP at p. 14 (emphasis added)). The APSLMP further describes wilderness as an area with "outstanding opportunities for solitude or a primitive and unconfined type of recreation." (APSLMP at p. 20).

The preferred alternative does include a substantial section of Wilderness to be added to the Hudson Gorge Wilderness Area from the newly acquired lands in the Essex Chain and the Indian River Tracts, which is more thoroughly described in the Preferred Alternative discussion. However, Alternative 1A is not preferred because the Essex Chain and Indian River Tracts are encumbered by reserved rights and easements which support uses which would be nonconforming in Wilderness. Until October 2018, the Inner Gooley and Polaris Club sub-lessees may be allowed to access those camps by vehicles and snowmobiles on roads designated by DEC, to use ATVs during mud season to access the camps on roads designated by DEC and to use motorboats on waters designated by DEC if such waters border the camps. The Nature Conservancy has a reserved right to motorized access to the Essex Chain Lakes Tract until October 1, 2019 to manage and police the leasehold estate, and to remove any remaining structures. These reserved rights preclude a Wilderness classification for the area until these reserved leasehold rights expire.

There are also more permanent restrictions on the land, which preclude Wilderness classification. Prior to transferring these lands to the State, The Nature Conservancy granted easements to the Towns of Minerva and Newcomb over portions of the Essex Chain Lakes Tract which will allow, as determined by DEC, for float plane access to First and Pine Lakes. The Towns also have a non-exclusive rights-of-way on roads to be designated by DEC for administrative and emergency purposes. The easement also grants the Towns access to, and use of materials from, two gravel pits located on the periphery of the property in order to provide gravel to maintain roads, trails and other infrastructure on this tract that may be open for motorized use. These activities would be nonconforming in lands classified as Wilderness. Even on adjacent lands and waters, such as

the Essex Chain Lakes other than First Lake, the presence of float planes in such close proximity to the Chain Lakes would defeat the sense of remoteness expected in Wilderness.

On the Indian River Tract, the Towns of Minerva and Indian Lake have a non-exclusive right to provide for public motorized access on the South Chain Lakes Road and to mine gravel from a gravel pit known as the Outer Gooley Pit for the purpose of maintaining the road and other infrastructure, subject to a DEC permit and all applicable laws, rules and regulations. Again, this limited motorized use on the parcel is inconsistent with a classification which applies to lands "with the imprint of man's work substantially unnoticeable" with "outstanding opportunities for solitude or a primitive and unconfined type of recreation." For these reasons, a Wilderness classification for the Essex Chain Lakes Tract is not appropriate.

Regarding the Upper Hudson from the northern boundary of the Essex Chain Lakes Tract to the Iron (Polaris) Bridge, staff found that the lands surrounding the river could withstand the higher level of use and that section is recommended for inclusion in the Vanderwhacker Mountain Wild Forest. The Preferred Alternative also contains additional protection for the Upper Hudson River prohibiting motorboat use; this prohibition is consistent with the APSLMP guidelines for a Scenic River. The lease-camp owners have certain rights on the Hudson River which are not affected by this prohibition.

ALTERNATIVE 1B: NEW STATE LANDS CLASSIFIED AS WILDERNESS

MAP 6

Alternative 1B creates a larger Wilderness area. This alternative would classify almost the entirety of the Essex Chain Lakes Tract as Wilderness (excepting a small primitive area to accommodate a short ROW on Ord and First Left Roads) and extend the boundary southwest to include the entire Indian River Tract and the reclassification of additional land (2,873 acres) from the Blue Mountain Wild Forest, following natural boundaries (rivers and tributaries).

This Wilderness alternative adds Wilderness fisheries guidelines to three additional ponds (Mud, Clear and Corner), but the boundary does not include the beds and waters of -First or Pine Lakes, thus enabling float plane access.

This alternative would classify the three gravel pits and the roads they would provide gravel for as Wilderness. Including these gravel pits and roads in Wilderness would likely render the gravel pits unnecessary to maintain the roads or other infrastructure. Since the right to extract gravel is limited to the purpose of maintaining roads, trails and other infrastructure, according to the terms of the easement, this alternative would eliminate the need for the three State Administrative areas.

Alternative 1B provides additional Wilderness protection to the Indian and Hudson Rivers and would move potential structures and motorized activities further from these rivers.

Alternative 1B requires potential parking areas be further away from access points to the Hudson River and the Essex Chain Lakes than is possible in Alternative 1A.

Alternative 1B

	Wilderness	Primitive	Canoe	Wild Forest	~~State Admin~~
New Acquisition	acres				
Essex Chain Lakes Tract	17,313	2	0	6	~~0~~
Indian River Tract	926	0	0	0	~~0~~
OK Slip Falls Tract	2,765	15	0	0	~~0~~
"OSC Tract"	160	0	0	0	~~0~~
Reclassification					
Hudson Gorge Primitive Area	16,360	0	0	0	~~0~~
Blue Mountain Wild Forest (portion)	2,873	0	0	0	~~0~~
Vanderwhacker Mountain Wild Forest (portion)	4,950	0	0	0	~~0~~

Analysis of Alternative 1B

Alternative 1B is not the preferred alternative. Although the natural resources, particularly the Essex Chain Lakes and the Hudson and Cedar Rivers, are sensitive and justify wilderness management, intangible considerations impacting the Essex Chain Lakes preclude a Wilderness classification. The considerations are detailed above in the analysis of Alternative 1A.

The preferred alternative includes a substantial section of Wilderness to be added to the Hudson Gorge Wilderness Area from the newly acquired lands in the Essex Chain and the Indian River Tracts, which is more thoroughly described in the preferred alternative discussion. However, Alternative 1B is not preferred because the Essex Chain and Indian River Tracts are encumbered by reserved rights and easements which support uses that are nonconforming in Wilderness. Also, the presence of floatplanes landing and taking off from First and Pine Lakes will impact the sense of remoteness experienced by paddlers, hikers and campers in the Essex Chain Lakes. The motorized access on the roads, the gravel pits, and the floatplane easements would prevent "outstanding opportunities for solitude or a primitive and unconfined type of recreation" expected in Wilderness, and therefore the acreage of Wilderness proposed in Alternative 1B is not included in the preferred alternative.

Regarding the Upper Hudson from the northern boundary of the Essex Chain Tract to the Iron (Polaris) Bridge, staff found that the lands surrounding the river could withstand the higher level of use and that section is recommended for inclusion in the Vanderwhacker Mountain Wild Forest. The Preferred Alternative also contains additional protection for the Upper Hudson River prohibiting motorboat use; this prohibition is consistent with the APSLMP guidelines for a Scenic River. The lease-camp owners have certain rights on the Hudson River which are not affected by this prohibition.

ALTERNATIVE 2: NEW STATE LANDS CLASSIFIED PRIMARILY AS PRIMITIVE, WITH WILDERNESS CORRIDOR ALONG THE HUDSON RIVER

MAP 7

Primitive

Alternative 2 would establish one large Primitive Area and two narrow Primitive Area Corridors. The proposed Essex Chain Lakes Primitive Area would be essentially permanent, not likely to become Wilderness or Canoe, due to the non-conforming use of float plane landings on First and Pine Lakes. This Primitive ~~Area~~area would be approximately 11,743 acres and would encompass all the Essex Chain Lakes and most lands immediately surrounding them, generally from the northern boundary of the newly acquired Essex Chain Lakes Tract south to the Camp 6 Road and a section of the North Chain Lakes Road near the Cedar River. It would also include Pine Lake, Corner, Mud and Clear Ponds, and would be bounded largely by the Cedar River to the west and an unnamed tributary in the Indian River Tract to the south.

A possible variation of this alternative would establish two Primitive ~~Areas~~areas with some Wild Forest lands – primarily a corridor – between them. The Primitive ~~Area~~area encompassing the Essex Chain Lakes would be isolated to the north and over 9,000 acres in size; the Primitive ~~Area~~area encompassing Pine Lake would be much smaller and would adjoin the Hudson Gorge Wilderness Area on its eastern boundary.

Alternative 2 includes two roadways that will remain open to adjacent landowners and therefore need to be designated as Primitive. The first is comprised of short sections of Ord and First Left Roads, providing access to neighboring easement lands across a 0.3-mile section of Forest Preserve in the northern section of the Essex Chain Lakes Tract. The second is OK Slip Road, crossing 2.6 miles of the OK Slip Falls Tract and providing access to the privately owned inholding. Neither of these roads ~~is~~will be open to ~~motorized~~motor vehicle use by the public.

2,085 acres of Blue Mountain Wild Forest, following natural boundaries (rivers and tributaries), would be reclassified as Primitive in this alternative.

Wilderness

This alternative would have a Wilderness ~~Area~~area of 32,234 acres. This area would include most of the Hudson Gorge Primitive Area, the entire OK Slip Falls and OSC Tract. Additionally, lands to the east of the South Chain Lakes Road in the Indian River Tract and land to the east of the Camp 6 Road in the Essex Chain Lakes Tract would be classified Wilderness.

A 125~~-~~-acre section of the Blue Mountain Wild Forest, located between the Essex Chain Lakes and Indian River Tracts, north of the road, would be reclassified as Wilderness. Land along the western edge of the Vanderwhacker Mountain Wild Forest, extending from a series of tributaries of Wolf Creek to the Hudson River, would also be reclassified as Wilderness.

Wild Forest

One relatively small portion of the newly acquired Essex Chain Lakes Tract would be classified Wild Forest. This area would be at the southwestern end of the Essex Chain Lakes Tract between First and Pine Lakes. (In the possible variation noted above, this area would be extended as a Wild Forest Corridor east toward the Hudson River and north toward the east end of Goodnow Flow.) In addition, approximately half the Indian River Tract– all that portion of it lying immediately to the west of the South Chain Lakes Road and south of an unnamed tributary – would also be added to Blue Mountain Wild Forest.

State Administrative

The Towns of Newcomb, Minerva, and Indian Lake have been granted limited rights use to three gravel pits on these tracts of land through a conservation easement. The gravel pits, referred to as the Chain Lakes, Deer Pond and Outer Gooley Pits, are limited in size to a maximum of one acre. The Towns have an easement to extract gravel only for the purpose of road, trail and infrastructure maintenance on this parcel, with a permit from the NYSDEC, "subject to all laws, rules and regulations in effect at the time of issuance of the DEC permit".[47] Classification of the Chain Lakes and Deer Pond gravel pits as Primitive would prevent the Towns from using the pits. Only the one-acre Outer Gooley gravel pit would be classified State Administrative.

Discussion of Selected Recreational Opportunities

The majority of the network of private, lease-club roads in the newly acquired lands would remain closed to public motor vehicle use in this alternative, to be abandoned or converted to trails. Mountain bikes would be allowed on State Administrative Roads as designated in an approved UMP.

In this alternative, commercial float plane operators would continue, under permit from DEC, to provide float plane access for the public to First Lake and Pine Lake. For recreationists who arrive at First Lake by float planes and desire to explore the rest of the lakes in the Chain, a 1/6-mile carry could provide direct and relatively easy access to them.

As with Alternative 1B, potential parking areas for access to the Hudson River and the Essex Chain Lakes would be farther away than in other alternatives.

Alternative 2

	Wilderness	Primitive	Canoe	Wild Forest	~~State Admin~~

~~47~~47 Grant of Conservation Easement Pursuant to ECL Article 49 Over Portions of the Chain Lakes Tract, from The Nature Conservancy to the Town of Minerva and Town of Newcomb, dated December 13, 2012 and recorded in Essex County, NY December 20, 2012 at B. 1718,P.264, Section 3(c) at page 3.

New Acquisition	acres				
Essex Chain Lakes Tract	7,385	9,616	0	320	~~0~~
Indian River Tract	489	28	0	408	~~1~~
OK Slip Falls Tract	2,765	15	0	0	~~0~~
"OSC Tract"	160	0	0	0	~~0~~
Reclassification					
Hudson Gorge Primitive Area	16,360	0	0	0	~~0~~
Blue Mountain Wild Forest (portion)	124	2,085	0	0	~~0~~
Vanderwhacker Mountain Wild Forest (portion)	4,950	0	0	0	~~0~~

Analysis of Alternative 2

Alternative 2 is the Preferred Alternative, although with areas and their boundaries modified as described below and as depicted on Map 7A. This alternative complies with the guidelines and criteria established in the APSLMP, which include evaluation of physical and biological characteristics, intangible considerations and established facilities.

ALTERNATIVE 2A: NEW STATE LANDS CLASSIFIED PRIMARILY AS PRIMITIVE, WITH WILD FOREST AND WILDERNESS AREAS ALONG THE HUDSON RIVER AND WILD FOREST BUFFERS BETWEEN THE PRIMITIVE AND WILDERNESS AREAS. (PREFERRED ALTERNATIVE)

MAP 7A (Variation of Map 7) – Preferred Alternative

Primitive

The Preferred Alternative is a variation of Alternative 2 that will ultimately establish, in the southwestern portion of the Essex Chain Lakes Tract and adjoining Blue Mountain Wild Forest (including all lakes and ponds of the Essex Chain), EITHER: one Primitive area; OR, two Primitive areas encompassing the same lands except for a Wild Forest Corridor running between them. At issue is the ultimate location of the southern portion of a Wild Forest corridor discussed below that will extend from Drakes Mill Road south along and including Camp 6 Road and then will EITHER: cross the Cedar River heading south to follow Chain Lakes Road (South) to the Indian River Tract (thereby creating one very large Primitive area to its west); OR, follow the north bank of the Cedar River heading west (i.e., not crossing the Cedar River) to follow Chain Lakes Road (North) toward First Lake before leaving the road and continuing west toward the Rock River (thereby creating a Primitive area to the northwest and a second Primitive area to the south[JTT1]).

Pending resolution of legal and regulatory issues concerning potential resource impacts to recreational uses of the corridor, lands of these two alternatives in the southern end of the Wild Forest corridor will remain unclassified. Following APA's analysis and decision in this matter,

only one corridor "leg" of unclassified land will be classified Wild Forest, while the other will be classified Primitive. If one Primitive area is the result, it will comprise approximately 9,894 acres and be named Essex Chain Lakes Primitive Area. If two Primitive areas are the result, the northern one will comprise approximately 6,914 acres and will be named Essex Chain Lakes Primitive Area and the southern one will comprise approximately 2,906 acres and will be named Pine Lake Primitive Area.

IN THE FIRST INSTANCE, the larger Essex Chain Lakes Primitive Area will be surrounded by lands of the Blue Mountain Wild Forest and conservation easement lands to the northwest.

IN THE SECOND INSTANCE, the Pine Lake Primitive Area will directly adjoin the Hudson Gorge Wilderness Area to its east and the Blue Mountain Wild Forest to the south, west and north.

In both instances, approximately 2,500 acres of Blue Mountain Wild Forest, following natural boundaries (primarily rivers and tributaries), will be reclassified as Primitive in the Preferred Alternative.

The OK Slip Road (2.6 miles, 19 acres) and its associated distribution power line, both of which serve a small private inholding within the Hudson Gorge Wilderness, will be part of a newly formed Primitive Area named the OK Slip Primitive Area. The road will not be open to motor vehicle use by the public. An 11-acre parcel abutting State Route 28 and occupied by a transmission power line will also be included as part of this new Primitive Area.

This alternative will also establish the Polaris Primitive Area. This Primitive area will be 964 acres in size, bounded on the west by the western shore of the Hudson River and the Hudson Gorge Wilderness Area, on the north and east by Vanderwhacker Mountain Wild Forest, and on the south by the Hudson Gorge Wilderness Area. This area is encumbered by reserved rights and easements which support uses that are nonconforming in Wilderness. Until October 2018, Polaris Club sub-lessees may be allowed to access their camps by vehicles and snowmobiles on roads designated by DEC, to use ATVs during mud season to access the camps on roads designated by DEC and to use motorboats on waters designated by DEC if such waters border the camps. The Nature Conservancy has a reserved right to motorized access to this land until October 1, 2019 to manage and police the leasehold estate, and to remove any remaining structures. These reserved rights preclude a Wilderness classification for the area until these reserved leasehold rights expire. Upon expiration of the reserved leasehold rights, this entire Primitive Area will be reclassified to Wilderness and added, automatically and without further Agency action, to the Hudson Gorge Wilderness.

Wilderness

This Alternative will feature a new 23,574-acre Hudson Gorge Wilderness Area. It will consist of all of the existing Hudson Gorge Primitive Area and the interior, newly acquired OK Slip Falls Tract, plus: newly acquired lands east of a Wild Forest corridor along the Camp 6 Road, across and including the Hudson River in the Essex Chain Lakes Tract; newly acquired lands to the east of the Chain Lakes Road (South) in the Essex Chain Lakes and Indian River Tracts; and a

reclassified, 133-acre portion of the Blue Mountain Wild Forest, located between the Essex Chain Lakes and Indian River Tracts, northeast of the Chain Lakes Road (South).

Wild Forest

A large portion of the newly acquired Essex Chain Lakes Tract will be classified Wild Forest in this Alternative. All of the lands to be classified Wild Forest within the Essex Chain Lakes Tract lying west of the center of the Hudson River and within the Indian River Tract will become part of the Blue Mountain Wild Forest. Included in the Blue Mountain Wild Forest will be the lands east of and including the Boots-to-Cornell Road, north of the Essex Chain Lakes Primitive Area and the Hudson Gorge Wilderness to the center of the Hudson River. Also included is a 1/10-mile wide corridor of land in the Essex Chain Lakes Tract along and including Camp 6 Road south to its intersection with the Cedar River, plus a Wild Forest access route along the road to the south shore of Fifth Lake intended to provide access to the lakes for persons with disabilities.

In the Indian River Tract, all that portion of the tract lying immediately to the west of the Chain Lakes Road (South), including this road, and south of the north boundary of the Indian River Tract will be classified Wild Forest and added to the Blue Mountain Wild Forest.

In addition, a 1/10-mile wide corridor of land along and including Chain Lakes Road (South) within the existing Blue Mountain Wild Forest leading northwest from the boundary of the Indian River Tract to the boundary of the Essex Chain Lakes Tract, will remain classified as Wild Forest. A 1/10 mile-wide corridor of land along the Chain Lakes Road (South) within the Essex Chain Lakes Tract will remain unclassified. This unclassified area will be classified as Wild Forest and connected to the Wild Forest corridor from the north, if the first option outlined in the Primitive section above is chosen. This corridor will essentially serve as the boundary between the Essex Chain Lakes Primitive Area, to the west, and the Hudson Gorge Wilderness Area to the east. In the event the second option outlined in the Primitive area discussion above is chosen, this area from the north boundary of the Indian River Tract to the Cedar River will be classified Primitive and added to the Pine Lake Primitive Area.

The lands east of the center of the Hudson River that are classified as Wild Forest, including portions of the Essex Chain Lakes Tract and the OSC Tract will become part of the Vanderwhacker Mountain Wild Forest. These lands will be bounded on the south by the Polaris Primitive Area, on the west by the Blue Mountain Wild Forest and on the north by private lands.

State Administrative

The Towns of Newcomb, Minerva, and Indian Lake have been granted limited rights use to three gravel pits on these tracts of land through a conservation easement. The gravel pits, referred to as the Chain Lakes, Deer Pond and Outer Gooley Pits, are limited in size to a maximum of one acre. The Towns' rights are in the form of an easement allowing gravel extraction, only, for the

purpose of road, trail and infrastructure maintenance on the Essex Chain Lakes Tract, with a permit from the NYSDEC and "subject to all laws, rules and regulations in effect at the time of issuance of the DEC permit." The Chain Lakes, Deer Pond and Outer Gooley gravel pits are classified State Administrative but will be reclassified once the gravel pits are exhausted.

Discussion of Selected Recreational Opportunities

The most extraordinary recreational opportunities that will be created as a result of this classification action will be the largely quiet, new non-motorized boating opportunities that will be available on the Hudson River, Essex Chain Lakes, Pine Lake and a few other smaller water bodies in those lands classified as Primitive. Immediately surrounding these lakes and ponds, the majority of the network of private, lease-club roads in the newly acquired lands classified as Wilderness and Primitive will remain closed to public motor vehicle use in this alternative, and may be abandoned or converted to various types of trails through the UMP planning process. This network could well form the basis of a significant new opportunity in the Adirondacks for horseback and horse-and-wagon riding, in fact. Additionally, if these roads in the new Primitive Area(s) meet the definition of State Truck Trails, all-terrain bicycles ("mountain bikes") could be allowed on such designated roads as approved in a UMP. (If there are no roads meeting the State Truck Trail definition, amendment to the APSLMP guidelines for the new Primitive Area(s) would be required to allow use of bicycles.)

In this alternative, commercial float plane operators may continue, under permit from DEC, to provide float plane access to First Lake and Pine Lake. For visitors who arrive at First Lake by float planes and desire to explore the rest of the lakes in the Essex Chain, a 0.6-mile carry could be developed to provide direct and relatively easy access to them.

Areas classified as Wild Forest could provide additional recreational opportunities, both motorized and non-motorized, through an approved UMP. The Wild Forest corridor that will be established along Camp 6 Road may, for instance (subject to guidelines and criteria of the Master Plan and other considerations), allow for public use of mountain bikes and snowmobiles for traveling to and back from the north bank of the Cedar River. If, through future classification action by the Agency, this Wild Forest corridor is extended either south or west, it could provide an opportunity for longer travel by mountain bikes and snowmobiles between those large blocks of Blue Mountain Wild Forest lands north/northeast and south/southwest of the Essex Chain Lakes.

Alternative 2A:

Preferred Alternative with Unclassified Lands	Wilderness	Primitive	Canoe	Wild Forest	State Admin
New Acquisition					
Essex Chain Lakes Tract	2852	7999	0	7377	2
Indian River Tract	510	0	0	452	1
OK Slip Falls Tract	2804	19	0	0	0
"OSC Tract"	0	0	0	160	0
Reclassification					
Hudson Gorge Primitive Area	17274	11	0	0	0
Blue Mountain Wild Forest (portion)	133	2450	0	0	0
Vanderwhacker Mountain Wild Forest (portion)	0	0	0	0	0
Preferred Alternative –Northern Route Option	Wilderness	Primitive	Canoe	Wild Forest	State Admin
New Acquisition					
Essex Chain Lakes Tract	2852	8082	0	7489	2
Indian River Tract	510	0	0	452	1
OK Slip Falls Tract	2804	19	0	0	0
"OSC Tract"	0	0	0	160	0
Reclassification					
Hudson Gorge Primitive Area	17274	11	0	0	0
Blue Mountain Wild Forest (portion)	133	2480	0	0	0
Vanderwhacker Mountain Wild Forest (portion)	0	0	0	0	0
Preferred Alternative–Southern Route Option	Wilderness	Primitive	Canoe	Wild Forest	State Admin
New Acquisition					
Essex Chain Lakes Tract	2852	8111	0	7460	2
Indian River Tract	510	0	0	452	1
OK Slip Falls Tract	2804	19	0	0	0
"OSC Tract"	0	0	0	160	0
Reclassification					
Hudson Gorge Primitive Area	17274	11	0	0	0
Blue Mountain Wild Forest (portion)	133	2525	0	0	0
Vanderwhacker Mountain Wild Forest (portion)	0	0	0	0	0

ALTERNATIVE 3A: NEW STATE LANDS CLASSIFIED AS CANOE WITH WILD FOREST TO THE NORTH OF ESSEX CHAIN LAKES AND WILDERNESS CORRIDOR ALONG THE HUDSON RIVER

MAP 8

Canoe

Alternative 3A would create a new Canoe ~~Area~~area of approximately 6,624 acres – only the second Canoe ~~Area~~area in the Adirondack Park. Primarily, it would feature the Essex Chain Lakes, excluding the bed and waters of First Lake where landings and take-offs by float planes can be expected to occur as noted above. The Canoe ~~Area~~area would include Second, Third, Fourth, Fifth, Sixth, Seventh, and Eighth Lakes and Deer, Jackson, and (one of the two) Mud Ponds. This Canoe ~~Area~~area would be bounded on the north by Long Six Lake Road, extending east to the Hudson River,~~-~~ south to the Cedar River and west to the tract boundary, excluding the bed and water of First Lake.

The Essex Chain Lakes Tract contains an additional seven (7) water bodies that are not considered to be within easy portaging distance of each other and have not been included in this Canoe classification.

Wilderness

This alternative would feature a Wilderness ~~Area~~area of 31,939 acres that would include the Hudson Gorge Primitive Area and the entire OK Slip Falls and OSC Tracts. Additionally, lands to the south of the Cedar River, including Mud, Corner and Clear Ponds in the Essex Chain Lakes Tract and north of an unnamed tributary in the Indian River Tract would also be classified Wilderness.

1,403 acres of Blue Mountain Wild Forest located southwest of the Essex Chain Tract, east of the Cedar River, would be reclassified as Wilderness.

Land along the western edge of the Vanderwhacker Mountain Wild Forest, extending from a series of tributaries of Wolf Creek to the Hudson River, would be reclassified as Wilderness.

This alternative would not feature Wilderness designated along both sides of the Hudson River as would alternatives 1A, 1B, and 2. Instead, this alternative would have 2.8 miles of the western edge of the Hudson River bounded by a Canoe ~~Area~~area.

Primitive Area

This alternative would have the same Primitive ~~Areas~~areas as described in Alternative 1A, which includes two road sections which will remain open to adjacent landowners. The first is a short section of Ord and First Left Roads, which provide access to neighboring easement lands and cross a 0.3 mile section of Forest Preserve in the northern section of the Essex Chain Lakes Tract. The second, OK Slip Road, crosses a 2.6 mile section of the OK Slip Falls Tract and provides access to the privately owned inholding. Neither of these roads is open to motorized vehicle use by the public.

Wild Forest

In this alternative, 7,032 acres of land would be classified as Wild Forest. The area classified as Wild Forest would be identical to Alternative 1A.

In two areas, portions of newly acquired lands would be classified Wild Forest. One would be the area generally north of the Essex Chain Lakes and south of Goodnow Flow, and the second would be the area just west of the South Chain Lakes Road, between the Indian River confluence and the vicinity of an unnamed tributary adjacent to the Outer Gooley Pit.

Due to the existence of deeded rights allowing float plane access to First and Pine Lakes, this alternative places the beds and waters of the lakes entirely within the Blue Mountain Wild Forest.

State Administrative

The Towns of Newcomb, Minerva, and Indian Lake have been granted limited use to three gravel pits on these tracts of land through a conservation easement. The gravel pits, referred to as the Chain Lakes, Deer Pond and Outer Gooley Pits, are limited in size to a maximum of one acre. The Towns have an easement to extract gravel only for the purpose of road, trail and infrastructure maintenance on this parcel, with a permit from the NYSDEC, "subject to all laws, rules and regulations in effect at the time of issuance of the DEC permit".[48] Each of these one-acre gravel pits would be classified as State Administrative.

Discussion of Selected Recreational Opportunities

Throughout this area, non-motorized, water-oriented recreation on lakes, ponds and rivers would be the primary activity enjoyed by visitors seeking a wilderness-type experience. The lakes and ponds listed above are interconnected or within portaging distance of each other and provide an opportunity for a six- to seven-mile canoe route. These lakes have seen little recreational use and are in pristine condition.

The majority of the network of private lease-club roads in the newly acquired lands would remain closed to public motor vehicle use in this alternative, to be abandoned or converted to trails. Mountain bikes would be allowed on State Administrative Roads, designated in an approved UMP.

In one fundamental contrast with the Wilderness classification alternative for this area, the Department would have the option to more intensively manage the area's high-quality, sensitive fisheries by means of the administrative use of motor vehicles and aircraft, even though the same wilderness fisheries management would be prescribed. Any roads designated by the Department for administrative use for fisheries purposes could then be designated for public recreational use by mountain bikers – a use that could not be allowed in Wilderness.

[48] Grant of Conservation Easement Pursuant to ECL Article 49 Over Portions of the Chain Lakes Tract, from The Nature Conservancy to the Town of Minerva and Town of Newcomb, dated December 13, 2012 and recorded in Essex County, NY December 20, 2012 at B. 1718,P.264, Section 3(c) at page 3.

Commercial float plane operators could continue, under permit from DEC, to provide float plane access for the public to First Lake and Pine Lake. The beds and waters of First and Pine Lakes would be in the Blue Mountain Wild Forest.

Alternative 3A

	Wilderness	Primitive	Canoe	Wild Forest	~~State Admin~~
New Acquisition			acres		
Essex Chain Lakes Tract	5,783	2	6624	4,909	~~2~~
Indian River Tract	517	0	0	408	~~1~~
OK Slip Falls Tract	2,765	15	0	0	~~0~~
"OSC Tract"	160	0	0	0	~~0~~
Reclassification					
Hudson Gorge Primitive Area	16,360	0	0	0	~~0~~
Blue Mountain Wild Forest (portion)	1,403	0	0	0	~~0~~
Vanderwhacker Mountain Wild Forest (portion)	4,950	0	0	0	~~0~~

Analysis of Alternative 3A

Alternative 3A is not the Preferred Alternative.

The creation of additional Canoe areas is dependent upon the acquisition of large tracts of private land which surround substantial acreages of water suitable for canoeing. The FPEIS states, "the canoe classification is given to an area where the watercourses or the number and proximity of lakes and ponds make possible a remote and unconfined type of water recreation in essentially a Wilderness setting." (FPEIS, p. 19.)

The preferred alternative includes a substantial section of Wilderness to be added to the Hudson Gorge Wilderness Area from the newly acquired lands in the Essex Chain and the Indian River Tracts, which is more thoroughly described in the preferred alternative discussion. However, Alternative 3A is not preferred because the Essex Chain and Indian River Tracts are encumbered by reserved rights and easements which support uses which would be nonconforming in Wilderness. Also, the presence of floatplanes landing and taking off from First and Pine Lakes will detract from the sense of remoteness experienced by paddlers, hikers and campers in the Essex Chain Lakes. The motorized access on the roads, the gravel pits, and the floatplane easements would prevent "outstanding opportunities for solitude or a primitive and unconfined type of recreation" expected in wilderness.

Factors such as the easements for float plane access, motorized use, and gravel extraction have been considered in this classification process. For many of the same reasons that Alternatives 1A and 1B are not preferred, it has been determined that this alternative does not comply with the guidelines and criteria established in the APSLMP for Canoe areas.

ALTERNATIVE 3B: NEW STATE LANDS CLASSIFIED PRIMARILY AS CANOE WITH WILD FOREST NORTH OF ESSEX CHAIN LAKES

MAP 9

Alternative 3B creates a larger Canoe ~~area~~Area (15,067 acres). This alternative extends the boundary southwest to include more of the Cedar River, the Indian River Tract and the additional reclassification of 2,083 acres from the Blue Mountain Wild Forest to the Canoe area.

This alternative also extends the Canoe ~~area~~Area boundary further north to surround a ¼ to ½ mile setback from the Hudson River in both the Essex Chain Lakes Tract and the Vanderwhacker Mountain Wild Forest. The lands to the east and west of the Canoe area boundary would be classified as Wild Forest.

The boundary of the Canoe Area would not include First or Pine Lakes, thus enabling float plane access. The beds and waters of First and Pine Lakes would be in the Blue Mountain Wild Forest.

This alternative would include two State Administrative one-acre gravel pits (Chain Lakes and Deer Pond). Classification of the Outer Gooley gravel pit as Canoe would prevent the Towns from using that pit.

Alternative 3B

	Wilderness	Primitive	Canoe	Wild Forest	~~State Admin~~
New Acquisition			acres		
Essex Chain Lakes Tract	0	0	10,818	6,501	~~2~~
Indian River Tract	309	0	520	96	~~0~~
OK Slip Falls Tract	2,765	15	0	0	~~0~~
"OSC Tract"	0	0	0	160	~~0~~
Reclassification					
Hudson Gorge Primitive Area	15,754	0	606	0	~~0~~
Blue Mountain Wild Forest (portion)	0	0	2,083	0	~~0~~
Vanderwhacker Mountain Wild Forest (portion)	1	0	1,039	0	~~0~~

Analysis of Alternative 3B

Alternative 3B is not the Preferred Alternative

The creation of additional Canoe areas is dependent upon the acquisition of large tracts of private land which surround substantial acreages of water suitable for canoeing. The FPEIS states, "the canoe classification is given to an area where the watercourses or the number and proximity of lakes and ponds make possible a remote and unconfined type of water recreation in essentially a Wilderness setting." (FPEIS, p. 19.)

The preferred alternative includes a substantial section of Wilderness to be added to the Hudson Gorge Wilderness Area from the newly acquired lands in the Essex Chain and the Indian River Tracts, which is more thoroughly described in the Preferred Alternative discussion. However, Alternative 3B is not preferred because the Essex Chain and Indian River Tracts are encumbered by reserved rights and easements which support uses which would be nonconforming in Wilderness. Also, the presence of floatplanes landing and taking off from First and Pine Lakes will impact the sense of remoteness experienced by paddlers, hikers and campers in the Essex Chain Lakes. The motorized access on the roads, the gravel pits, and the floatplane easements would prevent "outstanding opportunities for solitude or a primitive and unconfined type of recreation" expected in Wilderness.

For many of the same reasons that Alternatives 1A, 1B and 3A are not preferred, it has been determined that this alternative does not comply with the guidelines and criteria established in the APSLMP for Canoe areas.

ALTERNATIVE 4A: NEW STATE LANDS CLASSIFIED PRIMARILY WILD FOREST WITH WILDERNESS CORRIDOR ALONG THE HUDSON RIVER

MAP 10

Wild Forest

Alternative 4A would significantly expand Blue Mountain Wild Forest to include the Essex Chain Lakes and Pine Lake. Throughout the area of the Essex Chain Lakes, motor-boating, snowmobiling and float plane use could be allowed, subject to an approved UMP, and a much greater portion of the existing road system could be retained for various public motorized and mechanical means of travel and recreation that do not conform to Wilderness, Primitive or Canoe ~~Area~~area guidelines. This could foster a greater diversity of recreational activities.

Wilderness

The proposed Hudson ~~River~~Gorge Wilderness Area in this alternative would be expanded further toward the Essex Chain Lakes than in the Canoe alternative, as well as somewhat further north to the northern boundary of State land. That would include classifying a portion of the Essex Chain Lakes Tract and reclassifying a portion of the Vanderwhacker Mountain Wild Forest to Wilderness. The Hudson River would flow through Wilderness (on both sides of the river) from just downstream of Route 28N in Newcomb south to the confluence with the Boreas River. 1,403 acres of Blue Mountain Wild Forest located southwest of the Essex Chain Tract, east of the Cedar River and north of the Rock River, would be reclassified as Wilderness.

Primitive

This alternative would feature the same Primitive Areas as described in Alternative 1A, which includes two roads sections which will remain open to adjacent landowners. The first is a short section of Ord and First Left Roads, which provide access to neighboring easement lands and cross a 0.3 mile section of Forest Preserve in the northern section of the Essex Chain Lakes Tract. The second, OK Slip Road, crosses a 2.6 mile section of the OK Slip Falls Tract and provides access to the privately owned inholding. Neither of these roads is open to motorized vehicle use by the public.

State Administrative

This alternative would include the same State Administrative Areas as described in Alternative 1A.

The Towns of Newcomb, Minerva, and Indian Lake have been granted limited use to three gravel pits on these tracts of land through a conservation easement. The gravel pits, referred to as the Chain Lakes, Deer Pond and Outer Gooley Pits, are limited in size to a maximum of one acre.

The Towns have an easement to extract gravel only for the purpose of road, trail and infrastructure maintenance on this parcel, with a permit from the NYSDEC, "subject to all laws, rules and regulations in effect at the time of issuance of the DEC permit".[49] Each of these one-acre pits would be classified as State Administrative.

[49] Grant of Conservation Easement Pursuant to ECL Article 49 Over Portions of the Chain Lakes Tract, from The Nature Conservancy to the Town of Minerva and Town of Newcomb, dated December 13, 2012 and recorded in Essex County, NY December 20, 2012 at B. 1718,P.264, Section 3(c) at page 3.

Discussion of Selected Recreational Opportunities

This Alternative could provide easier access to the northern section of the Essex Chain Lakes Tract and across the Hudson to parts of the Vanderwhacker Mountain Wild Forest, which could result in increased recreational use.

Commercial float plane operators would continue, under permit from DEC, to provide float plane access for the public to First Lake and Pine Lake. Float plane access could also be permitted at Third Lake and any other water bodies in Wild Forest that would be considered large enough for safe landings and take-offs.

The Department's Wilderness fisheries policy would not apply to the lakes and ponds classified as Wild Forest.

Alternative 4A

	Wilderness	Primitive	Canoe	Wild Forest	~~State Admin~~
New Acquisition	acres				
Essex Chain Lakes Tract	7,787	2	0	9,530	~~2~~
Indian River Tract	517	0	0	408	~~0~~
OK Slip Falls Trac	2,765	15	0	0	~~1~~
"OSC Tract"	0	0	0	160	~~0~~
Reclassification					
Hudson Gorge Primitive Area	16,360	0	0	0	~~0~~
Blue Mountain Wild Forest (portion)	1,403	0	0	0	~~0~~
Vanderwhacker Mountain Wild Forest (portion)	4,950	0	0	0	~~0~~

Analysis of Alternative 4A

Alternative 4A is not the Preferred Alternative. Additional analysis of the natural resources in the Essex Chain Lakes Tract the presence of lakes, ponds, and wetlands that are considered to be the area's most sensitive natural resources and require wilderness type management. High value wetlands ring the lakes and are found in the channels which connect the lakes. These resources require protection from overuse. Motorized watercraft would degrade the aquatic ecosystem though a variety of mechanisms, including re-suspension of sediment by propeller contact and wave action. Usage patterns would likely disturb the habitat of fish and wildlife, and lead to the destruction of aquatic plants. This alternative might also allow greater pollution of the water resources.

The three channels interconnecting the Essex Chain Lakes are shallow (less than 6 feet) and have a bottom substrate consisting of silt, muck, and organic substrate that is easily disturbed. Research has shown that boats capable of traveling in shallow waters may cause physical damage to emergent and submerged aquatic macrophytes, which create subsequent biological

impacts as habitat is altered or damaged. The primary mechanism appears to be direct cutting of plants, but other researchers have determined that scouring of the sediment, uprooting of plants, and increased wave activity may also be factors[50] [51] [52].

Motorboats are also known to affect water quality by increasing turbidity, phosphorous and chlorophyll *a*. Any increase in nutrients, such as phosphorous, will contribute to increases in aquatic macrophyte growth and algae. Shallow lakes, shallow parts of lakes and rivers, and channels connecting lakes are the most susceptible to impacts[53]. Motor boats can also impact water quality by releasing chemical contaminants into the water column from unburned gasoline and oil. These contaminants consist of the breakdown of gasoline compounds such as benzene, toluene, ethyl benzene, xylene (collectively known as BTEX), methyl tertiary butyl ether (MTBE) and polycyclic aromatic hydrocarbons (PAHs)[54]. PAHs and BTEX represent the most toxic of gas and oil components to aquatic life.

Wilderness type protection of these waterbodies will also decrease the likelihood of the introduction of aquatic invasive species, both from boat propellers and float planes.

The channels connecting Third Lake to Fourth Lake, Fourth Lake to Fifth Lake, and Fifth Lake to Sixth have large (greater than 20 acres) emergent marsh and deepwater marsh wetlands. Due to their size, wetland covertypes present, diversity and abundance of aquatic macrophytes, and hydraulic connection to the main waterbodies, they have the highest value rating as defined in 9 NYCRR Part 578. Emergent marsh is the most valuable individual covertype and one of the highest in productivity. These wetlands provide nesting habitat, food and cover for wildlife, stabilize lake sediment and cycle large quantities of nutrients. Deepwater marsh wetlands provide valuable fish spawning and nursery habitat and are a food source for waterfowl and other wildlife. Several emergent and deepwater marsh wetland plants are found in these channels, including the following species: bladderwort (*Utricularia spp.*), bur reed (*Sparganium sp*), pickerelweed (*Pontederia cordata*), white water lily (*Nymphaea odorata*), yellow-lily (*Nuphar*

[50] McEwen, A., Dawson, C., and Gerstenberger, L. 2011. Adirondack Park Forest Preserve Carrying Capacity of Water Bodies Study: Phase 1- Selecting Indicators for Monitoring Recreational Impacts. State University of New York, College of Environmental Science and Forestry.

[51] Asplund, T.R. 2000. The Effects of Motorized Watercraft on Aquatic Ecosystems. Madison(WI):Wisconsin Department of Natural Resource, Bureau of Integrated Science Services; University of Wisconsin. Report No. PUBL-SS-948-00.

[52] Asplund, T.R. and C.M.Cook. 1997. Effects of motor boats on submerged aquatic macrophytes. Lake and Reservoir Management. 13(1):1-12.

[53] Yousef, Y.A., W.M. McLellon, and H.H. Zebtuh. 1980. Changes in phosphorus concentrations due to mixing by motor boats in shallow lakes. Water Research 14:841-852.

[54] Asplund, T.R. and C.M.Cook. 1997. Effects of motor boats on submerged aquatic macrophytes. Lake and Reservoir Management. 13(1):1-12.

variegata), pipewort (*Eriocaulon aquaticum*), and watershield *(Brasenia schreberi).* These sensitive wetland habitats also require wilderness type management.

In addition to the aquatic macrophytes referenced previously, two NYS protected aquatic plants were identified by Adirondack Park Agency and Adirondack Park Invasive Plant Program staff during site visits on July 11 and September 18, 2013. Farwell's milfoil (*Myriophyllum farwellii*) was identified in Third Lake and in the channel between Third and Fourth Lake. It is listed as threatened in Environmental Conservation Law, Section 193.3. Plants listed as threatened are likely to become endangered within the foreseeable future throughout all or a significant portion of their ranges within the State. Water marigold (*Bidens beckii*) was found in Third Lake and in the channel between Third and Fourth Lake. It is listed in the 2010 New York Natural Heritage Program (NHP) rare plant watch list as threatened. The NHP watch list contains native species that are considered rare, uncommon, or declining in numbers and need continued periodic monitoring to decide if they should be actively inventoried or removed from the list. Agency staff observations during the two site visits describe the wetlands in the channels as consisting of a diverse assemblage of healthy native aquatic macrophytes with some areas exhibiting large densities of Farwell's milfoil and water marigold. These species will benefit from wilderness type protection.

ALTERNATIVE 4B: NEW STATE LANDS CLASSIFIED PRIMARILY WILD FOREST WITH A SPECIAL MANAGEMENT AREA FOR THE WILD FOREST AND WILDERNESS CORRIDOR ALONG THE HUDSON RIVER [55]

MAP 11

Alternative 4B would include the same classification proposal as Alternative 4A, with a 12,759 acre Special Management Area within the Blue Mountain Wild Forest. Recreational opportunities potentially allowable throughout Wild Forest would be limited in this Special Management Area. The Essex Chain of Lakes area is fairly remote and pristine, and some of its resources are sensitive enough – particularly its waters and fisheries – to call for special management guidelines that would prohibit or limit certain uses. Examples could include prohibiting motorized access on the lakes or limiting motorized access on some roads to big game season only and allowing camping at designated sites only.

Some prohibitions or limits considered critical could be effected or partially effected via this classification action. ~~If this alternative is identified as the preferred alternative, specific~~Specific protective management guidelines would be developed ~~through the public comment~~ and ~~hearing process and included in the Final Supplemental Environmental Impact Statement. These guidelines would~~ then be included in prescriptive language for the area description included in the APSLMP. This protective management approach would then need to be implemented through the unit management planning process for the area and the promulgation of special regulations.

[55] This alternative is most similar to the Proposal for Public Access and State Land Classification of the Former Finch Lands suggested by the NYSDEC http://www.dec.ny.gov/lands/89400.html

The Primitive Area for the Ord and Left Turn Road in the Essex Chain Lakes Tract would no longer be needed in this alternative.

Unlike with a Canoe classification, this alternative would allow, with an approved UMP, additional access for persons with disabilities and mountain biking opportunities beyond use on State Administrative Roads.

Alternative 4B

	Wilderness	Primitive	Canoe	Wild Forest	~~State Admin~~
New Acquisition			acres		
Essex Chain Lakes Tract	7,787	2	0	9,530	~~2~~
Indian River Tract	517	0	0	408	~~0~~
OK Slip Falls Trac	2,765	15	0	0	~~1~~
"OSC Tract"	0	0	0	160	~~0~~
Reclassification					
Hudson Gorge Primitive Area	16,360	0	0	0	~~0~~
Blue Mountain Wild Forest (portion)	1,403	0	0	0	~~0~~
Vanderwhacker Mountain Wild Forest (portion)	4,950	0	0	0	~~0~~

Analysis of Alternative 4B

Alternative 4B is not the Preferred Alternative. Additional analysis of the natural resources in the Essex Chain Lakes tract showed that the lakes, ponds, and wetlands are considered to be the area's most sensitive natural resources and require wilderness type management (see Analysis of Alternative 4A above).

Further analysis of the APSLMP and its use of Special Management Guidelines determined that a Special Management Area (SMA) may not be used as a substitute for classification or a classification category. SMA's are created during the Unit Management Planning (UMP) process, which follows classification. The APSLMP makes specific mention of "special management to reflect resource or public use factors" (APSLMP at p. 49) and notes that these exist in all land use classifications. Guideline #1 states that SMA's are addressed during the UMP process.

Thus, the process for adopting special management restrictions are governed by the planning process and when specific management guidelines best serve the natural resource, those guidelines (which are identified in each classification category) are a basis for choosing the appropriate classification.

ALTERNATIVE 5: NO ACTION

The **No Action Alternative** is not being considered for the new acquisitions because the APSLMP requires classification of newly acquired lands as promptly as possible following acquisition. The No Action Alternative for the lands presently in the Blue Mountain Wild Forest, the Vanderwhacker Mountain Wild Forest, and the Hudson ~~River~~ Gorge Primitive Area is to leave those lands classified in their current classifications, as described in the current APSLMP.

MAPS

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On 6/10/2013, corrections were made to Maps 8, 9, 10 and 11 to correspond with the correct descriptive subtitles in the above list of maps.

REFERENCES

New York Natural Heritage Program: Rarity Ranks
www.acris.nynhp.org/ranks.php

Final Programmatic Environmental Impact Statement (1979) (FPEIS),
http://apa.ny.gov/Documents/Guidelines/FPEIS_GuidelinesForAmendingSLMP1979.pdf

Natural Resource Conservation Service, Web Soil Survey
http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

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http://apa.ny.gov/Documents/Laws_Regs/SLMP-20120201-Web.pdf

Snowmobile Plan for the Adirondack Park
http://www.dec.ny.gov/outdoor/27707.html Management Guidance: Snowmobile Trail Siting, Construction and Maintenance on Forest Preserve Lands in the Adirondack Park. November 2009. APA/DEC MOU Appendix E. http://apa.ny.gov/State_Land/Appendix_E.pdf

APPENDICES

A. Response to Public Comment on the Draft Supplemental Environmental Impact Statement (May 22, 2013)

B. Snizek, E. APA Resource Analysis & Scientific Services. November 26, 2013. Essex Chain Lakes Aquatic Resources. Unpublished paper.

C. Jenkins, Jerry. 2001. Finch-Pruyn Biological Survey 2000-2001 Summary of Results. Unpublished paper.

D. Preall, L. DEC Fisheries. September 26, 2012. Fisheries Recreation for former Finch-Pruyn Lands. Ray Brook.

E. Natural Resource Conservation Services, Soil Descriptions.

F. Draft Supplemental Environmental Impact Statement (May 22, 2013) Comparison (redline showing changes from DSEIS to FSEIS).

G. APSLMP Area Descriptions (redline showing changes from October 2011).

APPENDIX G

APSLMP AREA DESCRIPTIONS (REDLINE SHOWING CHANGES FROM OCTOBER 2011).

HUDSON GORGE

This ~~Primitive~~Wilderness Area is in the ~~Town~~Towns of Newcomb and Minerva, Essex County, and the Town of Indian Lake, Hamilton County. It encompasses the wildest and most remote section of the Hudson River, as well as a spectacular white water gorge.

There are two ~~designated~~ foot trails within this area that have long been designated for public use by the Department. From the south, a trail leads from Route 28 to Whortleberry Pond, with short spur trails to Ross and Big Bad Luck Ponds. From the north, a trail begins on Northwoods Club Road and ends at Blue Ledge on the Hudson River. There are no public roads or other access routes to this section of the Hudson River. In the past relatively few people were successful in navigating the waters by canoe, boat or raft. These factors had served to retain this portion of the river and its immediate surroundings in a near wilderness condition. River access has significantly increased with the development of commercial rafting since the early 1980's.

Although ~~there are~~ no established foot trails ~~that~~ parallel this section of the Hudson River, the two above-mentioned trails, particularly the Blue Ledge Trail, ~~receives~~receive considerable use.

~~Private~~ There is also a trail network on the recently acquired lands ~~border about two miles,~~ developed by previous landowners, that may be designated in whole or in part for public use, including trails to OK Slip Falls.

Unlike the majority of the ~~approximately ten-mile river section included~~Adirondack Park, much of the underlying bedrock in this area~~.~~

is calcareous, which is reflected by the species and natural communities that occupy these lands and waters. The river ~~has furnished some excellent fishing~~corridors along the Hudson and Cedar Rivers, along with limey cliffs and wetlands, feature a diversity of bryophytes and vascular plants that may be unmatched in the Park. In addition to ~~this, the public is attracted to the scenic~~its biological diversity, Blue Ledge~~.~~ provides dramatic cliffs enjoyed by those who run the river or hike to the ledges. Opportunities for good ~~brook trout~~ fishing are available along the river and at several interior ponds.

The distance between Newcomb and North River is the most dramatic white water trip in the Adirondacks, if not the State as a whole, and one of the most demanding and hazardous. Since the early 1980's, commercial white water rafting, utilizing a release from the Lake Abanakee dam which permits rafts to gain access via the Indian River, has increased dramatically on the lower portion of this route. This type of use has reached about the maximum level consistent with the carrying capacity of the resources of the river banks and wild character of the river and care should be taken not to exceed present use levels.

~~Non-conforming uses that were closed include 2.5 miles of jeep trails and 2.3 miles of snowmobile trails.~~

~~The~~

This area ~~is~~was originally classified as Primitive because of ~~the~~ substantial ~~amount of~~ private ~~land that intrudes~~ inholdings in the vicinities of the ~~area~~confluence with the Indian River and Blue Ledge and the critical relationship of ~~that land~~those lands to the river gorge. ~~This~~The area ~~should be~~was upgraded to Wilderness ~~as soon as~~ in 2013 after most of the private lands ~~can be~~ – including their entire river frontage – were acquired ~~or their uses limited by conservation easement so as to be compatible with the adjacent State lands. Pursuit of these acquisitions or easements should be a matter of highest priority.~~.

~~The~~ The Department developed an Interim Access Plan for this area in June 2013.

This area does not yet have an adopted Unit Management Plan.

Hudson Gorge area statistics:

State Lands	~~16,517~~23,518 Acres
Bodies of Water (~~29~~	~~352~~25) 314 Acres
Foot Trails	~~6.6~~7 Miles
Non-conforming Uses:	None

WILDERNESS STATISTICAL TOTALS:

State Lands	1,122,319 Acres
Private Inholdings (32)	21,530 Acres
Bodies of Water (~~-~~982)	19,295 Acres
Foot Trails	~~780~~787 Miles
Horse Trails	75 Miles
Lean-tos	151
Impoundments	5

Non-conforming Uses:

Ranger Cabins*	2
Telephone Lines (on the ground)	4 Miles
Roads (public)	2.73 Miles
Steel Bridge	1
Suspension Bridge	1
Gravel Pit	1
~~Powerline~~Power Line	0.6 Miles

*Non-conforming uses whose removal cannot be scheduled by a fixed deadline.

ESSEX CHAIN LAKES

This area was classified in 2013 and is located in the Towns of Newcomb and Minerva in Essex County and the Town of Indian Lake in Hamilton County. The dominant feature of the landscape is the Essex Chain Lakes, a series of eight interconnected lakes. Together with nearby ponds, this tract has eleven lakes and ponds that are interconnected or within portaging distance of each other to provide a six- to seven- mile canoe route.

Significant wetlands surround many of the water bodies and are also found throughout the upland area. Both emergent marshes and deepwater marsh wetlands border the Essex Chain Lakes. These wetlands provide nesting habitat, food and cover for wildlife, stabilize lake sediment and cycle large quantities of nutrients. Deepwater marsh wetlands provide valuable fish spawning and nursery habitat and are a food source for waterfowl and other wildlife. Several emergent and deepwater wetland plants are found in the channels which connect the lakes, including two state protected species.

Rivers in the unit include portions of the Cedar and Rock Rivers. The Rock River is designated Scenic and the Cedar River is designated Wild from the southeast edge of the area to its confluence with the Rock River, at which place its designation changes to Scenic.

There are permanent restrictions on the land that preclude Wilderness classification. Prior to transferring these lands to the State, The Nature Conservancy granted easements to the Towns of Minerva and Newcomb over portions of the Essex Chain Lakes Tract that will allow for, as permitted by DEC, float plane access to First and Pine Lakes. The easement also grants the Towns access to, and use of materials from, two gravel pits located on the periphery of the property in order to provide gravel to maintain roads, trails and other infrastructure in this Area that may be open for motorized use. These activities would be nonconforming in lands classified as Wilderness. Even across adjacent lands and waters, such as the Essex Chain Lakes other than First Lake, the activities of float plane use in such close proximity to the lakes would significantly detract from the sense of remoteness expected in Wilderness.

The Department developed an Interim Access Plan for this area in June 2013.

This area does not yet have an adopted Unit Management Plan.

Essex Chain Lakes area statistics:

State Lands	6,914 acres
Waterbodies (14)	620 acres
Non-conforming Uses:	
Camps	
Roads (private)	indeterminate mileage
Float Plane Access*	1 lake.

OK SLIP POND

Located in the Town of Minerva, Essex County, this area includes a 2.6-mile long segment of road that crosses the Hudson Gorge Wilderness and leads to a private inholding surrounding OK Slip Pond. The area includes the road, the distribution power line that serves the inholding and an 11-acre parcel abutting State Route 28 that is occupied by a transmission power line. This road is not open to the public. Should the private inholding ever be acquired by the State, the road should be closed to all motorized use and the lands of this Primitive corridor and the inholding should be classified as Wilderness.

The Department developed an Interim Access Plan for this area in June 2013.

This area does not yet have an adopted Unit Management Plan.

OK Slip Pond area statistics:

State Lands	30 acres
Non-conforming Uses	
Road (private)*	2.6 miles
Powerlines*	2

PINE LAKE

This area is located in the Towns of Newcomb and Minerva in Essex County and the Town of Long Lake in Hamilton County. This area was classified in 2013 and includes lands from the TNC/Finch acquisition and a portion of the Blue Mountain Wild Forest that was reclassified. The eastern boundary follows the Cedar River north to a point where a bridge once crossed the river. The boundary then follows, but does not include, the western edge of the Cornell Road (South).

Prominent features of this area include Pine Lake and Mud, Clear and Corner Ponds. The easements held by the Towns of Minerva and Newcomb for float plane landings on Pine Lake prevent this area from being designated as Wilderness or Canoe, but it offers a rare and remote recreational opportunity and its natural resources are sensitive, which requires wilderness management.

Pending resolution of legal and regulatory issues concerning potential recreational uses and resource impacts of a potential Wild Forest corridor, the unclassified lands between this Primitive Area and the Essex Chain Lakes Primitive Area may be classified Primitive. If this Wild Forest Corridor is not established, the two Primitive Areas will be merged as the Essex Chain Lakes Primitive Area.

The Department developed an Interim Access Plan for this area in June 2013.

This area does not yet have an adopted Unit Management Plan.

Pine Lake area statistics:

State Lands	2,793 acres
Waterbodies (4)	147 acres
Non-conforming Uses:	
Floatplane access*	1 Lake

POLARIS MOUNTAIN

This area is located on the east side of the Hudson River in the Town of Newcomb, Essex County, including the waters of the river directly adjacent to this land. Although the land is owned by the State, the lessees of these camps have exclusive use of the existing roads and one-acre parcels surrounding each camp until October 1, 2018. One year following termination of the camp leases, no later than October 1, 2019, this area will automatically and without further Agency action be reclassified as Wilderness and added to the Hudson Gorge Wilderness.

The Department developed an Interim Access Plan for this area in June 2013.

This area does not yet have an adopted Unit Management Plan.

Polaris Mountain area statistics:

State Lands	964 acres
Waterbodies (1)	18 acres
Non-conforming Uses	
Camps	
Roads (private)	indeterminate mileage

PRIMITIVE AREA STATISTICAL TOTALS:

State Lands	~~45,385~~ 32, 567	Acres
Private Inholdings	(3) 107	Acres
Bodies of Water	(~~40) 811~~34) 1,282	Acres
Foot Trails	19.8	Miles
Non-conforming Uses:		
Roads (public)*	7.85	Miles
Roads (private)*	63.43	Miles
Roads (State-owned with private access)	undetermined	Miles

Snowmobile Trails*		
	Public	6 Miles
	Private	2.3 Miles
Fire Towers*	1	
Observer Cabins*	1	
Ranger Cabins*	1	
Lighthouse*	1	
House and Outbuildings*		
Railroad*	2 Miles	
Railroad Station	1	
Camps	~~4~~	
Dams	2	
Steel Bridge	1	
Power Lines*	2	
Float Plane Access*	2 Lakes	

*Permanent non-conforming uses or non-conforming uses whose removal cannot be scheduled by a fixed deadline.

BLUE MOUNTAIN

This area is located in Hamilton and western Essex counties. It is generally bounded by Route 30 on the west and south, the Indian River and Hudson River on the east and Route 28N on the north.

The terrain varies from gentle around the easily accessible and popular Rock Lake to extremely steep and rugged in the remote Fishing Brook Range.

The 3,759-foot Blue Mountain dominates the landscape for some distance around, offering wide ranging views in all directions for those willing to make a short but steep hike to the summit from the picturesque hamlet of Blue Mountain Lake. Tirrell Pond ~~nestles~~is nestled to the northeast of Blue Mountain and, due to relatively easy access, affords an excellent opportunity for day use or primitive camping. Opportunities for more remote and rugged explorations through some truly wild back county are afforded by long, lower segments of the Rock and Cedar Rivers – designated Scenic and Wild, respectively – just upriver of where they reach the Essex Chain Lakes and Pine Lake Primitive Areas.

~~With the exception of a crossing of the Northville-Lake Placid trail, the ridge from East Inlet Mountain to the Fishing Brook Range represents a wild, unbroken ten mile block of Forest Preserve,~~

In 2013, with the addition of the Nature Conservancy/Finch land acquisition, some existing portions of the northeastern section of this unit near the Essex Chain Lakes were reclassified to Primitive and added to the Essex Chain Lakes and Pine Lake Primitive Areas. At the same time, a major block of the newly acquired lands north of the lakes, extending from the Cornell Road in the west, eastward to the Hudson River and northward toward Newcomb, was classified as Wild Forest and added to the area. Wild Forest access along the Boots to Cornell Road to the south shore of Fifth Lake was established for the purpose of Universal Access only.

Further south, additional land from the Indian River Tract west of the Chain Lakes Road (South) was added to this unit, including the road itself from the edge of the unit northwest to the old boundary of the Essex Chain Lakes Tract. Also in 2013, a 1/10-mile wide corridor following and including the old Camp 6 Road from its beginning at Drakes Mill Road to the north, south to its end at the Cedar River, was classified Wild Forest and added to the area. This corridor separates the Essex Chain Lakes Primitive Area from the northernmost reaches of the Hudson Gorge Wilderness and may allow for certain mechanized or motorized uses along it.

In the event the Pine Lake Primitive Area is merged into the Essex Chain Lakes Primitive Area, the corridor of Wild Forest in this area south of First Lake and north of Pine Lake will be reclassified to Primitive from the old boundary of the Essex Chain Lakes Tract to the confluence of First Lake outlet ("The Chain Drain") with the Rock River.

Consistent with Master Plan guidelines for Wild, Scenic and Recreational Rivers, the waters of the Hudson River in this area shall be free from motorized activity.

A Unit Management Plan was adopted for this area in 1995.

VANDERWHACKER MOUNTAIN

This area is located in the Towns of Chester, Johnsburg, Keene, Minerva, Newcomb, North Hudson, and Schroon in Essex and Warren Counties. It is generally bounded on the south by the ~~Siamese Ponds~~ Hudson Gorge Wilderness ~~and State Route 8~~; on the west by the Hudson River ~~and the Hudson Gorge Primitive Area~~; on the east by State Route 9 and Schroon Lake; and on the north by State Route 28N and the High Peaks Wilderness.

The ~~three~~ primary attractions of the area are the lakes and ponds, the Hudson and Boreas ~~River~~Rivers and Vanderwhacker Mountain. The latter, by virtue of its isolated location, provides perhaps the best view of the High Peaks from the south in the Park. From the summit of ~~Vanderwhacher~~Vanderwhacker Mountain ~~It~~, it is also possible to trace the course of the Hudson River and gain an appreciation of that river's ~~magnificance~~magnificence.

The Hudson River and the Boreas River~~, a~~ within this area are designated ~~scenic river, is one of the most beautiful Adirondack~~Scenic rivers. White water stretches, interspersed with stillwaters, provide a variety of scenes to hold one's appreciation. The Wolf Pond, Durgin Brook and Lester Flow sections of the Upper Boreas are well known to bird clubs. There are plant and birdlife communities of unusual interest, particularly ~~the~~those featuring boreal species.

Consistent with Master Plan guidelines for Wild, Scenic and Recreational Rivers, the waters of the Hudson River in this area shall be free from motorized activity.

A Unit Management Plan was adopted for this area in 2005.

STATE ADMINISTRATIVE AREAS

Lands included in the State Administrative classification:

CLINTON

Ausable -- Maintenance Area, Rt. 9N-I-87 - DOT
Dannemora -- Correctional Facility - Dept. of Correctional Services
Dannemora -- Correctional Facility – DCS
Dannemora -- Clinton East Annex - DCS
Dannemora -- Surplus Property - OGS
Dannemora -- Adk. Correctional Treatment & Evaluation Center
Dannemora -- ROW- SH 5186, Vacant Land - DOT
Saranac SH -- 1398 Moffittsville/Franklin, Maintenance Area – DOT
Saranac -- Vacant, Rt. 3/Saranac River – DCS
Saranac – Cemetery, Douglas Rd. –DCS
Saranac – Cemetery, Ryan Rd. –DCS
Saranac – Vacant, West side of Picketts Corner Rd. – DCS
Saranac – Vacant, East and West sides of Picketts Corner Rd. – DCS
Saranac – Vacant, Picketts Corner Rd. at Barnham Brook Rd. - DCS

ESSEX

Crown Point – Maintenance Area, Factoryville Rd. – DOT
Chesterfield – Maintenance Area, Rt. 22 - DOT
Elizabethtown -- Rt. 9N - Essex County Stonehouse Maintenance Area – DOT
Keene – Route 73, Essex County Sub-headquarter - DOT
Lewis -- West of Exit 32, Maintenance Area - DOT
Minerva -- Maintenance Area, Rt. 28N – DOT
Minerva – One acre gravel pit along Chain Lakes Road (South)
Newcomb – One acre gravel pit along Chain Lakes Road (North)
Newcomb – One acre gravel pit north of Deer Pond
North Elba -- Camp Adirondack - DCS
North Elba -- Ray Brook State Office Complex
North Hudson -- Maintenance Area, Exit 30 - DOT
Schroon -- Schroon Lake Sewage Treatment Plant - EFC
Schroon -- Horseshoe Brook Pumping Station, Utility - EFC
Schroon -- Int. Rts. 9, 73/Maintenance Area, Residency Office - DOT
Severance -- Maintenance Area - Int. Rts. 9 & 73 - DOT
Stowerville -- Maintenance Area - 2 mi. west of I.87 - DOT
Ticonderoga -- 315 Champlain Ave., State Armory, Div. Military, Naval Affairs
Underwood -- Maintenance Area - Rt. 9 - DOT
Westport-- N. Main Street, Sewage Treatment Plant - EFC
Westport -- Pumping Station No. 1, Washington Avenue - EFC

Westport -- Pumping Station No. 2, S. Main Street - EFC
Wilmington -- Atmospheric Sciences Research Center

FRANKLIN

Duane -- Maintenance Area Rt. 458, "Meacham Lake" - DOT
Franklin -- Maintenance Area Rt. 3, Vermontville - DOT
Harrietstown -- State Armory
Harrietstown -- Maintenance Area Rt. 86, Lake Clear Jct. – DOT & DEC
Harrietstown -- Wawbeek Maintenance Area - DOT
Santa Clara -- Adirondack Fish Hatchery
Tupper Lake -- Sunmount Developmental Center - DMH

FULTON

Northampton -- Maintenance Area SH 362 - DOT
Northampton -- DEC, Northville - DEC
Rockwood 29 -- DOT

HAMILTON

Arietta -- Maintenance Area - Rt. 10, 1.5 mi. north of Fulton County - DOT
Indian Lake -- Maintenance Area, Residency - DOT
Hoffmeister -- Maintenance Area, Rt. 8 – DOT
Long Lake -- Maintenance Area, Rts. 28N, 30 - DOT
Long Lake -- Maintenance Area Rt. 28, Raquette Lake Patrol
Long Lake -- Maintenance Area SH 5189, Long Lake Patrol
Long Lake -- Little Tupper Lake Headquarters, Rt.10, 4 mi. west of Rt. 3
Long Lake – Raquette Lake Water Supply – DEC
Long Lake – Maintenance Area, Sagamore Road - DOT
Wells -- Hamilton County Sub-headquarters

ST. LAWERENCE

Colton -- Town of Colton Maintenance Area-Rt. 3 - DOT
Colton – Cranberry Lake Maintenance Center - DEC
Fine -- St. Lawrence Power Radio Tower
Fine -- Radio Tower Site – PASNY
Fine -- Ranger School – SUNY ESF
Hopkinton -- White Hill Radio Towers

WARREN
Lake George -- Residential Bldg. Location/I-87 - DOT
Chester SS -- Rt. 8, Maintenance Area – DOT

Chestertown -- Maintenance Area-I-87, Exit 25 on Rt. 8 – DOT
Johnsburg – Maintenance Area, Peaceful Valley Road -DOT
Warrensburg -- Parking Lot SH 5157 Warrensburg-Chestertown - DOT
Warrensburg -- Maintenance Area near I-87/Lake George-Warrensburg - DOT
Warrensburg -- Warren County Storehouse Site
Warrensburg -- DEC Office-DEC Warrensburg-Warren County Residency on Rt. 9
Queensbury -- DOT properties - DOT