New York State
Department of Environmental Conservation

Division of Lands & Forests

Wilmington Wild Forest

Unit Management Plan/ Environmental Impact Statement

Town of Black Brook, Clinton County
Towns of Jay, Keene and Wilmington, Essex County

October 2005

GEORGE E. PATAKI, Governor

DENISE M. SHEEHAN, Acting Commissioner

Lead Agency:
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GEORGE E. PATAKI
GOVERNOR

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY, NEW YORK 12233-1010

DENISE M. SHEEHAN
ACTING COMMISSIONER

MEMORANDUM

OCT 28 2005

TO: The Record

FROM: Denise M. Sheehan

SUBJECT: Wilmington Wild Forest Unit Management Plan

The Unit Management Plan for the Wilmington Wild Forest has been completed and approved by the Adirondack Park Agency. The Plan is consistent with guidelines and criteria for the Adirondack Park State Land Master Plan, the State Constitution, Environmental Conservation Law, and Department Rules, Regulations and Policies. The Plan includes an Environmental Impact Statement accepted as Final on July 6, 2005 and is hereby approved.

NEW YORK STATE
Adirondack
parkagency

RESOLUTION AND SEQRA FINDINGS
ADOPTED BY THE ADIRONDACK PARK AGENCY
WITH RESPECT TO
WILMINGTON WILD FOREST
UNIT MANAGEMENT PLAN

August 12, 2005

WHEREAS, Section 816 of the Adirondack Park Agency Act directs the Department of Environmental Conservation to develop, in consultation with the Adirondack Park Agency, individual management plans for units of land classified in the Master Plan for Management of State Lands and requires such management plans to conform to the general guidelines and criteria of the Master Plan; and

WHEREAS, in addition to such guidelines and criteria, the Adirondack Park State Land Master Plan prescribes the contents of unit management plans and provides that the Adirondack Park Agency will determine whether a proposed individual unit management plan complies with such general guidelines and criteria; and

WHEREAS, the Department of Environmental Conservation has prepared a unit management plan for the Wilmington Wild Forest; and

WHEREAS, this action is a Type I action pursuant to 6 NYCRR Part 617 for which the Department of Environmental Conservation is the lead Agency and the Adirondack Park Agency is an involved Agency; and

WHEREAS, a final environmental impact statement was completed by the Department of Environmental Conservation on July 6, 2005; and

WHEREAS, the Department of Environmental Conservation has consulted with the Adirondack Park Agency staff in the preparation of the proposed plan; and

WHEREAS, the Agency is requested to determine whether the final Wilmington Wild Forest Unit Management Plan, dated June, 2005, is consistent with the Standards and Guidelines of the Adirondack Park State Land Master Plan; and

WHEREAS, the Adirondack Park Agency has reviewed the proposed Wilmington Wild Forest Unit Management Plan; and

WHEREAS, the Department has agreed to include language in the UMP regarding future placement of memorial signs, plaques and monuments in the Unit; and

WHEREAS, the Department has committed to develop Wild Forest Principles in consultation with Agency staff which will be consistent with the State Land Master Plan and amend this UMP to include these Principles; and

WHEREAS, the Department has agreed to include language in the UMP regarding management objectives and actions with respect to the control of invasive species in the Unit and added a budgeted item to do so in the Implementation Section of the UMP; and

WHEREAS, the proposal to create a connector snowmobile trail from the present Cooper Kill Trail to Forestdale Road is not a material increase in snowmobile mileage for the Wilmington Wild Forest Unit since the proposal calls for closure of approximately 4.9 miles of existing snowmobile trails while creating 5.25 miles of new trail; and

WHEREAS, the Department has agreed to include language in the UMP regarding a commitment to monitoring increased snowmobile trail use in the interior of the Unit that may result from the new connector trial; and

WHEREAS, the Department has committed in this Unit Plan to further study and evaluation of the expansion of proposed mountain biking trails for the Beaver Brook tract and to consult with the Agency pursuant to the terms of the MOU; and

WHEREAS, the Department has committed to develop a baseline inventory and assessment of all established roadside campsites; and

WHEREAS, the Department has committed, in consultation with the Agency, to develop and implement site design guidelines and criteria for roadside campsites so that they can be renovated or relocated and conform to the guidelines and standards of the State Land Master Plan; and

WHEREAS, the site guidelines and criteria will be submitted for Agency review in future Wild Forest Unit Management Plans.

NOW, THEREFORE, BE IT RESOLVED, that pursuant to Section 816 of the Adirondack Park Agency Act, the Adirondack Park Agency finds the Wilmington Wild Forest Unit Management Plan, dated June, 2005, conforms with the general guidelines and criteria of the Adirondack Park State Land Master Plan; and

BE IT FURTHER RESOLVED, that the Adirondack Park Agency finds pursuant to 6 NYCRR Part 617.11 that the management actions contained therein are:

1. Intended to protect the Wilmington Wild Forest by providing for the long-term protection and preservation of the Area's natural setting and natural resources in accordance with the Adirondack Park State Land Master Plan. (FEIS p.5)

2. Intended to encourage, within legal constraints, varied types of outdoor recreation that afford enjoyment of the area's resources and economic benefits to local communities without destroying the natural character and setting of the Wild Forest and to provide a diversity of recreation opportunities and improve interior access. (FEIS p.5 and 60)

3. Intended to provide the highest level of accessibility for persons with disabilities consistent with the Americans with Disabilities Act to the extent it does not alter the fundamental nature of programs offered to the public. (FEIS p.79)

4. Intended to provide for snowmobiling opportunities consistent with the Adirondack Park State Land Master Plan. (FEIS p.68)

5. Intended to comply with State Land Master Plan primitive campsite standards and to reduce, eliminate or mitigate adverse effects on natural resources that result from improperly located campsites. (FEIS p.77)

6. Intended to obtain more comprehensive visitor use data in order to better assess resources and social conditions. (FEIS p.78)

7. Intended to keep soil erosion caused by recreational use within acceptable limits that closely approximate natural processes and to remediate and stabilize areas that have significant erosion caused by pre-Forest Preserve logging activities. (FEIS p.50)

8. Intended to insure that the succession of native plant communities is not altered by human use and to prevent, contain and eradicate invasive plant occurrences on the unit via cooperative partnerships and development of invasive plant workplans. (FEIS p.51 and 52)

9. Intended to protect locations of sensitive, rare, threatened and endangered plant species and to promote programs and studies that identify rare ecological communities. (FEIS p.51)

10. Intended to monitor existing populations and census potential new habitat of Bicknell's Thrush in the Unit. (FEIS p.57)

11. Intended to maintain and perpetuate annual hunting and trapping seasons as legitimate uses of the Wild Forest and provide additional access to public lands for hunting and fishing. (FEIS p.57 and 58)

12. Intended to enhance wildlife viewing opportunities. (FEIS p.56)

13. Intended to preserve, enhance and restore populations of native brook trout to the unit's streams and ponds. (FEIS p.57)

BE IT FURTHER RESOLVED, that consistent with the social, economic and other essential considerations, from among the reasonable alternatives, the proposed Final UMP seeks to minimize or avoid adverse environmental effects to the maximum extent practicable, including the effects disclosed in the environmental impact statement; and

BE IT FINALLY RESOLVED, that the Adirondack Park Agency authorizes its Executive Director to advise the Commissioner of Environmental Conservation of the Agency's determination in this matter.

Ayes: R. Whaley, Chairman; R. Beach (DED), S. Buchanan (DEC), R. Hoffman (DOS), F. Mezzano, D. Rehm, K. Roberts, J. Townsend, L. Ulrich, C. Wray

Nays: None

Abstentions: None

Absences: None

REW:dal
Attachments

List of Preparers and Acknowledgments

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Special recognition to Jim Papero for initiating and preparing most of the content in this plan

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DEC Gratefully acknowledges the contributions made by the following:

Jeanne Ashworth	Supervisor, Town of Wilmington
Rarilee Conway	Whiteface Mountain Regional Visitors Bureau
Robert Eccleston	Wilmington Mountain Peddlers
David Gillespie	Alpine Club of Canada
Dr. Edwin Ketchledge	Retired Professor Emeritus, College of Environmental Science & Forestry
Wilfred LaHart	Resident of Forestdale, Black Brook
Gilbert Manley	Retired Forest Ranger, Jay
Kathy Regan	The Nature Conservancy
Gerald Smith	Natural Resource Conservation Service
Guy Stephenson	Wilmington Fish and Game Club
Scott Van Lear	Forest Ranger
Doug Wolfe	Atmospheric Science Research Center
Bert Yost	Wilmington Mountain Peddlers

And to the many residents of the Towns of Black Brook, Jay, Keene, and Wilmington and other countless individuals and organizations who offered advice, comments, and support.

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

I. INTRODUCTION

A. Legal Requirements

The Wilmington Wild Forest Unit Management Plan has been developed pursuant to, and is consistent with, relevant provisions of the New York State Constitution, the Environmental Conservation Law (ECL), the Executive Law, the Adirondack Park State Land Master Plan, Department of Environmental Conservation ("Department") Rules and Regulations, Department Policies and Procedures and the State Environmental Quality and Review Act.

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

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

ECL §3-0301(1)(d) and 9-0105(1) provide the Department with jurisdiction to manage Forest Preserve lands, including the Wilmington Wild Forest.

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

The APSLMP places State land within the Adirondack Park into the following classifications: Wilderness, Primitive, Canoe, Wild Forest, Intensive Use, Historic, State Administrative, Wild, Scenic and Recreational Rivers, and Travel Corridors, and sets forth management guidelines for the lands falling within each major classification. The APSLMP classifies the lands which are the subject of this UMP as part of the Wilmington Wild Forest.

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

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

Executive Law §816(1) provides in part that "(u)ntil amended, the APSLMP for management of State lands and the individual management plans shall guide the development and management of State lands in the Adirondack Park." Thus, the APSLMP and the UMPs have the force of law in guiding Department actions.

It is important to understand that the State Land Master Plan has structured the responsibilities of the Department and the Agency in the management of State lands within the Adirondack Park. Specifically, the APSLMP states that:

"..... the legislature has established a two-tiered structure regarding state lands in the Adirondack Park. The Agency is responsible for long range planning and the establishment of basic policy for state lands in the Park, in consultation with the Department of Environmental Conservation. Via the master plan, the Agency has the authority to establish general guidelines and criteria for the management of state lands, subject, of course, to the approval of the Governor. On the other hand, the Department of Environmental Conservation and other state agencies with respect to the more modest acreage of land under their jurisdictions, have responsibility for the administration and management of these lands in compliance with the guidelines and criteria laid down by the master plan."

In order to put the implementation of the guidelines and criteria set forth in the APSLMP into actual practice, the DEC and APA have jointly signed a Memorandum of Understanding concerning the implementation of the State Land Master Plan for the Adirondack Park. The document defines the roles and responsibilities of the two agencies, outlines procedures for coordination and communication, defines a process for the revision of the APSLMP, as well as outlines procedures for State land classification, the review of UMPs, state land project management, and state land activity compliance. The MOU also outlines a process for the interpretation of the APSLMP.

No Action Alternative or Need for a Plan

From the legal perspective, the “No Action” alternative of not writing an UMP is not an option. Executive Law §816 requires the Department of Environmental Conservation to develop, in consultation with the APA, individual unit management plans (UMPs) for each unit under its jurisdiction classified in the APSLMP. In addition an UMP serves as a mechanism for the Department to study and identify potential areas for providing access to the SPW for persons with disabilities in accordance with the Americans with Disabilities Act (ADA of 1990). The UMP also serves as an administrative vehicle for the identification and removal of nonconforming structures as required by the APSLMP.

From the administrative perspective, the “No Action” alternative is not an option. The UMP provides guidance necessary for staff to manage the lands of the unit in a matter that is most protective of the environment while at the same time providing the most enjoyable outdoor recreation opportunities for the public. Without the UMP the sensitive environmental resources of the unit could be negatively impacted and it is highly likely that the public enjoyment of such resources would decrease. Management of the Wilmington Wild Forest via an UMP will allow the Department to improve public use and enjoyment of the area, avoid user conflicts and prevent over use of the resources (e.g., through trail designations, access restrictions, placement of campsites and lean-to in relation to a sensitive resource, etc.)

B. Background

The subject of this Unit Management Plan is those State lands designated as the Wilmington Wild Forest (WWF), formerly a sub-unit of the much larger Taylor Pond Wild Forest. The WWF was established in 1998 in accordance with APSLMP guidelines which permits larger, widely dispersed Wild Forest units, such as the Taylor Pond Wild Forest (TPWF), to be divided into smaller units. The TPWF covers more than 50,000 acres across several towns and two counties making it difficult to administer. Some segments are more than 50 miles apart. Creation of a smaller and separate Wild Forest was desirable to facilitate management because of its location, physical features, ecological systems, and the public use patterns surrounding Whiteface Mountain and the hamlet of Wilmington.

The WWF sits in the shadow of Whiteface Mountain (elevation 4,867 feet), the fifth highest peak in the Adirondacks. Whiteface is unique in that it sits strikingly apart from New York State's other 4,000 foot high mountains that lie in a distinct group ten miles south. The mountain has been extensively developed with a two-lane highway to its summit and a large ski center, yet significant portions remain wild and undeveloped.

State Forest Preserve lands, north and south of the Whiteface Mountain Veteran's Memorial Highway are classified as **"**Wild Forest**"** and are known collectively as the WWF. The APSLMP defines, on page 32, a Wild Forest area as "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 is further defined as an area that frequently lacks the sense of remoteness of wilderness, primitive, or canoe areas and that permits a wide variety of outdoor recreation."

C. Plan Purpose

The primary purpose of this Unit Management Plan is to establish a public partnership between the DEC, local governments, interested groups and citizens to cooperatively develop and share strategies for the use, conservation, enhancement, and enjoyment of this area in accordance with the New York State Constitution and the APSLMP. However, the ultimate discretion in adopting and implementing this plan resides with the DEC and APA. Comprehensive planning allows for the exchange of ideas and information before actions, that can have long-term effects, are taken. This is necessary to afford consistent management direction by establishing clearly stated management goals and objectives and the means necessary to implement them.

One of the most important aspects of the planning process is to introduce and involve the public in the care and stewardship of State lands. This element increases the DEC's awareness of, and responsiveness to, the values and opinions expressed by citizens and further helps the DEC make better decisions in managing public lands.

Major contributors to the planning effort include the Whiteface Mountain Regional Visitors Bureau, the Whiteface Preservation and Resource Association, the State University of New York at Albany's Whiteface Mountain Atmospheric Science Research Center, The Wilmington Mountain Peddlers, the Olympic Regional Development Authority (ORDA), and the Towns of Black Brook, Jay, Keene, and Wilmington.

The plan is designed to guide the management of this area for a five-year period commencing at the time the plan is approved by the Commissioner of the DEC. Plan monitoring is essential to determine whether or not management goals and objectives are being met. If a management action is clearly ineffective and a change is needed, alternatives will be analyzed and a new action will be proposed and implemented, following APSLMP criteria and guidelines that include public review, through the UMP amendment process.

D. Area Overview

1. Location and Description

The WWF consists of several detached Forest Preserve parcels within a 10 mile radius of the hamlet of Wilmington that were formerly included in the much larger 50,000 acre TPWF. The unit management plan, as previously stated, only addresses State lands and does not encumber any private lands. The planning area consists of low mountains straddling the Clinton/Essex County line and takes in portions of the Town of Black Brook in Clinton County and the Towns of Jay, Keene, and Wilmington in Essex County. State lands are interspersed with a mix of rural private lands used for farming, logging, and residential home sites. Larger publicly owned tracts included in the bounds of the WWF are the Beaver Brook Tract, Clements Mountain, Hamlin Mountain, the Whiteface/ Marble Mountain Tract, and the Wilmington/Stephenson Mountain Range. Smaller blocks of Forest Preserve are located in between these larger tracts. This contributes to a unique blend of State and private holdings providing a wide diversity of forested conditions, wildlife, and open space lands, complemented by an extensive road network.

Roadside access to State lands is afforded by State Highways (SH) 86 and SH 431 and numerous county and town roads. The existing road network lends itself to a variety of recreational opportunities for those recreationists seeking a higher level of facilities and well marked trails as compared to remote Wilderness areas. Recreationists in this group include visitors seeking short outings to mountains and lakes, boaters, fishermen and hunters, older and less physically-able persons, and those persons desiring mechanical and/or motorized forms of recreation such as mountain biking and snowmobiling.

This draft Unit Management Plan does not include the Wilmington Notch Public Campground, the Whiteface Veteran's Memorial Highway, the Whiteface Mountain Ski Area and the State University of New York 's (SUNY at Albany) Atmospheric Science Research Center on Whiteface Mountain. These units are separately classified by the APSLMP and are not within the WWF.

The Wilmington Notch Public Campground is listed as an intensive use area by the APSLMP and is addressed by its own unit management plan (1990). A unit management plan for the Whiteface Veteran's Memorial Highway, also described as an Intensive Use Area, was completed in July 2004 by the Olympic Regional Development Authority (ORDA). The Whiteface Atmospheric Science Research Center (ASRC) occupies a small tract of land at the base of Marble Mountain, 2.4 miles up the Whiteface Veteran's Memorial Highway. This area is classified by the APSLMP as a State Administrative Area, one where the State provides facilities for a variety of scientific purposes.

2. Boundary

Boundaries of the WWF are depicted on the official Adirondack Park Land Use and Development Plan Map and State Land Map. On-the-ground boundaries parallel roads, rivers, or individual property lines. Road frontage and survey lines are identified by "State Forest Preserve" signs. State Forest Preserve boundaries are painted yellow. There are approximately 36 miles of perimeter boundary lines to maintain in this unit.

The area is roughly bounded by the Forestdale and Silver Lake Roads on the north, by SH 9N to the east, the boundaries of Sentinel Wilderness and the Whiteface Ski Center to the south, and Gillespie Drive, the Whiteface Mountain Veteran's Memorial Highway, and the McKenzie Mountain Wilderness to the west. The boundary described in this plan is used for administrative and planning purposes and does not have any legal connotation aside from APSLMP requirements.

3. Size and Ownership

The WWF, by geographical area, contains the following sub-units as summarized below:

Table I. Wilmington Wild Forest Components

Beaver Brook Tract	700 ac.
Clements Mountain	1,481 ac
Hamlin Mountain	306 ac.
Whiteface/Marble Mountain Tract	3,407 ac.
Wilmington/Stephensen Range	6,440 ac.
Misc. Small Parcels (4)	897 ac.
Total: All Areas	**13,231 acres**

II. PLAN GOALS

Article XIV of the New York State Constitution and the Adirondack Park State Land Master Plan (1987) set management guidelines and criteria for Wild Forest Areas. These legal mandates provide the basis upon which all management actions are based.

DEC's management goals for the WWF are as follows:

- To provide for the long-term protection and preservation of the Area's natural setting and natural resources in accordance with the Adirondack Park State Land Master Plan.
- To encourage, within legal constraints, varied types of outdoor recreation that afford enjoyment of area resources and economic benefits to local communities without destroying the natural character and setting of the WWF.
- To preserve and protect all sites of known cultural resource value within the Wild Forest boundaries.

These goals are intentionally broad based, not only to serve present resource and human needs, but to provide a basis for future planning as resource and social conditions change.

III. BIOPHYSICAL RESOURCES

The APSLMP requires that each unit management plan contain an inventory, at a level of detail appropriate to the area, of the natural, scenic, cultural, fish and wildlife (including game and non-game species) and other appropriate resources of the area and an analysis of the area's ecosystems. This inventory process is important to identify, search and survey the resources of an area so that future management activities or uses do not adversely impact them.

A. Geology and Soils

Whiteface Mountain and its surroundings are part of an ancient Precambrian mountain range dating back more than one billion years ago. This region has been elevated by internal doming of the base rock and shaped by subsequent erosion. Most of the mountain is underlain with anorthosite, a fine grained igneous rock made up mostly of the mineral, plagioclase feldspar. It underlies the whole High Peaks Region, most of the eastern United States, and Canada. Bedrock, where exposed at the surface, is deeply pitted and grooved by weathering.

The present landscape has been significantly modified by mountain glaciers, deep stream cutting, and landslides. Four widely separated glaciers more than 10,000 years ago have sculptured the mountain. Aside from Whiteface's rounded summit, its most prominent glacial features are its cirques. Cirques are half-bowl shaped features, with steep walls, dug out of bedrock at the head of mountain glaciers. These encircle the summit of Whiteface and are separated by sharp ridges marking the dividing lines between flows.

Landslides of varying intensity have occurred in these cirques. Slopes on the upper head walls have gradients ranging 30-50%. The area of the mountain that has exhibited the most frequent landslides is in the area between the ski center and the Veteran's Memorial Highway. Within this basin, the relatively steep and smooth bedrock surfaces have allowed slippage of the overburden to lower elevations. This occurs after the soil has been super-saturated with water, permitting the soil to slide on a slope that otherwise, when dry, is stable.

Five miles northeast of the Village of Lake Placid, SH 86 parallels a set of three deep-walled, white-water gorges on the West Branch of the Ausable River. Here, the West Branch follows a northeast trending fracture zone in the bedrock dropping several hundred feet in elevation. The gorges are close to the highway and make easy viewing. Originally this valley was cut by glacial ice pushing through zones of weakened bedrock that were further eroded by rushing water. Wilmington Notch is the first gorge encountered, followed by High Falls Gorge. The latter is privately owned and operated as a commercial tourist operation attracting thousands of tourists annually. Farther downstream, one mile below the ski center at the bridge, Wilmington Flume is another deep gorge cut by the river along the fault line.

Soils across the planning unit vary widely in degree of slope, depth to bedrock, stoniness, drainage. General meso-soil maps for the planning area are available from the Adirondack Park Agency and the Natural Resource Conservation Service's (NRCS) Essex County Soil Survey. These depict broad soil associations relative to a particular landscape type. The maps portray soil associations as patterns of similar soils based on their properties and constituents. These are useful in the management of large forested areas and watersheds, but are not suitable for planning areas less than 40 acres in size. For specific projects in small areas, such as placement of trails, parking facilities, camping areas, etc., detailed on-site soil surveys may be required.

Soil names are usually reflective of their dominant characteristics followed by a list of minor components and limitations. For example, frequently observed soils in the WWF include:

> **Adams Loamy Fine Sand:** Adams is a very deep, excessively drained sandy soil formed in low lime deltaic deposits. It is found throughout the landscape, from nearly level deltas and gently sloping outwash plains to steeper sloping terraces and very steep eskers. The rate of surface runoff ranges from very slow to very rapid as the slope increases. Erosion hazard is rated slight but increases with slope and equipment limitations are moderate on steeper slopes. Permeability is rapid or very rapid and the available water capacity is low. This makes Adams a droughty soil

that is usually low in available nutrients. Some units of Adams are recognized on the New York listing of Farmland of Statewide Importance, although it is generally best suited for woodland and wildlife uses. In the WWF, Adams is found in the valley-sides along both branches of the Ausable River and its secondary tributaries. It is commonly found alongside the Fern Lake and Becket soil types.

Becket Fine Sandy Loam: This loamy soil is a very deep, very bouldery, well drained soil formed in low lime glacial till. It is found from nearly level farmland to very steep terrain. Permeability is moderate in the surface and subsoil, and slow in the firm substratum. Available water capacity is moderate. Erosion hazard and equipment limitations are generally slight, but these limitations increase with the slope. Some units of Becket are recognized on the New York listing of Farmland of Statewide Importance, although it is generally best suited for woodland and wildlife uses. This soil is common in the Wilmington "four corners" area and can be found on the southeastern facing lower slopes of Marble Mountain and the Stevenson Range. Becket is also found on both sides of the unnamed mountain on the Hardy Road parcel, to the west of the Hardy Road.

Fern Lake Cobbly Loamy Sand: This is a very deep, somewhat excessively drained sandy soil formed in low lime glacial drift with slopes ranging from 3 to 60 percent. Boulders cover up to 3 percent of the ground surface. The available water capacity is low and permeability is moderately rapid or rapid. Erosion hazard is slight to moderate and the equipment limitations are slight to severe, depending on the severity of the slope. The capability of this soil is best suited for woodlands and wildlife purposes and is commonly found near Fern Lake, Newberry Pond, as well as the Ausable Acres development. In general, it is widespread throughout the northeastern portion of the WWF.

Colton Gravelly Loamy Coarse Sand: This is a very deep, excessively drained, gravelly soil formed in low lime glacial outwash material on terraces, kames, eskers, and outwash plains. Large stones are likely to cover up to 3 percent of the ground surface. The permeability is rapid or very rapid and the available water capacity is very low. The erosion hazard and equipment limitations are rated as slight on gentle slopes, but in strongly sloping and steep areas, the erosion hazard is moderate and the equipment limitations are severe. Certain units of this soil are recognized on the New York listing for Farmland of Statewide Importance. This soil is found on the pine flats along the Hazelton Road on the east side of Black Brook and north of the West Branch of the Ausable River and adjacent to the Flume areas.

Monadnock Find Sandy Loam: This very deep and well drained loamy soil formed in low lime glacial till and is very bouldery. In the WWF, Monadnock is generally found on slopes between 3 and 35 percent and surface runoff ranges from slow on gentle slopes to very rapid on strongly sloping hillsides. The soil permeability is moderate in the surface and subsoil, and moderately rapid in the substratum. Available water capacity is low to moderate. Some units of this soil are recognized as prime farmland with a risk of erosion if cover is not maintained. Forested units of this soil are best maintained as woodlands due to the rockiness of the soil and there are moderate equipment limitations on the strongly sloping areas. Monadnock primarily can be found near the Wilmington "four corners," west of the Ausable River and south of Hazelton.

Becket-Tunbridge (and Skerry) Complex: This complex consists of well drained loamy soils formed in low lime glacial till deposits in the uplands. Becket soils are well drained, very deep soils with a dense till substratum and are found on strongly sloping to steep uplands. Tunbridge soils are well drained, moderately deep soils and occur over an acidic metamorphic bedrock on gently sloping and strongly sloping uplands. Skerry soils are moderately well drained loamy

soils that are moderately deep to dense till substratum deposits and are found on gently sloping uplands. Boulders cover up to 15% percent of the ground surface. The available water capacity of this unit is low to moderate and the permeability is moderate to moderately slow in the dense till. This complex has slight to moderate ratings for erosion hazard and equipment limitations, depending on the severity of the slope. The capability of this soil is best suited for woodlands and wildlife purposes and it is commonly found on the lower slopes surrounding the Wilmington and Stephenson Ranges, Catamount Mountain, and the general area surrounding Taylor Pond. It is also found in the southern portion of the management area near the Flume Falls and Quaker Mountain.

Tunbridge-Lyman Complex: This complex consists of well drained, rocky soils formed in low lime glacial till deposits found on strongly sloping to very steep terrain. Tunbridge soils are moderately deep soils that occur over an acidic metamorphic bedrock and occupy about 45-50% of the area. Lyman soils are shallow soils and occupy about 30-35% of the area. The remaining percentage of the area includes a mixture of other soils and up to 5% rock outcrop. Surface runoff is moderate to very rapid. Permeability is moderate or moderately rapid, and available water capacity is low or very low. Erosion hazard is moderate to severe. This soil complex is best suited for woodlands and wildlife purposes and is commonly found on the middle and lower slopes of local mountainsides, including: Hamlin, Clark, and Clements Mountain. Additionally, Tunbridge-Lyman is commonly observed alongside the Ricker-Lyman & Lyman Ricker Complexes.

Ricker-Lyman & Lyman-Ricker Complexes: These similar soil complexes contain well drained to excessively well drained, very rocky soils found on moderately steep to very steep terrain. Ricker soils are very shallow to moderately deep soils formed from low lime glacial till with partially decomposed organic deposits over mineral soil. Lyman soils are shallow soils formed in low lime glacial till deposits. Each soil types occupy between 30-45% of the area. The remaining percentage of the complexes includes a mixture of other soils and up to 20% rock outcrop. Surface run off is rapid to very rapid. Permeability is moderate or moderately rapid, and available water capacity is low or very low. The equipment limitation and erosion hazards are severe and generally restrict the soils capacity for use to woodlands and wildlife purposes. These soil complexes can be observed on the middle and upper slopes of mountains, including: Hamlin, Clark, and Clements Mountains.

Hogback-Ricker Complex: This very rocky soil complex is found on slopes between 15 and 60 percent. The soil unit is comprised of about 45 percent Hogback soils, 35 percent Ricker soils, and 20 percent other soils–with rock outcrop areas covering up to 10 percent of the ground surface. Hogback soils are well drained but shallow soils formed in low lime glacial till deposits found on strongly sloping to steep uplands. Ricker soils are very shallow to moderately deep, partially decomposed organic deposits over loamy soil that is well to excessively drained. The Hogback-Ricker complex has rapid to very rapid surface runoff and the risk of erosion and equipment limitations are rated as severe. Permeability is moderate or moderately rapid and the available water capacity is low. Overall, this is a very poor soil and the capability for land use is best suited for woodlands and wildlife purposes. Hogback-Ricker complex is primarily found on the uppermost slopes of the Wilmington and Stephenson Ranges.

Rawsonville-Hogback Complex: This complex consists of loamy soils formed in low lime glacial till. Rawsonville soils are well drained, moderately deep soils that occur on strongly sloping to moderately steep uplands. Hogback soils are well drained but shallow soils that are found on strongly sloping to steep uplands. The soils are very rocky and the bedrock is exposed on up to 10 percent of the landscape. The available water capacity is low to moderate and permeability is moderate to moderately rapid. Erosion hazard and equipment limitations are rated as moderate for Rawsonville and severe for Hogback. The capability for usage of Rawsonville-Hogback is best suited for woodlands and wildlife purposes and it is commonly found on the upper slopes of the Stephenson and Wilmington Range.

B. Elevation Change

Elevations range from approximately 1,000 feet in the valley near Wilmington to 4,240 feet atop Esther Mountain. Vertical rises are abrupt with few level areas or benches located in between.

C. Water

The WWF lies within the Lake Champlain watershed. Most of the area is drained by small headwater streams that are tributary to the West Branch of the Ausable River. A segment of the Wild Forest includes 1.7 miles of the bank of the West Branch of the Ausable River in the Town of Jay. This portion of the river is classified as a recreational river by the New York Wild, Scenic, and Recreational Rivers Act of 1972, ECL §15-2714(3) c). Recreational rivers are generally accessible, and may have a significant amount of development in their river areas and may have been impounded or diverted in the past. Management of recreational rivers is directed to preserving and restoring their natural, cultural, scenic, and recreational qualities (ECL §15-2707(2) c). A small portion of the area is drained by headwater tributaries of the Saranac River via French Brook.

Ponded waters include Clements Pond and Cooper Kill Pond with surface areas of 2.2 and 3.0 acres respectively. Appendix Six lists physical, chemical and biological information for the two ponds.

While, acid deposition has affected all areas of the Adirondack Park, the available data on the fisheries resources in the WWF would indicate that watershed buffering is adequate in some areas. For example, the pH of the two ponds are 7.2 and 7.4 indicating a mildly basic, circumneutral condition. Data on pH of small streams in the unit are not available. However fish collections on White Brook and Little Black Brook do not indicate an acidity problem and pH data for the downstream receiving water, the West Branch Ausable River do not indicate a problem, most likely due to the large watershed that the river drains at the point.

D. Wetlands

The mountainous terrain in the WWF generally restricts the occurrence of wetlands to the narrow valleys, lowlands, and associated creeks and rivers that drain the surrounding mountains. Wetlands occupy 206 acres or approximately two percent of the total area of the WWF. While there are some small isolated wetlands, the vast majority of the wetlands in this management area are found in small groups or successive chains along the East and West Branch of the Ausable River and its tributaries. The largest of these areas is an expansive marsh though which Beaver Brook meanders before it empties into the West Branch. This wetland is owned in part by private individuals, forest industry, and New York State.

However, relatively few wetlands in the WWF occur on State-owned land. This is due to the geographic distribution of the wetlands described above and the corresponding patterns of land use in the area. The State Forest Preserve lands are primarily in the more remote forested uplands (e.g. the Stephenson and Wilmington Ranges), whereas the wetlands tend to occur in association with the more accessible and valuable, privately-owned river frontage.

In places where there are classified wetlands on State land, including Beaver Brook, Clements Pond, and the Black Brook parcel, any management activities that are conducted near or within the boundaries of a classified wetland may require a permit and will be done in full consultation with the Adirondack Park Agency.

E. Climate

Climatic conditions vary considerably, even across a small unit such as the WWF. Local variations are attributed to such factors as slope, aspect, elevation, proximity to water bodies, precipitation, prevailing winds, and natural barriers to air currents. Summers tend to be warm with cool nights. Maximum day-time temperatures seldom exceed 90 degrees. Frost can occur any month of the year and occasional freezing temperatures are recorded in July and August. Winters are long and accompanied by high winds. Arctic-like conditions may be encountered on Whiteface Mountain. Daily temperature variations of 20-30 degrees Fahrenheit are common.

Annual precipitation, in rainfall, is between 40 to 60 inches per year; snowfall ranges from 100-150 inches per year. Due to the increased availability of direct sunlight, southern slopes are drier than northern slopes. The northern slopes are wetter and retain greater moisture. Prevailing winds are generally westerly, but may be modified by topography. Eastern slopes, leeward of prevailing winds, tend to be drier and warmer than western slopes. Extensive damaging winds (hurricane force) are rare, but do occur when coastal storms move inland as in the great hurricane of 1950 and Hurricane Floyd in 1999.

F. Air Quality

Air quality in the region is good to excellent, rated Class II (moderately well controlled) by federal and state standards. The region receives weather flowing south from the Arctic Circle that tends to be cleaner than weather emanating from the west and southwest. Summit visibility is often obscured by haze caused by air pollutants when a large number of small diameter particles exist in the air. Air quality may be more affected by particulate matter blown in from outside pollution sources rather than from activities inside the Adirondack Park. The relative assimilation of outside pollutants, commonly referred to as “acid rain,” is under investigation and study by staff at the NYS Atmospheric Science Research Station located on Whiteface Mountain and other researchers. Whiteface’s preeminent feature as a high standing mountain apart from the other High Peaks, in the face of prevailing winds, and a long-term collection center of weather research data, makes it an outstanding outdoor research laboratory.

Recent results of lake chemistry monitoring by NYS DEC from 1992 through 1999, sulfates declined in 92 percent of a representative sample of lakes, selected by the Adirondack Lakes Survey Corporation (ALSC), but nitrates increased in 48 percent of those lakes. The decrease in sulfates is consistent with decreases in sulfur emissions and deposition, but the increase in nitrates is inconsistent with the stable levels of nitrogen emissions and deposition.

Continued monitoring by collection and analysis of acid deposition will allow the monitoring network to determine if improvements will continue as a result of reductions of SO2- and NO4- legislated in the 1990 Clean Air Act Amendments (CAAA).

Effects of Acidic Deposition on Forest Systems

At present, the mortality and decline of red spruce at high elevations in the Northeast and observed reductions in red spruce growth rates in the southern Appalachians are the only cases of significant forest damage in the United States for which there is strong scientific evidence that acid deposition is a primary cause (National Science and Technology Council Committee on Environment and Natural Resources, 1998). The following findings of the National Acid Precipitation Assessment Program (1998) provide a broad overview of the effects of acidic deposition on the forests of the Adirondacks.

The interaction of acid deposition with natural stress factors has adverse effects on certain forest ecosystems. These effects include:

! Increased mortality of red spruce in the mountains of the Northeast. This mortality is due in part to exposure to acid cloud water, which has reduced the cold tolerance of these red spruce, resulting in frequent winter injury and loss of foliage.

! Reduced growth and/or vitality of red spruce across the high-elevation portion of its range.

! Decreased supplies of certain nutrients in soils to levels at or below those required for healthy growth.

Nitrogen deposition, in addition to sulfur deposition, is now recognized as an important contributor to declining forest ecosystem health both at low and at higher elevations. Adverse effects occur through direct impacts via increased foliar susceptibility to winter damage, foliar leaching, leaching of soil nutrients, elevation of soil aluminum levels, and/or creation of nutrient imbalances. Excessive amounts of nitrogen cause negative impacts on soil chemistry similar to those caused by sulfur deposition in certain sensitive high-elevation ecosystems.

Sensitive Receptors

High-elevation spruce-fir ecosystems in the eastern United States epitomize sensitive soil systems. Base cation stores are generally very low, and soils are near or past their capacity to retain more sulfur or nitrogen. Deposited sulfur and nitrogen, therefore, pass directly into soil water, which leaches soil aluminum and minimal amounts of calcium, magnesium, and other base cations out of the root zone. The low availability of these base cation nutrients, coupled with the high levels of aluminum that interfere with roots taking up these nutrients can result in plants not having sufficient nutrients to maintain good growth and health.

Sugar maple decline has been studied in the eastern United States since the 1950s. One of the recent studies suggests that the loss of crown vigor and incidence of tree death is related to the low supply of calcium and magnesium to soil and foliage (Driscoll 2002).

Exposure to acidic clouds and acid deposition has reduced the cold tolerance of red spruce in the Northeast, resulting in frequent winter injury. Repeated loss of foliage due to winter injury has caused crown deterioration and contributed to high levels of red spruce mortality in the Adirondack Mountains of New York, the Green Mountains of Vermont, and the White Mountains of New Hampshire.

Acid deposition has contributed to a regional decline in the availability of soil calcium and other base cations in high-elevation and mid-elevation spruce-fir forests of New York and New England and the southern Appalachians. The high-elevation spruce-fir forests of the Adirondacks and Northern New England are identified together as one of the four areas nationwide with a sensitive ecosystem and subject to high deposition rates.

Effects of Acidic Deposition on Hydrologic Systems

New York's Adirondack Park is one of the most sensitive areas in the United States affected by acidic deposition. The Park consists of over six million acres of forest, lakes, streams and mountains interspersed with dozens of small communities, and a large seasonal population fluctuation. However, due to its geography and geology, it is one of the most sensitive regions in the United States to acidic deposition and has been impacted to such an extent that significant native fish populations have been lost and signature high elevation forests have been damaged.

There are two types of acidification which affect lakes and streams. One is a year-round condition when a lake is acidic all year long, referred to as chronically or critically acidic. The other is seasonal or episodic acidification associated with spring melt and/or rain storm events. A lake is considered insensitive when it is not acidified during any time of the year. Lakes with acid-neutralizing capability (ANC) values below 0 μeq/L are considered to be chronically acidic. Lakes with ANC values between 0 and 50 μeq/L are considered susceptible to episodic acidification; ANC may decrease below 0 μeq/L during high-flow conditions in these lakes. Lakes with ANC values greater than 50 μeq/L are considered relatively insensitive to inputs of acidic deposition (Driscoll et al. 2001). Watersheds which experience episodic acidification are very common in the Adirondack Region. A 1995 EPA Report to Congress estimated that 70% of the target population lakes are at risk of episodic acidification at least once during the year.

Recent results of lake chemistry monitored by NYS DEC

From 1992 through 1999, sulfates declined in a majority of selected lakes by the Adirondack Lake Survey Corporation, but nitrate patterns were less clear with a few lakes improving and most lakes not changing. The decrease in sulfates is consistent with decreases in sulfur emissions and deposition, but the nitrate pattern is not explained by the unchanged levels of nitrogen emissions and depositions of recent decades.

In addition to sensitive lakes, the Adirondack region includes thousands of miles of streams and rivers which are also sensitive to acidic deposition. While it is difficult to quantify the impact, it is certain is that there are large numbers of Adirondack brooks that will not support native Adirondack brook trout. Over half of these Adirondack streams and rivers may be acidic during spring snowmelt, when high aluminum concentrations and toxic water conditions adversely impact aquatic life. Acid ion depositions, “acid rain,” has apparently had little impact on the fisheries resources in the WWF. The pH of the two ponds are 7.2 and 7.4 which indicates a mildly basic, circumneutral condition, not acidic. Data on pH of

small streams in the unit are not available. However, fish collections on White Brook and Little Black Brook do not indicate an acidity problem and pH date for the downstream receiving water, the West Branch Ausable River do not indicate a problem.

Permanent Long-Term Monitoring (LTM) sites in and around this unit.

As part of an Adirondack Park extensive survey in 1986, the ALSC surveyed a total of two waters in this unit (See Appendix Six table for ALSC ponds). One other surveyed pond is on private lands within the geographical boundary of the unit. Summaries of those ponded waters data can be found at (http://www.adirondacklakessurvey.org), see ALS Pond Information. Since 1992, the Adirondack Long-Term Monitoring (LTM) program managed by the ALSC has been sampling chemistry in 52 lakes across the Park on a monthly basis. The nearest LTM lake to this unit is Owen Pond located 3 miles due south of the Whiteface Mountain summit.

G. Open Space and Visual Setting

Whiteface Mountain and its surrounding area affords an endless variety of open space and scenic vistas. The Whiteface Veteran's Memorial Highway in the adjoining intensive use area, often referred to as "the road to the top of the Adirondacks," introduces thousands of visitors to 360 degree panoramic views of the Adirondack Park every year. A single vantage point yields the High Peaks Region, with Lake Placid in-between the south and west, and Quebec, Vermont, and Lake Champlain to the north and east.

SH 86, between Lake Placid and Wilmington is a State-designated "Scenic Byway" because of its diverse mix of natural resources, with outstanding scenic, cultural, and recreation features also found within the highway corridor. "The lands adjacent to the corridor are the most visible to the traveling public and frequently determine the image and atmosphere of the Adirondack Park for many visitors" (APSLMP, 1987).

H. Plants and Animals

Plant Species

The unit hosts a wide variety of plant species. Most of these species thrive throughout the Adirondack Park. However, due to ecological factors, change in climate, and human factors, there are some species that warrant protection. According to the NYS DEC, Natural Heritage Program (NYNHP), various plant and community species have been identified as rare, threatened, endangered or protected. The plant and community species that were identified primarily consist of the various alpine species. These alpine species are found on the upper reaches of Whiteface Mountain where soil conditions and a severe climate provide unique habitats. Alpine species are extremely rare in New York and are only found on 19 of the State's highest peaks, including Whiteface. The alpine community on the mountain is very small, less than one acre spread across the mountain in small patches. Much of the alpine community is located in the intensive use area; however, a small portion extends into the WWF. Ground cover is scant and open areas with bare rock are frequent. The ecological strategy among alpine plants is to stay small and grow close to the ground in order to survive. Their presence here dramatizes the ecological truth that these few alpine summits are indeed living museums of the plant life surviving from late glacial times (Ketchledge, 1999). The area has been identified by NYNHP as an "Area of Special

Concern within the Adirondack Park" and is included in the Nature Conservancy's Natural Area Registry of Protected Areas.

The Adirondack Council has identified the Beaver Brook Valley between Jay and Wilmington as a biologically significant area because of its diverse wetlands and upland communities (Twenty/Twenty Vision, 1988). Upper slopes have red spruce and balsam fir stands that are boreal in nature. The lower slopes are covered in white pine and northern hardwoods. The State Forest Preserve portion of the valley occupies 700 acres.

1. Forest Vegetation

The WWF features a mosaic of plant communities that correspond to local variations in soil, temperature, moisture, and elevation. Past events such as fire, wind, ice, land clearing, and pre-forest preserve logging have had a profound influence on present conditions. For example, the softwood component that once covered the area has been significantly reduced over time and replaced with faster-growing northern and pioneer hardwoods that out compete the softwoods. Hemlock was removed for tanning bark, white pine saw logs were floated down the Ausable River to local mills, and red spruce and balsam fir were cut for pulp and paper. Hardwoods were cut extensively for charcoal to smelt locally-produced iron ore. Today most of the planning area is in a second growth condition that has made a remarkable recovery from these disturbances. In general, area vegetation can be categorized into vegetative zones based on elevation and topography. Each zone has plant communities and associated species that biologists recognize as belonging together under certain circumstances and site requirements. The vegetative zones described below are adapted from *Ecological Communities of New York State,* (Reschke, 1990).

Beech-Maple Northern Hardwoods

This broadly defined forest made up of sugar maple, American beech and yellow birch found on the more fertile and better drained uplands of the unit, generally below 2,500 feet. Soils are usually acidic. Associated species are red maple, white ash, black cherry, hemlock, red spruce, white birch and red oak. Within these areas, hemlock is dominant in small patches found in steep ravines and gullies. This forest type is capable of reproducing itself under its own canopy. As the forest regenerates itself, yellow birch will tend to become less important due to its relative intolerance or inability to grow in the shade as compared to maple and birch. This is a characteristic forest on the lower slopes of Clements Mountain.

Successional Northern Hardwoods

This zone is normally composed of aspen, gray birch, and pin cherry with occasional red maple and balsam fir. It is characteristic of sites that have been cleared for farming or logging, or otherwise disturbed. The over-story of this forest type is almost entirely composed of white birch while the under-story is composed of thick spruce and fir. Other associated species, as mentioned above, can be found in the forest-type cover. It can occur in pure timber stands or occupy a transition zone with mixed or northern hardwoods. However, the almost pure dominance of white birch overshadows the importance of the other hardwood species normally found. A characteristic feature of this successional forest is the lack of reproduction of the canopy species. Most of the seedlings and sapling growing underneath the canopy are of more shade-tolerant

species of a different type. Over time, more tolerant and longer-lived trees such as sugar maple, beech, red spruce, and hemlock will eventually capture the site. The north slopes of the Stephensen Range are in this transition phase.

Mountain Spruce-Fir Forest

The species composition of this forest consists of balsam fir, red spruce and black spruce, which are sometimes associated with tamarack, hemlock and white cedar. The spruce-fir forest cover type in the Whiteface Mountain Region is composed almost entirely of red spruce and balsam fir at elevations ranging from 3,000 to 4,000 feet. This forest grows best in areas protected from prevailing westerly winds. Balsam fir is the more numerous of the two species. The presence of a heavy understory consisting of balsam fir and red spruce mixed with an over-story of the same species is evidence of a spruce-fir climax forest cover type. A significant disturbance that is affecting this forest is spruce decline, a phenomenon that retards tree growth and eventually kills many trees. The causes of spruce decline have not been fully substantiated, but atmospheric deposition (acid rain) is a major contributing factor. As the spruce declines, they are gradually being replaced by balsam fir. The best example of a mountain spruce-fir forest in the unit is found on the steep slopes of Esther Mountain.

Alpine Krummholz and Mountain Forest

These are commonly referred to as forests of "crooked wood," encountered at elevations ranging from 3,500 to 4,000 feet on the cooler, upper slopes exposed to heavy winds. As elevation increases, trees become shorter and appear as dwarf woodland. Species composition is dominated by balsam fir, black spruce, and mountain paper birch. It is reflective of the severe growing conditions encountered at higher elevations below timberline in the Adirondacks. Trees are generally less than five feet tall, stunted, disfigured, of small diameter, with bent tops. In certain areas of the planning unit; especially on Whiteface Mountain, this forest and its lower elevation associate, mountain spruce-fir forests, exhibit a distinctive pattern of disturbance and regrowth called a "fir wave." The "waves" consist of patches or "troughs" of dead and windthrow trees intermixed with vigorously growing fir seedlings underneath that correspond to certain elevation gradients and location relative to prevailing winds. This forest type appears on the upper slopes and summit of Esther Mountain.

Spruce-Northern Hardwood Forest

This combination of forest cover types occupies an important transition niche on the lower slopes and upper margins of the Ausable River Valley. Species composition consists of red spruce with sugar maple, beech, and red maple with scattered balsam fir and striped maple in the understory.

Red Pine-White Pine Mix

This forest consists of eastern white pine and red pine at low elevations nearing 1,500 feet near the river valley. It occurs on well-drained sands and gravels. Associated species are balsam fir, red spruce, hemlock, aspen, red maple and white birch. This forest is encountered as you drive the Hazelton Road through Black Brook Woods in the Towns of Black Brook and Wilmington.

Successional Red Cedar Woodland (The Nature Conservancy Data Files)

A woodland community, usually found at elevations less than 1,000 feet. The dominant tree is eastern red cedar (*Juniperus virginiana*), which may occur widely spaced in young stands and may be rather dense in more mature stands. Smaller numbers of gray birch (*Betula populifolia*), hawthorn (*Crataegus spp*.), buckthorn (*Rhamnus carthartica*) and other early successional hardwoods may be present. This forest type can be found in the vicinity of the Beaver Brook Tract.

Pine-Northern Hardwood Forest (The Nature Conservancy Data Files)

The Pine-Northern Hardwood Forest in the Beaver Brook Valley, dominated by white and red pine and red oak, has been documented as significant on a state-wide level by the New York Natural Heritage Program. This forest is very large, moderately diverse, and has a relatively large, intact, core which may qualify as old growth. Some of this core area is found on State Forest Preserve land.

Red Pine

A pure naturally-occurring forest of red pine exists in a small area on Whiteface Mountain and in small patches in Black Brook Woods above the West Branch of the Ausable River. Pure natural red pine is considered a unique forest cover type due to the fact that red pine is almost always associated with seedling establishment following a fire, often mixed with white pine on dry, south-facing upland sites. The red pine forest cover type is located on isolated, high rocky ridge tops on the east and southeast slopes of Whiteface Mountain.

Hemlock

Small patches of a hemlock dominated forest are found near the banks of the Ausable River near the ski area. Hemlocks occur in nearly pure, dense, and small groupings with just a few associated species consisting of white birch, yellow birch, and American beech. Hemlock is a climax forest cover type capable of reproducing itself under its own dense shade. Hemlock provides excellent winter deer shelter.

Endangered, Threatened, and Species of Special Concern

The New York Natural Heritage Program (2001) lists two important plant species in the WWF that are listed as Threatened by New York State. The plant Appalachian firmoss (*Huperzia appalachiana*), currently found on Esther Mountain, and pink wintergreen (*Pyrola asafolia*), last reported in 1958 from "5 miles west of Wilmington." The NYNHP also noted that mountain hairgrass (*Deschampsia atropurpurea*) was reported in 1851 from alpine grassland on Whiteface Mountain, but is now believed to be extirpated from that location.

Vegetation Current Situation
Invasive Plants

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

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

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

The Department has entered into a partnership agreement with the Adirondack Park Invasive Plant Program (APIPP). The mission of the Adirondack Park Invasive Plant Program (APIPP) is to document invasive plant distributions and to advance measures to protect and restore native ecosystems in the Park through partnerships with Adirondack residents and institutions. Partner organizations operating under a Memorandum of Understanding are the Adirondack Nature Conservancy, Department of Environmental Conservation, Adirondack Park Agency, Department of Transportation, and Invasive Plant Council of NYS. The APIPP summarizes known distributions of invasive plants in the Adirondack Park and provides this information to residents and professionals alike. Specific products include a geographic database for invasive plant species distribution; a central internet website for invasive plant species information and distribution maps; a list-serve discussion group to promote community organization and communication regarding invasive species issues; and a compendium of educational materials and best management practices for management.

Relationship to State Forest Preserve Lands

Because of the intermingled nature of private and public lands and embedded transport vectors, State Lands are, and are likely to be, affected by infestations of invasive species and subsequent degradation of natural system function. This report is prepared to provide NYS DEC staff with current inventory and management information on documented invasive plant species infestations that threaten exemplary communities and conservation targets within the Adirondack Park.

Terrestrial Invasive Plant Inventory

In 1998 the Adirondack Nature Conservancy's Invasive Plant Project initiated Early Detection/Rapid Response (ED/RR) surveys along Adirondack Park roadsides. Expert and trained volunteers reported 412 observations of 10 plant species throughout the area surveyed, namely NYS DOT Right-of-Ways (ROW). In 1999 the Invasive Plant Project was expanded to include surveying back roads and the "backcountry" (undeveloped areas away from roads) to identify the presence or absence of 15 invasive plant species. Both surveys were conducted under the auspices of the Invasive Plant Council of New York "Top Twenty List" of non-native plants likely to become invasive within New York State. A continuum of ED/RR surveys now exists under the guidance of the Adirondack Park Invasive Plant Program (APIPP).

Assessments from these initial ED/RR surveys determined that four (4) terrestrial plant species would be targeted for Control and Management based upon specific criteria such as geophysical setting, abundance and distribution, multiple transport vectors and the likelihood of human-influenced disturbance. The four Priority terrestrial invasive plants species are Purple loosestrife (Lythrum salicaria), Common reed (Phragmites australis), Japanese knotweed (Polygonum cuspidatum) and Garlic mustard (Alliaria petiolata).

The Adirondack Park is susceptible to further infestation by invasive plant species intentionally or accidentally introduced to our ecoregion. While many of these species are not currently designated a priority species by APIPP, they may become established within or in proximity to a respective UMP.

Terrestrial invasive plant species documented in, or within proximity to, Wilmington Wild Forest include the following: Purple loosestrife (Lythrum salicaria), Common reed (Phragmites australis) and Japanese knotweed (Polygonum cuspidatum).

For species specific information regarding natural history, ecology, and reproduction, please refer to the Invasive Plant Atlas of New England program website http://webapps.lib.uconn.edu/ipane/search.cfm.

Terrestrial Locations

There are two (2) Purple loosestrife (Lythrum salicaria) infestations affecting this UMP. At 4909733N 597859E Purple loosestrife occurs off of Trumbells Corners Road, 1/10th mile west of State Route 9N, in a privately-owned field south of the road.

There are four (4) Common reed (Phragmites australis) infestations affecting this UMP. At State Route 86, RM 86-1202-1172 approximately 50 plants exist to the southwest of the edge of the High Falls Gorge Adventure Center parking lot. DEC State Forest Preserve appears to buffer both sides of the road where NYS DOT ROW ends.

There are six (6) Japanese knotweed (Polygonum cuspidatum) affecting this UMP. At State Route 9N, RM 9N-1203-1580 multiple infestations occur within the ROW and along the east river bank of the East Branch Au Sable River.

Please refer to the terrestrial invasive plant species distribution map for approximate locations. (Appendix thirteen).

Observances of New Non-Native Invasive Plant Species

Within the Wilmington Wild Forest, multiple and rapidly expanding stands of Indian Cup-Plant (Silphium perfoliatum) have been observed along the East Branch Au Sable River's riparian corridors. The stands are interspersed from the Town of Keene into the Town of Jay, from the confluence of Cascade Brook downstream to Stickney Bridge Road. New York Natural Heritage staff suggests that the Indian Cup-Plant stands be eliminated from water courses in NY, especially within the Adirondacks. Based upon empirical observations by APIPP during the 2004 field season, this species, a tall grass prairie native, is displaying invasive characteristics within the East Branch Au Sable River watershed.

Aquatic Locations

Longitude and latitude coordinates are used to indicate a lake with a documented infestation. Infestations may range from an isolated population to a lake-wide invasion. Knowledge of locations and coordinates of specific infestations within the lake is limited and variable and will be provided as available.

Initial surveys do not detect occurrences of aquatic invasive plants within the Wilmington Wild Forest.

2. Wildlife

The WWF supports a variety of wildlife typical of the north-central Adirondacks. This area occupies a transition zone between deciduous forests typical of the southern Adirondacks, and coniferous forests typical of more northern areas. With the convergence of these forests, there is also a corresponding mix and richness of wildlife species. In addition to this diversity, activities on adjoining private lands, such as cut-back roadsides, farming and timber harvesting, have added even more habitats and more wildlife.

In September of 1997, §11-2001 of the Environmental Conservation Law of New York was established creating the New York State Bird Conservation Area Program. Legislation establishing a Bird Conservation Area (BCA) program was established on Whiteface Mountain in 1997 (ECL, Title 20). This legislation created a program on State-owned lands and waters to "safeguard and enhance populations of wild birds native to New York State and the habitats therein that birds are dependent upon for breeding, migration, shelter, and sustenance." The BCA on Whiteface Mountain was established above 2,800 feet in its sub-alpine forests. See Appendix Three for a list of known birds observed within the unit.

A generalized list of bird species who are residents or occasional visitors to the planning area are:

Birds *(The Atlas of Breeding Birds in New York State, 1988*):

Bald Eagle (threatened)
Osprey
Peregrine Falcon (endangered)
Northern Raven
Ruffed Grouse
Ring-necked Duck
Common Goldeneye
Common Merganser
Northern Three-toed Woodpecker
Gray and Blue Jays
Boreal Chickadee
Ruby-crowned Kinglet
Philadelphia Vireo
Wild Turkey
Yellow-bellied Flycatcher
Tennessee Warbler
Northern Parula Warbler
Cape May Warbler
Bay-breasted Warbler
Blackpoll Warbler
Bicknell's Thrush (special concern)
Swainson's Thrush
Lincoln Sparrow
Rusty Blackbird
Common Crow
Evening Grosbeak
Olive-sided Flycatcher

Mammals

Larger mammals known to inhabit WWF include white-tailed deer, moose (occasional visitor), black bear, coyote, bobcat, raccoon, red fox, gray fox, fisher, marten, mink, muskrat, striped skunk, river otter, beaver, porcupine, cottontail rabbit, and varying hare. Smaller mammals residing in the area include bats, shrews, moles and mice, along with the ermine, long-tailed weasel, eastern chipmunk, red squirrel, and gray squirrel. Most of these species are distributed evenly throughout the unit, although the populations of weasel, mink, muskrat, otter, and beaver are concentrated near water, and varying hare and red squirrel are mostly confined to spruce-fir forests (DEC Bureau of Wildlife Reports, 2000). See Appendix One for a comprehensive list of mammals that may occur within the unit.

Big game, both deer and bear, exist in moderate numbers in the unit, and hunting seasons are set according to management units 5F and 5C in the NYS hunting guide published annually. Trapping regulations are also identified and set by the same two management units. Appendix Four contains calculated deer, bear and furbearer harvest figures.

A deer yard or deer wintering area is any piece of landscape where deer tend to concentrate during winter. Deer yards typically have features that provide thermal benefits and/or mobility advantages during periods of cold and deep snow. In the Adirondacks, deer yards are often associated with dense conifer cover which helps to reduce rapid snow accumulation, provides shelter from winds, and limits radiational cooling during the evening. South-facing slopes are also used by wintering deer, where lower snow accumulation and favorable sun exposure provide similar benefits. Better quality deer yards also have adjacent regenerating hardwood components that provide available woody browse during milder conditions.

In the Adirondacks, deer use the same yarding areas annually, although the precise boundaries change over time with succession. Deer use within yarding areas will also change annually in response to

winter severity. The maintenance and protection of winter deer yards remains a concern of wildlife managers, particularly in the Adirondacks, as they fulfill a critical component of the seasonal habitat requirements of white-tailed deer.

Historic deer yard maps (1970's) were inventoried for deer yards in State Wild Forest lands within the WWF. At that time no deer yards were identified on State lands. Pending further investigation by the Bureau of Wildlife, DEC, deer yard information will be updated in the next revision of the WWF.

Amphibians and Reptiles

Relatively short summers and cold winters limit the number of species of amphibians and reptiles found in the WWF. Species found in marshes or ponds and along wooded stream banks, under logs and leaf litter, or in openings include: turtles - painted and snapping; snakes - northern water, redbelly, common garter, eastern ribbon, brown, and ringneck; toads - American; salamanders - red spotted newt, spotted, blue-spotted, spring, two-lined, mountain dusky; frogs - bullfrog, pickerel frog, green frog, wood frog, mink frog, and gray treefrog. The spring salamander and the mink frog are important indicator species of a healthy ecosystem (NYSDEC Amphibians and Reptiles Atlas Project, 2000). See Appendix Two for a complete listing of species known to occupy the unit.

Endangered, Threatened, and Species of Special Concern

No permanent resident wildlife species have been identified as endangered, rare, or threatened in the planning area. Although, the bald eagle (*Haliaeetus leucocephalus*), a threatened species and the peregrine falcon (*Falco peregrinus*), an endangered species, are frequent visitors to the unit, they are not known to nest in the unit. Peregrine falcons are confirmed nesters in the adjoining McKenzie Mountain Wilderness Area. Bald eagles have been observed at several locations along the West Branch of the Ausable River. Species of Special Concern as listed under Title 6, New York Code of Rules and Regulations (NYCRR) Part 182, which have been observed in the unit, include: Bicknell's thrush, the small-footed bat, common loon (not known to nest in unit), northern raven, common nighthawk, Cooper's hawk, eastern bluebird, vesper sparrow, wood turtle, Jefferson salamander, and spotted salamander (DEC Bureau of Wildlife, 2000).

Bicknell's thrush (*Catharus bicknelli)*, a species of special concern, has been identified as a breeding species within the unit. Breeding habitat of the Bicknell's thrush includes young and stunted spruce stands, some birch and dense stands of balsam fir generally at higher elevations. A breeding population exists on Esther Mountain, but has not been found in other areas of the unit. It is a species of concern due to a relatively small home range, low population size and habitat specialization. In the year 2000, New York State created an Adirondack Subalpine Bird Conservation Area to continue to maintain the wilderness quality of the area, while facilitating recreational opportunities in a manner consistent with conservation of the unique bird species present. Presently, opinions differ as to tolerance of this species to human activity and disturbance. If research indicates a need to protect habitat from human activity, recommendations will be made at that time.

The Small footed bat (*Myotis leibii*), also a species of special concern, has been identified within the unit. During the winter months, these bats are most often found within caves and abandoned mines near forested areas. Because this bat is thought to occur in such small numbers, the likelihood of encountering this bat is extremely low. For this reason, little is known about this specie's habitats when not

in hibernation. If further research indicates wintering habitat within the unit, recommendations will be initiated to protect such habitat.

Wood Turtles (*Glyptmys insculpta*) are a semiaquatic turtle found in streams with a sandy-pebbly substrate that are deep enough for hibernation (do not freeze, well oxygenated) and have good water quality. Ideal habitat includes dense alder swamp and forested wetland habitat bordering the streams where the turtles can bask in filtered sunlight, yet have adequate cover from predators. Wood turtles are listed as a Species of Special Concern in New York State where they also are protected as a small game species (with no open season). Range-wide, the species is declining due to habitat degradation and both commercial and incidental collecting for the pet trade, a practice that has extirpated entire populations. Populations of wood turtles are particularly vulnerable due to their low reproductive potential (including their late age of sexual maturity [usually 15 yrs] and high egg and hatchling mortality).

Jefferson Salamanders (*Ambystoma jeffersonianum*) are a member of a group of "mole" salamanders that are rarely encountered above-ground, except when they enter their ponds to breed. These breeding migrations take place early in the year (usually during March or early April in this area). Jefferson salamanders breed in temporary ponds that remain deep long enough for the larvae to complete metamorphosis. Typical Jefferson salamander breeding pools are depressions located in upland deciduous forest that are ringed with scattered shrub vegetation. Although these pools are critical habitat for the salamanders, they spend most of their life cycle in other areas of the forest. Jefferson salamanders are listed as a Species of Special Concern in New York State; they are becoming rare due to habitat degradation, especially both due to a lack of protection or the breeding pools and development of their upland habitat.

The spotted salamander (*Ambystoma maculatum*) is easily identified by its pattern of large yellow spots on a black background. The spotted salamander also will use vernal pools for breeding, but its jelly-like globular egg masses are found in a variety of wetland habitats. Because of its fossorial habits the spotted salamander is rarely encountered except during the breeding season. Then look for them under rocks, logs, and debris near the edges of the breeding pools. Although usually more common than the Jefferson salamander, the spotted salamander is also a species threatened by habitat degradation.

Although the specific location of these species is exempted from public Freedom of Information Laws (FOIL) to protect the species, this information is used and integrated by DEC in all resource planning activities.

3. Fish

The WWF lies within the Champlain watershed. Most of the area is drained by small headwater streams that are tributary to the West Branch Ausable River. A parcel of the area includes about 1.7 miles of one bank of the West Branch Ausable River in the Town of Jay. A small portion of the area is drained by headwater tributaries to the Saranac River via Frenchs Brook.

Ponded waters in the WWF include Clements Pond and Cooper Kill Pond with surface areas of 2.2 and 3.0 acres respectively. See Appendix Six for a list of physical, chemical and biological information for the two ponds.

Biological

Fish communities in the Adirondacks are a result of geological and human influences. Prior to human influences relatively simple fish communities were common. Human-caused changes in habitat and introduction of fishes have altered those natural communities.

The Fishes of the Adirondack Park, a DEC publication (August 1980) by Dr. Carl George of Union College, provides a summary of geological events which influenced the colonization of the Adirondack ecological zone by fishes. A limited number of cold tolerant, vagile, lacustrine species closely followed the retreat of the glacier. Such species presumably had access to most Adirondack waters. Additional species gained access about 13,000 B.P. (before present) via glacial Lake Albany. With a surface elevation of 350' a.s.l. (average sea level), Lake Albany provided a colonizing route for Atlantean and eastern boreal species to portions of the southern and eastern Adirondacks. Barriers above that elevation would have excluded those species from interior portions of the Adirondacks.

By about 12,300 BP, the Ontario lobe of the glacier had retreated sufficiently to allow species associated with the Mississippi drainage access to fringes of the Adirondacks via the Mohawk Valley and the St. Lawrence drainage including Lake Champlain. Lake Albany had apparently drained prior to that, as barriers had formed on the Lake George outlet.

The sequence of colonization routes to surrounding areas, combined with Adirondack topography, resulted in highly variable fish communities within the Adirondacks. In general, waters low in the watersheds would have the most diverse communities. The number of species present would have decreased progressing towards headwater, higher elevation sections. Chance and variability in habitat would have complicated the trends. Consequently, a diversity of fish communities, from no fish to monocultures to numerous species, occurred in various Adirondack waters.

The two ponds in the unit are very high in the watersheds and would be expected to have low fish diversities, as is the case. Brook trout were among the most successful species at colonizing such headwater areas, so their presence is appropriate.

Streams in the unit generally support coldwater fish communities, likely to include brook trout, brown trout, white sucker, blacknose dace, northern redbelly dace, common shiner, creek chub, longnose dace, and slimy sculpin.

IV. SOCIAL CONSIDERATIONS

A. History

Since the term "Adirondack" is said to mean "bark-eater" and was a term used by the Iroquois to describe the Algonquins, this area was likely used by the native people as an occasional hunting and fishing area (Late Woodland Period I 200 - 1600 AD). The word was not applied to the area until 1838. "Couchsachrage" is the French word on a 1756 Map and means "Indian Beaver Hunting Country." Thus, for the purpose of this Unit Management Plan, we assume that this area was primarily a hunting and fishing area for Native Americans prior to European settlement. The Ausable Valley from Lake Champlain served as a natural travel corridor.

Large land tracts were established for administrative purposes, first by the English and then by the American government. The Whiteface Mountain Region was once part of early land grants known as the Ryers and Mallory Grants and the Jay and Whiteface Tracts. Essex County was established in 1799. The earliest recorded settlement in Wilmington was by Paul Thayer, also in 1799, who was followed by settlers, John Malbone, Thaddeus and Leonard Owen, Hiram Stoffs, Cyrus Wilson and Danfle Ray. These emigrants were generally farmers from New England and relied on farming for their economic subsistence.

The area's natural resources (timber, ore deposits and water power) were exploited during the early eighteen hundreds. Rueben Sanford arrived in Wilmington in 1803 and settled his family there in 1812, began a number of diverse enterprises. Among them were a sawmill, general store and tavern, whiskey distilleries, and an iron works. Three iron works were operating in the area by 1829. They processed a low-grade iron ore called hypersthene into bar iron. The processing occurred a distance from the extraction sites as hydraulic power had to be used in the manufacturing. By 1842 only one processor remained in service.

Timber (pine, spruce and fir) was commercially harvested in the region. It was cut on the mountain slopes, and fed down wooden sluiceways to holding ponds on the Ausable's West Branch and then rafted to the sawmills. Burr's map of 1829 and Gray's 1876 map indicate several sawmill sites along the river.

Rye, from local farms, was distilled to produced whiskey in the Wilmington area and Town historical records show that it was sold to the Union Army. However the location of these stills is not known today.

Potatoes and rye were cash crops produced on farms in the area. These farms were concentrated along the flood plains of the Ausable and lower upland slopes. Rye was used in whiskey production and potatoes were grown to produce starch for a factory begun by Rueben Sanford. Small plots of land were used to produce basic farm produce for area families.

After the Civil War, with the local natural resources reaching depletion, the economic and population growth of the Wilmington area stopped and many people left the area in search of other employment. For example, in 1840 the area's population was recorded at 928 persons; by 1905, this number was reduced to just 574 persons. The last quarter of the 19th century witnessed a significant change in the economic base of Wilmington; one from an agrarian-industrial base to an economy largely dominated by recreation.

Tourists interested in guided tours up Whiteface Mountain, became attracted to the area in the second part of the 19th century. Seneca Ray Stoddard, a famous early photographer, published a guide book of his travels in the Adirondacks in 1872 which included a detailed description of trails leading to Whiteface Mountain. This indicated the early and still continuing tourist use of Whiteface Mountain. Several hotels were established during that time and one in particular, The Whiteface Mountain House, was located on the southwest corner of the SH 86 and Springfield Road intersection, operated until the 1950's when it was demolished.

The Forest Preserve was established by statute in 1885 and the Adirondack Park instituted in 1892. The Forest Preserve was given constitutional protection in 1895. Boundaries of the park and preserve have changed over time and at present, all of the areas in this Unit Management Plan are within

these confines. State lands were acquired through tax sales and negotiated sales with private individuals and corporations. For example, many of the State lands in the Town of Black Brook were acquired by back-tax sales in the 1870's. These lands were heavily cut for charcoal production to supply the J. J. Rogers Ironworks in Ausable Forks. Once cut, owners let the properties go for unpaid taxes which were redeemed by the State. Monies from early legislative appropriations and bond programs, enabled the State to purchase lands directly from private owners. Several hundred acres were purchased north of SH 431 in 1907, 1908, and 1909 for $3.00 per acre, the average price for cut-over woodland at the time.

In 1909, the State acquired a temporary easement on the summit of Whiteface, which was then privately owned by the Pardee family of Philadelphia. Whiteface was one of the first mountains in the Adirondacks used for forest fire detection in response to devastating forest fires that occurred across the region in 1903 and the early part of 1909. The observation station was initially constructed of log poles with an open platform on top. It was replaced by a steel fire tower in 1919. The steel tower proved to be too small to accommodate ever increasing use and was supplanted by the current, much larger stone observation tower that was constructed in 1935.

More than 4,500 acres on Whiteface, including portions of the Wilmington Range, were purchased in the 1920's from the J. J. Rogers Co. of Ausable Forks and the Pardee family who had long standing business interests in the area. The Pardees later gifted title to 4.1 acres comprising the summit of Whiteface Mountain to the State of New York in 1929. Subsequent acquisitions have occurred through negotiated sales with willing sellers. For example, Hamlin Mountain (306 acres) was acquired in 1920, Clements Mountain (352 acres) in 1984, and the Wilmington/Stephensen Range (3,432 acres) from the International Paper Co. in 1988.

In the 1920's area civic leaders conceived the idea of constructing a highway up Whiteface Mountain. It was built by NYS between 1929 and 1934 and dedicated to those who had fallen in World War I. This dedication has been expanded to include veterans of all subsequent conflicts since that time. An important factor in the construction of the highway was the rise of "auto-tourism." This 8.5- mile road, dedicated by President Franklin D. Roosevelt, that ascends the mountain includes a castle-like stone building, a chalet-style tollhouse, a 426 foot long tunnel into the mountain, which leads to an elevator that carries visitors to the summit 276 feet above where there is a summit weather observatory.

After World War II, a ski center was developed by the former Conservation Department on Marble Mountain. The original ski lodge burned in 1950 and was rebuilt in 1951 with logs salvaged from the 1950 blow-down. The ski center was relocated to an expanded site farther south on the mountain in 1956 and the Marble Mountain facilities were closed. Its buildings were subsequently converted to an atmospheric sciences research center operated by SUNY at Albany.

More recently, President George W. Bush visited the area on Earth Day, April 19, 2002. The President used this opportunity to announce his new "Clear Skies" initiative to amend the Clean Air Act of 1990. He also worked on a student Conservation Association/ Ameri-Corps volunteer project building a bridge for the Wilmington Bike Trails.

B. Cultural Resources

The term "cultural resources" encompasses a number of categories of human-created resources including structures, archaeological sites and related resources. The Department is required by the New

York State Historic Preservation Act (SHPA - PRHPL Article 14) and SEQRA (ECL Article 8) to include such resources in the range of environmental values that are managed on public lands. The Adirondack Forest Preserve was listed as a National Historic Landmark by the National Park Service in 1963. This designation also results in automatic listing in the State and National Registers of Historic Places.

Within the Adirondack Forest Preserve, the number of standing structures is, in general, limited due to the requirements of the Forever Wild Clause and the APSLMP. Often those that remain are structures that relate to the Department's land management activities such as fire towers, ranger cabins and related resources. Fire towers, as a class of resources, have been the subject of considerable public interest over the last decade. The majority of surviving fire towers have been found eligible for inclusion in the State and National Registers of Historic Places and a number of towers were formally listed in the Registers in 2001. For State agencies, register listing or eligibility are effectively the same; obligating the Department to treat these resources appropriately and requiring that special procedures be followed should it be necessary to remove or otherwise affect these resources. This formal listing is in addition to the SHPA Memorandum of Agreement relating to fire towers that the Department signed with OPRHP in 1994. This agreement was designed to accommodate the requirements of the APSLMP and the SHPA. A portion of the fire tower that was removed from the summit of Whiteface Mountain now stands at the Adirondack Museum in Blue Mountain Lake.

Archaeological sites are, simply put, any location where materials (artifacts, ecofacts) or modifications to the landscape reveal evidence of past human activity. This includes a wide range of resources ranging from pre-contact Native American camps and villages to Euro-American homesteads and industrial sites. Such sites can be entirely subsurface or can contain above-ground remains such as foundation walls or earthwork features.

As a part of the inventory effort associated with the development of this plan, the Department arranged for the archaeological site inventories maintained by the New York State Museum and OPRHP to be searched in order to identify known archaeological resources that might be located within or near the unit. The two inventories overlap to an extent but do not entirely duplicate one another. The purpose of this effort was to identify any known sites that might be affected by actions proposed within the unit and to assist in understanding and characterizing past human use and occupation of the unit.

The quality of the site inventory information varies a great deal in all respects. Very little systematic archaeological survey has been undertaken in New York State and especially in the Adirondack Region. Therefore all current inventories must be considered incomplete. Even fewer sites have been investigated to any degree that would permit their significance to be evaluated. Many reported site locations result from 19th century antiquarian information, artifact collector reports that have not been field verified. Often very little is known about the age, function or size of these sites. This means that reported site locations can be unreliable or be polygons that encompass a large area. Should systematic archaeological inventory be undertaken at some point in the future it is very likely that additional resources will be identified.

The archaeological inventory of the WWF reflects the known general characteristics of the area's history. No pre-contact Native American sites are known within the unit but several have been identified in the immediate area, primarily along major watercourses. Euro-American sites within the unit reflect

land use prior to state acquisition. These include a number of farmstead sites and the remains of mining and logging operations.

It is important for DEC to inventory cultural resources on Forest Preserve lands because this information reveals an important link between people and natural resources in this area long ago. Traditional resource inventory efforts will lead to more inclusive discussions with local citizens and other interested parties in managing area natural resources. Cultural/Historic sites in and/or adjacent to the WWF identified to date include:

- Logging Flumes - remnants located south of Whiteface Mountain Veteran's Memorial Highway, two others are listed in the historical record but not located.
- Charcoal Kilns - one on Whiteface Mountain and one on the Wilmington Range (Cooper Kill); East, Middle and West Kilns near Forestdale Road.
- Old Rock Quarry - stone used to build walls and structures for the Whiteface Veteran's Highway.
- Stevens Pond Area - water used for logging flume.
- Lower Tollhouse Pond and Stone Dam - water used for logging flume.
- Visitor Interpretation Center at Tollhouse Park (adjoins the wild forest boundary).
- Atmospheric Sciences Research Center (State Administrative Use Area surrounded by the WWF).
- "Little Montreal" - former lumber camp site located at west end of Cooper Kill Trail near Gillespie Road.

C. Economics

Besides its many intrinsic values relative to watersheds protection, preservation of scenic values, and outdoor recreation, the State lands in this region are an important economic asset to local and regional economies. Indirectly, these lands are a powerful attraction to tourists and maintenance of their natural setting has a positive influence on private land values. The People of the State of New York also make substantial tax payments to local towns for forest preserve lands pursuant to Real Property Tax Law §532(a).

Tourism is the mainstay of local economies. Much of local tourism depends on the natural setting and scenic beauty afforded by Forest Preserve lands that attract visitors to local communities. The Whiteface Veteran's Memorial Highway and the WWF provide easy access to a host of outdoor recreational opportunities in an area that has commercial services and development compatible with adjacent State protected lands. Local government, business owners, and local citizens are important stakeholders in protecting the natural resource base of their economies. There are numerous guiding services, motels, restaurants, bed and breakfast inns, grocery stores, gas stations, and equipment sales and rental businesses, that depend on this link between Forest Preserve lands and local economic activities to draw customers to the region. Hikers, campers, skiers, bike riders, rock climbers, sportsmen especially fishermen, fall foliage seekers, and general tourists spend a significant amount of time and money on food, lodging, goods, and services in this region.

A direct economic benefit to local governments is the assessment of Forest Preserve land and the payment local taxes. This is significant because State lands do not require the same infrastructure, government goods and services demanded of private landowners. The State government pays the same

taxes on unimproved forest lands as private landowners. State land holdings are assessed by local assessors in their respective town and subject to review by the New York State Office of Real Property Services (formerly the State Board of Equalization and Assessment). The procedure is the same for private landowners and the property tax must be comparable to rates on similar private lands.

Table 1. Tax payments for all Forest Preserve Lands in the Towns of Black Brook in Clinton Co., and Jay, Keene, and Wilmington, in Essex Co. (NYS Office of Real Property Services, 1998).

Town	Forest Preserve Acreage	Land & School Taxes Paid	Ave. Tax/Acre
Black Brook	22,340.99	$355,115.79	$15.89
Jay	7,657.68	78,973.22	$10.31
Keene	69,451.13	784,551.11	$11.30
Wilmington	25,460.28	230,625.87	$ 9.06
Totals:	124,910.08	$1,449,265.90	$11.64

D. Public Use

Despite its close proximity to Upper Jay, Keene, Lake Placid, and Wilmington, total annual visitation is relatively low. During Calendar Year 2001, it was estimated that fewer than 2,000 people visited the WWF. Very steep slopes, rugged terrain, and thick vegetation are barriers to cross-country travel. Practically, all visitation is therefore limited to the few existing trails and former logging roads in the area. Although some winter-related recreation such as cross-country ski touring, snowshoeing, and snowmobiling has been observed, most recreation occurs during mid-May through mid-November.

From field observations, it is clear that most day-use activities are preferred over those requiring an overnight stay. The Wild Forest's small size, lack of recreation facilities, ease of access, and proximity to local communities strongly favor day-use activities of a short duration. Day hiking, hunting, fishing, cross-country skiing, snowshoeing, snowmobiling, sightseeing, wildflower and wildlife observation, and mountain biking are popular activities.

The most heavily used trail for hiking leads to Esther Mountain (4,240 ft. elevation). This is essentially an unmarked footpath, a "herd path" leading to the summit. It is not an officially marked DEC trail. The Forty-sixers maintained a registration canister on the summit until 2001 when the canister was removed to conform to the APSLMP. It recorded 600 visitors annually.

The trail register at the Wilmington Reservoir registered 164 visitors in 2000. No compliance checks have been made at this register. The actual number of visitors using this location may be substantially higher.

Hunting is a popular use of the Wild Forest because of its easy access and the proximity of public land to the hamlets. Popular hunting locations include the area behind Wilmington Flume on the lower slopes of Whiteface Mountain, the Beaver Brook Tract, off Bonnieview Road, the Stephenson Range, and along the Forestdale Road.

Cross country skiing is growing in popularity behind the Wilmington Flume and on the Beaver Brook Tract. The Town of Wilmington is snow plowing the Flume Parking Area.

Forest Rangers believe very little over-night camping takes place at the two designated campsites in the WWF. There are three user-created primitive campsites on the northeast side of Wilmington Flume that are located too close together and too close to the West Branch of the Ausable River. These sites were closed in 2004. Any existing fire rings will be removed in 2005. *No camping* and *No Fire* signs will be posted in the riparian area. One designated site is located on the east side of SH 86 at the Flume, but will be closed. The remaining designated campsite is situated off the Bonnieview Road adjacent to the Cooper Kill Trail.

E. Man- Made Facilities

The WWF has a modest inventory of facilities considering its acreage and central location near Lake Placid and Wilmington. No roads outside of town, county or state highways are open for motor vehicles within the unit.

1. Campsites

East side of SH 86 at the Flume (1). Bonnieview Road adjacent to Cooper Kill Trail (1).

2. Lean-tos:

Cooper Kill Pond (1); sits less than 100 feet from the pond. This lean-to is non-conforming with APSLMP criteria because of proximity to water, less than 100 feet. Condition: fair.

3. Bridges:

Foot Bridge (1); Whiteface Mt. via Wilmington Trail at reservoir. 4 ft. x 32 ft. Condition: good, needs new railings.

Foot Bridge (1); Cooper Kill Trail. 1.6 miles from the Franklin Falls Rd. 3 ft. x 12 ft. Condition: poor, needs full replacement.

Foot Bridge (1); West side of the Flume on the old river trail. 4 ft x 12 ft. Condition: Good.

4. Trails:

Whiteface Mountain via Wilmington Trail: Designated foot trail: 5.2 miles, reservoir to Whiteface Summit. Red markers. Condition: fair, needs extensive erosion control to remove water from trail. Trail register near reservoir. Parking limited.

Cooper Kill Trail (also locally known as Cooper Kiln): Designated foot, snowmobile, and ski trail: 5.9 miles from the Franklin Falls Road to the Bonnieview Road. Orange markers. Snowmobile trail conforms to DEC standards, less than 8 ft. wide. Extremely steep coming in from the east. Some sections located too close to streams. Condition: fair, needs extensive erosion control to remove water from trail. Needs new trail markers. No trail registers at either end.

Wilmington Flume: Mountain bike and hiking: 4.0 miles, various loops, follows former logging roads. Yellow markers. Condition: fair, needs erosion control to remove water from the trail, some sections too steep to maintain suitable tread, and needs improved signing. Infrequently marked with yellow markers. A kiosk with a register is located at the entrance of the trail system at the parking lot off SH 86.

Bears Den (Walton's Ledges): Large rock outcrop, scenic overlook northeast of the Kid Kampus on the Whiteface Mountain Ski Center. Unmarked trails from the Flume and ski center. Partially on Wild Forest and the Intensive Use area.

Esther: Esther has two unmarked footpaths, both approximately 1.3 miles in length, leading from the Whiteface Trail to the summit of Esther (4240 ft.). Used extensively by people who are attempting to climb all 46 Adirondack peaks over 4,000 feet. The Forty-sixers maintained a registration canister on the summit. It was removed in 2001. The overall route needs brushing and erosion control to remove water from the trail.

Unmarked Trails at Reservoir and Atmospheric Science Research Center. The following two trails will be closed to recreational use:(a) A trail(approx. 1 mile long) veers north and west off the Wilmington Trail approximately .25 miles from the reservoir.(b) trail (approx. 1 mile long) located at the ASRC that heads up the west side of Marble Mountain. This trail is severely eroded.

ATV Use - It should be noted that no road or trails within the unit are legally open, nor proposed to be open, to all terrain vehicles. Gates are proposed to be erected at trailheads, most notably, the Cooper Kill Trail and at the entrance to the Beaver Brook tract to deter all motor vehicle use. A rock barrier has been placed at the Flume trail system adjacent to SH 86.

5. Trail Registers:

Standard box Type (1): Whiteface Mt. via Wilmington Trail. Located near reservoir, upstream beyond bridge. Condition: good.

Kiosk and register are located beyond parking lot at Wilmington Flume West, above the falls. Condition: new

6. Parking Facilities:

Wilmington Flume West-above the falls: Non-designated. Six-car capacity. Occupies portion of NYS Department of Transportation Right-Of-Way, SH 86. Plowed by Town of Wilmington for winter recreationists.

Wilmington Flume East-below the falls: Non-designated. Three-car capacity. Occupies NYS Department of Transportation Right-Of-Way, SH 86.

Wilmington Reservoir: Non-designated. Three-car capacity. Owned by the Town of Wilmington. Limited winter parking. Recreation parking sometimes interferes with access to the reservoir.

Beaver Brook Tract/Hardy-Kilburn Road: Roadside parking for four vehicles adjacent to Colby/Ollife Monument. Not plowed in winter.

Ausable Run - Lenny Preston Road, Town of Wilmington: Roadside parking area for three cars. This small parking area provides fishermen access to the West Branch of the Ausable River.

Whiteface Mountain Atmospheric Science Research Station: Off-shoulder, roadside parking on lower road. Not a maintained facility nor an official trailhead. Hikers park along road to reduce the climb to Esther and Whiteface. This shortens the route by 2.5 miles. Hiker parking may, at times, interfere with administrative use of the research center. While not itself in the Unit, the science research center is surrounded by lands that are in the Unit.

7. Monuments and Plaques:

The following monument and 2 plaques exist in the Wilmington Wild Forest:

Beaver Brook Tract: Stone monument and brass plaque. Dedicates a 700 acre gift of land to The People of the State of New York by the Estate of Deborah Colby as memorial to her father, the Honorable Lewis Ollife, Justice of the New York State Supreme Court, Kings Co., erected June 6, 1985.

Esther Mountain: Plaque erected by the Adirondack Forty-sixers to commemorate Esther McComb, the mountain's namesake. Summit elevation is 4240 ft.

F. Capacity of the Resource to Withstand Use

Carrying Capacity Concepts

The WWF, like any other natural area in our Forest Preserve, cannot withstand ever-increasing, unlimited visitor use without suffering the eventual loss of its essential, natural character. This much is intuitive. What is not intuitive, though, is how much use and of what type the whole area - or any particular site or area within it - can withstand before the impacts of such use cause serious degradation of

the very resource being sought after and used. Such is a wildland manager's most important and challenging responsibility, however, to work to ensure a natural area's "carrying capacity" is not exceeded while concurrently providing for visitor use and benefit.

The term "carrying capacity" has its roots in range and wildlife sciences. As defined in the range sciences, carrying capacity means "the maximum number of animals that can be grazed on a land unit for a specific period of time without inducing damage to the vegetation of related resources" (Arthur Carhart National Wilderness Training Center, 1994). This concept, in decades past, was modified to address recreational uses as well; although in its application to recreational use it has been shown to be significantly flawed when the outcome sought has been the "maximum number" of people who should visit and recreate in an area such as the WWF. Much research had shown that the derivation of such a number is not useful.

Essentially, this is because the relationship between the amount of use and the resultant amount of impact is not linear (Krumpe and Stokes, 1993). For many types of activities, for instance, most of the impact occurs with only low levels of use. In the case of trail erosion, once soil starts to wash away, additional foot travel does not cause the impact upon the trail to increase proportionately. It has been discovered that visitor behavior, site resistance/resiliency, type of use, etc. may actually be more important in determining the amount of impact than the amount of use, although the total amount of use is certainly (and obviously) still a factor (Hammit and Cole, 1987).

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

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

This shift in managers' central focus - away from trying to determine how many visitors an area can accommodate to trying to determine what changes are occurring in the area and whether or not they are acceptable - is as critical in a Wild Forest area like the WWF as it is in a Wilderness. All such areas are State Forest Preserve Units which must be protected, as per the state Constitution, as "forever wild forest land." Furthermore, the APSLMP dictates in the very definition of Wild Forest areas that their "essentially wild character" be retained.

The magnitude of the challenge here is made evident by other statements and acknowledgments found in the APSLMP concerning Wild Forest areas. The 1972 APSLMP claim that "many of these areas

are under-utilized" remains seemingly true, and from this determination and the determination that these areas "are generally less fragile, ecologically" comes a directive that "these areas should accommodate much of the future use of the Adirondack Forest Preserve."

Clearly, a delicate balancing act is called for, and yet just as clearly, the Department's management focus must remain on protecting the resource. "Future use" is not quantified in the above directive, but it is generally quantified and characterized in the definition of Wild Forest as only "a somewhat higher degree of human use" when compared to Wilderness. And whereas certain "types of outdoor recreation... should be encouraged," they must fall "within constitutional constraints... without destroying the Wild Forest character or natural resource quality" of the area.

A central objective of this plan is to lay out a strategy for achieving such a balance in the WWF. This strategy reflects important guidelines and principles, and it - along with the guidelines and principles - have directed the development of the management proposals which are detailed in Section VIII.

Strategy

The long-term strategy for managing the WWF uses a combination of three generally accepted planning methods: (1) the goal-achievement process; (2) the Limits of Acceptable Change (LAC) model employed by the U.S. Forest Service; and (3) the Visitor Experience and Resource Protection (VERP) model employed by the National Park Service. Given the distinctly different, yet important purposes of these methods (particularly between the first method and the second two), there are clear benefits offered by employing a blend of these approaches here.

Goal-Achievement Process

The goal-achievement process provides a framework for proposed management by means of the careful, stepwise development of key objectives and actions that serve to prescribe the Wild Forest conditions (goals) outlined by APSLMP guidelines. DEC is mandated by law to devise and employ practices that will attain these goals. For each management activity category included in Section IV of this plan, there has been worked up a written assessment of the current management situation and a set of assumptions about future trends, in which the specific management proposals which follow are rooted.

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

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

Establishing and maintaining acceptable conditions depends on well-crafted management objectives which are explicit and which draw on managerial experience, research, inventory data, assessments and projections, public input, and common sense. When devised in this manner, objectives founded in the LAC and VERP models essentially dictate how much change will be allowed (or encouraged) to occur and where, as well as how management will respond to changes. Indicators (measurable variables that reflect conditions) are chosen, and standards (representing the bounds of

acceptable conditions) are set, all so that management efforts can be effective in addressing unacceptable changes. A particular standard may be chosen so as to act as a simple trigger for management action (as in VERP), or it may be chosen to act as a kind of boundary which - given certain assessments - allows for management action before conditions deteriorate to the point of no longer meeting the standard (as in LAC).

Even well-conceived and executed efforts can prove ineffective, but when this is the case, management responses must be adjusted. **Monitoring of resource and social conditions is absolutely critical.** Both the LAC and VERP models rely on monitoring to provide systematic and periodic feedback to managers concerning specific conditions. However, since the VERP model was developed to apply only to impacts from visitor use, some management issues in the WWF (for instance, the impacts of acid deposition) call for an approach that is properly in the LAC vein.

Since differences between LAC and VERP are not significant, choices are left up to managers. These choices are as evident as they need to be wherever this plan, in Section IV, calls for sets of management actions which incorporate them.

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

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

A list of indicators which may be used by the DEC for measuring and evaluating acceptable change on the WWF are:

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

These indicators form the basis for the proposed management actions presented in Section VIII. This approach will require flexibility, determination and patience. It may not be possible to complete all inventories and assessments called for by this strategy - and by the APSLMP - in this plan's five-year time frame. It will be important to show progress in achieving APSLMP goals and in gaining initial managerial experience and knowledge in applying this strategy to some carrying capacity questions and issues. Knowledge gained as a result of the implementation of this first WWF Unit Management Plan will be useful to: 1) revising and refining management actions if evaluation shows that desired conditions are not being attained or sustained; and 2) creating a foundation upon which this strategy can eventually be built

into a fully-developed, science-based approach to protecting and managing the unique resources of the WWF.

The APSLMP requires that each unit management plan provide an environmental and social assessment of area resources to determine the area's capacity to withstand increased public use and recreation development.

The preceding facilities inventory, assessments and assumptions of current use, and the inventory of biophysical resources, indicates that the WWF can withstand higher use levels except in sensitive areas. The latter include areas adjacent to or in wetlands, riparian areas, and mid-slope to high elevation summits and ridges.

Generally speaking at elevations below 3,000 feet in elevation and not on steep slopes, there are opportunities to increase the recreational resource base of the area without adversely affecting the environment and the social experiences of visitors. Area physiography, soils, landscape character, vegetation, water resources, fish and wildlife dictate the type and extent of recreation facilities development and the uses of the land thereon. Analysis of these items indicate that greater facility centered development is both possible and desirable at lower elevations to expand recreational opportunities. The lower slopes are drier, have well drained soils, and more resilient vegetation capable of withstanding increased recreational use. Day hiking, expanded hunter and fishermen access, trail system expansions for cross-country ski touring, mountain biking, snowmobiling and snowshoeing are examples of facility-centered opportunities generally compatible with Wild Forest designation.

At elevations above 3,000 feet, there would be greater environmental consequences to such expansion. Steep slopes, thin wet soils, the sensitivity of the sub-alpine and alpine forest , and the presence of sensitive plant and animal species in this zone severely limit the capacity of the area to withstand use.

Before any new facilities are planned or constructed, substandard facilities need to be brought up to acceptable standards to correct undesirable environmental impacts. For example, within the WWF, new sections of trail would be constructed to replace trail sections which are poorly designed, eroded, or located in sensitive areas. Abandoned trail sections no longer needed would be rehabilitated and permanently closed. There are opportunities to utilize and improve an existing network of pre-forest preserve logging roads to complement the existing trail system for a variety of compatible recreation uses. This for example, would reduce tree cutting and soil disturbance in conversion of these roads to more environmentally stable recreational uses.

The Department believes present use levels within the Wild Forest preserve parcels covered by this plan are generally low. The portion of the unit where carrying capacity limits are most likely to reach sustainable limits in the near future are the proposed mountain bike trail systems. With expanded mountain bike uses being proposed in this unit, the Department believes this recreational use will likely increase. How much of an increase will occur is not easily predictable. Nonetheless, where these trails are proposed, erosion potentials are rated low on gently sloping soils and can tolerate mountain biking trails, if properly constructed. Monitoring will be important. The Department will conduct a yearly internal meeting (and field trip) with Operations, Forest Ranger staff, Whiteface Mountain Intensive Use staff and appropriate steward groups(Adopt A Natural Resource agreement holders) to assess impacts to all

mountain bike trail systems within the unit. Proposals will be made at that time to alleviate overuse problems such as erosion, if they are found to occur. If damage to trails occur and mitigation proposed fails to correct a problem, sections of trails will be closed to mountain bike use.

The Department will undertake a park-wide visitor use survey of Forest Preserve lands. The data collected will focus on both park-wide trends in use and unit level use. The survey will investigate such aspects as seasonality, modality and total level of use of public lands. Data regarding specific units will focus on trends in register sign-ins, programs and resources targeted by users and other specific data to be used in a Limits of Acceptable Change decision-making system. This survey is intended to provide data not only for use in managing facilities and improvements, but also for decision making pertaining to fish and wildlife management practices including programs such as fish stocking. No intensive surveys are planned for the WWF, but information obtained from this survey will result in better management of Wild Forest areas in the future. State of the art technology will be combined with traditional methods to inventory the type and extent of actual public use of the areas. This program is currently under development.

G. Adjacent Land Uses

The WWF lies adjacent to the McKenzie Mountain and the Sentinel Range Wilderness Areas, the Taylor Pond Wild Forest, and the Whiteface Mountain Intensive Use Area. These areas are bisected by the Whiteface Veteran's Memorial Highway. Private lands are interspersed throughout. This mix of State and private land combined with ease of access affords a diversity of forest conditions and a wide spectrum of recreation opportunities.

1. State Lands

McKenzie Mountain Wilderness (37,616 acres): Although this area is in close proximity to Saranac Lake on the southwest, Lake Placid on the southeast, and Wilmington on the east, its interior has retained its Wilderness character. This is due, in part, to its steep terrain which prevented most motor vehicle penetration prior to wilderness designation in 1972. The Wilderness wraps around the west and north sides of Whiteface Mountain. This area is popular with hunters, fisherman, and long-distance hikers.

Sentinel Range Wilderness (23,252 acres): This area sits due south of Wilmington and is dominated by high mountain terrain. The latter is steep, rugged, with some vertical cliffs facing north and northeast. Most of the Wilderness is accessible from SH 86, but has not been as susceptible to motor vehicle penetration as some of the less rugged State land because of its terrain (APSLMP,1987).

Whiteface Mountain Intensive Use Area (2,910acres): Managed by the Olympic Regional Development Authority (ORDA), this area provides recreational and competitive downhill skiing, cross-country skiing, hiking, and mountain biking. The ski center includes three mountain lodges and provides approximately 18 miles of ski trails on 170 acres.

Taylor Pond Wild Forest (TPWF) - (approx. 50,000 acres): The TPWF lies immediately north of the WWF. It consists of numerous detached parcels spread over a wide area across southern

Clinton County and northern Essex County. The Forestdale Road, just inside the Clinton County line serves as the division line between the two Wild Forest areas. Even though a unit management plan for the TPWF has not been completed, planning must be complementary to the WWF and adjoining areas.

2. Commercial Forest Landowners

Private commercial forest lands are interspersed throughout the WWF. Haselton Lumber, International Paper Co., and Ward Lumber have substantial forest holdings in this area. These lands are actively managed for forest products. Several segments have private recreational leases and are closed to public use.

3. Non-commercial Forest Landowners

The Alpine Club of Canada (ACC) borders State land west of Clements Pond. The ACC has 105 acres there and uses the property for education and recreation purposes. Members frequently camp on the club grounds, utilize the area as a base camp and hike on adjoining State lands.

In addition, the WWF borders many private residences and many small non-commercial forest landowners (less than 50 acres in size).

The mix of private and State lands provides for a diversity of access, forest conditions, wildlife, and recreation opportunities.

V. SUPPORTING PLANS, PROGRAMS, AND STUDIES

The WWF figures prominently in land use, conservation, and recreation activities of many local governments, organizations, and State agencies. Some of these entities include:

A. Towns of Jay, Keene, Wilmington, and the Essex County Planning Office

All of these entities have development plans and strategies to include physical improvements to public areas in the hamlets and the county. They stress redevelopment of the private sector, as well as promotional activities and marketing to enhance natural amenities afforded by State lands. Programs are in place to promote outdoor fun and recreation. Local groups have mapped trails, identified scenic drives, hiking, mountain biking, snowmobiling, and fishing opportunities.

B. Whiteface Preservation and Resource Association

This is a local grass-roots organization intended to preserve and promote the rich natural and cultural history associated with Whiteface Mountain and the Town of Wilmington. The Association operates a small museum at the Whiteface Mountain Tollhouse, maintains a nature trail, and provides interpretative materials.

C. Whiteface Mountain Visitors' Bureau

The Whiteface Mountain Visitors Bureau promotes economic development through tourism in the Town of Wilmington and adjoining area. Programs are designed to convey tourist information, and provide for a wide range recreation opportunities and experiences

D. Olympic Regional Development Authority

The Olympic Regional Development Authority (ORDA), a government agency, is charged with the administration of the Whiteface Mountain Ski Center and the Whiteface Veteran's Memorial Highway that border the WWF. ORDA has prepared a detailed unit management plan for the ski center which identifies many complementary issues that affect the WWF.

VI. ISSUE IDENTIFICATION AND PUBLIC PARTICIPATION

Issue identification is an important element of the planning process that comes only through public participation. An issue is defined as a point or question of public discussion or interest that needs to be addressed or decided upon in the planning process. Issues help identify where DEC needs to focus its management efforts in the future. A public participation program was initiated in April of 2001 and a public meeting was held in Wilmington to solicit public input. Numerous interviews were conducted with interested citizens, local organizations and town governments.

A. Enhance Recreational Opportunities

Despite intense recreational development at the Whiteface Mountain Ski Center and in the Lake Placid area, little recreational development has occurred in the nearby WWF. Damage due to the Ice Storm of 1998 and the lack of an approved unit management plan have limited this area's recreational potential to meet public demands. Issues raised by the public include future use of many former roads and footpaths as well as places where new trails and parking lots should be constructed. For example:

- Expand opportunities for short hiking trips, fishing, hunting, mountain biking, and snowmobiling.
- Provide additional parking areas and pull-offs to access State lands.
- Coordinate day use activities with ORDA on Whiteface Mountain and the Whiteface Veteran's Memorial Highway.

B. Preserve Cultural Resources

The historical and archaeological sites located in WWF as well as additional unrecorded sites that may exist on the property are protected by the provisions of the New York State Historic Preservation Act (SHPA - Article 14 PRHPL), Article 9 of Environmental Conservation Law, 6 NYCRR § 190.8 (g) and Section 233 of the Education Law. No actions that would impact these resources are proposed in this Unit Management Plan. Should any such actions be proposed in the future they will be reviewed in accordance with the requirements of SHPA. Unauthorized excavation and removal of materials from any of these sites is prohibited by Article 9 of the ECL and Section 233 of the Education Law. In some cases, additional

protection may be afforded these resources by the federal Archaeological Resources Protection Act (ARPA).

The archaeological sites located on this land unit as well as additional unrecorded sites that may exist on the property may be made available for appropriate research. Any future archaeological research to be conducted on the property will be accomplished under the auspices of all appropriate permits. Research permits will be issued only after approval by the New York State Museum and consultation with OPRHP and APA. Extensive excavations are not contemplated as part of any research program in order to assure that the sites are available to future researchers who are likely to have more advanced tools and techniques as well as more fully developed research questions.

The WWF has many cultural resources that document the early history of the Towns of Jay, Keene, and Wilmington. Interpretation of these cultural resources helps define the evolution of the landscape encountered in the WWF today. Questions of concern include the following:

- How can we better identify and protect area cultural resources?
- Do we understand how various management activities and recreational uses affect area cultural resources?
- Do we know what types of information visitors want to learn about this area's past and how this information should be interpreted?

C. Education, Information, and Interpretation

Education, information, and interpretation are the means that connect people and places, influence behaviors, and help instill a sense of responsibility and stewardship for wild places.

- How can information and education materials be delivered to reach potential visitors before they arrive in the region, at trailheads, and once they go in the interior?

•What is the best formation for maps and brochures to help visitors enjoy the amenities of the WWF?
•How can the dissemination of information be coordinated with outside groups, organizations, area businesses, and Chambers of Commerce?

Concerning the placement of directional, informational and interpretive signs, they shall be of rustic material and placed in limited numbers.

VII. MANAGEMENT AND POLICY

A. Past Management

Public use management of the original tracts acquired since the late 1800's consisted of gradual establishment of boundary lines and a long period of custodial management. The three designated trail systems in the unit, the Cooper Kill, Flume and the Whiteface Mtn. trail via the reservoir, are believed to have received low to moderate recreational use in past years. These trails have been maintained periodically from year to year.

The two ponds in the WWF are managed for the native brook trout. Natural reproduction maintains brook trout in Cooper Kill while Clements is stocked. Natural reproduction maintains the trout populations in the area streams except that brook trout are stocked in portions of Little Black Brook and portions of Black Brook are stocked with brown trout. Area waters are generally subject to statewide angling regulations. However, the use of fish as bait is prohibited in Cooper Kill Pond.

B. Management Guidelines

1. Guiding Documents

This Unit Management Plan has been developed within the guidelines set forth by Article XIV, Section 1, of the State Constitution, Article 9 of the Environmental Conservation Law, Parts 190-199 of Title 6 NYCRR of the State of New York, the Adirondack Park State Land Master Plan, and established Department policy.

Article XIV of the State Constitution provides in part that, "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."

The APSLMP provides guidance for the use and management of lands which it classifies as "Wild Forest" by establishing basic guidelines.

This UMP contains Forest Preserve units with the APSLMP classification of Wild Forest.

"Wild Forest" is defined, in relevant part, on page 32 of the APSLMP, as:

> *"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 area is further defined as an area that frequently lacks the sense of remoteness of Wilderness, Primitive or Canoe areas and that permits a wide variety of outdoor recreation."*

Wild Forests are generally less fragile than Wilderness or Primitive areas, and thus more human impacts can be tolerated. But, the natural resources and natural forest setting must still be protected in a Wild Forest despite the expanded recreational opportunities that can be provided.

DEC policy has been developed for the public use and administration of Forest Preserve lands. Select policies relevant to the management of this Unit include:

- Administrative Use of Motor Vehicles and Aircraft in the Forest Preserve (CP-17).
- Motor Vehicle Access to State Lands Under the Jurisdiction of DEC for People with Disabilities (CP-3).
- Standards and Procedures for Boundary Line Maintenance (NR-91-2; NR-95-1).
- Tree Cutting on Forest Preserve Land (O&D #84-06).
- Cutting and Removal of Trees in the Forest Preserve (LF-91-2).

- Snowmobile Trails - Forest Preserve (ONR-2).
- The Administration of Conservation Easements (NR-90-1).
- Acquisition of Conservation Easements (NR-86-3).
- Division Regulatory Policy (LF-90-2).
- Adopt-A-Natural Resource (ONR-1).
- Policies and Procedures Manual Title 8400 - Public Land Management.

The Department also maintains policy to provide guidelines for the design, location, siting, size, classification, construction, maintenance, reconstruction and/or rehabilitation of dams, fireplaces, fire rings, foot bridges, foot trails, primitive camping sites, road barriers, sanitary facilities and trailheads. Other guidelines used in the administration of Forest Preserve lands are provided through Attorney General Opinions, Department policy memos, and Regional operating procedures.

The recommendations presented in this Unit Management Plan are subject to the requirements of the State Environmental Quality and Review Act of 1975 and accordingly this UMP also constitutes an environmental impact statement. All potentially significant impacts resulting from proposed management activities are assessed and voided or mitigated.

It is important to understand that the State Land Master Plan has structured the responsibilities of the Department and the Agency in the management of State lands within the Adirondack Park. Specifically, the APSLMP states that:

"..... the legislature has established a two-tiered structure regarding state lands in the Adirondack Park. The Agency is responsible for long range planning and the establishment of basic policy for state lands in the Park, in consultation with the Department of Environmental Conservation. Via the master plan, the Agency has the authority to establish general guidelines and criteria for the management of state lands, subject, of course, to the approval of the Governor. On the other hand, the Department of Environmental Conservation and other state agencies with respect to the more modest acreage of land under their jurisdictions, have responsibility for the administration and management of these lands in compliance with the guidelines and criteria laid down by the master plan."

In order to put the implementation of the guidelines and criteria set forth in the APSLMP into actual practice, the DEC and APA have jointly signed a Memorandum of Understanding concerning the implementation of the State Land Master Plan for the Adirondack Park. The document defines the roles and responsibilities of the two agencies, outlines procedures for coordination and communication, defines a process for the revision of the APSLMP, as well as outlines procedures for State land classification, the review of UMPs, state land project management, and state land activity compliance. The MOU also outlines a process for the interpretation of the APSLMP.

2. Guidelines and Standards

Directional and Informational Signs

The Department produces and posts a variety of signs that provide information about regulations, recommendations, directions and distances to destinations, and resource conditions to those who visit the unit. These signs are posted at trailheads as well as interior locations.

To maintain a consistent and recognizable appearance, the dimensions, materials, colors, and wording of DEC signs will be standardized. To ensure the public's ability to locate the unit's lands and facilities easily, the following guidelines will apply to the design and erection of signs:

- All roadside directional signs, trailhead identification signs and interior guide boards will be made of wood and will be brown with yellow lettering.
- Informational "posters" may be made of metal or plastic and generally will be brown with yellow lettering, although other unobtrusive color combinations may be used, such as yellow or white with dark green lettering, or white with black lettering. Posters or signs intended to draw attention to obstacles or hazardous conditions may be red and white.
- Lettering clearly indicating the unit name and classification; "Vanderwhacker Mountain Wild Forest", will be given in all roadside directional signs and trailhead identification signs.
- Standard boundary signs indicating the Wild Forest classification will be posted every one-tenth mile along all highways that pass through or adjacent to the unit and at other strategic locations, such as points on trails where they pass from private onto state lands.
- All signs removed through vandalism or other causes will be promptly replaced.
- Signs will carry a positive message. Rather than simply citing a regulation, a sign should explain the reasons behind the message.
- Managers will use the smallest number of signs necessary to accomplish an informational or regulatory objective.
- Signs will be clustered on a single sign post or bulletin board placed where they are most likely to be seen by visitors.
- The posting of signs by all DEC divisions will be coordinated through the Area Manager.
- As a general rule, informational signs will be posted on the periphery of a management unit rather than in the interior.
- Signs will be constructed of rustic materials and will be limited in number.
- Only signs that conform to Department rules and regulations and policy will be placed within the unit.

Design Standards

It is useful and desirable to have consistent design standards for all Forest Preserve facilities, structures and improvements. This assists users in quickly recognizing state facilities and obtaining information on services, destinations, etc. Forest Preserve design standards will be developed. Since no formal Forest Preserve design standards exist at this time, the Area Manager will refer to existing documents such as the "Interior Use Manual" and the "Adirondack lean-to plan," when designing or rehabilitating structures. If no specific guidance is available for a structure, it will be designed to incorporate the use of natural materials such as round wood, wood shingles and native stone. The appearance of structures within the unit will conform to the natural environment through the use of colors such as subdued greens, browns and other "earthtones."

The Americans with Disabilities Act (ADA) and Its Influence on Management Actions for Recreation and Related Facilities

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

The ADA requires a public entity to thoroughly examine each of its programs and services to determine the level of accessibility provided. The examination involves the identification of all existing programs and services and an assessment to determine the degree of accessibility provided to each. The assessment includes the use of the standards established by Federal Department of Justice Rule as delineated by the Americans with Disabilities Act Accessibility Guidelines (ADAAG, either adopted or proposed) and/or the New York State Uniform Fire Prevention and Building Codes, as appropriate. The development of an inventory of all the recreational facilities or assets supporting the programs and services available on the unit was conducted during the UMP process. The assessment established the need for new or upgraded facilities or assets necessary to meet ADA mandates, in compliance with the guidelines and criteria set forth in the Adirondack Park State Master Plan. The Department is not required to make each of its existing facilities and assets accessible. New facilities, assets and accessibility improvements to existing facilities or assets proposed in this UMP are identified in the "Proposed Management Recommendations" section.

The Americans with Disabilities Act Accessibility Guidelines

The ADA requires public agencies to employ specific guidelines which ensure that buildings, facilities, programs and vehicles as addressed by the ADA are accessible in terms of architecture and design, transportation and communication to individuals with disabilities. A federal agency known as the Access Board has issued the ADAAG for this purpose. The Department of Justice Rule provides authority to these guidelines.

Currently adopted ADAAG address the built environment: buildings, ramps, sidewalks, rooms within buildings, etc. The Access Board has proposed guidelines to expand ADAAG to cover outdoor developed facilities: trails, camp grounds, picnic areas and beaches. The proposed ADAAG is contained in the September, 1999 Final Report of the Regulatory Negotiation Committee for Outdoor Developed Areas.

ADAAG apply to newly constructed structures and facilities and alterations to existing structures and facilities. Further, it applies to fixed structures or facilities, i.e., those that are attached to the earth or another structure that is attached to the earth. Therefore, when the Department is planning the construction of new recreational facilities, assets that support recreational facilities, or is considering an alteration of existing recreational facilities or the assets supporting them, it must also consider providing access to the facilities or elements for people with disabilities. The standards which exist in ADAAG or are contained in the proposed ADAAG also provide guidance to achieve modifications to trails, picnic areas, campgrounds, campsites and beaches in order to obtain programmatic compliance with the ADA.

ADAAG Application

Current and proposed ADAAG will be used in assessing existing facilities or assets to determine compliance to accessibility standards. ADAAG is not intended or designed for this purpose, but using it to establish accessibility levels lends credibility to the assessment result. Management recommendations in each UMP will be proposed in accordance with the ADAAG for the built environment, the proposed ADAAG for outdoor developed areas, the New York State Uniform Fire Prevention and Building Codes, and other appropriate guiding documents. Until such time as the proposed ADAAG becomes an adopted rule of the Department of Justice, the Department is required to use the best information available to comply with the ADA; this information includes, among other things, the proposed guidelines.

Best Management Practices

All trail construction and relocation projects will be developed in accordance with the APSLMP, and will incorporate the use of Best Management Practices, including but not limited to such considerations as:

- Locating trails to minimize necessary cut and fill
- Wherever possible, lay out trails on existing old roads or clear or partially cleared areas
- Locating trails away from streams, wetlands, and unstable slopes wherever possible
- Use of proper drainage devices such as water bars and broad-based dips
- Locating trails to minimize grade
- Using stream crossings with low, stable banks, firm stream bottom and gentle approach slopes
- Constructing stream crossing at right angles to the stream
- Limiting stream crossing construction to periods of low or normal flow
- Using stream bank stabilizing structures made of natural materials such as rock or wooden timbers
- Using natural materials to blend the structure into the natural surroundings

All construction projects will be developed in accordance with the APSLMP, and will incorporate the use of Best Management Practices, including but not limited to such considerations as:

- Locating improvements to minimize necessary cut and fill
- Locating improvements away from streams, wetlands, and unstable slopes
- Use of proper drainage devices such as water bars and broad-based dips
- Locating trails to minimize grade

- Using stream crossing with low, stable banks, firm stream bottom and gentle approach slopes
- Constructing stream crossings at right angles to the stream
- Limiting stream crossing construction to periods of low or normal flow
- Avoiding areas where habitats of threatened and endangered species are known to exist
- Using natural materials where appropriate

All parking lot construction and relocation projects will incorporate the use of Best Management Practices, including but not limited to such considerations as:

- Locating parking lots to minimize necessary cut and fill
- Locating parking lots away from streams, wetlands, and unstable slopes wherever possible
- Locating parking lots on flat, stable, well-drained sites using gravel for surfacing or other appropriate material to avoid stormwater runoff and erosion
- Locating parking lots in areas that require a minimum amount of tree cutting
- Limiting construction to periods of low or normal rainfall
- Wherever possible, using wooded buffers to screen parking lots from roads
- Limiting the size of the parking lot to the minimum necessary to address the intended use

Fisheries Projects

All fish stocking projects will be in compliance with the Programmatic Environmental Impact Statement on Fish Species Management Activities of the Department of Environmental Conservation, dated December 1979.

All pond reclamation projects will be undertaken in compliance with the Programmatic Environmental Impact Statement on Fish Species Management Activities of the Department of Environmental Conservation, Division of Fish and Wildlife, dated June 1980 and the Programmatic Environmental Impact Statement on Undesirable Fish Removal by the Use of Pesticides Under Permit Issued by the Department of Environmental Conservation, Division of Lands and Forests, Bureau of Pesticides Management, dated March 1981.

All liming projects will be in compliance with the Final Generic Environmental Impact Statement on the New York State Department of Environmental Conservation Program of Liming Selected Acidified Waters, dated October 1990, as well as the Division of Fish, Wildlife and Marine Resources liming policy.

C. Administration and Management Principles

1. Administration

Several programs within the Environmental Conservation Department share responsibility for the administration of the WWF.

The Division of Lands and Forests manages the Forest Preserve lands. This unit also acquires, maintains and promotes responsible use of public lands.

The Division of Operations is responsible for designing, building and maintaining Department facilities. This unit operates Department campgrounds and maintains facilities such as roads, trails, lean-tos and parking lots.

The Division of Fish, Wildlife and Marine Resources protects and manages fish and wildlife species. It also protects and manages habitat and provides for public fishing, hunting and trapping opportunities.

The Division of Water protects water quality in lakes and rivers by monitoring waterbodies and controlling surface runoff.

The Division of Law Enforcement enforces Environmental Conservation Laws relating to hunting fishing and trapping; endangered species; possession, transportation and sale of fish an wildlife; and laws relative to environmental quality such as pollution.

The Division of Public Affairs and Education is the public communication link to the public. It promotes citizen participation in the UMP process.

The Division of Forest Protection and Fire Management is responsible for the preservation, protection, and enhancement of the State's forest resources and the safety of the public using the State's resources. Forest Rangers are the stewards of the State lands and are responsible for fire control and search/rescue functions.

VIII. MANAGEMENT PROPOSALS

A. Bio- Physical Resources

This section describes specific management proposals, and policies for administering the WWF, as well as an overview of current situations and assumptions of future trends in public use. DEC decisions and management actions are guided by Article XIV, Section 1 (the "forever wild" clause of the New York State constitution), the APSLMP and applicable case law, the Environmental Conservation Law (ECL), the State Environmental Quality Review Act (SEQRA) and DEC rules and regulations. The objectives that follow address issues identified by DEC staff and input received from the public. These are considered the minimum necessary to meet the plan's goals as stated in Section II.

1. Water Resources

Current Situation and Assumptions

The WWF is bisected by many small streams and wetlands. The West Branch of the Ausable is a core trout fishing stream and has special protections under the Wild, Scenic, and Recreational Rivers Act as a river. The portion that passes through the WWF is classified as a *recreational river*. Some sections of the Cooper Kill Trail have the stream overflowing its banks and running down the trail. Bank erosion is occurring next to the West Branch of the Ausable River below the Wilmington Flume east of SH 86.

Objectives

Maintain and improve overall water quality.

Management Policies and Actions

- Relocate portions of trails away from streams and wetlands. This will apply to sections of the Cooper Kill Trail and all new trail construction.
- Activities in or adjacent to wetlands will require consultation and wetlands permits as necessary with the Adirondack Park Agency.
- Rehabilitate pond, stream and river riparian areas that have been impacted by bank erosion caused by recreation use. Address bank erosion on the footpath leading to the Wilmington Flume (East Side).

2. Soils

Current Situation and Assumptions

Little information has been collected to document soil loss through human disturbance on trails, ponded shorelines and ravine areas, and at campsites. The Adirondack Forty-sixers maintains an unmarked trail to Esther Mountain (4,240 feet elevation). This route requires waterbars and stone steps to control and prevent future erosion.

Objectives

- Keep soil erosion caused by recreation use within acceptable limits that closely approximates natural processes.
- Remediate and stabilize areas that have significant erosion caused by motorized use and pre-forest preserve logging such as behind Wilmington Flume West and on the Beaver Brook Tract.

Management Policies and Actions

1. Prepare a detailed inventory of all trails and former roads to identify areas requiring erosion control.
2. Correct problem areas by rehabilitating the area and/or relocating use to more durable sites.
3. Establish routine maintenance on all designated trails; establish a priority list based on resource needs rather than on the convenience of users.
4. Relocate portions of the Cooper Kill Trail to avoid steep sections next to streams which may overflow and run down the trail.
5. Address erosion on The Flume Mountain Biking Area, specifically on all trails that have connections with the Whiteface Mountain Intensive Use Area through proper trail maintenance and drainage control.
6. Relocate portions of The Flume Mountain Biking Area that have steep grades in excess of 10% to areas with lesser-sustained grades.

7. Request voluntary compliance in seasonal closures of area trails during the spring "mud season" and/or periods of excessive wet weather. This applies to all user groups including hikers and all terrain cyclists.
8. Maintain the cooperative program with the Adirondack Forty-sixers to designate the most environmentally durable route to Esther Mountain, establish routine schedule maintenance, install waterbars and stone steps and close all other so-called "herd paths" to the summit. Closed routes will be barred by brush to obliterate unwanted paths and erosion control will be put in place where needed.

3. Vegetation

Current Situation and Assumptions

Much of the WWF landscape has been altered by agriculture, wind, fire, ice storm, and pre-forest preserve logging. Despite these influences, the Unit has several unique ecosystems requiring special attention and study. These include areas of rare flora, wetland complexes, and forest communities such as the alpine and sub-alpine communities on Whiteface, the sub-alpine community on Esther, and the Pine-Northern Hardwood Forest in Black Brook Woods. Both the Nature Conservancy (TNC) and the New York Natural Heritage Program (NYNHP) have conducted studies in the aforementioned communities.

Objectives

- Allow natural processes to freely operate to insure that the succession of native plant communities are not altered by human use.
- Protect known locations of sensitive, rare, threatened, and endangered plant species.
- Promote programs and studies that identify rare ecological communities.
- Protect the area from introduction, establishment and spread of invasive plants.

Management Policies and Actions

- Encourage botanical examinations to produce a more complete inventory and understanding of area ecosystems by expanding New York Natural Heritage Program (NYNHP) and TNC programs in the WWF.
- Utilize case studies and management recommendations afforded by NYNHP in managing sensitive areas.
- Ecological inventories and maps will be correlated with recreation, fish and wildlife project plans to prevent unintended and undesirable impacts to sensitive areas prior to any new facility construction or major maintenance of existing facilities.
- Monitor impacts on vegetation from such things as trail widening, erosion, and camping.
- Assess and monitor the existence of invasive terrestrial and aquatic invasive species and implement management actions necessary to control the introduction or spread of individual plants or communities.

Invasive Plants Proposed Management

Terrestrial Plants

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

The Department will enter into cooperative partnerships through AANR agreements and TRPs to facilitate containment and eradication of the invasive plant occurrences on the unit. Any eradication work involving the use of herbicides will be carried out under an Inter-Agency Work Plan. For Management of Terrestrial Invasive Plant Species On State Land in the Adirondack Park (Invasive Plant Work Plan), developed by DEC and APA. This Invasive Plant Work Plan will provide a template for the process through which comprehensive active terrestrial invasive plant management will take place on State lands in the Adirondack Park. The Work Plan will provide protocols for implementing BMP's on State land. The protocols will describe what management practices are acceptable and when they can be implemented, who can be authorized to implement the management practices, and which terrestrial invasive plant species are targeted. The Work Plan also describes a process by which the Department may enter into AANR Agreements with and facilitate individuals or groups seeking to manage terrestrial invasive plant species on State ands using the listed best management practices, including herbicide use, in the appropriate circumstances. The Invasive Plant Work Plan will be subject to SEQRA and serve as the mechanism for assessing the impacts, and suitability of eradication BMPs and actions.

For species specific information regarding natural history, ecology, and reproduction, please refer to the Invasive Plant Atlas of New England program website http://webapps.lib.uconn.edu/ipane/search.cfm.

Target "easy to contain- low abundance" terrestrial infestations within the Wilmington Wild Forest as immediate targets for containment and/or eradication controls. Minimizing the spread of newly documented and immature infestations before they have the chance to become well-established should be considered a priority management action.

Existing stands of Indian Cup-Plant will be monitored and considered for management action. NYS DEC will work with APPIP on an Early Detection/Rapid Response inventory and GPS referencing of the Au Sable River watershed in 2005 in regard to this species.

Aquatic Invasive Plant Inventory

A variety of monitoring programs collect information directly or indirectly about the distribution of aquatic invasive plants in the Adirondack Park including the NYS DEC, Darrin Fresh Water Institute, Paul Smiths College Watershed Institute, lake associations, and lake managers. In 2001, the Adirondack Park Invasive Plant Program (APIPP) compiled existing information about the distribution of aquatic invasive plant species in the Adirondack Park and instituted a regional long-term volunteer monitoring program. APIPP trained volunteers in plant identification and reporting techniques to monitor Adirondack waters for the presence of aquatic invasive plant species. APIPP coordinates information exchange among all of the monitoring programs and maintains a database on the current documented distribution of aquatic invasive plants in the Adirondack Park.

Aquatic invasive plant species documented in the Adirondack Park are Eurasian watermilfoil (*Myriophyllum spicatum*), water chestnut (*Trapa natans*), curlyleaf pondweed (*Potamogeton crispus*), fanwort (*Cabomba caroliniana*), European frog-bit (*Hydrocharus morsus-ranae*), and yellow floating-heart (*Nymphoides peltata*). Species located in the Park that are monitored for potential invasibility include variable-leaf milfoil (*Myriophyllum heterophyllum*), southern naiad (*Najas guadalupensis*), and brittle Naiad (*Najas minor*). Additional species of concern in New York State but not yet detected in the Park are hydrilla (*Hydrilla verticillata*), water hyacinth (*Eichhornia crassipes*), and Brazilian elodea (*Egeria densa*).

Infestations located within and in proximity to a Unit may expand and spread to uninfected areas and threaten natural resources within a Unit; therefore it is critical to identify infestations located both within and in proximity to a Unit to identify high risk areas and prioritize Early Detection Rapid Response (ED/RR) and management efforts.

The WWF has few lakes and ponds with public access within its boundaries, and therefore has low risk of invasion by aquatic invasive plants, which are primarily spread via human activities. While a comprehensive survey for the presence of aquatic invasive plant species has not been completed at present, no aquatic invasive plant infestations are documented in the Unit to-date. The APIPP Park-wide volunteer monitoring program and partner efforts identified occurrences of Eurasian watermilfoil (*Myriophyllum spicatum*) and curlyleaf pondweed (*Potamogeton crispus*) in the adjacent Taylor Pond Wild Forest. Water chestnut (*Trapa natans*), curlyleaf pondweed (*Potamogeton crispus*), European frog-bit (*Hydrocharus morsus-ranae*), and yellow floating-heart (*Nymphoides peltata*) are four additional aquatic invasive plant species documented in Lake Champlain. All aquatic invasive species pose a risk of spreading via transport mechanisms.

For species specific information regarding natural history, ecology, and reproduction, please refer to the Invasive Plant Atlas of New England program website
http://webapps.lib.uconn.edu/ipane/search.cfm

Aquatic Actions

No aquatic plant occurrences are documented within the WWF, therefore there are no management recommendations prescribed at this time. However, ongoing inventory is required to detect new invasive plant occurrences. Lake Everest and other waters with public access should be

inventoried for the presence of aquatic invasive plants. If aquatic invasive plant infestations occur, rapid response should be implemented by hand-pulling plants via the guidelines set forth by the Adirondack Park Agency's "Advice on the Handharvesting of Nuisance and Invasive Aquatic Plants." Additional methods may be required to manage an infestation to contain, reduce, or eradicate the population. Management will require assessing a set of criteria to evaluate site conditions to determine appropriate and permitted actions.

Information Needs

Additional research and collaboration with conservation partners such as NY Natural Heritage Program, Invasive Plant Atlas of New England (IPANE) and the Au Sable River Association should occur prior to implementing best management practices for the *Silphium perfoliatum* infestations within the WWF.

All management recommendations are based on knowledge of nonnative invasive species present in a Unit and their location, species, abundance, and density. A complete inventory of the Unit is necessary to identify aquatic and terrestrial invasive plant threats facing the Unit. Inventory should be based on existing inventories, formal or informal inventories during routine operations, and by soliciting help from volunteers to actively study the Unit and report on invasive species presence, location, and condition.

Facilities and designated and passive activities within the Unit may influence invasive plant species introduction, establishment, and distribution throughout and beyond the Unit boundaries. The lack of control of ingress/egress, whether motorized or non-motorized traffic, of frequently utilized facilities warrants an elevated response to ED/RR inventory for invasive species. These facilities and activities are likely to serve as "hosts" for invasive plant establishment. Perpetual ED/RR protocols should be implemented for probable hosts of invasive plant introduction. These probable hosts include the following:

- Public Day Use Areas
- Campgrounds
- Boat Launches
- Horse Trails and other trails

Protocols to minimize the introduction and transfer of invasive plant species on this unit should be incorporated during routine operations and historic and emergency maintenance activities, which may include the following:

<u>Construction Projects</u>

- Supplemental to the principals of the Minimum Tools Approach, all soils/straw/seed or sources of materials to be used as stabilization/cover for construction projects within the UMP should be certified as weed-free sources.

Trail Maintenance

- Supplemental to the principals of the Minimum Tools Approach, all soils/straw/seed or sources of materials to be used as stabilization/cover for construction projects within the UMP should be certified as weed-free sources.

Field Sampling

- Personnel performing field sampling should avoid transferring aquatic invasive species between waters by thoroughly inspecting and cleaning equipment between routine operations. Potential pathways include: vehicles, boats, motors, and trailers; sampling equipment; measuring and weighting devices; monitoring equipment; and miscellaneous accessories.

Angling Tournaments / Derbies

- Licensing, registration, and/or permitting information distributed by DEC to Tournament or Derby applicants should include guidelines to prevent the introduction and transport of invasive species.

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

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

4. Wildlife

Current Situation and Assumptions

The WWF hosts a variety of Adirondack wildlife. Many species depend on area habitats for nesting, rearing, and survival. Public hunting is a major use of the WWF because of the easy access to public land. Many visitors come to the WWF to view wildlife, especially along riparian areas and wetlands. Sportsmen and the Town of Black Brook have identified a need for safe parking areas along the Forestdale Road. This road is used to access the Stephenson Range for both small and big game hunters. It is narrow and has few opportunities for off-shoulder parking especially after snowfall.

Objectives

- Expand DEC's knowledge of wildlife species within the Unit.
- Enhance wildlife viewing opportunities.
- Maintain and perpetuate annual hunting and trapping seasons as legitimate uses of the Wild Forest.
- Provide additional hunter access to public lands.

Management Policies and Actions

- Monitor deer populations and occasional moose sightings in the Unit through visual observation, deer surveys, and public input.
- The construction of four parking areas along the Forestdale Road will help serve small and big game hunters.
- Continue pelt sealing of furbearers to determine harvest levels, guarding against over-harvest for species especially vulnerable to trapping, such as marten and fisher.
- Identify bird viewing locations on Esther Mountain, Whiteface Mountain, Beaver Brook, the Forestdale Road wetlands by maps, brochures, and/or signs.
- Monitor existing populations of Bicknell Thrush's and census potential new habitat of this bird species within the Unit.

5. Fisheries

Current Situation and Assumptions

Fishing is an important use of the WWF. It is important to preserve area waters in a clean and healthy state. Additional and improved access to area streams and ponds is needed to expand and enhance fishing opportunities.

Objectives

- Preserve, enhance, and restore populations of native brook trout to area streams and ponds.
- Improve fishermen access to public lands.

Management Policies and Actions

- Maintain the cold water fish populations in the streams in the Unit.
- Manage Cooper Kill and Clements Pond as Adirondack brook trout ponds. Cooper Kill Pond will be reclaimed if additional fish species become established and impact naturally reproducing brook trout populations.
- Encourage and promote angler use of waters in the unit through routine fish management practices including hotlines, correspondence and contact with the public by Department staff.
- Provide a parking area on the Black Brook Road and a trail to portions of the West Branch Ausable River. Also, provide a parking area on the Styles Brook Road and a trail to Clements Pond. Provide for parking lot at Signor Lane for fishing access of West Branch Ausable River. Maintain the existing trail into Cooper Kill Pond.
- Conduct biological surveys of area waters as required.

Schedule of Implementation

Annually	Conduct biological and chemical surveys of selected unit waters to assess management needs and to determine progress towards the objectives stated in this plan.
	Stock fish in unit waters consistent with Bureau of Fisheries policies and the Programmatic Environmental Impact Statement on Fish Species Management Activities of the Department of Environmental Conservation.
Year 1	Develop parking and a hiking trail, off Black Brook Road, to the West Branch Ausable River.
Year 2	Develop parking lot and a hiking trail to Clements Pond. Develop parking lot at Signor Lane for fishing access of West Branch Ausable River.

Public Fishing Rights

Although fishing rights agreements provide public access to private lands, these lands are not considered Forest Preserve (State) lands. This UMP will address fishing rights agreements due to numerous inquires concerning public fishing rights issues at public meetings.

Current Situation and Assumptions

The State of New York began acquiring public fishing rights on the West Branch of the Ausable River as early as 1935 (Van Valkenburgh,1985). These rights provided public access across private landowners' properties to the river from a public highway. In most cases, this consisted of a narrow (usually four feet in width) foot path. In some cases, a small parking lot along a public highway was provided where the fishermen could leave their cars. Over the years, many of these access routes were not marked nor maintained. Many fee ownerships have changed and these right of access have not been exercised. Records and field checks indicate there are at least three access routes on the Lenny Preston Road and one on the Bonnieview Road in the Town of Wilmington that are no longer marked and open to the public.

Objective

- Re-open and exercise all public fishing rights to the West Branch of the Ausable River.

Management Policies and Action

- Conduct title searches for all listed public fishing rights on the West Branch of the Ausable River.
- Identify and notify current landowners where public fishing rights exist.
- Relocate and mark deeded access routes where feasible.

- Renegotiate new access routes with current landowners where prior routes were not specified in the deeds and cannot be located.

B. Land Protection

1. Administration

Current Situation and Assumptions

The overall framework for land protection in New York State is identified in the "State Open Space Conservation" Plan. The plan is built from the bottom up from the work of nine regional committees, representing the spectrum of open space advocates, natural resource and recreation professionals, local government, and concerned citizens. This plan ensures that the State of New York conserves its cherished open space resources as a critical part of efforts to improve the economy and the quality of life in New York Communities.

Objectives

- Physically identify APSLMP unit designations on the ground for public use.
- Acquire suitable private lands, by fee title and/or conservation easement that adjoin the WWF through negotiated sale with willing sellers.
- Locate and post all State boundaries and fishing rights on a regular basis.

Management Policies and Actions

- Physically inspect the boundary to determine resurvey and maintenance needs. Undertake maintenance activity to ensure all boundaries are identified and marked within the five- year implementation of this plan. Boundaries will be brushed, signed, and painted every 7-8 years. Mark boundaries where they cross any road , trail, or stream. Monitor boundaries for unauthorized activities, such as illegal motor vehicle and mountain bike entry and timber trespass.
- Acquire legal access to Hamlin Mountain for trail and parking lot access.
- Research, review, and reestablish all publically-held fishing rights to the West Branch of the Ausable River.

C. Man- Made Facilities

1. Trails

Current Situation and Assumptions

The Ice Storm of 1998 and the lack of an approved unit management plan has limited opportunities for visitors to participate in many types of primitive recreation that are authorized in Wild Forest areas by the APSLMP within the WWF. The Ice Storm hit hardest on Clements Mountain, Whiteface Mountain and the Stephenson Range causing large areas of blown down trees.

All trails, existing and proposed within the unit will be classified according to the trail classification system in Appendix Seven.

Objectives

Provide a diversity of recreation opportunities and improve interior access.

Mountain Bike Trails

Current Situation and Assumptions

Presently, mountain bikers recreate on the Flume trail system and other hiking trails within the unit. No trails are posted against mountain bike use in the Wilmington Unit.

The Master Plan, on page 36**,** specifies that in Wild Forest areas "all terrain bicycles may be permitted, in the discretion of the Department, on roads legally open to the public and on state truck trails, foot trails and snowmobile trails deemed suitable for such use as specified in a management plan". DEC regulation 6NYCRR §196.7(e) provides that "[t]he operation of bicycles is permitted on roads and trails on Adirondack forest preserve wild forest areas except for those roads and trails posted as closed to bicycle operation."

Designation of The Flume and Beaver Brook Tracts for Mountain Biking

Description of Issue

Mountain bike enthusiasts have been encouraging the development of mountain biking opportunities on existing and proposed trails in the Adirondack region for many years. Many hiking trails are open for mountain bike use in Wild Forest areas, but few are designed primarily for mountain bike use.

Alternatives Discussion

Three alternatives are described below to develop mountain bike opportunities within the unit:

Alternative 1. Develop and designate approximately seventeen miles of mountain bike trail in the WWF(See Appendix Thirteen). This alternative proposes designating approximately 6.0 miles of existing trail at the Wilmington Flume; also designating 4.0 miles of existing trail at the Beaver Brook tract and constructing approximately 7.0 miles of new trail at the Beaver Brook tract in the form of old roads and existing herd paths. Much of the trail system is already present at the two locations with most of the new construction of trails being proposed for the Beaver Brook tract. This alternative maximizes present and future use opportunity at the Beaver Brook tract. The Department is proposing to annually monitor both trail systems. During the 5-year period of the initial plan, mountain bike use will be evaluated and environmental impacts will be assessed to determine if additional recommendations are needed.

Alternative 2. Develop and designate approximately thirteen miles instead of seventeen miles in the WWF(See Appendix Thirteen). At Beaver Brook, approximately 3.0 miles of new trail is recommended for construction instead of 7.0 miles. Recommend the same proposed mileage as Alternative 1 for the Flume area. The Department is proposing to annually monitor both trail systems. During the 5-year period of the initial plan, mountain bike use will be evaluated and environmental impacts will be assessed to determine future recommendations. With this alternative, if mountain bike use was determined to be minimal or low, no expansion of existing trail systems would likely be proposed in the next revision of the plan.

In *Alternatives 1 and 2*, no Natural Heritage Communities are known to exist in the areas identified for mountain biking opportunities. Also, no historic deer yards were documented at the Flume or Beaver Brook tracts. The GIS Model for Potential Deer Yard identifies potential deer wintering habitat on both the east and west sides of the Hardy Road. Most of the potential habitat here is adjacent to the Hardy Road. Mountain Bike trails will not be sited on steep slopes, and areas of existing mountain bike trails are on gentle to moderate terrain with slopes of 20 % or less. Therefore soil erosion is not expected to be a problem. No other user groups are likely to be impacted negatively from designation of existing trails already used by Mountain Bikes.

Alternative 3. No Action alternative. Without the designation and adoption of mountain bike trails in the Unit, an opportunity will be lost to provide managed recreation to a user group that has few designated areas to bike in the Adirondack region. Biking will likely continue at the Flume and conflicts will likely result from user groups interacting with one another there. Without a designated trail system, illegal trails may develop in less suitable locations and enforcement will be more difficult.

The preferred alternative is *Alternative 2*. The Department is proposing formal adoption of the Flume and Beaver Brook areas primarily for mountain bike use. Hiking, cross-country skiing and snowshoeing will also be allowed on the two trail systems. Mountain bikers have been using the trail system at the Flume for several years and serious erosion problems along the present trail system have not been documented. With this alternative, less mountain bike trail mileage is being proposed. The Department will be able to monitor the new trail system with lesser mileage more effectively. Recommendations for additional trail extensions may not be required if recreational use is determined to be lower than anticipated or excessive environmental impacts result over the period of the plan. Soil types are rated low for erosion and the trail system is proposed for gentle slopes in both areas. During the 5-year period of the initial plan, mountain bike use will be evaluated and environmental impacts will be assessed to determine future recommendations.

Management Policies and Actions

The Flume Mountain Biking Trail Area, Town of Wilmington

- Develop a 6 mile mountain biking trail system west of the Flume below 2,000 feet in elevation according to modified International Mountain Biking Association Standards, Appendix Eight. Approximately 4.0 miles of existing former logging roads will be designated and approximately 2.0 miles of existing herd paths will be developed (See Appendix Thirteen). Soil types vary from Colton gravelly to sandy loam in the

Wilmington Flume area. Erosion hazards are rated low on gently sloping soils and can tolerate mountain biking trails, if properly constructed.

- Close and relocate steep portions to acceptable grades (≤10 %). Improve connections to the Whiteface Mountain Ski Center Mountain Bike Trail System.
- Activities in and adjacent to wetlands require consultation with the Adirondack Park Agency.
- These trails can be used for cross-country skiing and snowshoe use in winter.
- Annually monitor bike trail system for erosion and overuse problems. If sections of trails become too eroded, and no mitigation measures are found to alleviate the damage , those sections of trails will be closed and relocated.

Beaver Brook Tract Mountain Biking Area, Town of Wilmington

- Develop and designate a trail system off the Hardy Road (Appendix Thirteen) primarily as a mountain bike trail system. Adapt approximately 4.0 miles pre-forest preserve roads and construct 3.0 miles of new trail to form loops according to modified International Mountain Bike Standards(Appendix Eight.)
- Trail construction is proposed in year two of this plan; Impacts from bike use can be monitored and surveyed over the 5- period of the plan to determine if a second phase of trail construction is warranted or needed on the Beaver Brook tract when the plan is revised.
- Close and relocate steep portions to acceptable grades (≤10%).
- Activities in and adjacent to wetlands require consultation with the Adirondack Park Agency.
- These trails can be used for cross-country ski and snowshoe use in winter.
- Annually monitor bike trail system for erosion and overuse problems**.** If sections of trails become too eroded, and proposed mitigation measures fail to alleviate the damage, those sections of trails will be closed.
- Other hiking trails, existing or proposed, open for mountain bike use in the unit include: Cooper Kill Snowmobile Trail, Clements Pond Trail, Black Brook Woods/ Vanderwhacker Flats Trail, Whiteface Mountain Trail (from the reservoir to the junction of the new Flume Trail), the proposed new snowmobile trail**,** except the portion from the Cooper Kill Trail north to the Forestdale Road.
- Any future additions to this trail system will be made pursuant to the terms of the APLSMP and the MOU between the APA and the DEC.

Hiking Trails Closed to Mountain Bike Use

The following trails will be closed to mountain bike use due to excessive grades and will be posted as such:

- Upper portion of the proposed Bear's Den Hiking Trail
- Section of the new proposed snowmobile trail starting at the junction of the Cooper Kill Trail heading north to the Forestdale Road

- Western portion of the Whiteface Mountain Trail from the intersection of the Flume Trail to Whiteface Mtn**.**
- Wilmington Flume East Trail(0.1 miles long)
- Upper Logging Flume Trail
- Quarry Trail and Cobble Hill Lookout
- Proposed Black Woods/Vanderwhacker Flats Trail

Hiking Trails

Current situation and Assumptions

It is believed that the Whiteface Mountain Trail is the most heavily used hiking trail within the unit. Esther Mountain will remain an unmarked trail. Once other proposed and existing hiking trails are designated and marked, it is expected more visitor use will occur, but negative impacts are anticipated to be very low.

Management Policies and Actions

Develop and mark the following existing and proposed trails within the Unit. Trails will be classified according to the trail classification system in Appendix Seven. Best Management Practices will be followed in construction of new trails and the upgrading of existing trails.

Wilmington Flume East Trail-East Side of SH 86:

- This will be a secondary trail in the trail classification system**.**
- Install water bars and rock steps on 0.1 mile of trail down to the West Branch of the Ausable River.

Bears Den Hiking Trail (Walton's Ledges), Town of Wilmington

- Designate as an official DEC marked hiking trail to the Bears Den overlook on Whiteface Mountain (1.5 miles). This trail is proposed to be a primitive trail according to the trail classification system. This trail starts in the WWF above the Flume Mountain Biking Area and ends at the Bears Den rock outcrop located in the Whiteface Mountain Intensive Use Area north of the "Kids Kampus." The upper portion of the trail, beyond the mountain biking area, will not be open to bicycles.
- Effect coordination, construction, marking and signing with ORDA.
- Address complementary issues in the revised Whiteface Mountain Unit Management Plan now in preparation.

The Flume Trail to Whiteface Mountain Trail, Town of Wilmington

- Construct a new hiking trail (classified primitive trail) starting at the edge of the Flume Mountain Biking Area, extending 1.4 miles northwest to intersect the Whiteface Mountain Trail southeast of Marble Mountain. BMPs will be followed for trail construction. Mountain biking will be allowed on this trail.

Upper Logging Flume Trail to the Whiteface Charcoal Kilns, Town of Wilmington

- Designate the former route of the Upper Logging Flume as an official DEC trail (classified primitive trail) on the north side of the Atmospheric Research Science Road on Whiteface Mountain. This proposed trail follows an old road that ran parallel and under the historic route of the Wilmington Logging Flume adjacent to Red Brook for a distance of 0.4 miles. It ends at the historic site of the three Whiteface Charcoal Kilns below the Whiteface Veteran's Memorial Highway. Maintain a cleared width of 8 feet.
- Provide area identification and interpretative signing at selected historical locations along the route.

Quarry Trail and Cobble Hill Lookout - Town of Wilmington

- Designate 0.2 miles of this trail (classified primitive trail) as an official DEC trail to the quarry over an existing footpath and extend it another 0.3 miles to a rock outcrop on Cobble Hill that overlooks the hamlet of Wilmington, Santa's Workshop at North Pole, Whiteface Mountain, and the Ausable River Valley. This area is also used by climbers.

Clements Pond Trail, Town of Keene

- Construct 1.2 miles (classified primitive trail) from the north side of the Styles Brook Road to reach Clements Pond. Mark and designate as a DEC Foot trail for fishermen, hikers, and hunters.

Cooper Kill Pond Trail from Gillespie Road, Town of Wilmington

- Relocate approximately 0.1 mile of this trail away from Cooper Kill Brook northwest of Morgan Mountain. Spring floods have seriously eroded portions of this trail making it difficult to maintain.
- Sign trail open to mountain bikes once trail relocation above is completed**.**
- Brush in and close old trail

Black Brook Woods/Vanderwhacker Flats Town of Black Brook and Town of Wilmington

- Construct a loop trail from the Black Brook Road approximately 1.4 miles in length through a native red pine forest. This trail will be classified a primary trail.

- The portion of this trail closest to the main road will be made accessible to persons with disabilities following ADA accessibility guidelines. This will not involve ATV accessibility.
- Develop a spur trail (0.3 miles) downhill from the proposed loop trail to the West Branch of the Ausable River to provide fishermen access. This will be classified a secondary trail. The distance from the road (approximately 0.7 miles) and the lack of stocking in this portion of the river are likely to result in light angler usage by anglers. Nevertheless, the remote nature of this section of river will be highly prized by some anglers.
- Provide interpretive signing and marking.

Whiteface Mountain Trail

- Classify the Whiteface Mountain Trail as a secondary trail.

Signor Lane Parcel- Town of Wilmington

- Designate 0.6 miles loop tail(primitive trail) to and beyond the West Branch of the Ausable River. This will provide hiking/ nordic skiing opportunities.

Esther Mountain

Current Situation and Assumptions

The WWF has one mountain above 4,000 feet in elevation. Esther Mountain has a summit elevation of 4240 ft. and has special significance to the Adirondack Forty-sixers organization as a "trailless peak." The Forty-sixers is an organization of individuals that have climbed all 46 Adirondack Peaks above 4,000 feet. The trail to the mountain is not formally signed and marked as a DEC designated trail. It is essentially an unmarked footpath that leaves the Whiteface Mountain Trail and continues 1.3 miles to the summit of Esther. It will be classified a primitive trail under the trail classification system. The Forty-sixers removed a registration canister from the summit in 2001 to comply with the APSLMP since the canisters were a non-conforming use. More than 600 people climbed the peak in 1995, the last date figures were compiled for the summit (Adirondack Forty-sixers, 1995).

A pilot program, begun in 1997 in the nearby High Peaks Wilderness Area, in cooperation with the Forty-sixer's and the Adirondack Mountain Club began to minimally mark the trailless peaks along environmentally durable routes, and closed extraneous so-called "herd paths" to help reduce the impact on the summits.

Objectives

- Continue to provide a unique recreational experience afforded by hiking to a trailless peak.
- Reduce physical and visual impacts to the trailless peaks.

Management Policies and Actions

- Promote and maintain a cooperative effort with the Adirondack Forty-sixers to maintain the most environmentally durable route to the summit of Esther.
- The designated route will be classified a primitive trail as a minimally marked footpath with due consideration given to appropriate layout based on drainage, and occasional blowdown removal to define the route.
- Any extraneous footpaths will be closed, barred with brush.
- Remediation may consist of water bars and/or broad-based dips to reduce erosion.

Snowmobile Trails

Current Situation and Assumptions

The Unit has only one designated snowmobile trail, the Cooper Kill Trail, 5.9 miles long. The trail is connected to Town of Wilmington highways designated as "*snowmobile roads,"* but does not connect to any major snowmobile routes. The trail follows portions of old roads that emanate east and west and gradually narrows in the center. The width of the trail varies from 4 to 8 feet, needs brushing, and has sections located too close to Cooper Kill Brook. During spring run-off, the brook overflows its banks and then flows down the trail. Eastern portions of the trail from Bonnieview Road have steep grades in excess of 15%. The trail is not groomed in winter.

Snowmobile Trails: The APSLMP allows snowmobile trails in units classified as Wild Forest. The APSLMP defines "snowmobile trail" as:

> *"a marked trail of essentially the same character as a foot trail designated by the Department of Environmental Conservation on which, when covered by snow and ice, snowmobiles are allowed to travel and which may double as a foot trail at other times of the year."*

The APSLMP (Wild Forest, Basic Guidelines (4)) also states that:

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

Further, the APSLMP (Wild Forest, Snowmobile Trails) states that:

> *"Snowmobile trails should be designed and located in a manner that will not adversely affect adjoining private landowners or the wild forest environment and in particular:*
>
> *–the mileage of snowmobile trails lost in the designation of wilderness, primitive and canoe areas may be replaced in wild forest areas with existing roads or abandoned wood roads as a basis of such new snowmobile trail construction, except in rare circumstances requiring the cutting of new trails;*

-wherever feasible such replacement mileage should be located in the general area as where mileage is lost due to wilderness, primitive or canoe classification;

-appropriate opportunities to improve the snowmobile trail system may be pursued subject to basic guideline 4 set forth above, where the impact on the wild forest environment will be minimized, such as (I) provision for snowmobile trails adjacent to but screened from certain public highways within the Park to facilitate snowmobile access between communities where alternate routes on either state or private land are not available or topography permits and, (ii) designation of new snowmobile trails on established roads in newly acquired state lands classified as wild forest, and,

-deer wintering yards and other important wildlife and resource areas should be avoided by such trails.

Snowmobile trails in the Wilmington Wild Forest

Proposals for the construction and maintenance of snowmobile trails in the Wilmington Wild Forest Unit have been made within the spirit of the language above, set forth in the APSLMP. Trail siting goals include the following:

- For safety reasons, trails should be kept off highways (especially major highways) and waterbodies whenever possible.
- Trails should be free of dangerous obstructions, such as trees and boulders.
- Trails must also be sited with environmental considerations in mind:
  - -rare and endangered plant and animal species and their habitats should be avoided;
  - -deer wintering yards should be avoided;
  - -vegetative disturbance should be minimized;
  - -wetlands, areas with poor drainage and steep slopes should be avoided;
  - -tree cutting should be minimized and the trail canopy preserved; and
  - -user group conflicts should be avoided.
- The Department will not place snowmobile trails on private land without the owner's permission. Where an owner of private property agrees to allow a snowmobile trail on their property, the Department should, whenever possible, acquire a permanent snowmobile trail easement which binds the owner's successors in title.

Objective

- Provide for snowmobiling opportunities in the WWF consistent with APSLMP criteria and guidelines.

Management Policies and Actions

- Maintain the Cooper Kill Trail (per discussions of Alternatives below) as a designated snowmobile trail
- Snowmobile trail width shall conform to DEC guidelines.

- Construct a snowmobile trail from the Hamlet of Wilmington to the Forestdale Road to facilitate access from this community west to Franklin County and north to Canada.

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Wilmington to Franklin County Snowmobile Trail

Description of Issue

The Town of Wilmington is seeking to facilitate snowmobile access from the Hamlet of Wilmington north to Canada and west to Franklin County and beyond. There are several alternatives for establishing this access between communities involving a combination of private lands and Forest Preserve lands of the Wilmington Wild Forest unit. This proposed trail would be a narrow trail, with a cleared width of 8 feet (12 feet on steep curves and tight running slopes), much like the current Cooper Kill Trail within this Wild Forest unit.

As noted above, the Master Plan provides on page 33 that the use of snowmobiles on DEC designated snowmobile trails is allowed in Wild Forest units provided there is no material increase in the mileage of snowmobile trails open to public use in Wild Forest areas that conformed to the Master Plan at the time of its original adoption in 1972. The Master Plan, on page 36, specifies that snowmobile trails should be designed and located in a manner that will not adversely affect adjoining private landowners or the wild forest environment, and that deer wintering yards and other important wildlife and resource areas should be avoided by such trails. The Master Plan further provides, on page 36, that appropriate opportunities to improve the snowmobile trail system may be pursued where the impact on the wild forest environment will be minimized. If new snowmobile trail mileage is approved within the unit, mileage lost from adjacent units when snowmobile mileage was closed or lost to Wilderness designations will be substituted.

Alternatives Discussion

Please refer to Appendix Thirteen for map portraying alternatives for snowmobile trail to facilitate access between the Town of Wilmington and points north. Five alternatives have been identified and a preferred alternative has been selected.

Alternative 1. This alternative begins on private land along SH 86 approximately ½ mile south of the Wilmington four-corners. The proposed trail heads westward on an existing private land trail system for approximately 1 mile then crosses onto Forest Preserve (Wild Forest lands) within the unit. The proposed trail continues west- northwest passing west of the Town of Wilmington water supply reservoir by approximately ½ mile. The proposed trail then crosses the Atmospheric Research Center Road continuing northwest to just south of the Whiteface toll house where it crosses SH 431 to the north side. Total distance on Wild Forest lands from SH 86 approximates 2.0 miles to the tollhouse area. The proposed trail then parallels the north side of the Gillespie Road for approximately 0.5 miles until it connects to the Cooper Kill Trail. Advantages of this route include access to the trail system and parking opportunities at the Town Beach and possibly other large parking lots close by just off SH 86.

No significant communities were identified from the Natural Heritage Program in any routes proposed in *Alternative 1.* No other user groups/ recreationist are expected to be adversely affected by any proposed route in *Alternative 1*. Terrain and slope are gentle on most of the proposed route, therefore erosion is not expected to be a concern. Slope approaches 20 % on some sections of *Alternative 1B,* therefore switchbacks will be required in at least one location to lessen erosion of soils. Snowmobilers will be required to cross SH 86 from the beach and run the shoulder of the road for a short distance to gain access to the trail system. *Alternative 1*'s proposed route does parallel the Gillespie Road and is not sited in the interior of the Wild Forest unit. In summary, from SH 86 to the Cooper Kill Trail, proposed trail mileage on Forest Preserve lands for this alternative approximates 2.5 miles. An easement or agreement would be required with one private landowner to secure public use of the private land. An established trail system is already available on this private land. Disadvantages of the route include approximately 2.5 miles of new trail on Forest Preserve lands. Several bridges would need to be constructed on this proposed route including one across both White Brook and Red Brook. As previously mentioned in the plan, no historic deer yards were inventoried in the 1970's in the unit. Presently, there are deer wintering in the vicinity of the reservoir, but the *Alternative 1* trail system is sited approximately 0.5 miles from the reservoir and is on the periphery of the deer concentration area near the reservoir.

Once at the Cooper Kill Trail, three different routes were identified for consideration to make a connection to the Taylor Pond trail system all using the original *Alternative 1* route identified above.

Alternative 1A. Once at the trailhead on the west end of the Cooper Kill Trail, the proposed trail would continue northwest parallel to the Gillespie Road for approximately 1.0 miles then swinging north- northeast paralleling the Forestdale Road for approximately 2.0 miles and connecting to the Forestdale Road. The one private landowner was receptive to a trail system on his property but a sugar bush operation prevents the siting of a trail on his property therefore this alternative is not feasible and the slope is too steep on Forest Preserve lands at this location to continue the trail system eastward.

Alternative 1B. Once at the trailhead on the west end of the Cooper Kill Trail, travel approximately .75 miles northeast on the present Cooper Kill Trail. A proposed new trail (approximately 2.0 miles long on Forest Preserve) will head north, through a saddle in the Stephenson Range and continue north to connect to the Forestdale Road. With this alternative, the remaining portion of the Cooper Kill Trail (5.1 miles) will remain open as an ungroomed trail for snowmobiling. *Alternative 1B* is entirely on Forest Preserve lands. Advantages of this proposed route include lesser trail mileage on Forest Preserve from the Cooper Kill Trail than *Alternative 1A.* Also, a portion of the proposed trail is on old logging roads, therefore requiring the removal of fewer trees.

No known significant communities were identified from the Natural Heritage Program along this proposed route. Disadvantages of the route include hilly terrain. However, slope is 20 % or less the length of the proposed trail. In relation to wintering deer, no known concentration areas were observed this year along the proposed route. The GIS Model for Potential Deer Habitat, in relation to *Alternative 1* and *Alternative 1B,* suggests very little potential deer wintering range occurring on the proposed route. A narrow band of potential deer wintering

range exists adjacent to the Forestdale Road. This proposed trail is more interior on the unit than *Alternative 1A*, but the total length of the trail is less.

Alternative 1C. Once on the west end of the Cooper Kill Trail, travel approximately 4.5 miles and a new trail would be constructed north and west following mild elevation to a saddle in the Wilmington Range and north to the Forestdale Road. This alternative is not feasible due to the excessive grade (35%) on the south side of the saddle. This alternative will not be considered.

Alternative 1D. Same as *Alternative 1B*, except that where this proposed Alternative 1B trail veers north from the Cooper Kill Trail through the Stephenson Range, approximately 1 mile of the present Cooper Kill Trail to the lean-to will remain open to snowmobiling to provide traditional winter access to the Cooper Kill lean-to. The remaining approximate 4 miles of the existing Copper Kill Trail to the Bonnieview Road will be closed to snowmobiling. This 4 mile section of trail will remain open to snowmobiling until the new alternative route (as defined in *Alternative 1 and 1B*) has been established. The Master plan provides on page 33 that "Public use of motor vehicles will not be encouraged and there will not be any material increase in the mileage of roads and snowmobile trails open to motorized use by the public in wild forest areas that conformed to the master plan at the time of its original adoption in 1972." This portion of the snowmobile trail closed for snowmobile use will remain open for nordic skiing, mountain biking and hiking opportunities.

Once on the Forestdale Road, snowmobiles may operate on the shoulder of the road. From here several possible routes exist to reach the Taylor Pond trail system. If private landowner permission is granted, an existing road and trail system on private property would connect to the Taylor Pond loop on the west side of the lake. These options will be discusses in the Taylor Pond Wild Forest UMP. The approximate location where Alternative 1A, 1B and 1D connect to the Forestdale Road would provide access to this private land route. Where *Alternative 2* connects to the Forestdale Road, the Nelson Road would provide access to the Taylor Pond trail system if snowmobiles were allowed to operate on the shoulders of the road.

Alternative 2. This option would entail development of a trail system from the Hamlet of Wilmington mainly on private lands and county/ town road connections. The proposed trails, depending on location might traverse a short section of Forest Preserve lands near the east end of the Cooper Kill Trail. A trail system for these alternatives would involve approximately 4-6 miles from the hamlet of Wilmington that would require some use of shoulders of existing roads. The West Branch of the Ausable River, a recreational river, flowing northeast from the hamlet of Wilmington limits opportunities for potential trail systems. Ultimately, this trail would connect to the east end of the Forestdale Road near the Nelson Road.

Alternative 2A. This possible route for this trail system would require use of the shoulder on the Black Brook Road for approximately 2.0 miles, crossing the bridge over the Ausable River, continuing along the shoulder and turning left onto the John Bliss Road. Once on the John Bliss Road for a short distance, the trail heads north and northwest on private lands to and across the Bonnieview Road. From here, the proposed route would continue north to cross the Bonnieview Road continuing north for approximately 3.0 miles to the Forestdale Road, where approximately 4 landowner agreements would be required. Advantages of this

alternative include no trail mileage or considerably lesser trail mileage on Forest Preserve, depending on where the trail system connects to the Bonnieview Road. Disadvantages include negotiation of at least one easement or public use agreements with a private landowner northeast of the John Bliss Road and a considerable amount of road riding. There were deer wintering in areas west of the Bonnieview Road this past year but the extent of any deer yarding area is unknown. No Natural heritage elements have been documented on this alternative. Terrain and slope are gentle, therefore soil erosion is not expected to be a concern, with this alternative. Also, snowmobiles running the shoulder of Black Brook Road and crossing a bridge over the Ausable River with automobile traffic could be hazardous. There does not appear to be a safe way to allow snowmobilers to cross this bridge. The potential is high for snowmobilers to disrupt the quiet atmosphere of landowners at their homes along the Black Brook Road as numerous residences exist here. Another disadvantage of this route to consider is the lack of parking lots for snowmobilers to park and access a trail system from the north side of the hamlet.

Alternative 2B. This proposed route runs north from the Town beach road along the west side of SH 86 somewhat inland to just west of the main intersection of SH 86 and crossing the Gillespie Road running parallel to the Bonnieview Road continuing north to the Cooper Kill Trail and beyond heading north- northwest to the Forestdale Road on private lands. Advantages of this route would be considerably less trail mileage on Forest Preserve and no requirement would exist to cross the Ausable River. Parking is available as specified in *Alternative 1*. No major concentration of deer are known to exist on most of this proposed route. No Natural Heritage elements are known to occur in association with this alternative. Disadvantages of this proposed route include a considerable number of private landowner agreements. Also, no reasonable locations exist to cross the Gillespie Road between the Four Corners (SH 86 and Gillespie Road) and the Reservoir Road as a number of residences exist on both sides of the road.

Alternative 3. No action Alternative. Presently, very little snowmobiling opportunity exists in the Wilmington area. With this Alternative, an important link in the local Wilmington area for snowmobiling opportunities to the Taylor Pond unit will be absent.

Snowmobile Trails in the Wilmington Wild Forest

Snowmobile Trail	Pre-'72 mileage	Current mileage	1A	1B	1C	1D	2A	2B	3	Town
McKenzie Pond Rd- Whiteface Inn (McKenzie Mt. Wilderness UMP) [1]	5.5	-	-	-	-	-	-	-	-	North Elba
Proposed Connector Trail [2]	-	-	5.5	4.5	7.0	5.25	0	2.0	0	Wilmington
Cooper Kill Trail	5.9	5.9	5.9	5.9	5.9	1.0	5.9	5.9	5.9	Wilmington
Total	11.4	5.9	11.4	10.4	12.9	6.25	5.9	7.9	5.9	Wilmington WF Unit

[1] closed following adoption of the APSLMP

[2] new trail proposed in this UMP

This Chart recognizes that prior to adoption of the APSLMP in 1972, there were 5.5 miles of snowmobile trails on adjoining state lands. The APSLMP recognizes these trails on page (36) in the description of guidelines for Snowmobile Trails in Wild Forest, stating that "the mileage of snowmobile trails lost in the designation of Wilderness, Primitive and Canoe areas may be replaced in Wild Forest areas with existing roads or abandoned wood roads as a basis of such new snowmobiles trail construction, except in rare circumstances requiring the cutting of new trails;" and that "wherever feasible such replacement mileage should be located in the general area where mileage is lost due toe Wilderness, Primitive or Canoe classification."

The **Preferred Alternative** is *Alternative 1D*. The Department believes this alternative to be the best choice to preserve the character and quality of the Wild Forest. The atmosphere of the hamlet of Wilmington will be preserved and this alternative will provide for a safe snowmobiling experience. This alternative provides for vehicle parking for snowmobilers and access to a trail system away from the main section of town, therefore preventing disturbances in the main downtown area of Wilmington. Also, a portion of the proposed trail is on old logging roads, therefore requiring the removal of fewer trees.

This Alternative is preferred over *Alternative 1B*, because it closes part of the of the Cooper Kill Snowmobile Trail addressing the APSLMP provisions regarding no material increase in the miles of snowmobile trails on the unit. By closing part of the Cooper Kill Trail the miles of trail being created is balanced with the miles of trail being closed. Disadvantages of the route include hilly terrain in portions of the proposed route. However, slope is 20 % or less the length of the proposed trail. In relation to wintering deer, no known concentration areas were observed this year on this proposed route, except on the periphery of the reservoir. Provided an easement or landowner agreement can be negotiated with two landowners (south of SH 431 and west of SH 86), this is the preferred alternative. If these requirements cannot be satisfied, then *Alternative 2A* is the next preferred alternative.

2. Lean-tos

Cooper Kill Lean-to

Current Situation and Assumptions

The Cooper Kill Lean-to was built in the early 1960's and is located too close to Cooper Kill Pond, less than 100 feet from the water. The APSLMP of 1972 acknowledges lean-tos as conforming structures, provided they meet minimum setback distances of 100 feet or more from water. The lean-to is in fair to poor condition and will soon need complete replacement of the base logs and roof.

Objective

- Relocate and replace the lean-to conform to proper APSLMP setback requirements.

Management Policies and Actions

- Discontinue all major maintenance on the existing lean-to. Do not replace the base logs, roof, etc.
- Remove the existing lean-to when it is no longer useable and replace with a new lean-to to be set back 100 feet or more from water to comply with the APSLMP. This is proposed to be done in the second year of this plan.

3. Gates

Current Situation and Assumptions

Gates are employed at selected locations to curtail illegal motor vehicle use and/or protect road and/or trail surfaces from unwarranted use during inclement weather. Gates are needed at the east and west ends of the Cooper Kill Trail to curtail illegal All-Terrain-Vehicle (ATV) use. A rock barrier has been placed at the entrance of thee river trail at the Wilmington Flume to preserve the structure of the river trail, that leads into the Whiteface Mountain Intensive Use Area. Gates are painted bright yellow, marked with red stop signs and have “barrier ahead” cautionary sign marked 150 feet on either side of the gate. Forest Rangers may open gates on designated snowmobile trails when the trail is covered by snow and ice.

Objectives

- Close roads and old logging trails to illegal motor vehicle use.
- Protect road surfaces.

Management Policies and Actions

- Install gates on the east and west ends of the Cooper Kill Trail.
- Install cautionary signs.
- Open gates for skiers and snowmobilers when the trail is covered by snow and ice.

4. Parking Facilities (Refer to Appendix Nine)

Current Situation and Assumptions

The WWF has extensive road frontage, but few places to safely park motor vehicles off the road shoulder to access State lands. Parking is even more restrictive along town and county roads in the winter due to deep snowfalls and banked snow. Discussions with Forest Rangers indicate parking for recreationist in the Unit has been inadequate, mainly on weekends. Recreationist, particularly hunters and hikers, are pulling off the shoulders of roads in the Unit with no available parking lots. On the Forestdale Road, four parking lots are proposed. The parking lot proposed in the Catamount Mtn area on the Forestdale Road, the northern boundary between both units, will provide ample parking for six vehicles with snowmobile trailers in the winter months and approximately 14 vehicles without trailers during the remainder of the year. The exact location of the parking lot will be determined during the initial planning efforts of the Taylor Pond Wild Forest UMP. At that time, the herd path up Catamount Mtn is expected to be designated a hiking trail and a potential facility is expected to be proposed for parking for that Unit. It is anticipated only one parking lot will be proposed on the Forestdale Road near the junction of the proposed snowmobile trail and the herd path to provide parking opportunities for hikers and snowmobilers recreating in both units. The remaining three parking areas proposed for the Forestdale Road are minimal parking lots designed mainly for hunters to provide a designated area to park and to disperse hunters in this popular hunting area. All other proposed parking areas are adjacent to proposed and existing trail systems. To mitigate any impacts to adjacent wetlands, present consultation with the Adirondack Park Agency is required before any construction commences. New parking lot locations were chosen on the basis of terrain, minimal need for excavation, tree cutting, Best Management Practices and safe sight distances for approaching traffic.

Objective

- Improve existing parking lots at four locations listed below and make one existing parking lot accessible and one proposed parking lot accessible

- Create safe parking in order to access public recreation facilities at nine proposed locations as noted below and make them accessible to persons with disabilities.

Management Policies and Actions

Improve and/or develop parking facilities at the following locations:

The Flume - West Side of SH 86, Town of Wilmington (existing):

- Coordinate improvements with NYS Department of Transportation since a portion sits in the SH 86 right-of-way.
- Re-grade/resurface to accommodate seven vehicles (current capacity six vehicles). Make parking lot accessible.

The Flume- East Side of SH 86, Town of Wilmington (existing):

- Re-grade/resurface this parking area.
- Increase to accommodate four vehicles (current capacity three vehicles).
- Sign with area identification and trailhead signs.
- Coordinate improvement with NYS DOT and provide pedestrian cautionary signs.

Beaver Brook Tract-Hardy Road, Town of Wilmington (existing):

- Re-grade/resurface existing parking area, maintain current size to accommodate four vehicles.
- Sign with area identification sign and install trailhead kiosk to serve hikers, hunters, mountain bikers, etc.

Upper Flume - Atmospheric Research Center Road intersection with Whiteface Veteran's Memorial Highway, Town of Wilmington (new):

- Construct a three vehicle, off-shoulder parking facility to serve hiking trails to the Upper Wilmington Flume and Whiteface Mountain Charcoal Kilns.
- Sign with area identification and trailhead signs.

Quarry Trail-Gillespie Drive, Town of Wilmington (new):

- Construct a three vehicle parking off-shoulder parking area to accommodate hikers on the Quarry trail and Lookout Mountain.
- Sign with area identification and trailhead signs.

Cooper Kill Pond Trail-Gillespie Drive, Town of Wilmington (new):

- Construct a seven vehicle parking area at this location to accommodate hunters, hikers, snowmobilers, skiers, and mountain bikers.
- Sign with area identification signs and place trailhead kiosk at rear of the parking lot.

Cooper Kill Pond Trail - Bonnieview Road, Town of Wilmington (new):

- Construct a seven vehicle parking area at this location to accommodate hunters, hikers, snowmobilers, fishermen, mountain bikers.
- Sign with area identification signs and place a trailhead kiosk at rear.

Ausable Run - Lenny Preston Road, Town of Wilmington (existing):

- Improve current 3 car parking area by regrading and resurfacing existing area. This provides fishermen access to the West Branch of the Ausable River

Black Brook Woods/Vanderwhacker Woods -Black Brook Road, Town of Wilmington (new):

- Construct a three vehicle, accessible, off shoulder strip-type parking lot parallel to the highway. This area will serve hikers to Black Brook Woods, hunters, and fishermen to the West Branch of the Ausable River.
- Sign with area identification and trailhead signs.

Forestdale Road - Southside, Town of Black Brook (new) or the north side of Forestdale Road on Taylor Pond Wild Forest Unit

- Construct a vehicle parking area large enough to accommodate six vehicles with snowmobile trailers during winter months and approximately fourteen vehicles during the remainder of the year. The exact location of the parking lot will be determined during the planning efforts of the Taylor Pond Wild Forest UMP. At that time, the herd path up Catamount Mtn is expected to be designated a hiking trail and a potential facility is expected to be proposed for parking for that Unit. It is expected only one parking lot will be proposed for recreational uses in both units on the Forestdale Road.

Forestdale Road-South side, Town of Black Brook (new):

- Construct three off-shoulder, strip parking areas parallel to Forestdale Road to accommodate three-four vehicles each. These are intended to primarily serve big game and rabbit hunters and fishermen along a 3.0 mile stretch of highway that is entirely State land.
- Sign with area identification signs.

Clements Pond Trail-North-side Styles Brook Road, Town of Keene (new):

If an agreement can be reached, an existing parking lot on the adjacent property of the Alpine Club may serve as a public parking lot to gain access to the Clements Pond Trail. Otherwise, a new parking lot is proposed.

- Construct a five vehicle parking lot to accommodate fishermen, hunters, and hikers.
- Sign with area identification and trailhead signs.

Signor Lane Parcel- Off Signor Lane, Town of Wilmington (new):

- Construct a five vehicle parking lot to accommodate fishermen.
- Sign with area identification and trailhead signs.

5. Campsites

Current Situation and Assumptions

Forest Rangers believe very little over-night camping takes place at the two presently designated campsites in the WWF. One of these designated campsites is situated off the Bonnieview Road adjacent to the Cooper Kill Trail and is proposed to remain open. The other designated site is on the east side of SH 86, at the Flume. It is too close to the West Branch of the Ausable River and will be closed. *No camping* and *No Fire* signs will be posted in the riparian area of the campsite being closed along the Ausable River. This plan proposes to designate a former campsite (now closed) just above the kiosk at the Flume on the west side of SH 86. This site had been closed to stop large groups from driving in and holding parties. The road has now been closed with boulders eliminating the attraction as a drive in party site. A new campsite will also be designated in the Clements Pond area.

Once the WWF plan is approved, three designated primitive campsites will remain open for recreational users.

All primitive tent sites within the unit will be monitored for damage due to overuse. Where ease of access by motor vehicle appears to be contributing to overuse of primitive tent sites the least intrusive measures, such as education and/or site remediation, will be implemented. If these are not successful in reducing user impacts, more stringent measures will be considered and appropriate management actions taken. However, consideration will be given to maintaining motor vehicle access to tent sites that provide recreational opportunities for people with mobility impairments.

Objective

- Avoid excessive negative impacts to vegetation, soils and water at non- designated campsites
- Reduce, eliminate or mitigate the adverse effects on natural resources that result from improperly located campsites
- Comply with the APSLMP campsite standards to disperse use

Management Policies and Actions

- *No camping* and *No Fire* signs will be posted in the riparian area along the Flume. Also, these signs will be placed at non-designated campsites and the Department will enforce against violations.
- Close the designated campsite as outlined above.
- Develop LAC indicators and standards for extent of soil erosion at campsites.
- Open a former campsite (now closed) on the west side of SH 86 at the Flume just above the present kiosk. This campsite will comply with APSLMP separation distance guidelines.

- Monitor the designated primitive campsites, the second and fifth year of the five year plan in the unit according to the campsite monitoring schedule in Appendix Ten.

6. Monuments and Plaques

Current Situation and Assumptions

The following monument and plaques exist in the Wilmington Wild Forest:

- **Beaver Brook Tract**: Stone monument and brass plaque. Dedicates a 700 acre gift of land to The People of the State of New York by the Estate of Deborah Colby as memorial to her father, the Honorable Lewis Ollife, Justice of the New York State Supreme Court, Kings Co., erected June 6, 1985.

- **Esther Mountain:** Plaque erected by the Adirondack Forty-sixers to commemorate Esther McComb, the mountain's namesake. Summit elevation is 4240 ft.

Management Policies and Assumptions

No new memorial signs, plaques or monuments of any kind will be placed in the unit, however, existing ones may remain in place. It will not be the responsibility of the DEC to maintain these signs, plaques or monuments that have had private sponsorship.

7. Directional and Informational Signs

Current Situation and Assumptions

The Department produces and posts a variety of signs that provide information about regulations, recommendations, directions and distances to destinations, and resource conditions to those who visit the unit. These signs are posted at trailheads as well as interior locations.

Objective

To maintain a consistent and recognizable appearance, the dimensions, materials, colors, and wording of DEC signs will be standardized.

Management Policies and Actions

To ensure the public's ability to locate the unit's lands and facilities easily, the following guidelines will apply to the design and erection of signs:

- All roadside directional signs, trailhead identification signs and interior guide boards will be made of wood and will be brown with yellow lettering.
- Informational "posters" may be made of metal or plastic and generally will be brown with yellow lettering, although other unobtrusive color combinations may be used, such as yellow or white with dark green lettering, or white with black lettering. Posters or signs intended to draw attention to obstacles or hazardous conditions may be red and white.

- Lettering clearly indicating the unit name and classification; “Vanderwhacker Mountain Wild Forest”, will be given in all roadside directional signs and trailhead identification signs.
- Standard boundary signs indicating the Wild Forest classification will be posted every one-tenth mile along all highways that pass through or adjacent to the unit and at other strategic locations, such as points on trails where they pass from private onto state lands.
- All signs removed through vandalism or other causes will be promptly replaced.
- Signs will carry a positive message. Rather than simply citing a regulation, a sign should explain the reasons behind the message.
- Managers will use the smallest number of signs necessary to accomplish an informational or regulatory objective.
- Signs will be clustered on a single sign post or bulletin board placed where they are most likely to be seen by visitors.
- The posting of signs by all DEC divisions will be coordinated through the Area Manager.
- As a general rule, informational signs will be posted on the periphery of a management unit rather than in the interior.
- Signs will be constructed of rustic materials and will be limited in number.
- Only signs that conform to Department rules and regulations and policy will be placed within the unit.

D. Public Use and Access

1. Public Use

Current Situation and Assumptions

Presently there are two trail registers for the entire unit. One is located on the west side of the Wilmington Flume and the other at the town reservoir on the Whiteface Trail. Current estimates on public use are largely based on assessments of physical condition of campsites and trails, access points and trailheads, field diaries of DEC personnel, and interviews with users. Combined, these techniques can only provide general assumptions of total use. Data has not been collected for distribution of use, mode of interior travel, periods of use, and visitor origin. More comprehensive visitor use information needs to be collected and analyzed to improve information and education efforts, target maintenance to correct undesirable conditions, adopt law enforcement schedules, and assess the need for new facilities. This information is needed to evaluate resource conditions with the degree of present use. Managers might consider higher use levels in areas where current resource conditions show little human modification

Hard data is unavailable, but current snowmobile use of existing snowmobile trails in WWF is believed to be low. This is perhaps due to in part to the disjointed system of trails in WWF and the units isolation from other trail systems. Most current use appears to be local.

With the establishment of a snowmobile trail to facilitate access between communities use of existing rails that become a part of that connection will likely increase. However, it is difficult to predict how large the increase will be. Use of the existing Cooper Kiln Trail mileage to the new trail by riders wishing to make longer trips, will clearly increase from local travel it currently experiences. The new established trail will be a part of a larger system of snowmobile trails connecting trails to the Taylor Pond

Wild Forest and o0ther nearby areas. This will certainly lead to increased snowmobile use in the areas. Any increase in use of WWF snowmobile trails, however will be limited by a number of factors, including the number of hotel rooms, restaurants, attractions, and other services (including gas) available in the area. The increase will likely be slow, since these factors do not currently exist in great numbers in the area.

Monitoring current conditions and increase in snowmobile traffic will be important to ensure that environmental degradation which may result from over-use of trails is minimized. If degradation occurs, the Department will take appropriate actions to mitigate the degradation, including increased maintenance activities. The Department will work with local snowmobile clubs to monitor use and possible overuse of the trail and to coordinate maintenance activities through the use of AANR Stewardship Agreements when possible.

All primitive tent sites within the unit will be monitored for damage due to overuse. Where ease of access by motor vehicle appears to be contributing to overuse of primitive tent sites the least intrusive measures, such as education and/or site remediation, will be implemented. If these are not successful in reducing user impacts, more stringent measures will be considered and appropriate management actions taken. However, consideration will be given to maintaining motor vehicle access to tent sites that provide recreational opportunities for people with mobility impairments.

Objectives

- Obtain more comprehensive visitor use data to better assess resource and social conditions.
- Educate visitors about care and use of the WWF.
- Ensure compliance with DEC Rules and regulations.
- Promote “Leave-No-Trace” skills and ethics.

Management Policies and Actions

- Install and maintain trail registers on all DEC designated trails to improve the public use data for the unit.
- Collect visitor use information, estimate total number of users and mode of travel.
- Conduct trailhead registration compliance checks randomly several times a year on different trailheads to determine the reliability and accuracy of trailhead data.
- Assess resource conditions annually on all trails and campsites and in sensitive areas such as alpine, riparian areas, water bodies etc. to determine any adverse change, if any.
- Change management in problem areas if conditions are below acceptable standards for trails, campsites, and sensitive areas. Bring sub-standard areas up to acceptable limits.
- Provide trailhead information, maps, and education materials. Better informed visitors are less likely to impact resources and create social problems.

2. Access for Persons with Disabilities

Current Situation and Assumptions

Potential locations to accommodate access for persons with disabilities were identified in the planning process. Although, the WWF has a great deal of rough, rocky, and steep terrain which limits access for persons with disabilities, potential locations to improve access for persons with disabilities were identified at the Flume and Black Brook Woods.

Objectives

- Provide the highest level of accessibility for persons with disabilities consistent with the American with Disabilities Act (ADA) to the extent it does not alter the fundamental nature of programs offered to the public.

Management Policies and Actions

- Construct an accessible interpretive hiking trail and a three vehicle parking area for persons with disabilities, 1.4 miles long in Black Brook Woods/Vanderwhacker Flats Area.
- All parking lots within the planning area will be made accessible.
- Provide fishing opportunities for persons with disabilities adjacent to the Wilmington Flume parking area next to the West Branch of the Ausable River. This will require minor improvements (grading and the addition of crushed stone dust) to 300 feet of the River trail to make it wheelchair accessible. This will enable persons with disabilities to fish from the rocky stream bank adjacent to the road and to fish in the beaver marsh a short distance from the kiosk. Consultation with the APA is required under the Freshwater Wetlands Act.

3. Information and Education

Current Situation and Assumptions

Designation of the WWF and recent publicity has increased public awareness and interest in this area. As recreation increases, more inquiries will be received concerning the area's potential for greater visitor use and management. Effective and timely information and education is important to the preservation of cultural and natural values. Signs, trails, brochures, and other educational/information materials help connect people and places. A basic understanding of DEC rules and regulations and minimum impact techniques helps to preserve this area and makes for a better visitor experience.

Objectives

- Educate and inform visitors about the WWF relative to the special qualities it possesses and promote Leave-No-Trace skills and ethics in order to preserve the area.
- Encourage visitor compliance with established DEC rules and regulations.
- Coordinate information and education efforts with outside groups, organizations, resorts, regional tourism councils, chambers of commerce, etc.

Management Policies and Actions

- Install trailhead kiosks with area and regulatory information at all trailheads.
- Develop maps, brochures, and other printed materials to provide necessary travel and safety information, information on natural and cultural values, and Leave-No-Trace skills and ethics.
- Meet with and coordinate delivery of information and education materials with outside groups that have an interest in promoting and preserve the WWF. This includes, but is not limited to the Essex County Visitors Bureau, the Whiteface Visitors Bureau, ORDA and other chambers of commerce and interested parties.

IX. SCHEDULE FOR IMPLEMENTATION

The management programs detailed in Section VII will be implemented through a five year time frame based on available resources. Estimates are based on 2002 labor, equipment, and materials rates. It is possible that not all actions planned for a particular year may be implemented because of the uncertainty of DEC's annual budget allocations. Any action delayed for this reason will be undertaken in sequence as funds become available. Some activities may be undertaken by volunteers or other interested groups under the leadership of DEC, and with careful coordination too make sure all activities are consistent with the APSLMP. Schedules may be readjusted if there are significant changes in resource and social conditions.

YEAR ONE

1. Conduct biological examinations on Esther and Whiteface Mt. in cooperation with the Adirondack Nature Conservancy and the New York Natural Heritage Program.	$ 5,000
2. Develop a trail for persons with disabilities through Black Brook Woods/ Vanderwhacker Flats - 1.4 miles. Also, construct 3 vehicle parking lot for this trail.	$24,000
3. Develop a fisherman extension trail (0.3 miles) as extension of Black Brook Woods/ Vanderwhacker Flats Trail	$1,000
3. Improve ASRC Parking at the intersection of SH 431.	$ 2,000
4. Develop Flume Mt. Biking Area (6.0 miles of reconstructed and new trails).	$48,000
5. Upgrade Bears Den/Walton Ledges Trail; Install water bars, mark, and sign (1.5 miles).	$3,000
6. Improve Wilmington Flume Trail to Charcoal Kilns (0.4 miles).	$2,000
7. Improve Ausable Run Fishing Access Site and Parking.	$2,000
8. ADAAG assessment for facilities.	$0
9. Research Ausable River Fishing Rights: document and map.	**
10. Relocate 0.1 mile of the Cooper Kill Trail - NW Morgan Mt.	$1,000
11. Meet with Chamber of Commerce and local governments.	$ 0

12. Annual maintenance of facilities: blowdown removal, erosion control, litter removal, sign replacement, etc.	$10,000
13. Schedule meeting with Operations and Forest Ranger staff to access impacts to mountain bike trail systems and conduct annual public use assessment	$0
14. Random trailhead registration compliance checks.	**
15. Close non designated campsites in unit by placing *No Camping* signs	$0
16. Re-inventory approximately 7.0 miles of boundary line within the unit.	$1,500
17. Redesignate the former campsite above the kiosk on the west side of SH 86.	$0
18. Conduct biological and chemical surveys of selected waters	$500
19. Construct 2.0 miles of a snowmobile access trail from Wilmington to Forestdale Rd	$8,000
Totals:	**$107,000**

YEAR TWO

1. Improve ASRC Parking at the intersection of SH 431.	$ 2,000
2. Complete upgrade of existing (3.6 miles) old logging trails and const. 3.0 miles of new trail at the Beaver Brook Tract for Mountain Bike use; place barriers off Hardy Rd.	$20,000
3. Develop hiking trails to Clements Pond.	$10,000
4. Install trailhead kiosk at Clements Pond.	$2,000
5. Construct five vehicle parking lot for Clements Pond Trail.	$10,000
6. Develop a new trail, 1.4 miles, Wilmington Flume to Whiteface Mtn. trail southeast of Marble Mtn.	$14,000
7. Annual maintenance of facilities: blowdown removal, erosion control, litter removal, sign replacement, etc.	$10,000
8. Schedule meeting with Operations and Forest Ranger staff to access impacts to mountain bike trail systems and conduct annual public use assessment.	$0
9. Random trailhead registration compliance checks.	**
10. Re-inventory approximately 7.0 miles of boundary line within the unit.	$1,500
11. Conduct biological and chemical surveys of selected waters	$500
12. Replace Cooper Kill Lean-to.	$7,500
13. Monitor designated campsites according to campsite monitoring forms in Appendix Ten.	**
14. Construct remainder of new snowmobile access trail from the Hamlet of Wilmington to the Forestdale Road, approximately 2.5 miles.	$8,500

15. Improve Wilmington Flume Parking Area (west side) of SH 86.	$10,000
16. Install trailhead kiosk and provide interpretive signing on Black Brook Woods/ Vanderwhacker Flats Trail and at the Beaver Brook tract	$8,000
17. Construct a five vehicle parking area, off Signor Lane, for fishing access.	$10,000
18. Assess status of invasive plants in the Unit and Develop necessary management objectives for control should they exist	$2,500
Totals:	**$120,500**

YEAR THREE

1. Construct a 7-10 vehicle parking area for the Cooper Kill Trailhead- Gillespie Rd. Gate trail at rear of parking area.	$12,000
2. Upgrade Bears Den/Walton Ledges Trail; Install water bars, mark, and sign (1.5 miles).	$3,000
3. Construct a 7-10 vehicle parking area for the Cooper Kill Trail-Bonnieview Road. Gate trail at rear of parking area.	$12,000
4. Install two trailhead Kiosks - Each End of Cooper Kill Trail.	$4,000
5. Install trailhead register on the Quarry/Cobble Hill Trail.	$500
6. Annual maintenance of facilities: blowdown removal, erosion control, litter removal, sign replacement, etc.	$10,000
7. Schedule meeting with Operations and Forest Ranger staff to access impacts to mountain bike trail systems and conduct annual public use assessment.	$2,000
8. Random trailhead registration compliance checks.	**
9. Conduct biological and chemical surveys of selected waters	$500
10. Re-inventory approximately 7.0 miles of boundary line within the unit.	$1,500
11. Close two existing undesignated trails on the reservoir area	$200
Totals:	**$45,700**

YEAR FOUR

1. Construct a 10 vehicle parking area opposite Catamount Mt. on the Forestdale Rd.	$15,000
2. Construct three 3-vehicle off-shoulder parking areas on the Forestdale Rd.	$9,000
3. Annual maintenance of facilities: blowdown removal, erosion control, litter removal, sign replacement, etc.	$10,000
4. Random trailhead registration compliance checks.	**

5. Re-inventory approximately 7.0 miles of boundary line within the unit.	$1,500
6. Schedule meeting with Operations and Forest Ranger staff to access impacts to mountain bike trail systems and conduct annual public use assessment.	$0
7. Conduct biological and chemical surveys of selected waters	$500
8. Assess status of invasive plants in the Unit and Develop necessary management objectives for control should they exist.	$2500
Totals:	**$ 38,500**

YEAR FIVE

1. Install trailhead kiosk and provide interpretive signing on the Black Brook Wood/Vanderwhacker Flats Trail and at the Beaver Brook tract	$ 8,000
2. Annual maintenance of facilities: blowdown removal, erosion control, litter removal, sign replacement, etc.	$10,000
3. Random trailhead registration compliance checks.	**
4. Re-inventory approximately 7.0 miles of boundary line within the unit.	$1,500
5. Schedule meeting with Operations and Forest Ranger staff to access impacts to mountain bike trail systems and conduct annual public use assessment.	$ 2,000
6. Monitor designated campsites according to campsite monitoring forms in Appendix Ten.	**
7. Conduct biological and chemical surveys of selected waters	$500
Totals:	**$22,000**

** Existing Funds available

X. PLAN REVIEW AND EVALUATION

Any unit management plan for the WWF must be sensitive to resource and social change and be kept relevant. Ordinarily unit management plans are required to be revised every five years after their initial approval (APSLMP, 1987). However, DEC's Region 5 interdisciplinary unit management team will conduct annual reviews and evaluations of the plan. This team will:

- Document completed actions and adjust implementation schedules if necessary.
- Monitor resource and social conditions in the unit to determine if plan goals and objectives are being met and APSLMP guidelines and criteria are adhered to. For example, monitoring will take in account impacts to trails, primitive tent sites, on wildlife, encounter between user groups, and rely heavily on visitor feedback.
- Recommend new management actions, revisions to the unit management plan, or amendments that adhere to APSLMP criteria and guidelines and make them available for public review.

XI. STATE ENVIRONMENTAL QUALITY REVIEW ACT

The State Environmental Quality Review Act (SEQRA) requires the consideration of environmental factors early in the planning stages of any proposed action(s) that are undertaken, funded, or approved by a local, regional, or state agency.

Unit management plans are considered a "Type I"Actions under SEQRA. A Type I action means an action or class of actions listed in the SEQRA regulations(617.12) or listed in DEC's procedures which is more likely than an unlisted action to have a significant impact on the environment.

This document constitutes an Environmental Impact Statement (EIS). A Positive Declaration was declared through a press release/Notice of Intent document (Appendix Eleven)

ACRONYMS

AANR	Adopt A Natural Resource
ADA	Americans with Disabilities Act
ADAAG	American with Disabilities Act Accessible Guidelines
ANC	Acid Neutralizing Capacity
ALSC	Adirondack Lakes Survey Corp.
APA	Adirondack Park Agency
APIPP	Adirondack Park Invasive Plant Program
APSLMP	Adirondack Park State Land Master Plan
ASRC	Atmospheric Science Research Center
BMPs	Best Management Practices
DEC	Department of Environmental Conservation
ECL	Environmental Conservation Law
EQBA	Environmental Quality Bond Act
IMBA	International Mountain Bike Association
LAC	Limits of Acceptable Change
NYNHP	New York Natural Heritage Program
NYCRR	New York Code of Rules and Regulations
NYS	New York State
ORDA	Olympic Regional Development Authority
OSP	Open Space Plan
RM	Reference Marker
SEQRA	State Environmental Quality Review Act
SH	State Highway
TNC	The Nature Conservancy
TPWF	Taylor Pond Wild Forest
UMP	Unit Management Plan
WWF	Wilmington Wild Forest

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APPENDICES

Appendix One	-	Mammals of the Unit
Appendix Two	-	Amphibians and Reptiles Inventory
Appendix Three	-	Breeding Bird Atlas
Appendix Four	-	Deer, Bear, Furbearer Harvest Data
Appendix Five	-	Rare Communities and Species
Appendix Six	-	Fisheries - Ponded Water Inventory and Survey Data
Appendix Seven	-	Trail Classification System- Wilmington Wild Forest
Appendix Eight	-	Mountain Bike Trail Standards and General Guidelines
Appendix Nine	-	Proposed Parking Lot Details
Appendix Ten	-	Designated Campsite Monitoring Form
Appendix Eleven	-	Positive Declaration
Appendix Twelve	-	Comprehensive Snowmobile Plan for the Adirondack Park
Appendix Thirteen	-	Response to Public Comments
Appendix Fourteen	-	Wetland, Project Maps, Invasive Species Information

APPENDIX ONE
Mammals of the Unit

The WWF Unit contains potential habitat for 47 species of mammals. Major species include:

MAMMALS	Scientific Name	Status			
Big Game:					
White Tailed Deer	*Odocoileus virgininanus*	P		G	R
Black Bear	*Ursus americanus*	P	R	G	
Moose	*Alces alces*	P		G	Tr
Furbearers:					
Eastern Coyote	*Canis latrans*	P		G	R
Bobcat	*Lynx rufus*	P		G	R
Beaver	*Castor canadensis*	P		G	R
Muskrat	*Ondatra zibethica*	P		G	R
Fisher	*Martes pennanti*	P		G	R
River Otter	*Lutra candensis*	P		G	R
Mink	*Mustela vison*	P		G	R
Raccoon	*Procyon lotor*	P		G	R
Red Fox	*Vulpes vulpes*	P		G	R
Gray Fox	*Urocyon cinereoargentus*	P		G	Oc
Ermine	*Mustela erminea* P	G			Oc
Long-tailed Weasel	*Mustela frenata*	P		G	Oc
Striped Skunk	*Mephitis mephitis*	P		G	Oc
Virginia Opossum	*Didelphis virginiana*	P		G	Oc
Marten	*Martes americana*	P		G	Oc
Small Game:					
Varying Hare	*Lepus americanus*	P		G	R
Woodchuck	*Mamota monax*	Un		Un	Oc
New England Cottontail	*Sylvigaus transiionalis*	P		G	Oc
Eastern Cottontail	*Sylvigaus floridanus*	P		G	R
Other:					
Porcupine	*Erethizon dorsatum*	Un		Un	R
Chipmunk	*Tamias striatus*	Un		Un	R
Red Squirrel	*Tamiasciurus*	Un		Un	R
Nn. Flying Squirrel	*Glaucomys sabrinus*	Un		Un	R
Masked Shrew	*Sorex cinereus*	Un		Un	R
Water Shrew	*Sorex palustris*	Un		Un	R
Smokey Shrew	*Sorex fumeus*	Un		Un	R
Pigmy Shrew	*Sorex hoyi*	Un		Un	R
Long-tailed Shrew	*Sorex dispar*	Un		Un	R
Short-tailed Shrew	*Sorex brevicauda*	Un		Un	R
Hairy-tailed Mole	*Parascalops breweri*	Un		Un	R

MAMMALS contd.	Scientific Name	Status		
Small Footed Bat	*Myotis leibii*	SC	P	R
Little Brown Bat	*Myotis lucifigus*	Un	Un	R
Indiana Bat	*Myotis sodalis*	E	P	Oc
Eastern Pipistrelle	*Pipistrellus subflavusl*	Un	Un	Oc
Keene's Myotis	*Myotis Keeni*	P	P	Oc
Deer Mouse	*Peromyscus maniculatus*	Un	Un	R
White-footed Mouse	*Peromyscus leucopus*	Un	Un	R
Sn. Red-backed Vole	*Clethrionomys gapperi*	Un	Un	R
Meadow Vole	*Micotus pennsylvanicus*	Un	Un	R
Rock Vole	*Micotus chrotorrhinus*	Un	Un	R
Sn. Bog Lemming	*Synaptomys cooperi*	Un	Un	R
Nn. Bog Lemming	*Synaptomys borealis*	Un	Un	R
Meadow Jumping Mouse	*Zapus hudsonius*	Un	Un	R
Woodland Jumping Mouse	*Napaeozapus insignis*	Un	Un	R

Un = Unprotected G = Game R = Resident Tr = Transient
Oc = Occasional P = Protected E = Endangered SC = Special Concern

APPENDIX TWO
Amphibians and Reptiles Inventory

Scientific Name	Common Name	Protected Status (NYS)	Natural Heritage Program Rank
Ambystoma maculatum	Spotted Salamander	Special Concern	S5
Ambystoma laterale	Blue-spotted Salamander	Special Concern	S4
Glyptmys insculpta	Wood Turtle	Special Concern	S3
Bufo americanus	American Toad	Unprotected	S5
Desmognathus ochrophaeus	Mountain Dusky Salamander	Unprotected	S5
Eurycea bislineata	Two-lined Salamander	Unprotected	S5
Gyrinophilus porhyriticus	Spring Salamander	Unprotected	S5
Hyla versicolor	Gray Treefrog	Unprotected	S5
Notophthalmus viridescens	Red-Spotted Newt	Unprotected	S5
Rana clamitans	Green Frog	Game Species	S5
Rana catesbeiana	Bullfrog	Game Species	S5
Rana sylvatica	Wood Frog	Unprotected	S5
Rana septemtrionalis	Mink Frog	Unprotected	S5
Rana palustris	Pickerel Frog	Unprotected	S5
Caelydra serpentina	Snapping Turtle	Unprotected	S5
Chrysemys picta	Painted Turtle	Unprotected	S5
Diaophis punctatus	Ringneck Snake	Unprotected	S5
Nerodia sipedon	Northern Water Snake	Unprotected	S5
Storeria occipitomaculata	Redbelly Snake	Unprotected	S5
Storeia dekayi	Brown Snake	Unprotected	S5
Thamnophis sauritus	Eastern Ribbon Snake	Unprotected	S5
Thamnophis sirtalis	Common Garter Snake	Unprotected	S5

APPENDIX THREE
New York State Breeding Bird Atlas
Wilmington Wild Forest (Data 1980-1985)

COMMON NAME	SCIENTIFIC NAME	BREED CLASS	YEAR	PROTECT NYN	SRANK
Common Loon	*Gavia immer*	FL	84	Protected-Special Concern	S3 S4
American Bittern	*Botaurus lentiginosus*	T2	83	Protected-Special Concern	S4
Great Blue Heron	*Ardea herodias*	FL	80	Protected	S5
Green Heron	*Butorides virescens*	T2	83	Protected	S5
Wood Duck	*Aix sponsa*	T2	83	Game Species	S5
American Black Duck	*Anas rubripes*	FL	83	Game Species	S4
Mallard	*Anas platyrhynchos*	FY	83	Game Species	S5
Hooded Merganser	*Lophodytes cucullatus*	X1	84	Game Species	S4
Common Merganser	*Mergus merganser*	FL	84	Game Species	S5
Turkey Vulture	*Cathartes aura*	X1	84	Protected	S4
Osprey	*Pandion haliaetus*	NY	81	Protected-Special Concern	S4
Sharp-shinned Hawk	*Accipiter striatus*	X1	81	Protected-Special Concern	S4
Cooper's Hawk	*Accipiter cooperii*	X1	84	Protected-Special Concern	S4
Northern Goshawk	*Accipiter gentilis*	FY	81	Protected-Special Concern	S4
Red-shouldered Hawk	*Buteo lineatus*	D2	80	Protected-Special Concern	S4
Broad-winged Hawk	*Buteo platypterus*	FL	83	Protected	S5
Red-tailed Hawk	*Buteo jamaicensis*	P2	80	Protected	S5
American Kestrel	*Falco sparverius*	FY	82	Protected	S5
Ring-necked Pheasant	*Phasianus colchicus*	D2	80	Game Species	SE
Ruffed Grouse	*Bonasa umbellus*	NE	81	Game Species	S5
Wild Turkey	*Meleagris gallopavo*	X1	83	Game Species	S5
American Crow	*Corvus brachyrhynchos*	FL	85	Game Species	S5
Virginia Rail	*Rallus limicola*	S2	83	Game Species	S5

COMMON NAME	SCIENTIFIC NAME	BREED CLASS	YEAR	PROTECT NYN	SRANK
Killdeer	*Charadrius vociferus*	FY	83	Protected	S5
Spotted Sandpiper	*Actitis macularia*	T2	83	Protected	S5
Common Snipe	*Gallinago gallinago*	DD	81	Game Species	S5
American Woodcock	*Scolopax minor*	FL	83	Game Species	S5
Herring Gull	*Larus argentatus*	P2	80	Protected	S5
Rock Dove	*Columba livia*	T2	84	Unprotected	SE
Mourning Dove	*Zenaida macroura*	FL	83	Protected	S5
Black-billed Cuckoo	*Coccyzus erythropthalmus*	X1	83	Protected	S5
Yellow-billed Cuckoo	*Coccyzus americanus*	S2	81	Protected	S5
Great Horned Owl	*Bubo virginianus*	X1	83	Protected	S5
Barred Owl	*Strix varia*	T2	82	Protected	S5
Northern Saw-whet Owl	*Aegolius acadicus*	S2	83	Protected	S3
Common Nighthawk	*Chordeiles minor*	T2	84	Protected-Special Concern	S4
Whip-poor-will	*Caprimulgus vociferus*	S2	84	Protected-Special Concern	S4
Chimney Swift	*Chaetura pelagica*	D2	83	Protected	S5
Ruby-throated Hummingbird	*Archilochus colubris*	T2	84	Protected	S5
Belted Kingfisher	*Ceryle alcyon*	NE	80	Protected	S5
Red-headed Woodpecker	*Melanerpes erythrocephalus*	T2	84	Protected-Special Concern	S4
Yellow-bellied Sapsucker	*Sphyrapicus varius*	FY	84	Protected	S5
Downy Woodpecker	*Picoides pubescens*	FY	83	Protected	S5
Hairy Woodpecker	*Picoides villosus*	FY	85	Protected	S5
Northern Flicker	*Colaptes auratus*	NE	80	Protected	S5
Pileated Woodpecker	*Dryocopus pileatus*	S2	83	Protected	S5
Olive-sided Flycatcher	*Contopus cooperi*	S2	83	Protected	S5
Eastern Wood-Pewee	*Contopus virens*	T2	81	Protected	S5
Yellow-bellied Flycatcher	*Empidonax flaviventris*	X1	82	Protected	S3
Alder Flycatcher	*Empidonax alnorum*	FY	84	Protected	S5
Willow Flycatcher	*Empidonax traillii*	S2	85	Protected	S5

COMMON NAME	SCIENTIFIC NAME	BREED CLASS	YEAR	PROTECT NYN	SRANK
Least Flycatcher	*Empidonax minimus*	T2	83	Protected	S5
Eastern Phoebe	*Sayornis phoebe*	NY	81	Protected	S5
Great Crested Flycatcher	*Myiarchus crinitus*	NY	83	Protected	S5
Eastern Kingbird	*Tyrannus tyrannus*	NY	81	Protected	S5
Tree Swallow	*Tachycineta bicolor*	NY	81	Protected	S5
Bank Swallow	*Riparia riparia*	NE	83	Protected	S5
Cliff Swallow	*Petrochelidon pyrrhonota*	NY	81	Protected	S5
Barn Swallow	*Hirundo rustica*	NY	83	Protected	S5
Blue Jay	*Cyanocitta cristata*	NE	81	Protected	S5
Common Raven	*Corvus corax*	FY	83	Protected	S4
Black-capped Chickadee	*Poecile atricapillus*	NY	83	Protected	S5
Red-breasted Nuthatch	*Sitta canadensis*	FL	83	Protected	S5
White-breasted Nuthatch	*Sitta carolinensis*	FY	85	Protected	S5
Brown Creeper	*Certhia americana*	T2	83	Protected	S5
House Wren	*Troglodytes aedon*	NY	84	Protected	S5
Winter Wren	*Troglodytes troglodytes*	T2	82	Protected	S5
Marsh Wren	*Cistothorus palustris*	X1	83	Protected	S5
Golden-crowned Kinglet	*Regulus satrapa*	FY	82	Protected	S5
Ruby-crowned Kinglet	*Regulus calendula*	X1	84	Protected	S3
Eastern Bluebird	*Sialia sialis*	NE	80	Protected	S5
Veery	*Catharus fuscescens*	FY	84	Protected	S5
Bicknell's Thrush	*Catharus bicknelli*	T2	82	Protected-Special Concern	S2 S3
Swainson's Thrush	*Catharus ustulatus*	FY	83	Protected	S5
Hermit Thrush	*Catharus guttatus*	NY	83	Protected	S5
Wood Thrush	*Hylocichla mustelina*	FY	84	Protected	S5
American Robin	*Turdus migratorius*	NY	85	Protected	S5
Gray Catbird	*Dumetella carolinensis*	FY	84	Protected	S5
Brown Thrasher	*Toxostoma rufum*	T2	83	Protected	S5
Cedar Waxwing	*Bombycilla cedrorum*	NY	81	Protected	S5

COMMON NAME	SCIENTIFIC NAME	BREED CLASS	YEAR	PROTECT NYN	SRANK
European Starling	*Sturnus vulgaris*	NY	80	Unprotected	SE
Blue-headed Vireo	*Vireo solitarius*	DD	83	Protected	S5
Warbling Vireo	*Vireo gilvus*	S2	83	Protected	S5
Red-eyed Vireo	*Vireo olivaceus*	NE	83	Protected	S5
Golden-winged Warbler	*Vermivora chrysoptera*	S2	83	Protected-Special Concern	S4
Nashville Warbler	*Vermivora ruficapilla*	FY	83	Protected	S5
Yellow Warbler	*Dendroica petechia*	FY	84	Protected	S5
Chestnut-sided Warbler	*Dendroica pensylvanica*	FY	84	Protected	S5
Magnolia Warbler	*Dendroica magnolia*	FY	83	Protected	S5
Black-throated Blue Warbler	*Dendroica caerulescens*	FY	84	Protected	S5
Yellow-rumped Warbler	*Dendroica coronata*	FY	84	Protected	S5
Black-throated Green Warbler	*Dendroica virens*	FY	83	Protected	S5
Blackburnian Warbler	*Dendroica fusca*	FY	81	Protected	S5
Pine Warbler	*Dendroica pinus*	T2	84	Protected	S5
Prairie Warbler	*Dendroica discolor*	T2	83	Protected	S5
Blackpoll Warbler	*Dendroica striata*	X1	82	Protected	S3
Black-and-white Warbler	*Mniotilta varia*	FY	84	Protected	S5
American Redstart	*Setophaga ruticilla*	FY	84	Protected	S5
Ovenbird	*Seiurus aurocapillus*	NE	83	Protected	S5
Northern Waterthrush	*Seiurus noveboracensis*	T2	83	Protected	S5
Mourning Warbler	*Oporornis philadelphia*	FY	81	Protected	S5
Common Yellowthroat	*Geothlypis trichas*	FY	85	Protected	S5
Canada Warbler	*Wilsonia canadensis*	FY	81	Protected	S5
Scarlet Tanager	*Piranga olivacea*	T2	84	Protected	S5
Northern Cardinal	*Cardinalis cardinalis*	P2	83	Protected	S5
Rose-breasted Grosbeak	*Pheucticus ludovicianus*	FY	84	Protected	S5
Indigo Bunting	*Passerina cyanea*	D2	83	Protected	S5
Eastern Towhee	*Pipilo erythrophthalmus*	FY	83	Protected	S5
Chipping Sparrow	*Spizella passerina*	FY	84	Protected	S5

COMMON NAME	SCIENTIFIC NAME	BREED CLASS	YEAR	PROTECT NYN	SRANK
Field Sparrow	*Spizella pusilla*	FL	80	Protected	S5
Vesper Sparrow	*Pooecetes gramineus*	P2	83	Protected-Special Concern	S5
Savannah Sparrow	*Passerculus sandwichensis*	FY	81	Protected	S5
Song Sparrow	*Melospiza melodia*	FY	84	Protected	S5
Lincoln's Sparrow	*Melospiza lincolnii*	D2	83	Protected	S4
Swamp Sparrow	*Melospiza georgiana*	FY	83	Protected	S5
White-throated Sparrow	*Zonotrichia albicollis*	NE	83	Protected	S5
Dark-eyed Junco	*Junco hyemalis*	NY	83	Protected	S5
Bobolink	*Dolichonyx oryzivorus*	FY	84	Protected	S5
Red-winged Blackbird	*Agelaius phoeniceus*	NY	80	Protected	S5
Eastern Meadowlark	*Sturnella magna*	FY	83	Protected	S5
Common Grackle	*Quiscalus quiscula*	FY	84	Protected	S5
Brown-headed Cowbird	*Molothrus ater*	FL	83	Protected	S5
Baltimore Oriole	*Icterus galbula*	FY	81	Protected	S5
Purple Finch	*Carpodacus purpureus*	FY	84	Protected	S5
House Finch	*Carpodacus mexicanus*	P2	84	Protected	SE
Red Crossbill	*Loxia curvirostra*	X1	81	Protected	S3
Pine Siskin	*Carduelis pinus*	X1	84	Protected	S5
American Goldfinch	*Carduelis tristis*	N2	80	Protected	S5
Evening Grosbeak	*Coccothraustes vespertinus*	FY	83	Protected	S5
House Sparrow	*Passer domesticus*	FY	84	Unprotected	SE

Breeding Classification Codes

Possible	
X	Species seen in possible nesting habitat or singing male(s) present during mating season.
Probable	
S	Singing male present on more than one date in the same place.
P	Pair observed in suitable habitat in breeding season.
T	Bird (or pair) apparently holding territory.
D	Courtship and display, agitated behavior. Includes copulation.
N	Visiting probable nest site.
B	Nest building or excavation of a nest hole.
Confirmed	
DD	Distraction display or injury feigning.
UN	Used nest found.
FE	Egg in oviduct. (For use by bird banders only.)
FL	Recently fledged young.
ON	Adult entering or leaving nest site indicating occupied nest.
FS	Adult carrying fecal sac.
FY	Adult(s) with food for young.
NE	Nest building or excavation of a nest hole.
NY	Nest with young.

APPENDIX FOUR
Deer, Bear, Furbearer Harvest Data

New York State Deer Take by Town

YEAR	Jay		Keene		Wilmington		Black Brook		Total	
	Bucks	Total	Bucks	Total	Bucks	Total	Bucks	Total	Bucks	Total
2001	48	52	98	106	31	32	55	61	232	251
2000	47	54	99	108	41	44	88	97	275	303
1999	51	57	66	71	24	25	64	77	205	230
1998	37	40	40	47	19	19	30	36	126	142
Annual Average Take	46	51	76	83	29	30	59	68	210	232
Percentage of Town in Wilmington Unit	2%	2%	.5%	.5%	18%	18%	5%	5%	6%	6%
Estimated Average Annual Take in Wilmington Unit	1	1	0	0	5	5	3	3	13	14

New York State Bear Take by Town

Year	Jay	Keene	Wilmington	Black Brook	Total
2001	1	12	4	9	26
2000	0	14	3	20	36
1999	8	6	0	15	29
1998	1	1	0	2	4
Annual Average Take	3	8	2	11	24
Percentage of Town in Wilmington Unit	2%	.5%	18%	5%	3%
Estimated Annual Take in Wilmington Unit	0	0	0	1	1

NEW YORK STATE FURBEARER HARVEST BY TOWN

Town	2001-2002	2000-2001	1999-2000	1998-1999	Annual Average
		BEAVER			
Black Brook	11	10	36	49	27
Jay	16	3	31	41	23
Keene	4	6	7	53	18
Wilmington	0	9	13	7	7
		OTTER			
Black Brook	0	2	3	2	2
Jay	2	0	1	2	1
Keene	0	2	0	1	1
Wilmington	0	0	0	1	0
		FISHER			
Black Brook	6	10	19	7	11
Jay	4	0	4	6	4
Keene	24	6	17	12	15
Wilmington	4	2	12	7	6
		BOBCAT			
Black Brook	0	0	0	0	0
Jay	1	0	0	0	0
Keene	1	0	0	4	1
Wilmington	0	1	0	0	0
		COYOTE			
Black Brook	0	2	0	0	1
Jay	4	0	0	0	1
Keene	1	0	8	5	4
Wilmington	0	1	0	0	0

MARTEN

Town	2001 -2002	2000 -2001	1999 -2000	1998 -1999	Annual Average
Black Brook	0	0	0	0	0
Jay	0	0	0	0	0
Keene	10	0	13	0	6
Wilmington	1	1	0	3	1

APPENDIX FIVE
Rare Communities And Species

Common Names	Scientific Name	Global Rank	State Rank
Communities			
Alpine Krummholz		G3, G4	S2
Beech-Maple Mesic Forest		G4	S4
Mountain Spruce Fir Forest		G2, G3	S2
Spruce-Northern Hardwood Forest		G3, G4	S3, S4
Successional Northern Hardwoods		G5	S5
Pine- Northern Hardwood Forest		G4	S4
Vascular Plants			
Appalachian Firmoss	*Hyperzia appalachiana*	G4, G5	S2
Pink Wintergreen	*Pyrola asarifolia ssp.*	G5, T5	S1, S2
Mountain Hairgrass	*Deschampsia atropurpurea*	G5	SX

Communities and rare species are the mapping units or "elements" of the Heritage inventory. Each community and species element is assigned an "element rank" consisting of a combined global and state rank. The global rank reflects the rarity of the element throughout the world and the state rank reflects the rarity within New York State (The Nature Conservancy 1982). Global ranks for communities are not currently standardized by The Nature Conservancy, so the ranks listed in the community descriptions are estimated global ranks.

GLOBAL RANKS

G1 = Critically imperiled throughout its range due to extreme rarity (5 or fewer occurrences, or very few remaining individuals, acres, or miles of stream) or extremely vulnerable to extinction due to biological factors.

G2 = Imperiled throughout its range due to rarity (6 - 20 occurrences, or few remaining individuals, acres, or miles of stream) or highly vulnerable to extinction due to biological factors.

G3 = Either very rare throughout its range (21 - 100 occurrences), with a restricted range (but possibly locally abundant), or vulnerable to extinction due to biological factors.

G4 = Apparently secure throughout its range (but possibly rare in parts of its range).

G5 = Demonstrably secure throughout its range (however it may be rare in certain areas).

GU = Status unknown.

STATE RANKS

S1 = Typically 5 or fewer occurrences, very few remaining individuals, acres, or miles of stream, or especially vulnerable to extirpation in New York State for other reasons.

S2 = Typically 6 to 20 occurrences, few remaining individuals, acres, or miles of stream, or very vulnerable to extirpation in New York Sate for other reasons.

S3 = Typically 21 to 100 occurrences, limited acreage, or miles of stream in New York State.

S4 = Apparently secure in New York State.

S5 = Demonstrably secure in New York State.

SH = No extant sites known in New York State but it may still exist.

SU = Status unknown.

"Q" added to the rank indicates a question exists whether or not the taxon is a distinct taxonomic entity.

"?" added to the rank indicates uncertainty about the rank.

APPENDIX SIX
Fisheries
Ponded Water Inventory and Survey Data

Pond Management Classifications

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

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

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

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

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

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

Clements Pond (CH-268)

Clements Pond is about 2.2 acres with a maximum depth of about 19 feet. The pond supports brook trout (sustained by stocking) and brown bullheads. To date, access to Clements Pond has required a bushwack. As part of this plan, a parking area for about two cars and a trail will be created.

Clements Pond will be managed as an Adirondack brook trout pond to preserve its native fish species.

Management Class: Adirondack Brook Trout

Cooper Kill Pond (CH-267)

Cooper Kill is a 3-acre pond with a maximum depth of 2 feet. Despite the shallow depth, the pond supports an abundant brook trout population sustained by natural reproduction. Surveys have not collected other fish species.

Cooper Kill Pond will be managed as an Adirondack brook trout pond, and will be reclaimed if additional fishes are introduced which degrade the brook trout abundance. When a reclamation is determined to be appropriate, the UMP will be amended to include the reclamation in the Schedule of Implementation, and the pond narrative will be revised to reflect the new survey data.

Management Class: Adirondack Brook Trout

Schedule of Implementation

Annually Conduct biological and chemical surveys of selected unit waters to assess management needs and to determine progress towards the objectives stated in this plan.

Stock fish in unit waters consistent with Bureau of Fisheries policies and the Programmatic Environmental Impact Statement on Fish Species Management Activities of the Department of Environmental Conservation.

Year 1 Develop parking and a hiking trail, off Black Brook Road, to the West Branch Ausable River.

Year 2 Develop parking lot and a hiking trail to Clements Pond.
Develop parking lot at Signor Lane for fishing access of West Branch Ausable River.

APPENDIX SIX

Ponded Water Survey Data

Wilmington Wild Forest - Ponded Water Physical Data

Name	P#	Wshed[1]	County	USGS Quad (7.5')	Area[2] (ac.)	Max. Depth (ft.)	Mean Depth (ft.)	Last Chemistry Survey Year	Last Chemistry Survey Source[3]	ANC (ueq/l)	pH	Conductivity
Morgan Pond (Cooperkill)	229	CH	Essex	Wilmington	3.0	2.0	2.0	1984	ALSC	132	7.4	41
Clements Pond	268	CH	Essex	Lake Placid	147.5	19.0	8.2	1985	ALSC	191	6.2	32
Unnamed Pond (Lake Eaton)	267	CH	Essex	Ausable Falls	635.3	14.1	4.2	1985	ALSC	512	6.2	82

[1]CH - Champlain Watershed

[2]New York State Biological Services Unit

[3]ALSC - Adirondack Lakes Survey Corporation

APPENDIX SEVEN

Trail Classification System

TRAIL CLASSIFICATION SYSTEM - Wilmington Wild Forest						
TITLE	**EXAMPLE**	**MARKING**	**TREAD**	**BARRIERS**	**USE LEVEL**	**ACCEPTABLE MAINTENANCE**
I. Unmarked Route	No Example	None	• Intermittently apparent, • Relatively undisturbed organic soil horizon	• Natural obstructions present, • Logs • Water courses	Occasional	None
II. Path	No Example	Intermittent	• Intermittently apparent, • Compaction of duff, • Mineral soils occasionally exposed	Same as unmarked route	Low, varies by location	• Intermittent marking with consideration given to appropriate layout based on drainage, • Occasional barrier removal only to define appropriate route.
III. Primitive	Esther Bears Den, Clements Pond Quarry Trail	• Trail markers, • Sign at junction with secondary or other upper level trail	• Apparent, • Soil compaction evident	Limited natural obstructions (logs and river fords)	Low	• Drainage: (native materials) where necessary to minimize erosion, • Blowdown: removed 2-3 years, • Brushing: as necessary to define trail (every 5-10 years), • Bridges: only to protect resource (max - 2 log width), • Ladders: only to protect exceptionally steep sections, • Tread: 14"-18", clear: 3' wide, 3' high.
IV. Secondary	Wilmington Flume(east side of SH 86)	• Markers, • Signs with basic information	• Likely worn and possibly quite eroded. • Rocks exposed, • Little or no duff remaining	• Up to one year's accumulated blowdown, • Small streams.	Moderate	• Drainage: where needed to halt erosion and limit potential erosion (using native materials), • Tread hardening with native materials where drainage proves to be insufficient to control erosion. • Blowdown: annual removal. • Brushing: to maintain trail corridor. • Bridges: Higher use may warrant greater use of bridges (2-3 logs wide) for resource protection. • Ladders: on exceptionally steep rock faces. • Tread: 18"-24". Clear 4' wide, 3' High.

TRAIL CLASSIFICATION SYSTEM - Wilmington Wild Forest						
TITLE	**EXAMPLE**	**MARKING**	**TREAD**	**BARRIERS**	**USE LEVEL**	**ACCEPTABLE MAINTENANCE**
V. Trunk Trail or Primary	No Example	• Markers, • Signed with more information and warnings.	• Wider tread, worn and very evident. • Rock exposed, • Possibly very eroded.	• Obstructions only rarely, • Small streams	High	Same as above; Plus: • Blowdown: Regular blowdown removal on designated ski trails, • Non-native materials as last resort, • Extensive tread hardening when needed, • Bridge: streams (2-4 logs wide) difficult to cross during high water, • Priority given to stream crossings below concentrations of designated camping. • Actual turn piking limited to 2% of trail length. • Tread: 18"-26", clear 6' wide, 8' high,
VI. Front Country	No Example	• Heavily marked, • Detailed interpretive signing	Groomed	None	Very High	This is to be implemented within 500' of wilderness boundary. • Extensive grooming, • Some paving, • Bark chips, • Handicapped accessible.
VII. Horse Trail	No Example	Marked as Trunk or Secondary	• Wide tread, • Must be rather smooth.	Same as trunk trail.	Moderate to High	Same as trunk trail, except • Use techniques appropriate for horses. • Bridges: 6' minimum width with kick rails, non-native dimensional materials preferred. • Tread: 2'-4' wide, clear 8' wide, 10' high.
VIII. Ski Trail	No Example	• Marked high. • Special markers, • Sign at all junctions with hiking trails.	• Duff remains. • Discourage summer use	Practically none due to hazards.	High	• Drainage: Provide drainage using native materials to protect resource. • Focus on removal of obstructions, • Maintenance should be low profile, • Tread: determined by clearing 6' (Should be slightly wider at turns and steep sections.

TRAIL CLASSIFICATION SYSTEM - Wilmington Wild Forest						
TITLE	**EXAMPLE**	**MARKING**	**TREAD**	**BARRIERS**	**USE LEVEL**	**ACCEPTABLE MAINTENANCE**
Snowmobile Trails- Class: A	No Example	• Marked high	• Groomed(width-8 feet, 12 feet on corners)	None	Moderate to High	• Blowdown removal(annual) • Trail brushing • Erosion control structures(Box culverts,etc.) • Trail Hardening(corduroy) • Bridges • Trail Rehabilitation
B	Cooper Kill Trail	• Marked high	• Groomed(width- 8 feet)	None	Low to Medium	• Blowdown removal(annual) • Trail brushing • Erosion control structures(Box culverts,etc.) • Trail Hardening(corduroy) • Bridges • Trail Rehabilitation
Mountain Bike Trails (according to International Mountain Biking Standards)	Wilmington Flume Trails, Beaver Brook Tract and Cooper Kill Trail	Marked frequently and No Biking signs posted on adjoining trails not specified for bike use	New trails to maximum of 4 feet. Tread width less than 18 inches on a rolling grade	None	Moderate	• Remove vegetation at root level • Texture the tread • Keep trails below 2000 feet • Use existing roads or trails that do not exceed 10 % • Blowdown removal(annual) • Trail brushing

APPENDIX EIGHT
Mountain Bike Trail Standards and General Guidelines According to International Mountain Biking Association

- Look for and identify control points (i.e wetlands, rock outcrops, scenic vistas).
- Avoid sensitive areas; wetlands and wherever water collects.
- Keep trails below 2,000 ft. on Whiteface Mountain.
- Use existing roadways where possible that do not exceed grades of 10%.
- Clear new trails to a maximum width of four feet to establish a single track route.
- Keep tread width less than 18" along a rolling grade.
- Texture the tread - this is the act of placing natural features, such small rocks, logs in the trail to help control speed and retard erosion.
- Remove vegetation at the root level - not at ground level.
- Keep routes close to the contour and avoid fall lines where water is likely to flow downhill.
- On side slopes, following the contour, cut full benches to construct the tread. Outsloping in this manner helps to remove water from the trail. Vegetate backslopes.
- Bench cuts on slide slopes should be cut to a depth of the mineral soil.
- Build flow into the trail with open and flowing designs with broad sweeping turns.
- Streams should be crossed at ninety-degree angles preferably across rock or gravel.
- Bridges may be used where steep banks prevent normal stream crossings. The latter may require an APA Wetlands Permit.
- Do not construct skid berms or extensive banked turns that may accelerate erosion.
- Avoid acute, sharp angle turns.
- Plan trails for beginners to intermediate levels of riders.
- Maintain an overall grade of 10% or less.
- Allow short changes in grade to avoid obstacles.
- Design grade dips to break up long, straight linear sections, and to help divert runoff from the tread.
- Monitor and inspect all trails semi-annually. Address water problems immediately.

APPENDIX NINE
Proposed Parking Lot Details
Subject to Adirondack Park Agency Review

East Forestdale Rd.

Coordinates: N 44 28 19.0
W73 49 9.8
Cleared Dimensions: 40' x 20', 899 sq. ft.
Capacity: 3 vehicles
Grade and Fill: 40 cubic yds. Coarse gravel with fines on top
Description: Roadside pull-off for hunters and fisherman.
South of Highway
Trees to be Removed: 11

Species	DBH	# to Be Removed
Black Cherry	4"	1
Black Cherry	12"	1
Red Maple	4"	2
Red Maple	6"	1
Red Maple	8"	3
Red Maple	14"	1
Sugar Maple	4"	2

Middle Kilns- Forestdale Rd.

Coordinates: N44 27 37.1
W73 50 42.1
Cleared Dimensions: 40' x 20', 800 sq. ft.
Capacity: 3 vehicles
Grade and Fill: 40 cubic yds. Coarse gravel with fines on top
Description: Roadside pull-off for hunters and fisherman.
South of Highway.
Trees to be Removed: 0 (no trees over 3" dia.)

West Forestdale Rd.

Coordinates: N44 27 12.7
W73 51 12.9
Cleared Dimensions 40' x 20', 800 sq. ft.
Capacity: 3 vehicles
Grade and Fill: 40 cubic yds. Coarse gravel with fines on top
Description: Roadside pull-off for hunters and fishermen
Trees to be Removed 3

Species	DBH	# to Be Removed
Aspen	4"	1
Aspen	6"	2

APPENDIX NINE (Continued)
Proposed Parking Lot Details

Catamount - Cooper Kill North*
Coordinates:

Cleared Dimensions 75'x90', 6750 sq. ft.
Capacity: 6 vehicles with snowmobile trailers, approximately 14 vehicles during remainder of year
Grade and Fill:
Description: Parking for hikers, hunters, fishermen and snowmobilers. Serves the Catamount Trail in the Taylor Pond Wild Forest and the proposed access snowmobile trail in the WWF
Trees to be Removed
* Location of parking lot has yet to be determined, site dependent upon APA wetlands review.

Cooper Kill West
Coordinates: N44 24 19.8
W73 53 6.0
Cleared Dimensions: 75'x40', 3,000 sq. ft.
Capacity: 7-10 vehicles
Grade and Fill: 77 cubic yds. Coarse gravel with fines on top
Description East side of Gillespie Rd. In present "triangle".
Trees to be Removed: 23

Species	DBH	# to be Removed
Red Maple	3"	1
Red Maple	4"	1
Red Maple	5"	1
Red Maple	6"	2
White Birch	5"	1
White Birch	6"	1
White Birch	7"	2
White Birch	8"	2
White Birch	9"	2
Balsam	3"	1
Balsam	4"	4
Balsam	5"	4
Balsam	9"	1

Quarry-Cobble Hill
Coordinates: N44 24 23.4
W73 52 45.6
Cleared Dimensions: 40' X 20', 800 sq. ft.
Capacity: 3 vehicles
Grade and Fill: 40 cubic yds. Coarse gravel with fines on top
Description: East side of Gillespie Road. Entrance to quarry.
Trees to be Removed 13

Species	DBH	# to Be Removed
Aspen	12"	1
Red Maple	4"	2

APPENDIX NINE (Continued)
Proposed Parking Lot Details

Red Maple	6"	1
White Birch	4"	3
White Birch	6"	4
White Birch	8"	2

Upper Flume - Atmospheric Science Research Ctr. Entrance

Coordinates: N44 23 5.6
W73 51 48.8
Cleared Dimensions 40' x 20', 800 sq. ft.
Capacity: 3 vehicles
Grade and Fill: 40 cubic yds. Coarse gravel with fines on top.
Trees to be Removed: 0 (No trees over 3' dia.)
Description: Roadside pull-off. East side.

Cooper Kill East - Bonnieview Rd.

Coordinates: N44 25 52 3.0
W73 44 01 2.0
Cleared Dimensions: 75' x 40', 3,000 sq. ft.
Capacity: 7-10 vehicles
Grade and Fill: 77 cubic yds. Coarse gravel with fines on top.
Description: West side of Bonnieview Rd. Extra capacity to accommodate snowmobilers.
Trees to be removed: 45

Species	DBH	# to Be Removed
Black Cherry	4"	1
Black Cherry	6"	1
Black Cherry	8"	1
Black Cherry	16"	1
White Pine	4"	3
White Pine	6"	6
White Pine	8"	7
White Pine	10"	9
White Pine	12"	4
White Pine	14"	2
White Pine	16"	5
White Pine	18"	2
White Pine	20"	2
White Pine	22"	1

APPENDIX NINE (Continued)
Proposed Parking Lot Details

Beaver Brook Tract - Hardy Rd.

Coordinates: N44 21 51.1
W48 04 5.0
Cleared Dimensions: 40' x20', 800 sq. ft.
Capacity: 3-5 vehicles
Trees to be Removed: 0 (No trees over 3" dia).
Description: East side of highway by monument. Room to expand if needed.

Clements Pond -Styles Brook Road

Coordinates: N44 12 01.8
W 73 46 01.1
Cleared Dimensions: 50' x 40', 2,000 sq. ft.
Capacity: 5 vehicles
Description: North of highway. For hikers and fishermen.
Trees to be Removed 10

Species	DBH	# to be Removed
Aspen	4"	1
Basswood	14"	1
Hemlock	4"	1
Red Oak	4"	1
Red Oak	14"	1
Sugar Maple	4"	1
White Ash	4"	1
White Ash	6"	1
White Ash	8"	2

Black Brook Woods/Vanderwhacker Flats - Black Brook Rd.

Coordinates: N44 26 38.7
W73 44 44.4
Cleared Dimensions: 40' x 20', 800 sq. ft.
Capacity: 3-5 vehicles
Grade and Fill: 40 cubic yds. Coarse gravel with fines on top.
Description: West side of highway
Trees to be Removed: 7

Species	DBH	# to Be Removed
Sugar Maple	6"	1
Red Oak	4"	2
White Pine	4"	1
White Pine	12"	2
White Pine	18"	1

APPENDIX NINE (Continued)
Proposed Parking Lot Details

Wilmington Flume - West Side SH 86

Coordinates	N44 21 58.0
	W73 50 29.2
Cleared Dimensions:	75' x 40', 3,000 sq. ft.
Capacity:	7-10 vehicles
Grade and Fill:	77 cubic yds. Crusher run over old asphalt.
Description:	Coordinate with NYS DOT
Trees to ve Removed:	0 (No existing vegetation)

Wilmington Flume - East Side of SH 86

Coordinates:	N44 22 06.1
	W 73 50 23.0
Cleared Dimensions:	40' x 20', 800 sq. ft.
Capacity:	3-5 vehicles
Grade and Fill:	40 cubic yds. Crusher run on existing surface.
Description:	Improvement to existing area.
Trees to be Removed:	0 (No vegetation to be removed)

Lenny Preston Rd:

Coordinates:	N 44 24 18.7
	W 73 47 28.5
Cleared Dimensions:	40' by 20', 800 sq ft.
Capacity:	3 vehicles
Grade and Fill:	40 cubic yards
Description:	Fishermen access
Trees to be removed:	None

Signor Lane Parcel- Town of Wilmington

Coordinates:	N 44 25 28.30
	W73 44 45.43
Cleared Dimensions:	50' x 40', 899 sq. ft.
Capacity:	5 vehicles
Grade and Fill:	40 cubic yds. Coarse gravel with fines on top
Description:	End of town road- fishermen access

Trees to be removed: 4

Species	DBH	# to be Removed
Aspen	12	1
White Pine	5	1
Black Cherry	9	1
Black Cherry	9	1

APPENDIX NINE (Continued)
Proposed Parking Lot Details

*Tree cutting permits for each proposed parking area are on file with the Regional Forester. Each permit lists location, number of trees to be removed by species and diameter. Parking lot locations may change pending consultation with the APA to verify the presence or absence of wetlands adjacent to project sites.

APPENDIX TEN

Monitoring Form A

1)Old Site Number:_____ 1a) New Site Number_____

2) Inventoried By:_____ 3) Date:____/____/____

INVENTORY PARAMETERS

4) Substrate of site area: (B=bedrock C=cobble S=sand O=soil) _____
5) Number of Other Recreational Sites Visible: _____
6) Fire Ring Present: (y or n) _____
Construction:(stone or metal) _____
Condition: (1=good, 2=poor, 3=replace) _____
7) Privy Present:(y or n) _____
Condition: (1= good, 2=poor, 3=replace) _____
8) Picnic Table Present: (y or n) _____
Condition: (1=good, 2=poor, 3=replace) _____
9) Tree Canopy Cover:(1=0-25%,2=26-50%,3=51-75%,4=76-100%) _____

IMPACT PARAMETERS (Begin with Site Boundary Determination)

10) Condition Class: (3,4 or 5) _____
11) Vegetative Ground Cover Onsite:(Use categories below) _____
(1=0-5%, 2=6-25%, 4=51-75% 5=76-95%, 6=96-100%)
12) Vegetative Ground Cover Offsite:(Use categories above) _____
13) Soil exposure: (use categories above) _____
14) Tree Damage: None/Slight____, Moderate____, Severe_____
15) Root Exposure: None/Slight____, Moderate_____, Severe_____
16) Number of Tree Stumps: _____
17) Number of Trails: _____
18) Number of Fire Sites: _____
19) Litter/Trash: (N=None, S=Some, M=Much) _____
20) Human Waste: (N=none, S=Some, M=Much) _____
21)Comments/Recommendations:_____
_____

22) Take Center point and Site Photographs:

Site Center point References

1)
2)
3)
4)

Satellite Site Dimensions

Island Site Dimensions

Site area from Program: _____
+Satellite Area _____
-Island Area _____=
Total Site Area _____(sq ft)

Transect Data
Azimuth Distance (ft)

1)
2)
3)
4)
5)
6)
7)
8)
9)
10)
11)
12)
13)
14)
15)
16)
17)
18)
19)
20)
21)
22)
23)
24)
25)

MONITORING FORM B

1)Old Site Number:_____ 1a) New Site Number:_____

2)Fire Ring Present:_____ Condition:_____.

3) Privy Present:_____ Condition:_____

4) Picnic Table Present:_____ Condition:_____

5) Condition Class (1 or 2)_____ Site Size:_____(ft^2)

DESIGNATED CAMPSITE MONITORING MANUAL

DESCRIPTION OF PROCEDURES

For the purpose of this manual, designated campsites are defined as those areas either designated by the Department with a yellow DEC designated campsite marker, or shown on an area brochure. In areas with multiple sites there may not always be undisturbed areas separating sites, and an arbitrary decision may be necessary to define separate sites. For each site, monitoring begins with an assessment of Condition Class:

CONDITION CLASS DEFINITIONS

Class 1: Recreation site barely distinguishable; slight loss of vegetation cover and/ or minimal disturbance of organic litter.
Class 2: Recreation site obvious; vegetation cover lost and/ or organic litter pulverized in primary use area.
Class 3: Vegetation cover lost and/ or organic litter pulverized on much of the site, some bare soil exposed in primary use areas.
Class 4: Nearly complete or total loss of vegetation cover and organic litter, bare soil widespread.
Class 5: Soil erosion obvious, as indicated by exposed tree roots and rocks and/or gullying.

For sites rated Condition Class 1 or 2, complete Form B; for sites rated Class 3, 4 or 5, complete Form A. Form B is an abbreviated version of Form A and greatly reduces the amount of field time. The rationale for this approach is that detailed information on lightly impacted sites is not as critical to management.

During subsequent surveys an attempt should be made to relocate and reassess all sites from the proceeding survey. Former designated sites that have been closed, and are still being used, should be noted as illegal sites. Always note information regarding the history of site use under the comment parameter.

Materials:
Compass, peephole or mirror type (not corrected for declination)
GPS data recorder (GPS point will be taken at each sites center point)
Tape measure, 100-foot (marked in tenths)
Flagged wire pins (25 min), one large steel center point stake.
Digital camera
Clipboard, pencil, field forms, field procedures
Steel nails (5 inch)

Form A Procedures

Inventory Parameters

1. Site Number: All sites will be assigned an old site number as well as a new site number. Old site numbers will use the existing site numbering system, while new site numbers will be assigned following completion of the mapping of all sites.
2. Inventoried By: List the names of field personnel involved in data collection.
3. Date: Month, day and year the site was evaluated (e.g., June 12, 1999 = 06/12/99)
4. Substrate of site area: Record the predominant substrate for the area of human disturbance for each site using the coded categories below.

B=bedrock - shelf bedrock
C=cobble - includes gravel size stone and up
S=sand - includes sandy soils that do not form a surface crust in trampled areas
O=soil - includes clays to loamy sands

5. Number of other sites visible: Record the number of other campsites, which if occupied, would be visible from this site.
6. Fire ring : if present or not (y or n)
    a. Construction: stone/masonry or metal
    b. Condition: good=intact, functional for cooking
        Poor= missing stones, broken , not functional for cooking but will contain open fire.
7. Privy: if present or not (y or n)
    a. Condition: good= functional, has door, wood not deteriorated(would you use it?)
        Poor=nonfunctional, door missing, wood rotten,
8. Picnic table: if present or not (y or n)
    a. Condition: good= usable, no broken boards, table is solid
        Poor=not usable, broken/rotten boards, not sturdy
9. Tree canopy cover: Estimate the percentage of tree canopy cover directly over the campsite.
    1=0-25%, 2=26-50%, 3=51-75%, 4=76-100%

Impact Parameters

The first step is to establish the sites boundaries and measure its size. The following procedures describe use of the variable radial transect method for determining the sizes of recreational sites. This is accomplished by measuring the lengths of linear transects from a permanently defined center point to the recreation site boundary.

Step 1. Identify Recreation Site Boundaries and Flag Transect Endpoints. Walk the recreation site boundary and place flagged wire pins at locations which, when connected with straight lines, will define a polygon whose area approximates the recreation site area. Use as few pins as necessary, typical sites can be adequately flagged with 10-15 pins. Look both directions along site boundaries as you place the flags and try to balance areas of the site that fall outside the lines with offsite(undisturbed) areas that fall inside the lines. Pins do not have to be placed on the site boundaries, as demonstrated in the diagram following these procedures. Project site boundaries straight across areas where trails enter the site. Identify site boundaries by pronounced changes in vegetation cover, vegetation height/disturbance, vegetation composition, surface organic litter, and topography. Many sites with dense forest over stories will have very little vegetation and it will be necessary to identify boundaries by examining changes in organic litter, i.e. leaves that are untrampled and intact versus leaves that are pulverized or absent. In defining the site boundaries, be careful to include only those areas that appear to have been disturbed from human trampling. Natural factors such as dense shade and flooding can create areas lacking vegetative cover. Do not include these areas if they appear “natural” to you. When in doubt, it may also be helpful to speculate on which areas typical visitors might use based on factors such as slope or rockiness.

Step 2. Select and Reference Site Center point. Select a site center point that is preferably a) visible from all site boundary pins, b) easily referenced by distinctive permanent features such as larger trees or boulders, and c) approximately 5 feet from a steel fire ring if present. Embed a 5 inch nail in the soil at the center point location so that the head is 3-4 inches below the surface. During future sight assessments a magnetic pin locator can be used to locate the center point. Next, insert a large steel stake at the center point and reference it to at least three features. Try to select reference features in three opposing directions, as this will enable future workers to triangulate the center point location. For each feature, take a compass azimuth reading and measure the distance

(nearest 1/10 foot) from the center point to the center of trees or the highest point of boulders. Also measure the approximate diameter of reference trees at 4.5 feet above ground (dbh). Be extremely careful in taking these azimuths and measurements, as they are critical to relocating the center point in the future. Record this information on the back of the form.

Take a digital photograph that clearly shows the center point location in relation to nearby trees or other reference features, such as the fire ring, trees or boulders. Record a photo description, such as" center point location site 23 ", in the photo log.

Options: Some sites may lack the necessary permanent reference features enabling the center point to be accurately relocated. If only one or two permanent reference features are available, use these and take additional photographs from several angles. If permanent features are unavailable, simply proceed with the remaining steps without permanently referencing the center point. This option will introduce more error in comparisons with future measurements, particularly if the site boundaries are not pronounced. Note your actions regarding use of these options in the comment section.

Step 3. Record Transect Azimuths and Lengths. Standing directly over the center point, identify and record the compass bearing (azimuth) of each site boundary pin working in a clockwise direction, starting with the first pin clockwise of north. Be careful not to miss any pins hidden behind vegetation or trees. Be extremely careful in identifying the correct compass bearings to these pins as error in these bearings will bias current and future measurements of site size. Next, anchor the end of your tape to the center point stake, measure and record the length of each transect (nearest 1/10 foot), starting with the same boundary pin and in the same clockwise direction as before. Be absolutely certain that the appropriate pin distances are recorded adjacent to their respective compass bearing.

Step 4. Measure island and satellite areas. Identify any undisturbed islands of vegetation inside the site boundaries (often due to the clumping of trees and shrubs) and disturbed satellite use areas outside the site boundaries (often due to tent sites or cooking sites). Use site boundary definitions for determining the boundaries of these areas. Use the geographic figure method to determine the areas of these islands and satellites (refer to the diagrams following these procedures). This method involves superimposing one or more imaginary geometric figures (rectangles, circles or right triangles) on island or satellite boundaries and measuring appropriate dimensions to calculate their areas. Record the types of figures used and their dimensions on the back of the form; the size of these areas should be computed in the office using a calculator.

Site Remeasurement: During site remeasurement use the data from the last monitoring period to reestablish the center point and all site boundary pins. If steel nails were embedded in the ground, a magnetic pin locator can assist in this process. Place flagged wire pins at each transect boundary point. Boundary locations based on the following procedures:

- Keep the same transect length if that length still seems appropriate, i.e., there is no compelling reason to alter the initial boundary determination.
- Record a new transect length if the prior length is inappropriate, i.e., there is compelling evidence that the present boundary does not coincide with the pin and the pin should be relocated either closer to or further away from the center point along the prescribed compass bearing. Use different colored flags to distinguish these current boundary points from the former boundaries.

- Repeat steps 1 and 3 from above to establish additional transects where necessary to accommodate any changes in the shape of recreation site boundaries (diagram below). Also repeat step 4.

! Leave all pins in place until all procedures are completed. Pins identifying the former site boundaries are necessary for tree damage and root exposure assessments.

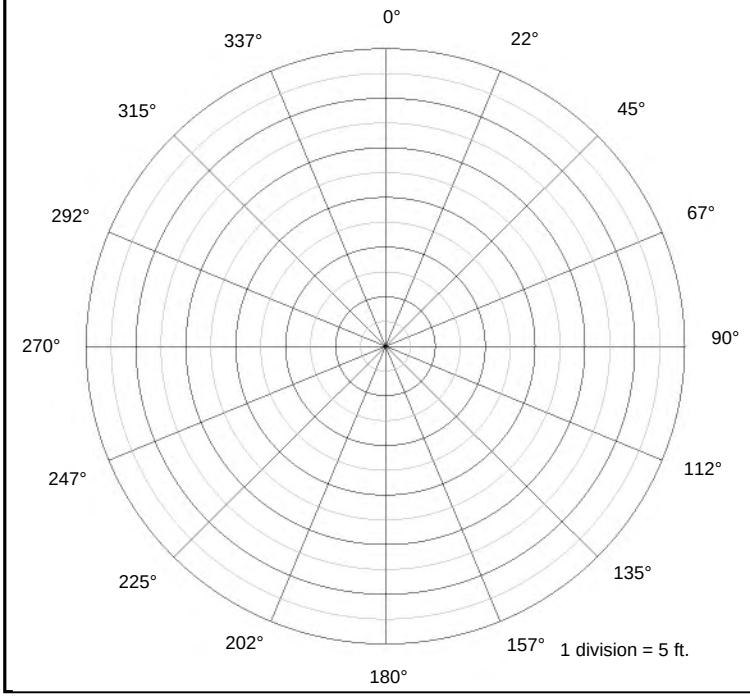
These additional procedures are designed to eliminate much of the measurement error associated with different individuals making subjective judgements on those sites or portions of sites where boundaries are not pronounced. These procedures may only be used for sites whose center points can be relocated.

Site Number / Site Name	_____/_____

Compass Bearing:

	0	22	45	67	90	112	135	157	180	202	225	247	270	292	315	337
X																
O																

Campsite Map:



10. Condition class: Record the condition class you assessed for the site using the categories described earlier.

11. Vegetative ground cover on site: An estimate of the percentage of live non-woody vegetative ground cover (including herbs, grasses, and mosses and excluding tree seedlings, saplings, and shrubs) within the flagged campsite boundary using the coded categories listed next. Include any disturbed satellite use areas and exclude any undisturbed Island areas of vegetation. For this and the following two parameters, it is often helpful to narrow your decision to two categories and concentrate on the boundary that separates them. For example, if the vegetation cover is either category 2 (6-25%) or category 3 (26-50%), you can simplify your decision by focusing on whether vegetative cover is greater than 25%.
1=0-5%, 2=6-25%, 3=26-50%, 4=51-75%, 5=76-95%,6=96-100%

12. Vegetative ground cover offsite: An estimate of the percentage of vegetative ground cover in an adjacent but largely undisturbed "control" area. Use the codes and categories listed earlier. The control site should be similar to the campsite in slope, tree canopy cover (amount of sunlight penetrating to the forest floor), and other environmental conditions. The intent is to locate an area that would closely resemble the campsite area had the site never been used. In instances where you cannot decide between two categories, select the category with less vegetative cover. The rationale for this is simply that, all other factors being equal, the first campers would have selected a site with the least amount of vegetation cover.

13. Soil exposure: An estimate of the percentage of soil exposure, defined as ground with very little or no organic litter (partially decomposed leaf, needle, or twig litter) or vegetation cover, within the campsite boundaries and satellite areas. Dark organic soil, which typically covers lighter colored mineral soil, should be assessed as bare soil. Assessments of soil exposure may be difficult when organic litter becomes highly decomposed and forms a patchwork with areas of bare soil. If patches of organic material are relatively thin and few in number, the entire area should be assessed as bare soil. Otherwise, the patches of organic litter should be mentally combined and excluded from assessments. Code as for vegetative cover.

14. Tree damage: Tally the number of live trees (> 1 in, diameter at 4.5 ft.) Within the campsite boundaries, including trees in undisturbed islands and excluding trees in satellite areas, into one of the rating classes described below. Assessments are restricted to trees within the flagged campsite boundaries in order to ensure consistency with future measurements. Multiple tree stems from the same species that are joined at or above ground level should be counted as one tree when assessing damage to any of its stems. Assess a cut stem on a multiple-stemmed tree as tree damage, not as a stump. Do not count tree stumps as tree damage. Take into account tree size. For example, damage for a small tree would be considerably less in size than damage for a large tree. Omit scars that are clearly not human-caused (e.g., lightning strikes).
During site remeasurement, begin by assessing tree damage on all trees within the site boundaries identified in the last measurement period. Tally the number of trees in areas where the boundary has moved closer to the center point, i.e., former site areas that are not currently judged to be part of the site separately. Place a box around this number. Next, assess tree damage in areas where boundaries have moved further from the center point, i.e. expanded site areas that are newly impacted since the last measurement period. Circle these tallies. These additional procedures are necessary in order to accurately analyze changes

None/Slight- No or slight damage such as broken or cut smaller branches, one nail, or a few superficial trunk scars.
Moderate- Numerous small trunk scars and/or nails or one moderate-sized scar.
Severe- Trunk scars numerous with many that are large and have penetrated to the inner wood; any complete girdling of trees (cut through tree bark all the way around tree).

15. Root exposure: Tally the number of live trees (> 1 in, diameter at 4.5 ft.) Within the campsite boundaries, including trees in undisturbed islands and excluding trees in satellite areas, into one of the rating classes described below. Assessments are restricted to trees within the flagged campsite boundaries in order to ensure consistency with future measurements. Where obvious, omit exposed roots that are clearly not human-caused (e.g., stream/river flooding).
During site remeasurement, begin by assessing root exposure on all trees within the site boundaries identified in the last measurement period. Tally the number of trees in areas where the boundary has moved closer to the center point, i.e., former site areas that are not currently judged to be part of the site separately. Place a box around this number. Next, assess root exposure in areas where boundaries have moved further from the center point, i.e. expanded site areas that are newly impacted since the last measurement period. Circle these tallies. These additional procedures are necessary in order to accurately analyze changes in root exposure over time.

None/Slight- No or slight root exposure such as is typical in adjacent offsite areas.
Moderate- Top half of many major roots exposed more than one foot from base of tree.
Severe- Three-quarters or more of major roots exposed more than one foot from base of tree; soil erosion obvious.

16. Number of tree stumps: A count of the number of tree stumps (> 1 in. Diameter) within the campsite boundaries. Include trees within undisturbed islands and exclude trees in disturbed satellite areas. Do not include cut stems from a multiple-stemmed tree.
During site remeasurement, begin by assessing stumps on all trees within the site boundaries identified in the last measurement period. Tally the number of trees in areas where the boundary has moved closer to the center point, i.e., former site areas that are not currently judged to be part of the site separately. Place a box around this number. Next, assess stumps in areas where boundaries have moved further from the center point, i.e. expanded site areas that are newly impacted since the last measurement period. Circle these tallies. These additional procedures are necessary in order to accurately analyze changes in stumps over time.

17. Number of trails: A count of all trails leading away from the outer campsite boundaries. Do not count extremely faint trails that have untrampled tall herbs present in their tread or trails leading out to any satellite sites.

18. Number of fire sites: A count of each fire site within campsite boundaries, including satellite areas. Include old inactive fire sites as exhibited by blackened rocks, charcoal, or ashes. Do not include areas where ashes or charcoal have been dumped. However, if it is not clear whether or not a fire was built on the site, always count questionable sites that are within site boundaries and exclude those that are outside site boundaries.

19. Litter/trash: Evaluate the amount of litter/trash on the site: n=None or less than a handful, S=some-a handful up to enough to fill a 2-1/2-gallon bucket, M=Much- more than a 2-1/2-gallon bucket.

20. Human waste: Follow all trails connected to the site to conduct a quick search of likely “toilet” areas, typically areas just out of sight of the campsite. Count the number of individual human waste sites, defined as separate locations exhibiting toilet paper and/or human feces. The intent is to identify the extent to which improperly disposed human feces is a problem. Use the following code categories: N=None, S=Some-1-3 sites, M=Much-4 or more sites evident.

21. Comments/Recommendations: An informal list of comments concerning the site: note any assessments you felt were particularly difficult or subjective, problems with monitoring procedures or their application to this particular campsite, or any other comment.

22. Campsite photograph: Select a good vantage point for viewing the entire campsite, preferably one of the site boundary pins, and take a digital picture of the campsite. Note the azimuth and distance from the center point to the photo point and record on the form. The intent is to obtain a photograph that includes as much of the site as possible to provide a photographic record of site condition. The photo will also allow future workers to make a positive identification of the site. Label disks with date, and site number.

23. Total campsite area: Calculate the campsite area based on the recorded transect measurements. Add the area of any satellite sites and subtract the area of any undisturbed islands to obtain the Total Campsite Area. Record campsite area to nearest square foot (ft^2).

Form B Procedures

Refer to the procedures described earlier, all procedures are the same with the exception of campsite size. Measure campsite size using the geometric figure method. Typically, class 1 and 2 campsites are quite small in size and this method should be both efficient and accurate. Be sure to record on form B the types of figures used (rectangle, square, triangles...etc.) And all necessary dimensions. Record campsite area to nearest square foot (ft^2).

APPENDIX ELEVEN
Positive Declaration

POSITIVE DECLARATION
NOTICE OF INTENT TO PREPARE A DRAFT EIS
DETERMINATION OF SIGNIFICANCE

POSITIVE DECLARATION

Essex County, Clinton County - The New York State Department of Environmental Conservation, as lead agency, has determined that management actions proposed in the Wilmington Wild Forest may have significant adverse impacts on the environment and a draft Environmental Impact Statement must be prepared. Proposed actions may include, construction of recreational trails which may require crossing wetlands, construction of additional campsites and parking lots. Possible adverse impacts from implementation of the Unit Management Plan may include temporary minor erosion; temporary increased siltation and stream bottom disturbance, increased recreational usage in certain areas and minor noise impacts during the construction of new facilities within the unit. The project is located in Essex County, Towns of Wilmington, Jay and Keene and Clinton County, Town of Black Brook.

Contact:

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NYS Department of Environmental Conservation
P.O. Box 220 232 Hudson Street
Warrensburg, NY 12885
Phone: 518-623-1246

NEW YORK STATE
DEPARTMENT OF

ENVIRONMENTAL
CONSERVATION

FACT SHEET

Comprehensive Snowmobile Plan for the Adirondack Park

February, 2001

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Comprehensive Park-Wide Snowmobiling Planning Underway

* * *

A partnership has been formed between the New York State Department of Environmental Conservation (DEC) the State Office of Parks, Recreation and Historic Preservation (OPRHP) and the Adirondack Park Agency (APA) to develop a comprehensive snowmobile plan for the Adirondack Park which recognizes the importance of snowmobiling to communities within the Adirondack Park and the need to create a manageable system to protect the Park and the State Constitution.

What is the Goal for this Planned Effort?

To develop and maintain an integrated snowmobile trail system on public and, increasingly, on private land in the Adirondack Park that will provide snowmobilers with an experience that is consistent with the spirit and letter of Article XIV of the State Constitution while also striving to enhance the economic vitality of the Park's citizens by providing trail linkages between local communities within the Park.

What is Happening Right Now?

1. The network of existing snowmobile trails in the Adirondack Park is being identified.
2. Existing laws, regulations, authorities, policies and related guidelines governing the use and management of snowmobiles in the Adirondack Park are being identified.
3. Public Information Sessions and other appropriate public involvement activities are being conducted to identify issues/ideas/concerns related to snowmobiles in the Adirondack Park.

What the Plan Hopes to Achieve: Planning Goals

- Supplement and amend the (ORPHP) Statewide Snowmobiles Trails Plan as it relates to the Adirondack Park.
- Provide intelligent and resource protective trail system planning in an overall way rather than dealing with each trail segment individually.
- Develop a community connection system that would: connect major points of interest; connect the trail systems from outside the Adirondacks; focus corridor trail system on non-state lands; encourage long term commitment of corridor trail systems on private lands; utilize to the maximum extent possible routes parallel and near to travel/transportation corridors for new trail development; consider underutilized trails for abandonment; and recognize the importance of minimizing the dependency on lake and road crossings and otherwise avoiding unsafe trail conditions.
- Protect natural and cultural resources and the character of the Adirondacks.
- Protect the principles of Article XIV of the State Constitution.
- Develop a secondary trails system that would be linked to the corridor system and connect to necessary support services (gas, food, lodging, maintenance, trailheads, etc.).
- Promote tourism and economic opportunities for the local communities.
- Provide an appropriate and enjoyable snowmobile experience.
- Encourage partnerships with the private sector, not-for-profit organizations, state and local governments that will provide, maintain and operate snowmobile trails.
- Establish a clear set of standards for snowmobile trails and snowmobile related activities consistent with the State Land Master Plan and applicable DEC policies and regulations.

A Draft Comprehensive Snowmobile Plan will include the following Information:

1. Executive Summary
2. Review of Action, Planning Process and Involved Public and Agencies
3. Outline of Planning and Environmental Review process and relationship to other plans
4. Overview of Environmental Setting (Area Description/Inventory of Trails)
5. Vision and Goals for Plan
6. Analysis of Issues and Alternatives
7. Compliance and Enforcement
8. Proposed Management
9. Recommendations (Trail System/ Standards for Construction, Maintenance and Grooming)
10. Environmental Review
11. Proposed Schedule for Implementation and Budgeting

The Plan will be developed in cooperation with local government officials, recreationists, environmental interests, the snowmobiling community, private landowners and the public.

COMPREHENSIVE SNOWMOBILE PLANNING PUBLIC INFORMATION INVITATION

Monday, February 26 *- Town of Webb Park Avenue Offices (Gymnasium) in Old Forge, Herkimer County, 4-7 p.m., (315) 369-3121*

Thursday, March 8 *- Colton Pierpont High School, Colton, St. Lawrence County, 4-7 p.m., (315) 262-2100*

Wednesday, March 14 *- Town of Queensbury Town Hall, Glens Falls, Warren County, 4-7 p.m., (518) 761-8224*

Thursday, March 15 *- Sanford Library/Town of Colonie Library, Albany County, 3-6 p.m., (518) 485-9274*

Monday, March 19 *- Rochester Museum & Science Center (Auditorium), Rochester, 4-7 p.m., (716) 755-7997; and*

Tuesday, March 20 *- Raddison Hotel (Ball Room), Utica, Oneida County, 4-7 p.m.; (315) 797-8010.*

In addition to these sessions, information about this effort will be presented at the Association of Towns Annual Meeting in New York City, during a presentation scheduled to take place on Tuesday, February 20 at 2 p.m. at the Hilton Hotel. There will also be a presentation at "Local Government Day," scheduled for March 23 at the Hotel Saranac in Saranac Lake, Essex County.

APPENDIX THIRTEEN
Response to Public Comment

DEC Response to Public Comments Received on the UMP for the **Wilmington Wild Forest**

Formal public comments were solicited from the Department on two separate draft UMP's. Comment periods were between September- November 2003 and April- May 2005. The Department held three public meetings, all in Wilmington at the Whiteface Ski Center, to present the draft plans and accept public comments. The Department received 114 written or e-mailed comments. In addition, 32 oral presentations on various issues were received at the public meetings.

Climbing

1. DEC should not close the quarry off Gillespie Road to climbing.

   There is no language in the plan that prohibits climbing in any areas.

Snowmobiling

1. A trail snowmobile trail system linking up the hamlet of Wilmington to the Taylor Pond unit is vital to the north country economy.

   The Department has outlined alternatives and is proposing a connector trail from Wilmington to the Taylor Pond area.

2. Turn the Cooper Kill snowmobile trail into a cross/ country ski trail.

   The preferred alternative in the plan is proposing to close the eastern 4 miles of the Cooper Kill Trail to snowmobiles. Nordic skiing and hiking will continue to be allowed on this trail system.

3. Snowmobile trail mileage lost in adjacent units due to Wilderness designation should be used for new mileage in this unit.

   The Department feels Alternative 1D that allows the portion of the Cooper Kill Trail, from the fork with the proposed new trail to the Cooper Kill lean-to, to remain open is the best alternative. Using mileage lost in adjoining Wilderness Areas will not be necessary as this alternative adequately balances the amount of new trail constructed with the amount of trail to be closed.

4. Any snowmobile trail proposal should be kept away from reservoir.

   An alternative snowmobile trail is proposed approximately ½ mile away from the reservoir.

Public Use and Access

1. DEC should purchase property adjacent to Hamlin Mountain to provide public access to the mountain.

   If money becomes available and any proposed property for sale receives a high rating for acquisition, consideration will be given for purchase.

2. There are too many parking lots being proposed for the unit without use data.

   Unfortunately, there is no public use data from registries, etc. Minimal sized parking lots are being proposed for trailheads and at several locations along the Forestdale Road where recreationist are pulling off the road. Designated parking lots where vehicles can pull entirely off the road will provide for a safer experience.

3. Access should be provided to the Cooper Kill lean-to during winter months for snowmobiles.

   The preferred alternative proposes to leave snowmobiling opportunities to the lean-to from the western end of the Cooper Kill Trail.

Hiking

1. Propose additional non designated (unmarked) trails in the unit.

   Several trails proposed for designation were looked at in the plan but were discounted for official designation because trails already existed or are being proposed to the same destination.

2. Two unmarked (non designated)trails in the reservoir vicinity should be closed due to erosion problems and non use due to availability of other trails systems.

   These two trails will be closed to recreational use!

Mountain Biking

1. The amount of bike trail mileage being proposed for the Hardy Road tract is excessive!

   The Department is scaling back the original proposal of construction of new trail at the Hardy Road property. Existing woods trails will be designated for mountain bike use and approximately three miles of new trail to provide for loop trails. Mountain bike use and associated impacts to trails will be monitored for the five year period of the plan. In the next revision of the plan, construction of additional mountain bike trails will be considered based on need and impacts of trail use to date.

2. There is a need to expand the mountain bike trails to form loops on the Hardy Road.

   Additional small loops will be formed.

Camping

1. DEC should place more campsites in the unit.

   Several existing campsites were closed due to Master Plan requirements. Additional campsites were proposed for Clements Pond and the Flume area.

Horse Back Riding

1. Letters were written in support of proposing horse riding trails.

   The Master Plan states that new horse trails proposed in UMP's "will be limited to those that can be developed by conversion of appropriate abandoned roads, snowmobile trails, and or state truck trails." The type of old road systems necessary to promote a horse trail system are not available in the Wilmington unit.

Other

1. Change “Cooper Kill” to Cooper Kiln

   The current board on USGS names uses “Kill”. There is reference in the plan that it is also known locally as “Kiln”.

2. A plaque should be placed near the crash site of the RCAF plane that occurred in 1942.

   Current interpretation of the Master Plan does not allow plaques in Wild Forest areas.

3. There is a parcel of Forest Preserve land off Signor Lane in the town of Wilmington. Parking and access should be provided.

   A parking lot and a short loop trail are proposed for this parcel.

APPENDIX FOURTEEN
Unit Maps
Invasive Species Information

Map 1 - Proposed Snowmobile Trail Alternatives

Map 2 - Beaver Brook Tract Mtn. Bike Trails

Map 3 - The Flume Mtn Bike and Nordic Ski Trail Map

Map 4 - Hardy Road Mtn Bike & X-country Trail Network Map

Map 5 - General Soils Map

Map 6 - Wetlands Map - West Kilns Area

Map 7 - Wetlands Map - Black Brook

Map 8 - Wetlands Map - Bonnieview Road

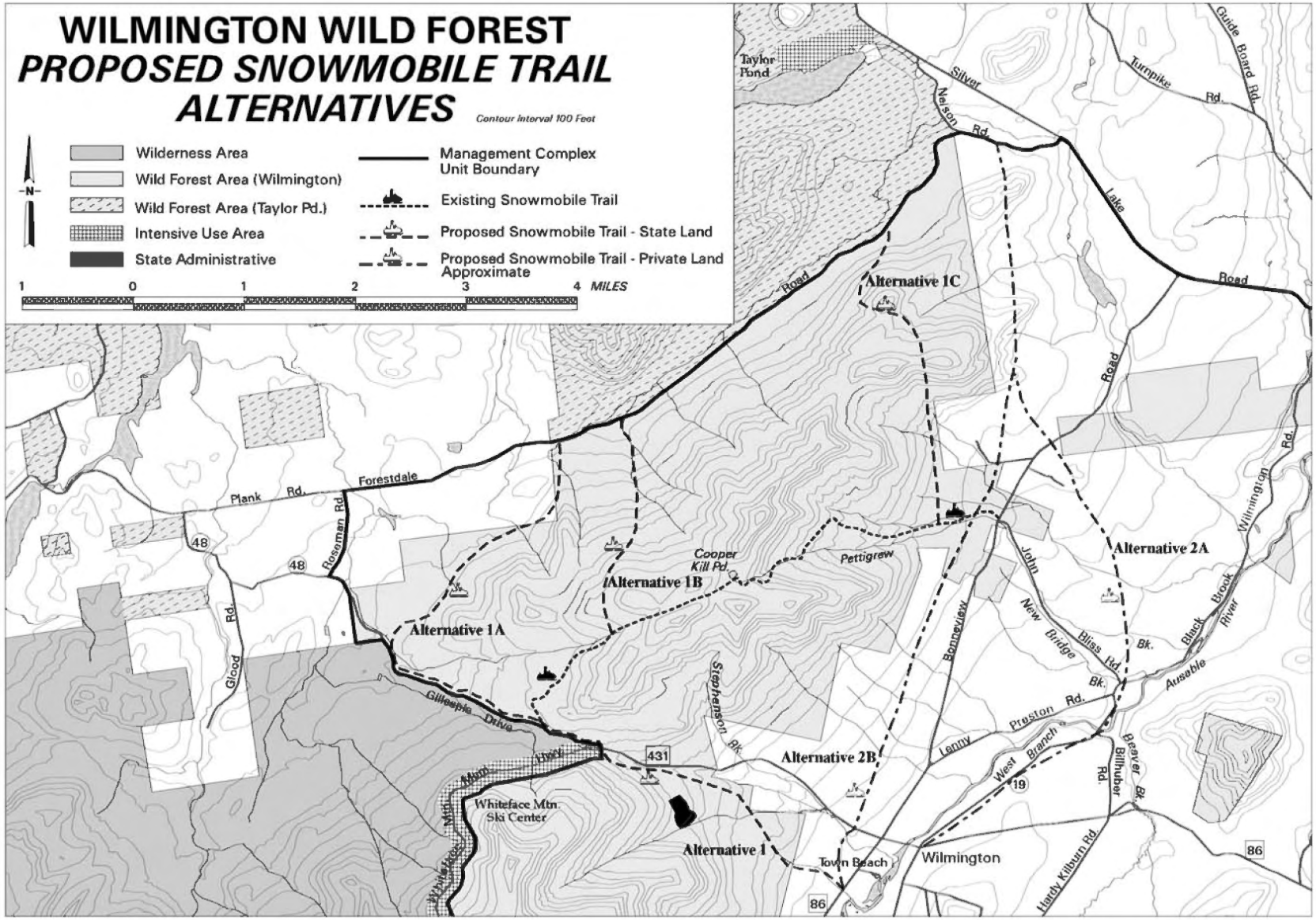
Map 9 - Wetlands Map - East Kilns Area

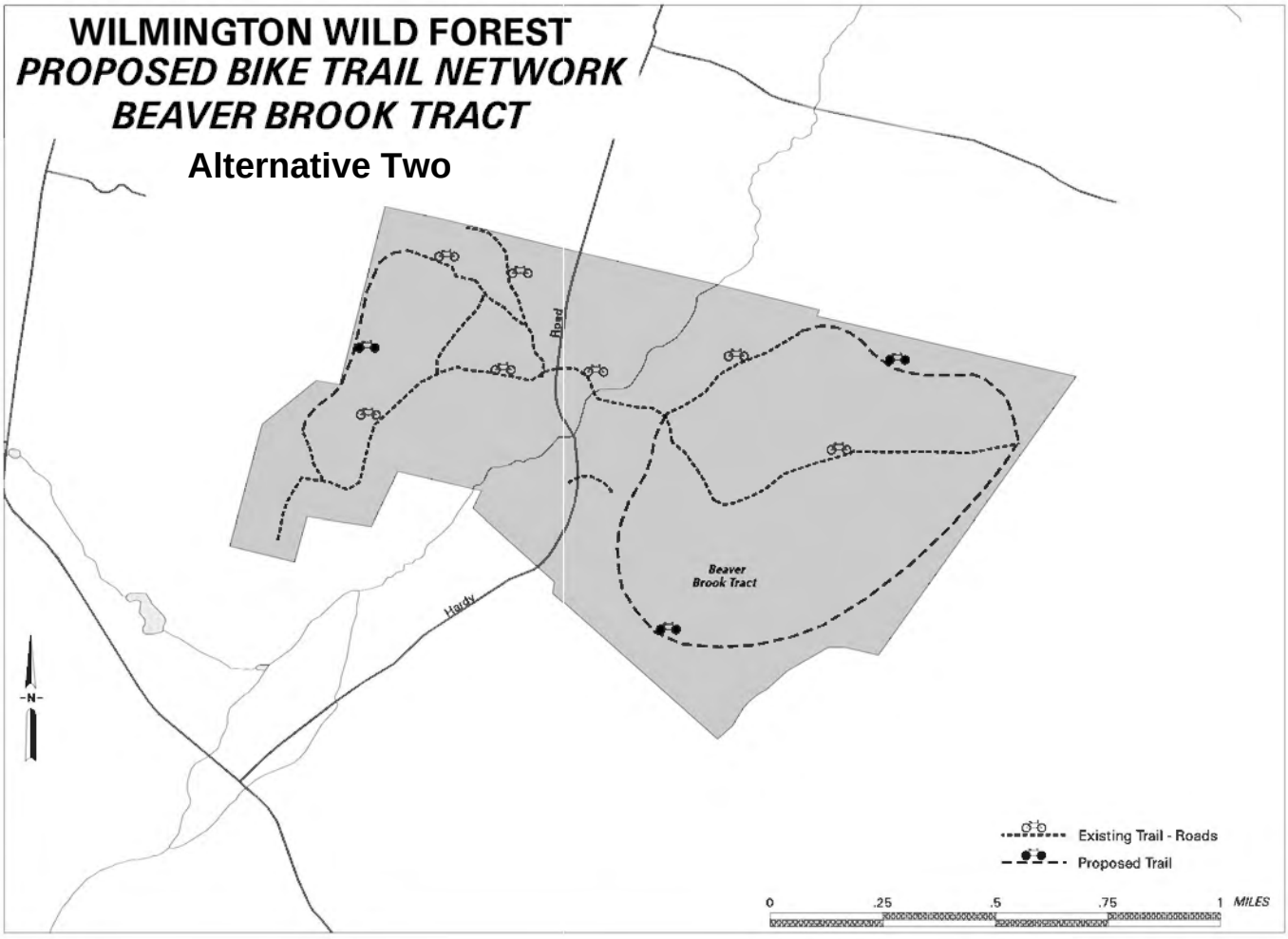
Map 10 - Wetlands Map - Hardy Road

Map 11 - Aquatic Invasive Plant Distribution Map

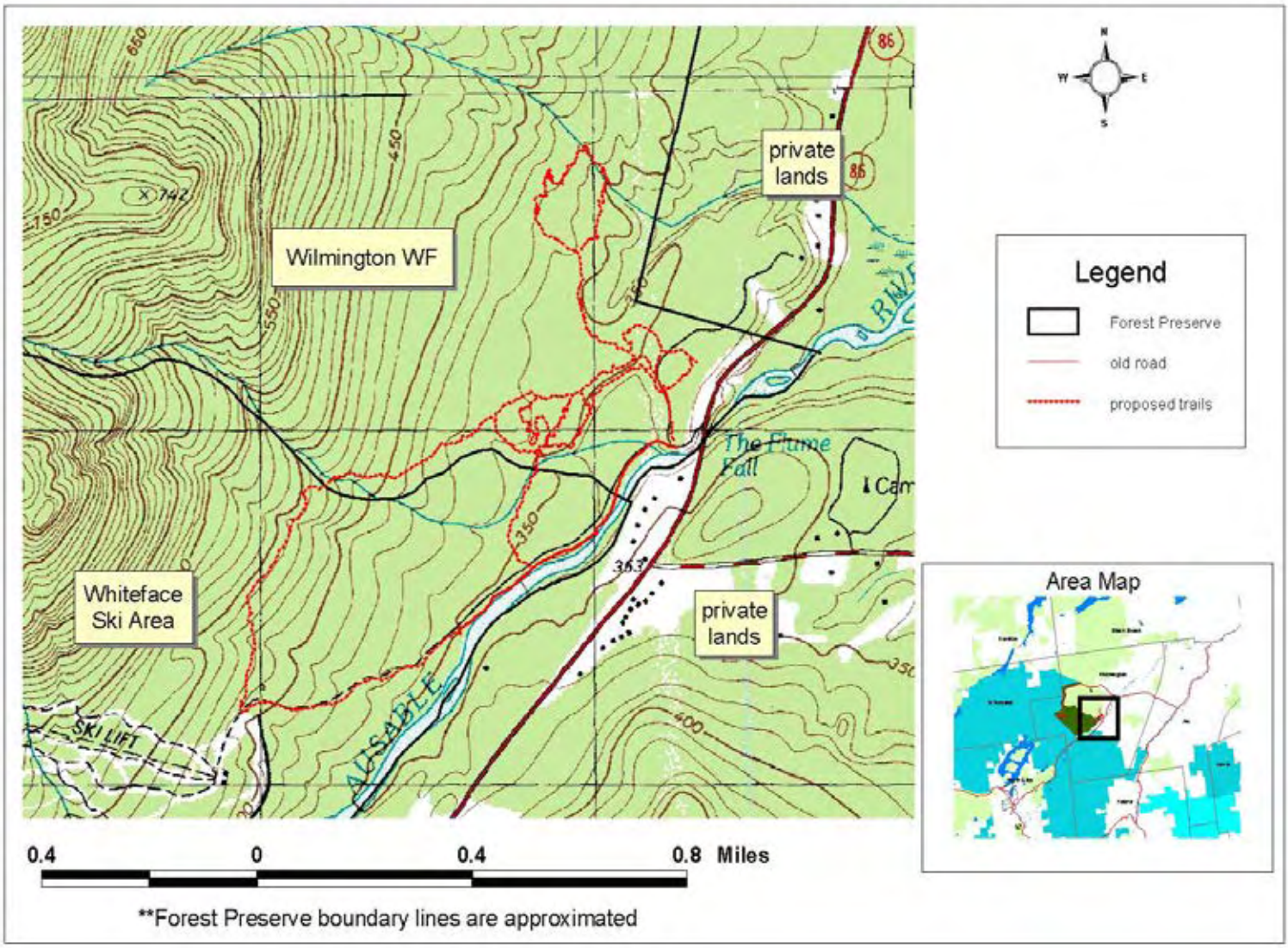
Map 12 - Invasive Species Distribution Map

Map 13 - Facilities Map

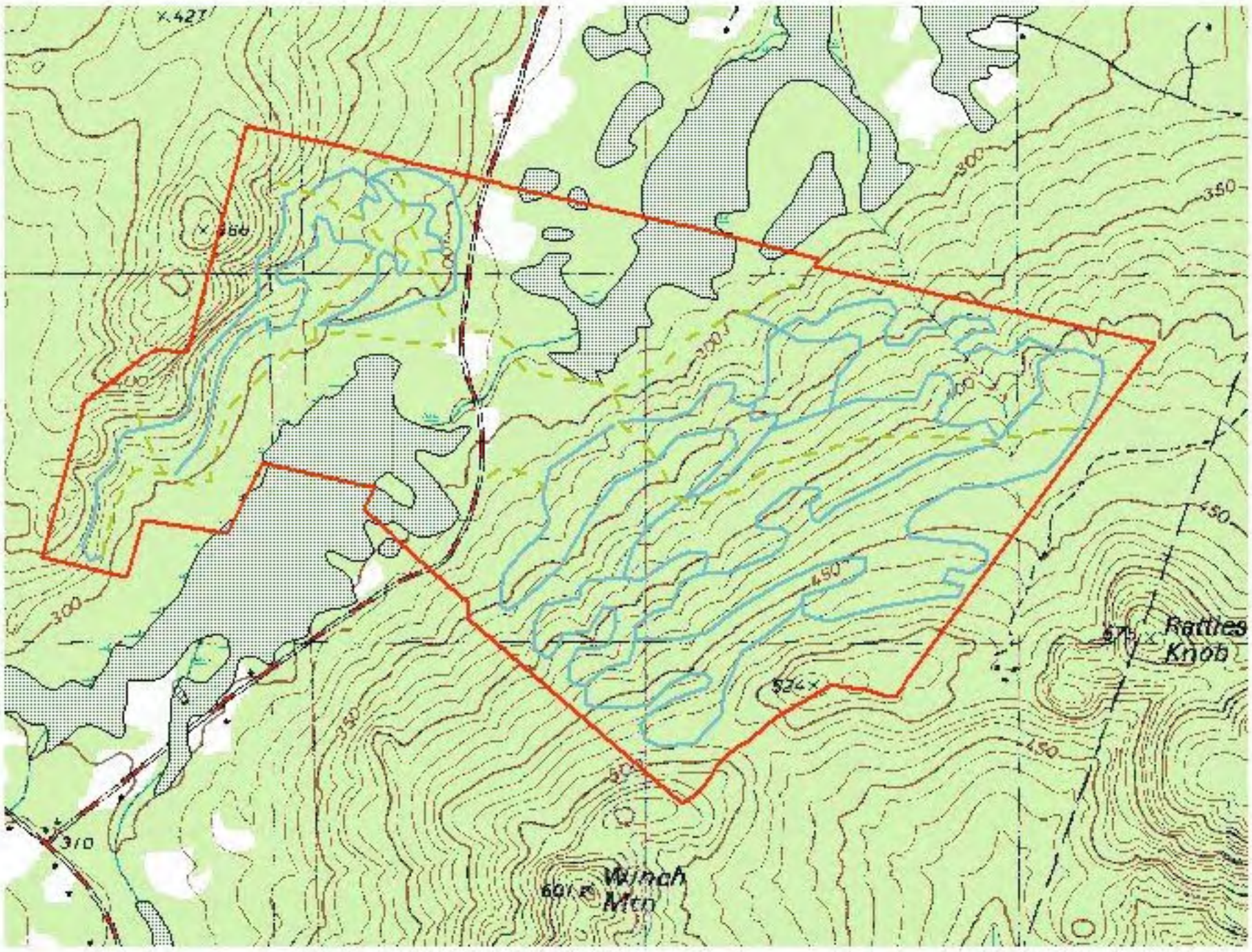

WILMINGTON WILD FOREST
PROPOSED SNOWMOBILE TRAIL
ALTERNATIVES
Contour Interval 100 Feet
Wilderness Area
Wild Forest Area (Wilmington)
Wild Forest Area (Taylor Pd.)
Intensive Use Area
State Administrative
Management Complex Unit Boundary
Existing Snowmobile Trail
Proposed Snowmobile Trail - State Land
Proposed Snowmobile Trail - Private Land Approximate
1 0 1 2 3 4 MILES
N
Taylor Pond
Silver
Nelson Rd.
Guide Board Rd.
Turnpike Rd.
Lake Road
Alternative 1C
Road
Plank Rd.
Forestdale
48
Rossman Rd.
Glood Rd.
Alternative 1A
Alternative 1B
Cooper Kill Pd.
Pettigrew
Stephenson Pk.
Gillespie Drive
Myers
Mtn.
Whiteface Mtn. Ski Center
431
Alternative 2B
Alternative 1
Town Beach
Wilmington
86
19
Lenny
Preston Rd.
West Branch
Bonnieview
John
New Bridge
Bliss Rd.
Bk.
Alternative 2A
Black Brook
Ausable River
Wilmington Rd.
Beaver Bk.
Billhuber Rd.
Hardy Kilburn Rd.


WILMINGTON WILD FOREST
PROPOSED BIKE TRAIL NETWORK
BEAVER BROOK TRACT
Alternative Two
Road
Beaver
Brook Tract
Hardy
N
Existing Trail - Roads
Proposed Trail
0
.25
.5
.75
1
MILES

Mountain Bike and Nordic Ski Trails at The Flume in Wilmington



Conceptual Design for the Hardy Road Mountain Bike and Cross Country Trail Network
Alternative One



0.5 0 0.5 1 Miles

Map Legend

- Existing roads.shp
- Proposed trails.shp

Wilmingtonwf.shp

- 10
- Major Road

APA Designated Rivers

- AUSABLE RIVER
- E BR AUSABLE R
- N BR SARANAC RIV
- SARANAC RIVER
- W BR AUSABLE R

APA Regulated Wetlands

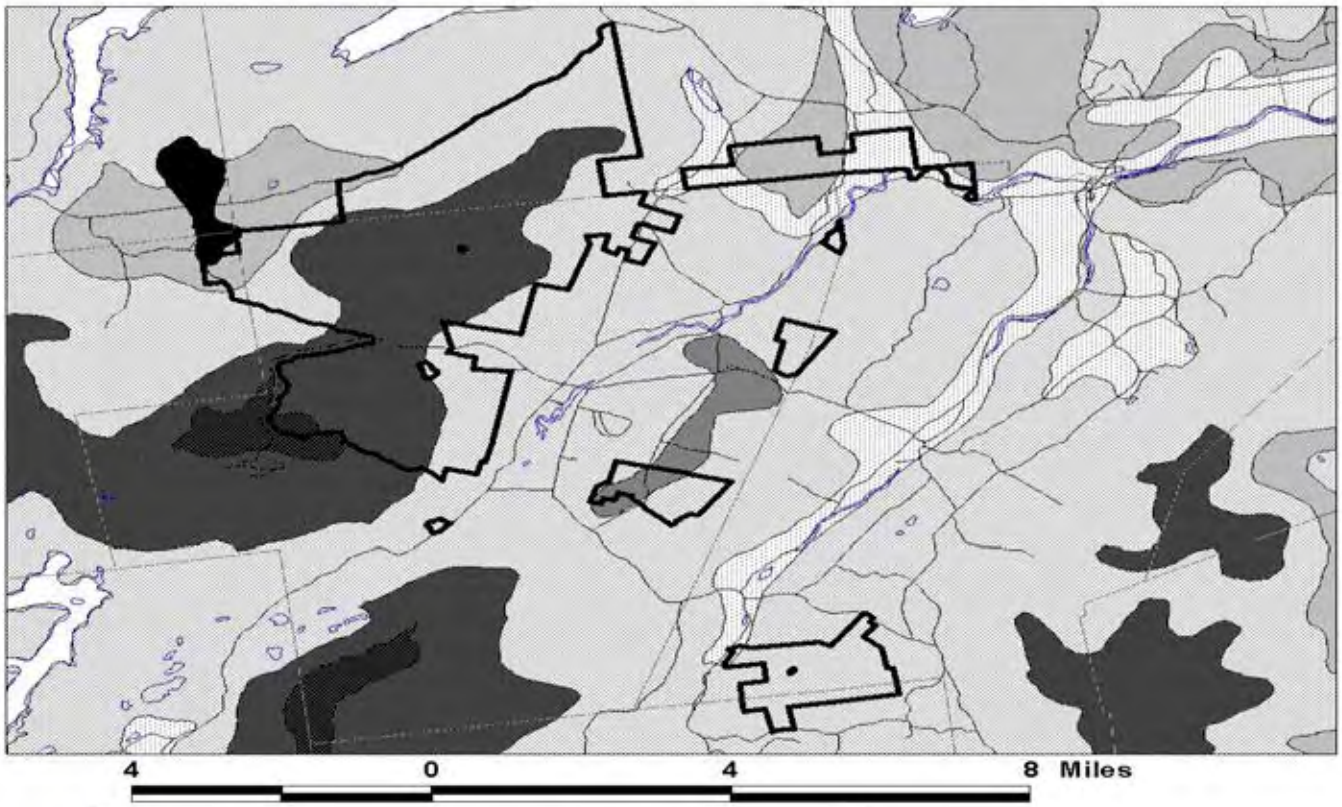
- Wetlands
- Open Water

APA Regulated Wetlands

- Wetlands
- Open Water

N W E S

General Soils Map for the Wilmington Wild Forest



4 0 4 8 Miles

Map Legend

Soil Type

- ADAMS
- BECKET
- BERKSHIRE
- HERMON
- NAUMBURG
- RAWSONVILLE
- SISK
- TUNBRIDGE

Forest Preserve

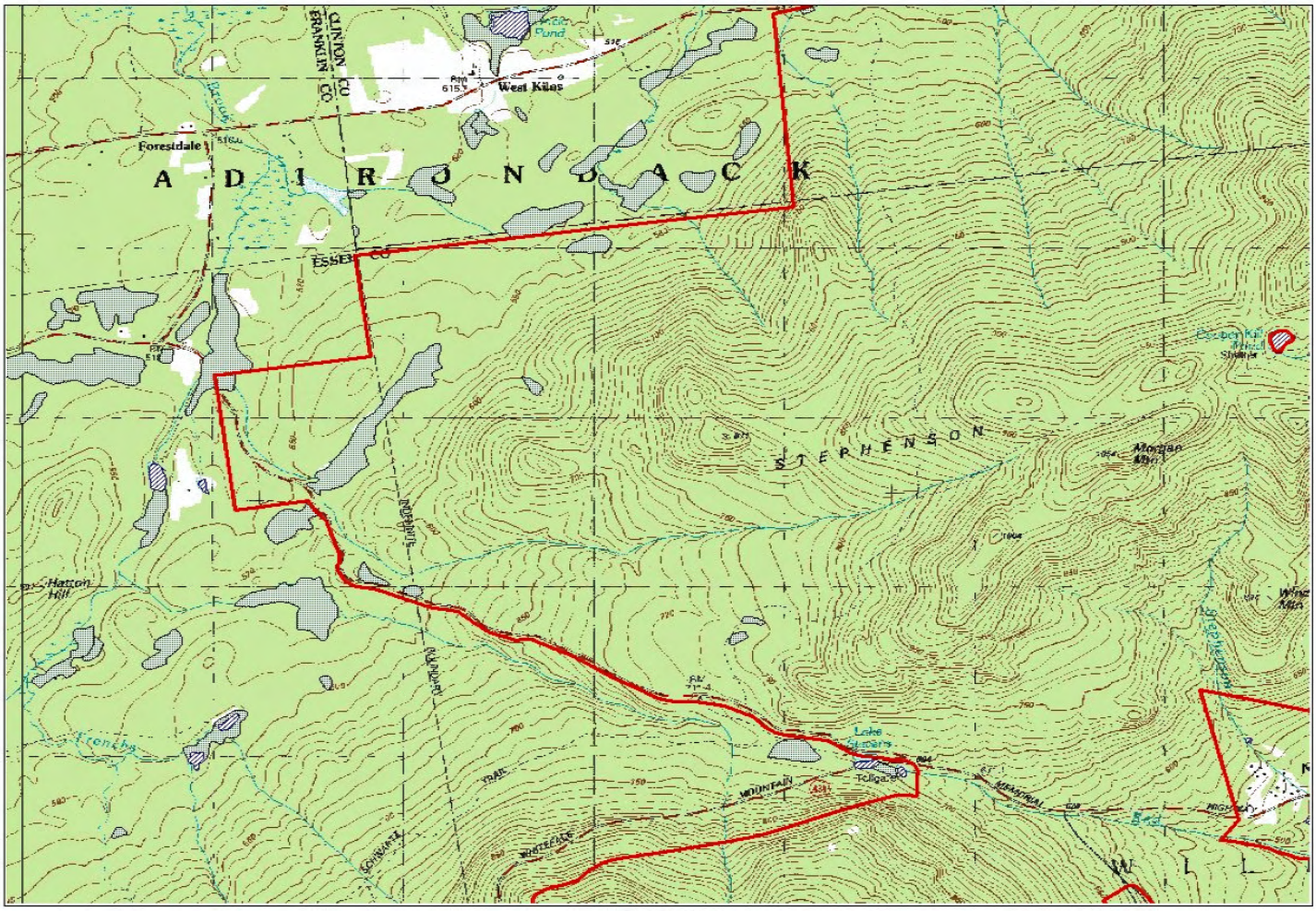
- Wilmington WF

Waterbody, 1:100,000

- Stream or Waterbody
- Road
- Town or Village Boundary

N W E S

Regulatory Wetlands in the Wilmington Wild Forest: West Kilns Area



Map Legend

APA Land Class
- Forest Preserve

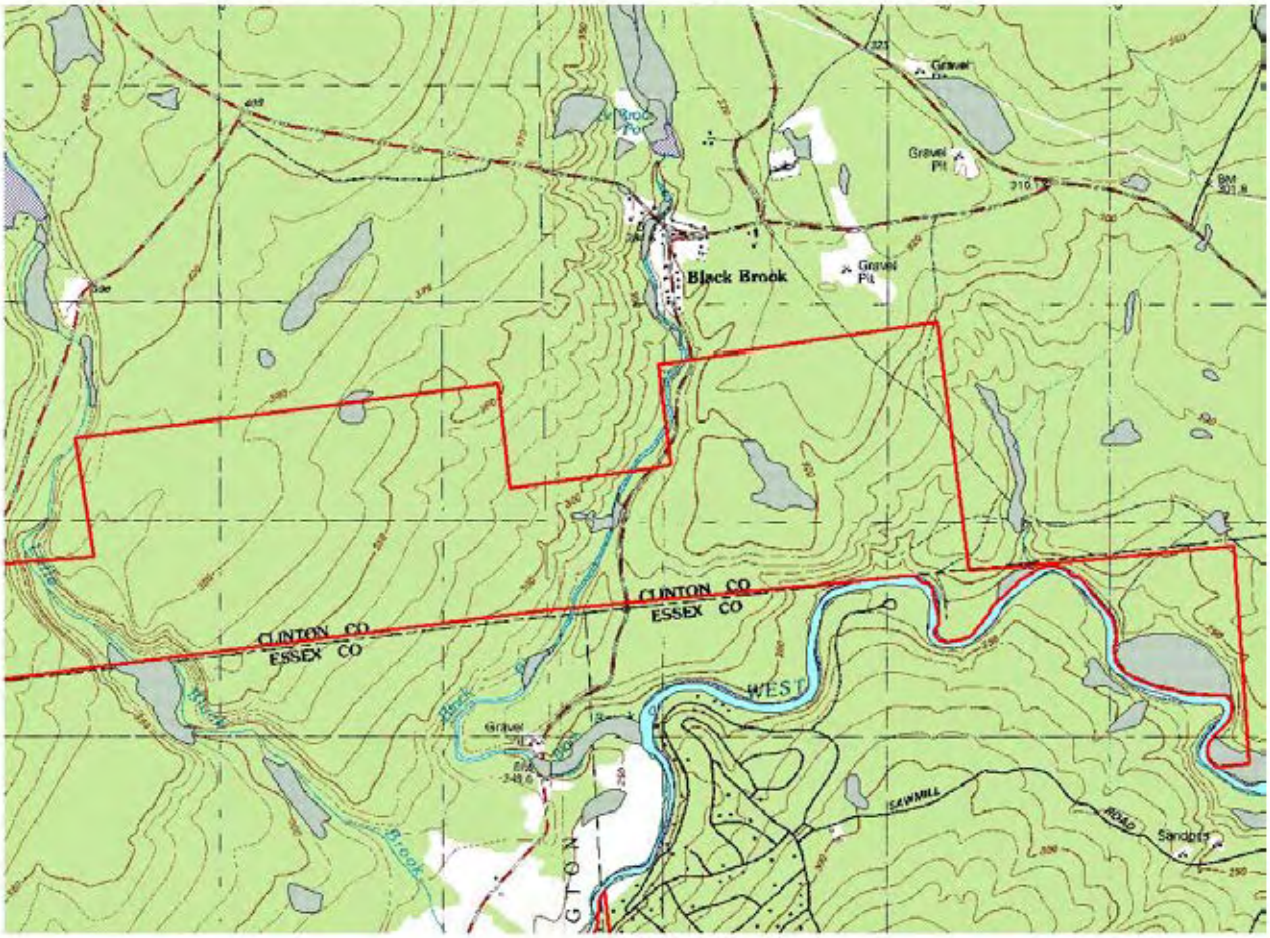
UMP Areas
- Wilmington UMP Boundary

APA Regulated Wetlands
- Wetlands
- Open Water

APA Designated Rivers
- AUSABLE RIVER
- E BR AUSABLE R
- N BR SARANAC RIV
- SARANAC RIVER
- W BR AUSABLE R

N W E S

Regulatory Wetlands in the Wilmington Wild Forest: Black Brook



1:28000

0.5 0 0.5 1 1.5 2 Miles

Map Legend

APA Land Class
- Forest Preserve

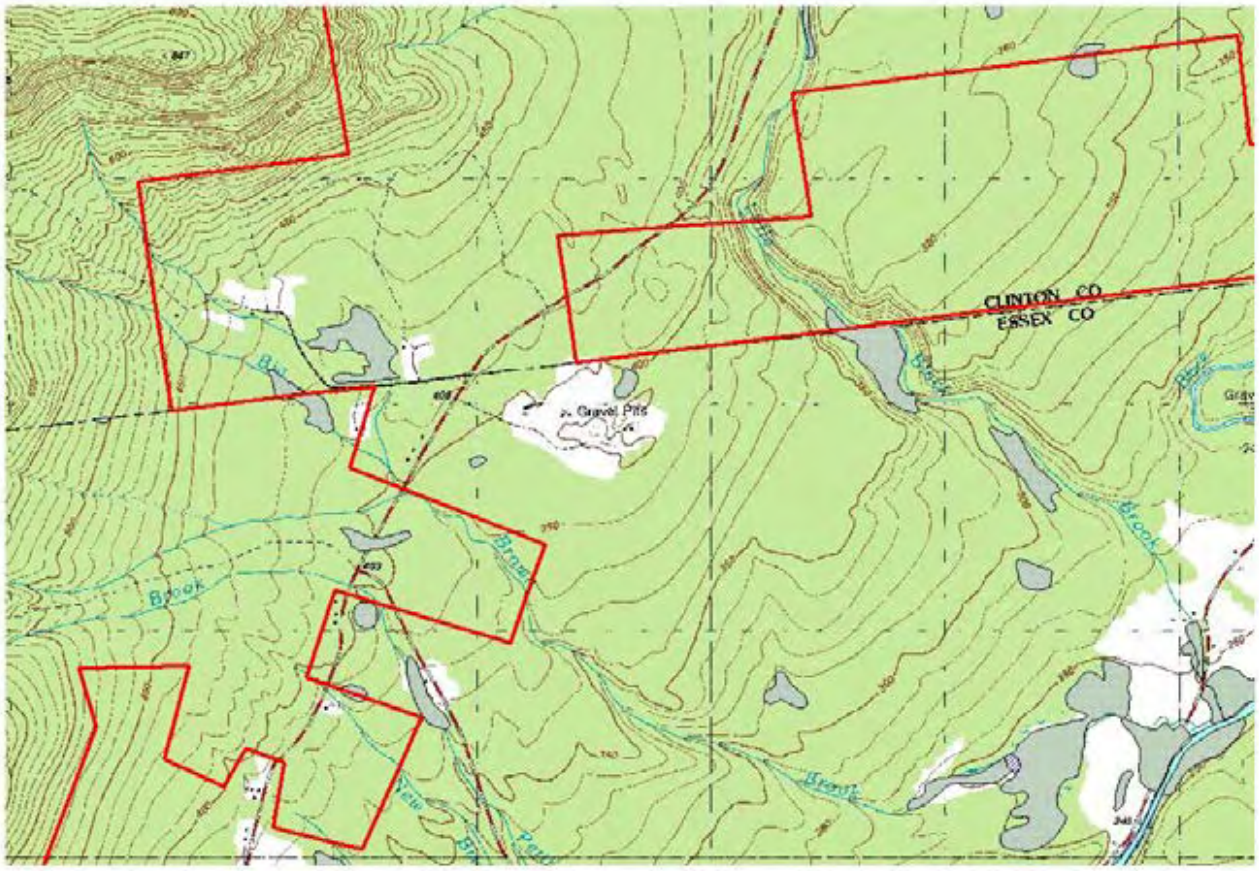
UMP Areas
- Wilmington UMP Boundary

APA Regulated Wetlands
- Wetlands
- Open Water

APA Designated Rivers
- AUSABLE RIVER
- E BR AUSABLE R
- N BR SARANAC RIV
- SARANAC RIVER
- W BR AUSABLE R

N
W E
S

Regulatory Wetlands in the Wilmington Wild Forest: Bonnieview Road



1:30000

1 0 1 2 Miles

Map Legend

APA Land Class
- Forest Preserve

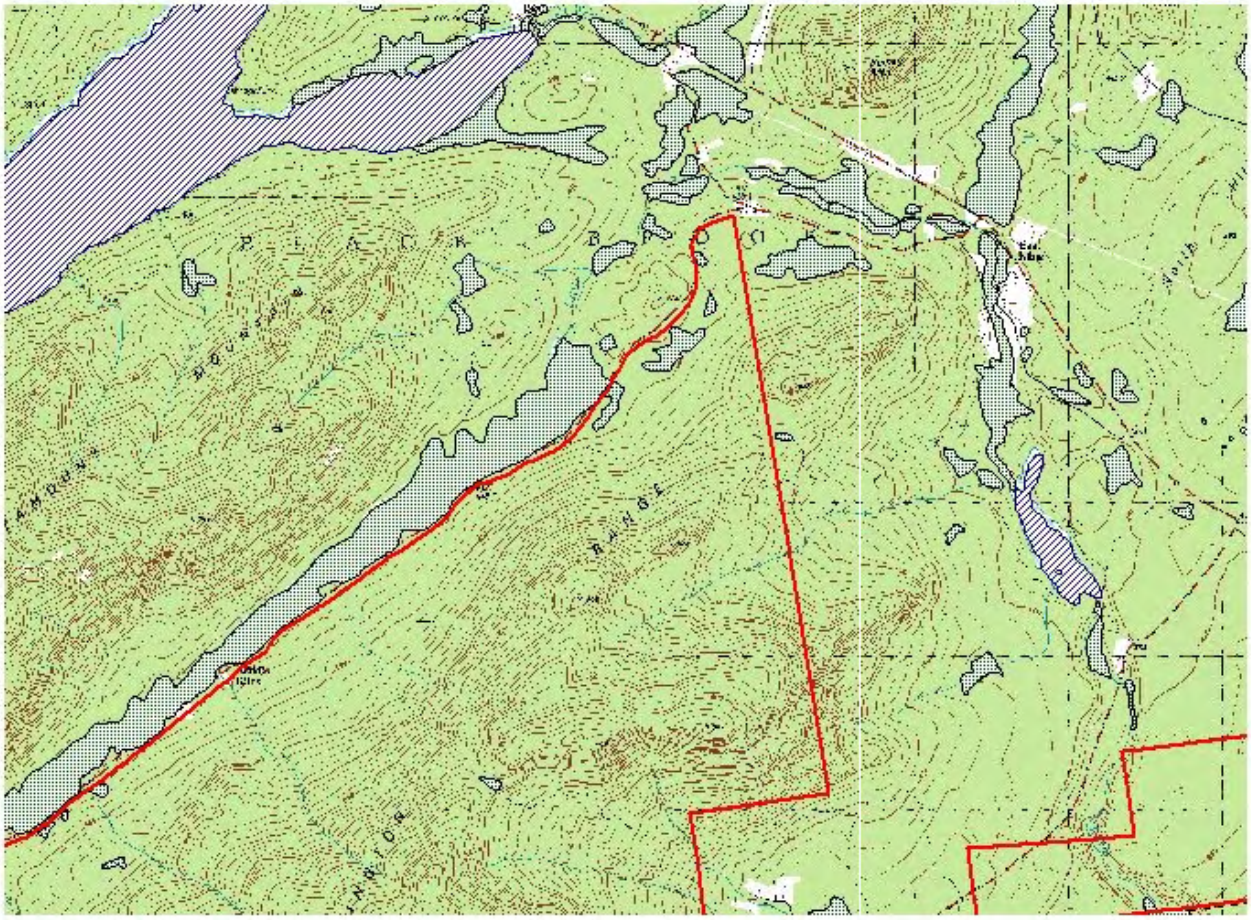
UMP Areas
- Wilmington UMP Boundary

APA Regulated Wetlands
- Wetlands
- Open Water

APA Designated Rivers
- AUSABLE RIVER
- E BR AUSABLE R
- N BR SARANAC RIV
- SARANAC RIVER
- W BR AUSABLE R

N
W E
S

Regulatory Wetlands in the Wilmington Wild Forest: East Kilns Area

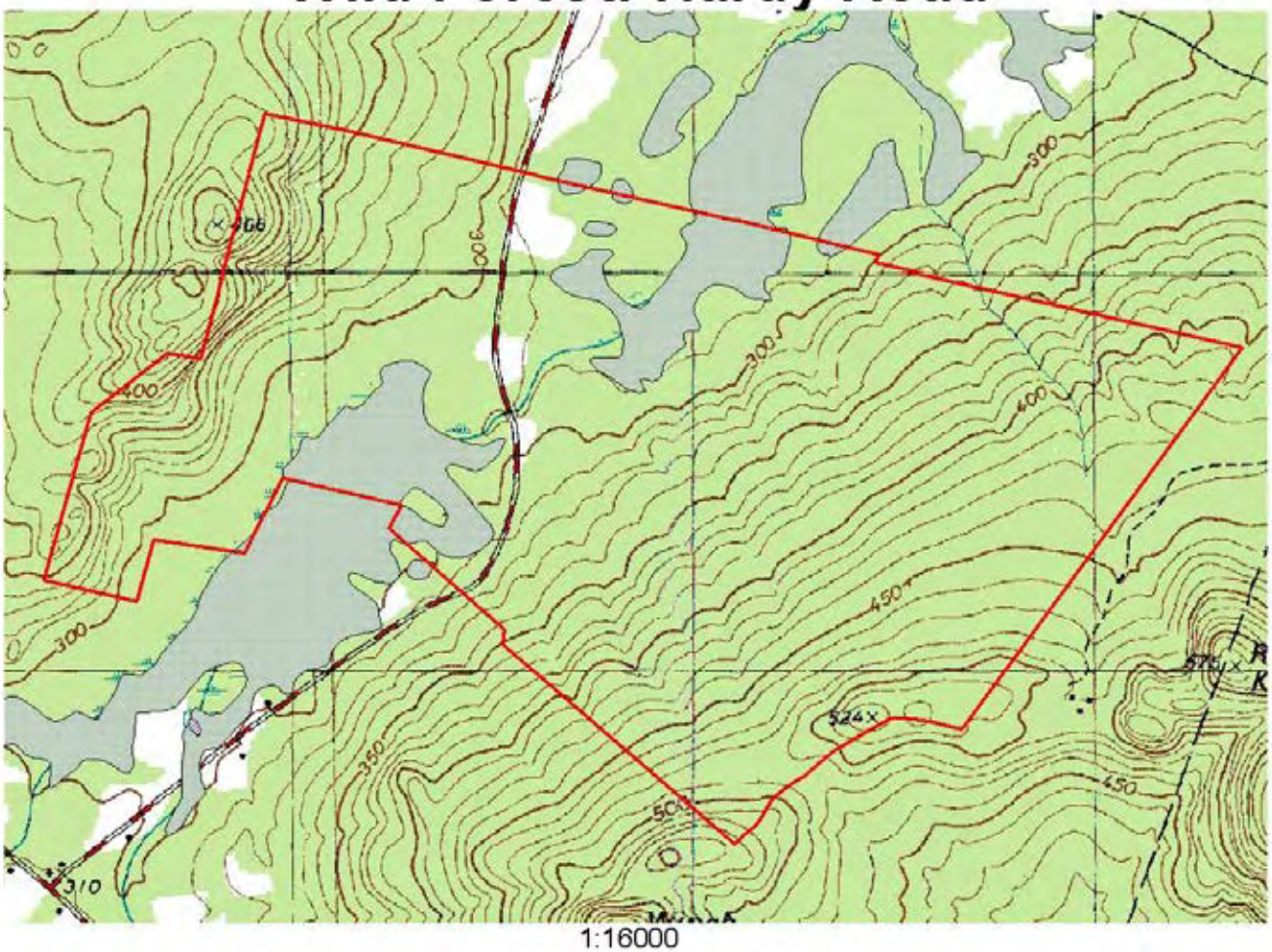


1 0 1 2 Miles

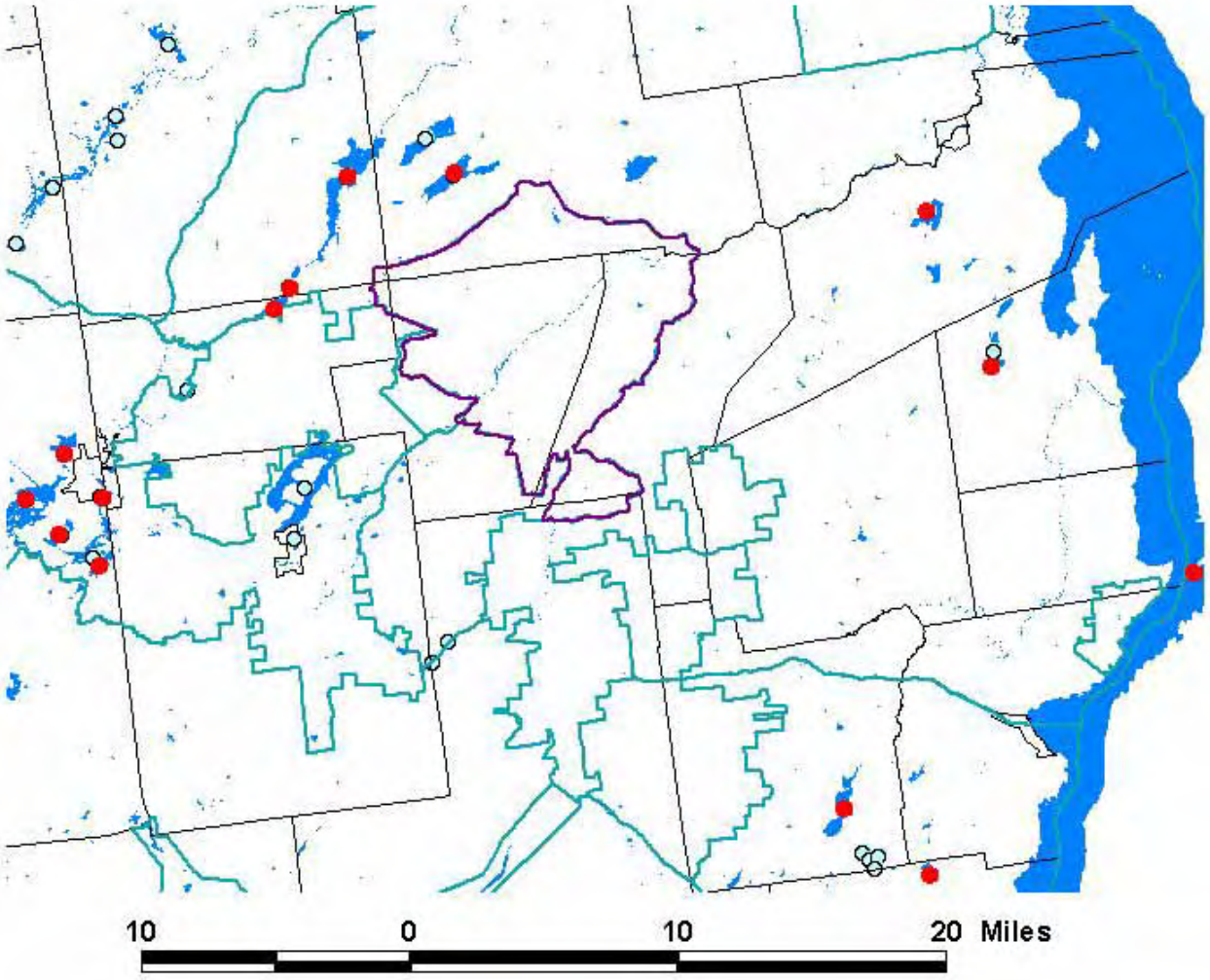
Wilmingtonwf.shp
10
Major Road
APA Designated Rivers
AUSABLE RIVER
E BR AUSABLE R
N BR SARANAC RIV
SARANAC RIVER
W BR AUSABLE R
APA Regulated Wetlands
Wetlands
Open Water

N
W E
S

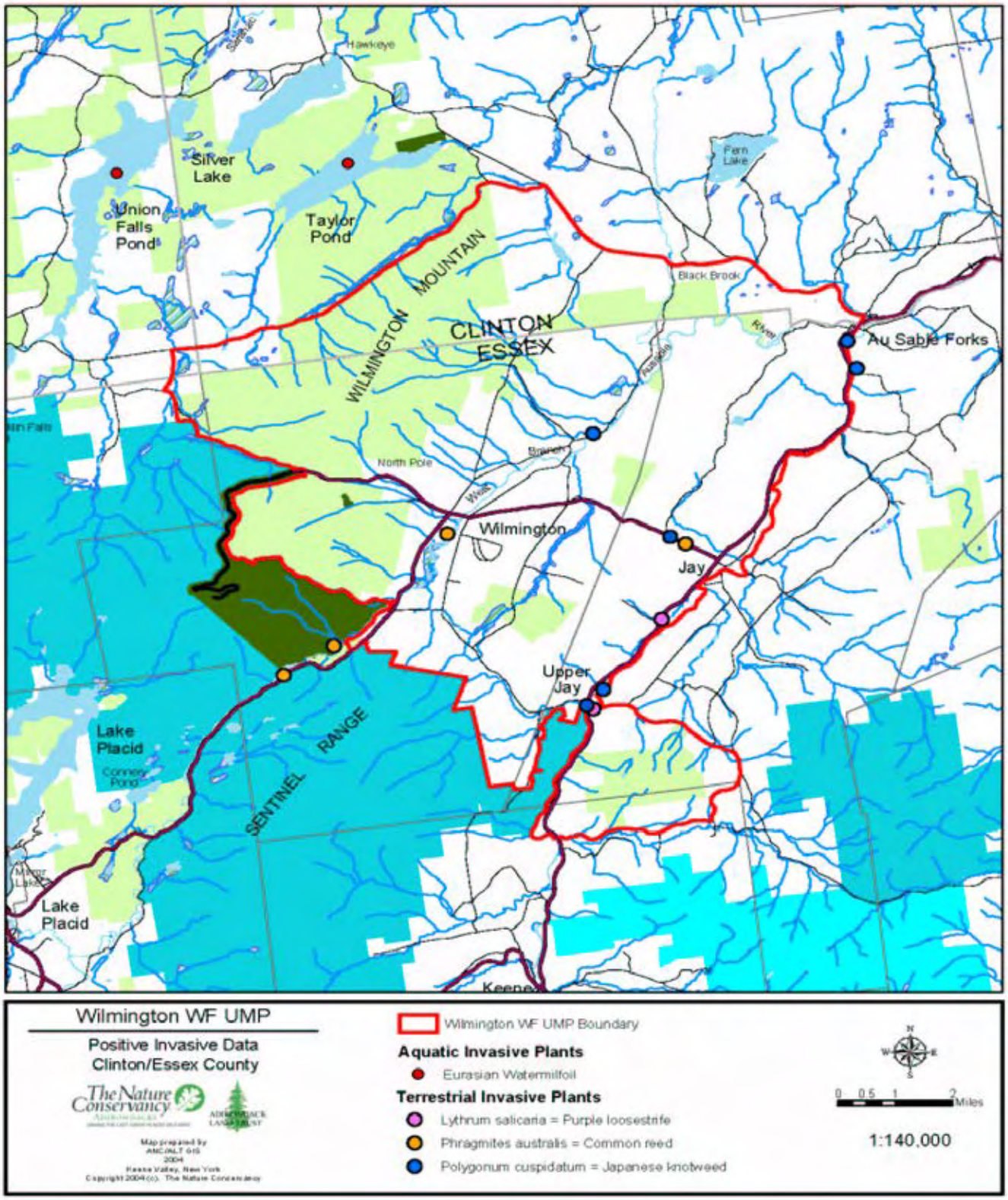
Regulatory Wetlands in the Wilmington Wild Forest: Hardy Road



Wilmington Wild Forest
Aquatic Invasive Plant Distribution, 2004



Invasive Species Distribution Map



WILMINGTON
WILD FOREST AREA

TAYLOR POND
WILMINGTON
MCKENZIE MTN.
SENTINEL RANGE
JAY MTN.
HURRICANE MOUNTAIN

Union Falls Pond
Silver Lake
Taylor Pond
Cranberry Pond
Wilmington Stephenson Range Tract
Cooper Kill Pd.
Whiteface Marble Mtn. Tract
Esther Mtn.
Marble Mtn.
Lookout Mtn.
Bear Den Mtn.
Whiteface Mountain Ski Center
Wilmington Notch
Beaver Brook Tract
Hamlin Mtn. Tract
Signor Lane Parcel
Clements Pond
Clements Mtn. Tract
Fern Lake
Lost Pond
Warren Pond
Winch Pond
Copperas Pd
Marsh Pd.
Owen Pond
Connery Pond
Holcomb Pond
Au Sable Forks
Black Brook
Upper Jay
Keene
Wilmington
Jay

Union Falls Rd.
Silver L. Rd.
Silver Lake Rd.
Turnpike Rd.
Boat Launch Road
Fern Lake Road
Black Brook Road
Stevens Road
Palmer Bk.
Jackson Crusher Rd.
Golf Course Rd.
Little Black Bk. Rd.
Au Sable River
Big Brother Bk.
John Brook
New Bridge Rd.
Bliss Bk.
Black Branch
Bonnieview Lenny Preston Rd.
Bilhuber Road
Hardy-Kilburn Rd.
Beaver Bk.
Quaker Mtn. Rd.
Perkins Rd.
Stonehouse Road
Fox Farm Road
Springfield
Forestdale
Gooper Kill Pd.
Gillespie Drive
Whiteface Memorial Highway
Stephenson
Red Bk.
Red Rd.
White Bk.
Whiteface Bk.
Lewis Bk.
Liscomb Brook
Bert Lett
Phelps Bk.
Styles Rd.
Zimmerly
Connery Brook
Ausable R.
E. Branch
Cascade
Walton Bk.
Tumbulls Cor.s Rd.
Glen Rd.
Luke
Glen Bk.
Maddan
Kiln Rd.
Lincoln Hill Rd.
McNalley Bk.
Num. 5 Bk.
Branch Bk.
Rocky Nugent Rd.
Oris Bk. Road
Rivers Rd.
Straight Road
Valley Road
East Branch
Jones Hill Road
Leslie Gay Rd.
O'Toole Rd.
Gulf Brook
Hurricane Rd.
Shelldrake Rd.
Stickney Bridge Rd.
Carey Road
Jay Road
North Hazen Road
Ausable River
Ausable Drive
Ausable Brook
Lake Road
Lake Rd.
Road
Rd.
Bk.
Brook
Drive

9N
86
431
19
12
73

EXISTING FACILITIES
Contour Interval 100 Feet

- Wilderness Area
- Primitive Area
- Wild Forest Area
- Intensive Use Area
- State Administrative
- Management Complex Unit Boundary
- Parking Area
- Trail Register
- Foot Trail
- Snow mobile Trail
- Leanto
- Fishing Access Site
- Campsite

PROPOSED FACILITIES

- Parking Area
- Trail Register
- Campsite
- Foot Trail
- Bike Trail
- Snow mobile Trail
- Trail Closure

-N-

1 0 1 2 3 4 MILES

FINAL MAP
6/24/05