New York State
Department of Environmental Conservation

Division of Lands & Forests

Ferris Lake Wild Forest
Draft Unit Management Plan
Draft Environmental Impact Statement

Towns of Stratford, Caroga, Oppenheim and Ephratah in Fulton County
Towns of Morehouse and Arietta in Hamilton County
Towns of Salisbury and Ohio in Herkimer County

October 2006
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FERRIS LAKE WILD FOREST

Draft Unit Management Plan/Draft Environmental Impact Statement

EXECUTIVE SUMMARY

The Ferris Lake Wild Forest (FLWF) is a 147,454 acre management unit located on the southwestern edge of the Adirondacks in the Towns of Salisbury and Ohio in Herkimer County; Morehouse and Arietta in Hamilton County; and Stratford, Caroga, Oppenheim, and Ephratah in Fulton County. The unit is roughly bounded on the north and west by Route 8, on the east by Route 10, and on the south by the Adirondack Park "Blue Line." Surrounding nearby state lands include the Black River Wild Forest and West Canada Lake Wilderness to the north, and Shaker Mountain Wild Forest and Silver Lake Wilderness to the east. The Hinckley Day Use Area, Point Comfort Campground, Little Sand Point Campground, and Poplar Point Campground are Intensive Use Areas and are not included in the FLWF.

The attractiveness of this area lies in its numerous ponds, lakes, and streams which attract sportsmen and other outdoor enthusiasts throughout the year. The unit's most distinguishing characteristic is its old growth spruce. Old growth spruce stands still exist and can be found along the Powley-Piseco Road, the north side of Alderbed Stream, around Blind Man's Vly, and on the slopes of Big and Little Alderbed Mountains.

The FLWF is readily accessible by car, lying approximately 20 miles north of the Mohawk Valley. One of the last old Adirondack dirt roads, extending about 17 miles from Route 10 near Piseco Lake to Stratford, cuts through the approximate center of this large, diverse, and interesting piece of forest preserve land. It provides the public with motor vehicle access to recreational programs through otherwise practically unbroken forest, quite comparable to some wilderness areas. A unit management plan (UMP) for this area has never previously been written.

There are several key issues related to the management of the Ferris Lake Wild Forest. They include:

The Development of more foot trails and associated facilities. The FLWF has many hiking opportunities, but very few "official" foot trails. There is an extensive network of unmarked footpaths and hunting and fishing trails which, by simply clearing, signing, and marking would become more accessible for hikers. Proposed management actions include designating and improving some of the existing unmarked foot trails and the development of some new trails. Facilities associated with trail development include parking areas, signs, and trailheads with register boxes and/or information kiosks.

Snowmobile trail safety and improvements. Snowmobiling is very popular within the FLWF. The current trail system is primarily a network of snowmobile trails that are used by other user groups during the summer months. Trail width and safety are the two biggest concerns of the snowmobiling community. Proposed management actions include closing approximately 16.7 miles of trail and the maintenance of trails and bridges in compliance with Department standards and policies, the Adirondack Park State Land Master Plan (APSLMP), and the 2003 DEC/APA Memorandum of Understanding.

Accessibility for people with disabilities. The Americans with Disabilities Act (ADA) requires that people with disabilities receive the opportunity for full and equal enjoyment of goods, services, facilities, privileges, and advantages of any place of public accommodation. The requirement to provide access depends on whether the facilities are being newly constructed, altered, or not changed at all. Proposed management actions include, but are not limited to, providing improved access for people with disabilities to G Lake and Sand Lake. The G Lake Trail is approximately ½ mile long and will be made accessible by wheelchair. This will require minor grading and resurfacing. The Sand Lake Trail is also approximately ½ mile long and will be made barrier-free. This will require minor grading and a reroute of the section of trail in a wetland area. An accessible canoe access site will be constructed at both locations and at least one existing campsite at

each location will be upgraded to current accessibility standards. This includes constructing accessible pit privies and fire rings.

Motorized access and ATV use. Motor vehicle access and use in the FLWF is a major issue and topic of discussion. The unit's relatively flat topography and existing network of old haul roads lend themselves to this type of use. The current snowmobile trail network is mostly multiple-use and illegal ATV use is high on some trails. A road inventory that identifies the open roads and mileages with a general description of each has been completed. Proposed management actions include posting a significant number of roads against motor vehicle use, the posting of open roads for continued motor vehicle use, temporarily closing one road to public motor vehicle use until it is rehabilitated, and the closing of one road to public motor vehicle traffic unless evidence is found which indicates that the road is the legal means of access for adjacent private landowners or is a public thoroughfare. There are no proposals to construct any new motor vehicle roads or proposals to open any closed motor vehicle roads.

Spy Lake access. Spy Lake is a 376-acre lake which is mostly divided between private ownership and the Silver Lake Wilderness. However, a small parcel of wild forest land on the north shore dictates that the lake be included as part of the inventory of the Ferris Lake Wild Forest. Public access to the lake is discussed in the Silver Lake UMP because one of the alternatives is a new foot trail through the wilderness. Interest in gaining access to the lake is mainly for the purpose of fishing. The access alternatives in their preferred order include: 1. Reestablish historic access via the Spy Lake Road. 2. Boat access via the Piseco Outlet. 3. Foot access via a new trail through the Silver Lake Wilderness. The Silver Lake UMP recommends exploring the possibility of obtaining public access to the lake through one of the mentioned alternatives.

West Lake Boat Launch. The West Lake boat launching site is located on West Lake Road north of Canada Lake. The launch site provides the public with recreational access to West Lake, Canada Lake, Lily Lake and Green Lake. The site was suggested as an area for improving access for people with disabilities and was incorporated into the Galusha ADA Consent Decree signed by the DEC and APA in July of 2001. The APSLMP does not identify West Lake under the boat launching site list; however, the launch did exist prior to the Master Plan's adoption in 1972.

The West Lake boat launch site does not currently comply with the APSLMP because trailered boat launches are not allowed in wild forest classified lands. The interconnecting lake system accessed from this site is around 1,000 acres, enabling it to be added to the APSLMP list. A proposal to recommend reclassification to intensive use is appropriate because the lake system complies with the MP lake size guideline, not to mention it will be the only public launch on the lake after the Stewart Landing Dam site is closed to trailered launching.

Over the last few years the number of vehicles bringing boats to the launch and parking at the site has greatly increased, causing several problems. Parking in the road and congestion caused from backing and maneuvering trailers has blocked residents' access to and from their camps. Many users often park their vehicles beyond the launching site parking area and use private drives to turn around, sometimes causing damage. Other use concerns include increased noise, trash and litter along the road, and people sleeping overnight in vehicles. Proposed management actions include designating parking spaces for launch users; designating or constructing a turn around area at the far end of the parking area that will be posted against parking.

Stewart Landing Dam. The Stewart Landing Dam regulates the water levels of Canada Lake, West Lake, and Lily Lake. The dam is owned by the State and DEC is the agency responsible for maintaining and regulating the water level. A 1986 agreement between DEC, Stewart Landing Association, and the Canada Lake Protective Association provides the framework for regulating the water level of Canada Lake. DEC currently spends an enormous amount of time trying to maintain the correct water level of the lake throughout the year.

The dam is also a very popular spot during the summer months. The public utilizes the site for swimming opportunities, car top boat access, and an occasional late night party. The local residents use the site as a "boat launch" even though it is simply a shallow place to access the water without any formal improvements. The launching of trailered boats appears to be causing some erosion along the shoreline and on the earthen part of the dam. There are four designated drive-to campsites in the area that provide overnight camping opportunities. The two most common complaints by local residents are about the loud noise and increased traffic near the dam area. Proposed management actions include placing a stone barrier along the Stewart Landing Road to prevent trailers from backing into the water; installing remote monitoring devices with automatic gate controls on the dam to help reduce the number of work hours needed to effectively regulate the water level; and posting the dam with "keep off" and/or "no trespassing" signs to keep swimmers from climbing the dam and jumping off. The plan proposes to adopt new regulations to apply to the part of FLWF within 500 feet of the Stewart Landing Dam to: allow parking only in designated areas, allow camping only in designated sites, allow fires only in fire rings at designated campsites, prohibit swimming, and prohibit the launching of trailered boats.

Acid rain and lake acidification. This is a Park wide problem, but has significant implications in this unit. The FLWF is somewhat more susceptible to acid deposition than other units because of its geographic location. Most of the acid rain pollution comes from the Midwest and South, thus hitting this region before reaching other regions of the Adirondacks. As a result, most of the unit's waters have low pH's and a severely impacted fisheries resource. Proposed management actions include re-establishing historic trout populations and maintaining existing trout populations through stocking, reclamation, and liming activities.

PROPOSED MANAGEMENT ACTION CHOSEN FOR ANALYSIS

Public motor vehicle access and ATV use was identified as having the potential for at least one significant adverse environmental impact, thus required further analysis. Motor vehicle use in and of itself is not a program offered by DEC in Wild Forest units. Instead, motor vehicle use is a means by which the public can access programmatic destinations such as fishing sites, hiking trails, hunting and trapping areas, and boat launch sites. The APSLMP does distinguish between the different types of motor vehicles and their use. It includes a definition of "All Terrain Vehicle" which typifies ATVs as a subset of motor vehicles. However, such a distinction is important from a management perspective because the environmental and social impacts associated with each different type of motor vehicle use can vary greatly. The APSLMP also includes wild forest guidelines specific to ATV use.

The following three management alternatives were identified for the motorized access/ATV issue:

Alternative 1. Allow ATV use synonymous with other motor vehicle use. This would allow ATVs to travel on all DEC roads within the unit that are open to public motor vehicle traffic. Upon analysis, this alternative has several problems, the first being that many of the open roads within the unit are short and dead end at either State or private land. Allowing ATVs to travel down these roads could encourage illegal use on these lands and subsequent resource degradation. A second problem with this alternative is that most town roads within the unit are not open to ATV use. The Town of Stratford and Town of Salisbury are the only towns that have roads posted for ATV use. The posting of all DEC roads for ATV use would create a fragmented opportunity with very limited additional program access opportunities since other motor vehicles could be used to access these roads instead of ATVs. A third problem with this alternative is the Vehicle and Traffic Law (V&TL) §2405(1), which states that a road or portion thereof may be posted for use by ATVs when it is otherwise impossible for ATVs to gain access to areas or trails adjacent to the highway. There are no such adjacent areas or trails in the FLWF. Considering these factors, this is not an appropriate or recommended management action.

Alternative 2. Allow ATV use only on some roads that are open to motor vehicles. As mentioned above, the Town of Stratford and Town of Salisbury are the only towns within the unit that have roads posted as being open for ATV use. It would make sense then that if any ATV opportunities were to exist, they would

somehow incorporate the open roads in these towns. The Hawes Road Extension was identified as a good candidate for allowing ATV use. This road has a suitable surface for ATV travel; provides access to other program areas such as hunting, fishing, camping, hiking, and wildlife observation and photography; and does not provide the opportunity for ATVs to access trails. At this point in time however, the road does not appear to be legally open to the public. Given the APSLMP guideline that "public use of motor vehicles will not be encouraged" it is inappropriate to open this road to ATV travel, and further it should be posted as closed to public motor vehicle traffic. APA staff have also indicated that the APSLMP implies that a road which is not open to the public for travel by automobiles may not be open to the public for travel by other types of motor vehicles. Reasonable restrictions on the type of vehicle or season of use may be imposed for environmental protection, but as a general rule, the APSLMP does not intend for a road to be open for the public use of ATVs unless the road is simultaneously open for the public use of automobiles. Considering these factors, this is also not an appropriate or recommended management action.

Alternative 3. No ATV use at all at the present time, but explore the possibility of designating certain old roads as open to ATV use by people with mobility impairments who possess a valid CP-3 permit. The federal Americans with Disabilities Act of 1990 (ADA) has important implications for the management of Forest Preserve lands. The ADA requires, in part, that each service, program and activity offered by state agencies be made accessible to and useable by people with disabilities, unless doing so would result in a fundamental alteration of the nature of the service, program or activity or undue financial and administrative burdens. Allowing ATV use would provide improved access for people with disabilities to activities such as camping, bird watching, hunting and fishing. Accordingly, roads which are otherwise closed to public motor vehicle use may be opened to motor vehicle and/or ATV use for persons with qualifying disabilities on a permit basis under Commissioner Policy 3 through the UMP process. Therefore, this option is the preferred alternative in this UMP.

FERRIS LAKE WILD FOREST
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ACKNOWLEDGMENTS

The development of this plan is part of the Governor's initiative to complete all remaining Unit Management Plans (UMPs) for Forest Preserve lands in the Adirondack and Catskill Parks. Opportunities for public involvement were provided through a mailing requesting written comments on planning issues followed by an information meeting. Some of the individuals and organizations that actively participated in the planning process are listed below. It should be noted that the listing of a named contributor does not imply that the individual or organization supports the management recommendations in the plan.

DEC gratefully acknowledges the contributions made by the following:

The Association for the Protection of the Adirondacks - David Gibson
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PREFACE

The Forest Preserve was created in 1885 and was one of the earliest attempts at land preservation in the United States. The 1885 legislation directed that the Forest Preserve "be forever kept as wild forest lands." Early concerns that led to the creation of Preserve lands centered around providing recreational opportunities, watershed protection, and a future timber supply. In 1892, most of the Adirondack Forest Preserve lands were included in the newly established Adirondack Park; the "blue line" created at that time did not encompass all of the state lands in Forest Preserve counties, nor does the current blue line. An amendment to the New York State Constitution in 1894 gave constitutional direction that Forest Preserve lands be forever kept as wild forest lands, and also directed that such lands "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." This mandate, now Article XIV, Section 1 of the New York State Constitution, applies to both the Adirondack and Catskill Forest Preserve and is applicable to approximately 3 million acres of public lands. New York is the only state where citizens have agreed to give such constitutional protection to their park lands.

Over time, use and interest by the public steadily increased to a point which threatened the very values for which the Forest Preserve was established. During the 1950's and 1960's, many studies were made to identify detrimental threats to the Forest Preserve and to offer solutions for the future of these lands. Notable among these studies was the work of the Temporary Study Commission on the Future of the Adirondacks, which was formed in 1968. The Commission was charged with making recommendations for the future use of both State and private lands within the Adirondack Park. Among its important recommendations were the creation of an Adirondack Park Agency; and the preparation of a master plan for State lands. These recommendations were eventually adopted in the 1971 legislation known as the Adirondack Park Agency Act, Article 27 of the Executive Law.

The first Adirondack Park State Land Master Plan (APSLMP) was completed in 1972 by the Adirondack Park Agency (APA) in consultation with the Department of Environmental Conservation (DEC). The development of this document affects State land management within the Adirondack Park in two key ways:

- Lands are classified according to their characteristics and/or capacity to withstand use. The following land classifications were established:
  - Wilderness
  - Primitive
  - Canoe
  - Wild Forest
  - Intensive Use
  - Historic
  - Travel Corridor
  - State Administrative
  - Wild, Scenic and Recreational Rivers

- It provides general guidelines and standards for the management and use of lands within each classification.

Article 27, §816 of the Executive Law mandates the DEC to develop, in consultation with the APA, individual unit management plans for each unit of land under its jurisdiction classified in the APSLMP. The APSLMP classifies the Ferris Lake unit as a wild forest area. A wild forest area is defined by the APSLMP as "an area where the resources permit a somewhat higher degree of human use than in wilderness, primitive or canoe areas, while still retaining an essentially wild character." It 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." Basic Guideline 1 in the Wild Forest section of the APSLMP provides that "The primary wild forest management guideline will be to protect the natural wild forest setting and to provide those types of outdoor recreation that will afford public enjoyment without impairing the wild forest atmosphere."

This Unit Management Plan has been prepared by the New York State Department of Environmental Conservation, in consultation with the Adirondack Park Agency, with the APSLMP setting the parameters

and local citizens providing additional input and review. The plan contains sufficient information to comply with all APSLMP requirements. It is as specific as possible in order to eliminate the need for further public or Departmental policy reviews at the project plan stage. This plan will direct management activities within the unit for a period of five years. The plan may be amended if necessary and will be reevaluated and updated at five year intervals.

PLANNING PROCESS DESCRIPTION

The Division of Lands and Forests has the lead role in and is responsible for developing Unit Management Plans (UMPs) for all lands designated as Forest Preserve. The appointment of a UMP team by the appropriate Regional Director initiates the UMP process. The team includes DEC staff from Fisheries, Wildlife, Forest Rangers, Forestry, Operations, and in the case of UMPs written for units in the Adirondacks, staff from the Adirondack Park Agency (APA). The Department announces the plan's inception via a press release and a letter to the Forest Preserve Advisory Committee, known interest groups, local governments, planning boards, and individuals known to have a specific interest in the property. The press release and the letter request public comment regarding the management of the unit. A public information meeting is held to provide members of the public the opportunity to express their concerns and ideas to the UMP team in person. Written comments are also accepted throughout the UMP process.

Concurrent with the public participation process, an inventory of the property's existing facilities is conducted. Data is compiled regarding current use of the property, its physical and biological resources, past management activities, and the relationship of the unit to surrounding lands and communities. The inventory data and the input received from the public are then used by the UMP team to develop goals and objectives for the management of the land. Specific management actions are formulated to achieve the stated goals and objectives, and a schedule for their implementation is developed. Depending on the size of the unit and the issues involved, the writing of goals, objectives, and management actions may require additional public input.

As required by the State Environmental Quality Review (SEQR) process, a range of alternatives were formulated to evaluate possible management approaches for dealing with certain issues or problem locations. Department staff considered the no-action and other reasonable alternatives, whenever possible. Potential environmental impacts, resource protection, visitor safety, visitor use and enjoyment of natural resources, user conflicts, interests of local communities and groups, and short and long-term cost-effectiveness were important considerations in the selection of proposed actions. Efforts were made to justify reasons for the proposals throughout the body of the UMP so the public can clearly understand the issues and the rationale for Department decision making. Due to the significance of potential environmental and/or social impacts, a positive declaration was determined to be necessary. A Positive Declaration will be declared through a press release/Notice of Intent to Prepare an Environmental Impact Statement. This UMP constitutes the Draft Environmental Impact Statement (DEIS).

The initial draft UMP is reviewed internally by DEC and APA staff, and any necessary changes are made prior to distribution for public review. At this time, a press release is issued and a public meeting scheduled to receive public comments on the draft plan/draft EIS. A notice stating that the draft plan/draft EIS is adequate for public review is published in the Environmental News Bulletin (ENB) and local newspapers, and a public meeting is held to comply with SEQR requirements.

A minimum 30-day public comment period follows the ENB notice, during which time written comments may be submitted regarding the draft plan/draft EIS. At the end of the public comment period, all comment received on the draft plan/draft EIS is assessed, and appropriate changes are made to the plan. A notice of Completion of the final EIS for the draft plan is published in the ENB. The proposed final UMP/final EIS is then reviewed by the APA staff and Commissioners to determine its consistency with the Adirondack Park

State Land Master Plan. Subsequently, the proposed final UMP/final EIS and SEQR findings are approved by the Commissioner of Environmental Conservation, printed and distributed.

No Action Alternative or Need for a Plan

From a legal perspective, the No Action alternative of not writing a UMP is not an option. DEC is required to prepare a management plan for the SMWF pursuant to the APSLMP and Executive Law § 816. In addition a UMP serves as a mechanism for the Department to study and identify potential areas for providing access to the FLWF 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.

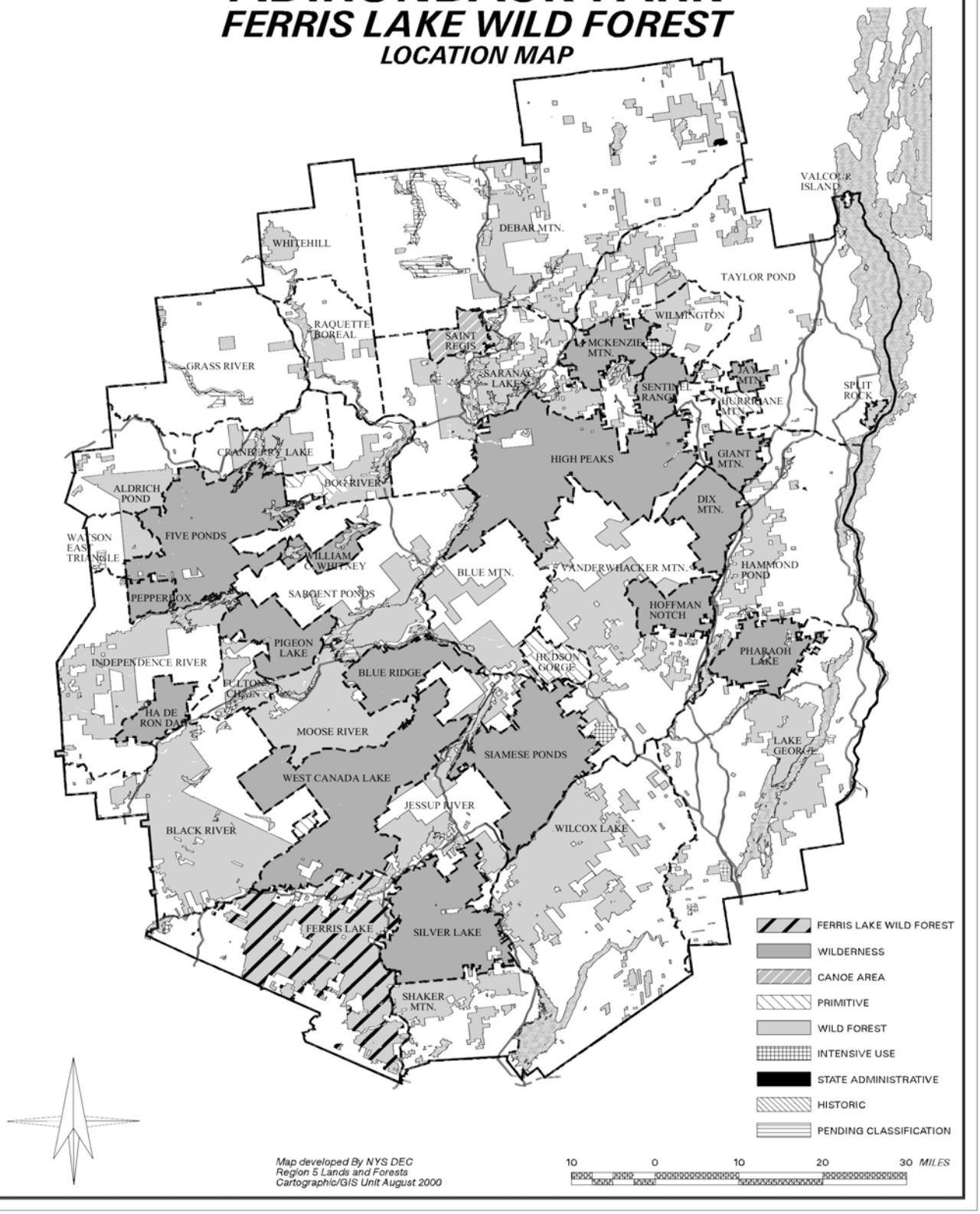
From an administrative perspective, the "No Action" alternative is not an option. The NYS Department of Environmental Conservation has the statutory responsibility under Environmental Conservation Law (ECL) §§3-0301(1)(d) and 9-0105(1), to provide for the care, custody, and control of these public lands. The UMP will provide the guidance necessary for staff to manage the area in a manner that protects the environment while at the same time providing for suitable outdoor recreation opportunities for the public. Without the development and future implementation of the UMP, sensitive environmental resources of the unit could be impacted negatively and it is highly likely that the public enjoyment of such resources would decrease. Public use problems would continue to occur.

Management of the FLWF via a UMP will allow the Department to improve public use and enjoyment of the area, avoid user conflicts and prevent over use of the resource (e.g., through trail designations, access restrictions, placement of campsites away from sensitive resources, etc.). Management Alternatives were developed for the UMP proposals that may: (1) have significant environmental impacts, (2) involve facility closures, or (3) involve controversial actions changing existing public use, can be found in Section V and VII of this document.

ADIRONDACK PARK

FERRIS LAKE WILD FOREST

LOCATION MAP



Map developed By NYS DEC
Region 5 Lands and Forests
Cartographic/GIS Unit August 2000

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I. INTRODUCTION TO THE FERRIS LAKE WILD FOREST

AREA OVERVIEW

General Location

The Ferris Lake Wild Forest (FLWF) is a management unit located in the southwestern portion of the Adirondack Park, north of the village of Stratford. The unit is roughly bordered on the north and west by Route 8, on the east by Route 10, and on the south by the Adirondack Park "Blue Line." The unit boundary lines are marked with yellow painted tree blazes and are identified with Forest Preserve signs along primary access roads. Surrounding nearby state lands include the Black River Wild Forest and West Canada Lake Wilderness to the north, and the Shaker Mountain Wild Forest and Silver Lake Wilderness to the east.

The Hinckley Day Use Area, Point Comfort Campground, Little Sand Point Campground, and Poplar Point Campground are Intensive Use Areas and are not included in the FLWF.

Size/Acreage

There are approximately 147,454 acres of public land in the management unit with 35,168 acres in Herkimer County, 71,731 acres in Hamilton County and 40,555 acres in Fulton County.

Geographic Information

The unit is made up of Forest Preserve lands in the Towns of Salisbury and Ohio in Herkimer County; Morehouse and Arietta in Hamilton County; and Stratford, Caroga, Oppenheim, and Ephratah in Fulton County. These lands are part of the Jerseyfield Patent; Glen Bleeker & Lansing Patent; Lott & Low's Patent; Lawrence Patent; Caldwell Tract; Vrooman's Patent; Oxbow Tract; Arthurboro Patent; Bethune Tract/Ayers Survey; Maxwell Tract/ Sheldon Survey; Morehouse Tract/Thompson's Survey; JG Tefft Tract; and very small portions of the Nobleboro Patent and Benson Tract. There are several detached Forest Preserve parcels and some private land inholdings within the unit boundaries.

The United States Geological Survey (USGS) topographic maps that cover the area include the Middleville, Salisbury, Stratford, Canada Lake, Oppenheim, Lassellsville and Caroga Lake 7.5 minute series quadrangles; and the Ohio, Morehouse Mountain, Piseco Lake and Morehouseville 7.5x15 minute series quadrangles.

GENERAL ACCESS

The unit is readily accessible by car, lying approximately 20 miles north of the Mohawk Valley. Access to the periphery can be gained via NYS Routes 8 and 10. The interior can be reached via the Jerseyfield Road, Powley-Piseco Road and NYS Route 29A. Jerseyfield Road enters the unit north of Salisbury Center and ends at a private holding surrounding Jerseyfield Lake. The Powley-Piseco Road provides some of the best access by traversing the unit from the hamlet of Stratford to NYS Route 10, just south of the bridge over the Big Bay of Piseco Lake. An extensive network of interior trails is designated for snowmobile use, but also provides access to skiers, hikers, hunters, fisherman, bikers, and horseback riders.

Seasonal water access can be gained via West Canada Creek and the South Branch of West Canada Creek along Route 8, the East Canada Creek along the Powley-Piseco Road, the Piseco Outlet and the West Branch of the Sacandaga River along Route 10.

HISTORY OF THE AREA

Barbara McMartin's "Discover the Adirondacks" series and The Great Forest of the Adirondacks are among the literature giving a good historical background of the area. A short compilation of the area's more significant historical people and places is included below. Consult the Bibliography for a listing of some of the many other excellent sources of historical information.

At the beginning of the nineteenth century many of the forests of the FLWF were logged for the prospering lumber and tanning industries. Temporary logging and mining settlements dotted the landscape, while logging roads provided access to the interior. The only documented iron mine was located just south of the unit near Salisbury Center (see below). Most of the area was unsuitable for farming, with the rich, fertile valley of the Mohawk to the south, and land to the west offering much better soil to grow crops. By the late 1800's, the soggy, rocky, logged-over forests had lost most of their commercial value and the state acquired much of what is now the Ferris Lake Wild Forest Area.

Broom Stick Lake. In 1936, Broom Stick Lake was the site of the original filming of the *Last of the Mohicans*. The movie was one of the most popular silent films of its day, and was revised and released again in 1992. The 1936 movie's stockade was built on the relatively flat east shore among the tall hemlocks.

Iron Mine. Iron production was the dominant industry in the Adirondacks during the middle and late nineteenth century (it was not until the end of the century that logging became the dominant economic industry). Most of the mining sites were located in the northeastern Adirondacks, with only one mine being documented in the southwestern Adirondacks. Although the site lies just south of the unit, it played an important role in shaping the history of the area.

In 1839, a bed of magnetic oxide was discovered north of Salisbury Center. Within a few decades, magnetic ore was extracted there and shipped to Port Leyden for smelting, since there were no iron-processing facilities nearby. During the first years of the twentieth century, Captain William H. Switzer organized the Salisbury Iron and Steel Company, incorporating the company with a million dollars' capital. A mile long railroad was built from the northwest to bring the ore to processing facilities in Irondale, on Irondale Road north of Salisbury Center. In 1909, the railroad went into full scale operation with the completion of a spur connecting Irondale and Salisbury Center to the Dolgeville and Little Falls Railroad.

The Jerseyfield Lumber Company soon extended the railroad from Salisbury Center north through a small crossroads known as Curtis. With no waterways or highways to transport logs to the market, extending the railroad was the least expensive way to reach the rich forests to the north. The railroad headed northeast toward Trammel Creek, then northwest toward the present Jerseyfield Road. Branches headed west from here as well as northeast along the upper reaches of Trammel and Black Creeks.

In 1913, Captain Switzer died and the operation could not compete in cost with those of the Midwest. The mine eventually closed and the state took over the property before the end of the decade. All the works were dismantled and removed, but the region still reveals clues from its iron mining past.

Tannery. In 1865, the Wheeler Claflin Company bought 20,000 acres in the town of Caroga. It was two-thirds of the entire township and is almost exactly the proportion that is now Forest Preserve land. William Claflin, owner of numerous shoe factories near Boston, Massachusetts, needed the forest to harvest hemlock bark for tannin, necessary to turn cowhides into leather. It was easier to ship the cowhides to the forest for curing than to ship hemlock bark or the tanning liquor to the factory sites.

Between 1850 and 1890, there were around one hundred and thirty different tanneries in the Adirondacks. One of the largest was at Wheelerville on the inlet of Canada Lake. It boasted some of the largest leaching and drying sheds in the Adirondacks. The tannery employed as many as 300 men during the two decades after 1865 and a small community developed around it.

Along with the tannery, the company built a large sawmill at Pine Lake. A plank road running north connected Wheelerville to the sawmill, while one running south connected Wheelerville to Newkirks. In 1849, a road had been built from the railroad at Fonda to Newkirks.

In 1866, Claflin constructed a huge frame hotel, one of the Adirondacks' first resort hotels, on the northeast shore of Canada Lake. The Canada Lake House was five stories high with wide porches overlooking the water. Canada Lake had become the first planned community in the Adirondacks. While Claflin himself spent scarcely any time at Canada Lake (a very wealthy man, he later became governor of Massachusetts) his vision began Canada Lake's long history as a resort area, which has spread to encompass the shores of several nearby lakes.

A small stone dam was built on the outlet of the lake to float logs to mills closer to Dolgeville and factories to the west. The dam created a 4.5 mile long outlet stream that was navigable. Vacationers were taken along the seven mile stretch of the lake and outlet by a small fleet of steamers, which provided a most elegant wilderness trip.

Two later hotels, the Auskerada, built in 1887 to replace the Canada Lake House, which burned in 1883, and the Fulton House, which was erected on the south shore in 1888, continued to attract guests to the southern Adirondacks through the first two decades of the twentieth century. Because travel to the lake was by horse and cart, most early visitors came from the surrounding communities. By 1890, visitors from New York City had discovered the resort, and a colony of artists and writers grew around the shores of the lake. Both hotels have since burned, but the area continues as the hub of one of the prettiest resort areas in the Southern Adirondacks

Sheriff Lake. Sheriff Lake is a private holding in the northern potion of the unit. In 1990, plans to build a 250-Lot subdivision and golf course were announced, but then put on hold perhaps by the weak economy and the downward trend in the demand for summer homes.

Blowdown. On November 25, 1950, the biggest 'wind' of all hit the Adirondacks, leveling trees in scattered locations of the Park from Franklin County to Fulton County. David H. Beetle, writing for the Utica Observer Dispatch of January 22, 1951 illustrated salvage estimates (1,740,000 cords) as "a four foot deep, four foot high pile of pulp logs that would stretch without a break from New York to Los Angeles plus a few miles out into the Pacific." In addition to this, the Department estimated that some 124 million board feet of maple, birch and beech were down. Sixty percent of this volume was located on state land and a portion of this occurred on the Ferris Lake Wild Forest. Larger areas damaged include the lands west of the Jerseyfield Lake area and lands northwest of Canada Lake.

Old Growth. Recent research indicates that some of the forests within the unit were never logged. As mentioned earlier, the lack of transportation limited the early development of lumbering in the area. Rivers were the only means of transportation, and pine logs were the most sought after since they would float and were easy to mill. With the depletion of accessible pine during the 1830's, loggers turned their attention to spruce. Spruce trees seldom reached a large diameter. The first spruce cut were usually the largest and most accessible trees.

During the early 1900's, the railroad from Little Falls through Dolgeville facilitated logging in the area. Fortunately, some spruce stands were never cut. Some of the stands were either too inaccessible or far from navigable streams, while others were sold to the state by an aging lumberman, and still others were acquired by the state for non-payment of taxes.

Today, some of these old growth spruce stands still exist and can be found along the Powley-Piseco Road, the north side of Alderbed Stream, around Blind Man's Vly, and on the slopes of Big and Little Alderbed Mountains (McMartin 1994).

Avery's Hotel. Located on a large piece of private land bordering the unit is Avery's Hotel, a typical old Adirondack hotel and hunting lodge. During the late 1800's and early 1900's, the development of railroads in

the Park opened up the interior and provided new recreational opportunities for vacationers. Areas that were once only accessible to people who could afford to travel by coach or guide boat, were now accessible to people of lesser means. The Adirondacks soon became known for their many hotels deep in the woods.

Avery's was not one of the larger or more popular hotels in the Adirondacks. Its claim to fame was a private lake full of trout and a game farm. The lake was named Kennels Pond after Eli Kennell, originally Quesnell, a Canadian who owned 2,200 acres between Avery's and the Shaker Place. Legend is that he was the only man who would ride logs through the rapids below the Shaker Place dam on the West Branch of the Sacandaga River.

The hotel and game farm have since closed due to the decline in visitors.

Jerseyfield Preserve. Jerseyfield is a relatively small (29,000 acres) tract that lies completely within the unit. It was originally owned by Alfred Dolge of Dolgeville and first lumbered to produce veneers and sounding boards for his piano factory. In 1898, he offered the tract to the State in connection with the State's plans for a demonstration site for the Cornell University College of Forestry. Dolge claimed to have practiced forestry on the lands since he took ownership in 1876. A survey of the property by a German forester hired by Dolge indicated that only softwoods larger than 12 inches had been cut and almost no hardwoods. Unfortunately, the State refused Dolge's offer for reasons unknown.

In 1939, during a logging operation by the West Virginia Pulp and Paper Co., the tract was described as containing one of the finest virgin spruce stands in the Adirondacks. Over the years, portions of the tract were sold. Julius Breckwold acquired the Dolge factory and retained the 5,000 acre core of the tract, which is still privately owned. Today, approximately half the original 29,000 acre tract is Forest Preserve.

II. BIOPHYSICAL RESOURCES

GEOLOGY

Geologically, the Adirondacks are part of the Canadian Shield, a vast terrain of ancient Precambrian igneous and metamorphic rock that underlies about half of Canada and constitutes the nucleus of the North American continent. In the U.S. the Shield bedrock is mostly concealed under younger Paleozoic sedimentary rock strata, but is well exposed in a few regions of the Adirondacks. The upward doming of the Adirondack mass during the past few million years (a process that is still going on) is responsible for the erosional stripping of the younger rock cover and exposure of the ancient bedrock (Cressey 1966). The rocks are mainly gneisses of a wide range of composition. One of the more interesting rocks is the enormous anorthosite mass that makes up nearly all of the High Peaks region. The nearly monomineralic rock composed of plagioclase feldspar is almost identical to some of the rock brought back from the moon.

The present landscape is geologically young, a product of erosion initiated by the ongoing doming. The stream-carved topography has been extensively modified by the sculpturing of glaciers during the last Ice Age. As the ice retreated northward, it left behind an irregular cover of rock rubble. Sand and stone settled out and formed natural dams which, when filled with melt water, created lakes and ponds. Since this early structuring of the Adirondacks, vegetation has gradually reclaimed the land and has helped evolve the present forest ecosystems, including the contribution of humus to today's soil structures.

SOILS

The soils in the unit are mostly derived from glacial deposits that were deposited as glaciers advanced and retreated. Soil characteristics are variable and can fluctuate widely from location to location. The soil types can be classified into three broad categories: glacial till, glacial outwash, and organically derived.

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

Soil characteristics need to be considered in the management and use of this unit. Some of the characteristics of soils found in the unit are listed below. These characteristics when combined with topographic features (i.e. slope, landscape position, etc.) can place moderate to severe limitations on recreational use.

- The soils are usually moist, retain water well, yet drain freely.
- The soils contain a layer enriched in iron and humus that is strongly acidic.
- A majority of the acreage is very stony and bouldery.
- The dominant soils have slowly permeable fragipan layers that form a barrier to roots and water.
- Some soils exhibit a seasonal high water table during wet times of the year.

TERRAIN

The unit's topography can be best described as non-mountainous with gently rolling or relatively level terrain. The topography generally rises from west to east and from south to north. Natural features include a variety of rock ridges, streams, swamps, meadows, lakes and ponds. The most outstanding topographic features are the cliffs on Good Luck Mountain, Rooster Hill, and Panther Mountain. These cliffs provide some of the best vistas in the southern Adirondacks and are popular day hike destinations.

The maximum relief (change in elevation) across the unit is approximately 1,800 feet. Elevations rise from 1,200 feet in the southern portion near Middle Sprite, to elevations which do not exceed 3,000 feet in the

northeast portion near G Lake. This increase in total elevation occurs as gradual, rolling, gentle topography. Overall, the combination of natural features and the variety of interspersed ecosystems provides for a very interesting and diverse unit.

WATER

Water resources are an abundant and important component of the natural ecosystem within the FLWF unit. They provide a wide range of aquatic environments along with opportunities for public recreation. The waters in the unit occur in two distinct watersheds, the Hudson and the Mohawk-Hudson. The boundary between the two watersheds runs north and south along a ridge connecting West Hill on the Fulton County/Hamilton County line and extending north to G Lake and beyond into the West Canada Lake Wilderness. Waters that flow into the Mohawk River generally flow to Sprite Creek, East Canada Creek, West Canada Creek or Canada Lake and then to the Mohawk. Ponds that drain to the Hudson River flow via the West Branch of the Sacandaga River to Great Sacandaga Lake which outlets to the Hudson.

There are more than 115 ponds and lakes within the unit, of which 78 are named on USGS 7.5 minute topographic maps. Most of these waters have all or a majority of their shoreline within the unit boundary. Exceptions include Canada Lake, Lily Lake, West Lake, Piseco Lake, West Caroga Lake, Spy Lake, North Branch Lake and Long Lake (MH-P 823), which all have sections of their shoreline in private ownership. The waters range in size from unnamed ponds less than 1 acre to 2,842 acre Piseco Lake. Piseco Lake, Canada Lake and West Caroga Lake are relatively large and accessible by public boat-launching facilities. Both Piseco Lake and West Caroga Lake have public campgrounds. The management of Hinkley Reservoir will not be addressed in this plan.

Appendix E lists the major ponded waters in and bordering the FLWF with a brief narrative statement pertaining to their important features, including past and current management, accessibility, size, water chemistry, and fish species composition. In Appendix E, tables gives additional biological/chemical data and statistical information, including watershed, fisheries management classification, and depth. (See 11" x 17" hydrology map in the Appendix)

The unit also contains many miles of small, coldwater and warmwater streams. Of these, forty are named on 7½ minute quadrangle maps. Best known of these streams is South Branch of West Canada Creek, which was famous for its fishing opportunities in the late 1800's. It is less popular today, but the upper stretches still produce good brook trout fishing and the lower reaches (below Wilmurt Falls) are stocked with brown trout. East Canada Creek was less well known and by the 1930's was known to be prone to problems with warm temperatures.

Acid Precipitation

Recently acidic deposition has impacted the aquatic resources of the Adirondacks. The ALSC surveyed 1,469 Adirondack waters, 24 percent of which had pH levels less than 5.0 (Kretser el al. 1989). Historic data and water chemistry analysis demonstrate that many of those waters were historically circumneutral and able to support fishes. Although less well studied, streams have also been impacted by acidification (Colquhoun 1984).

While acid deposition has affected all areas of the Adirondack Park, the available data indicates that it has had a substantial impact on the fisheries resources in the Ferris Lake Wild Forest. Many waters that formerly contained fish populations are now devoid of fish life and the units overall diversity of native species has been reduced. Individual pond narratives and a summary of the most recent biological/chemical data are included in Appendix E.

Bti Program

The Townships of Arietta, Morehouse, Stratford, and Caroga currently use the biological pesticide *Bacillus thuringiensis var. israelensis* (Bti) to control black fly larvae populations in water; the Towns of Salisbury, Ohio, Oppenheim and Ephratah do not. Bt is a naturally occurring bacteria that has been used for years in the control of various garden pests. The variety *israelensis* is very specific and found to be extremely selective, killing only the larvae of black flies, mosquitoes, and a few non-biting flies. Several field and laboratory studies have indicated that the bacteria is non-toxic to most other organisms and does not persist in the environment.

Since the application is made directly to water, it falls within the scope of Article 15 of the Environmental Conservation Law and an aquatic pesticide application permit is required under 6 NYCRR Part 329. In cases where the program involves the treatment of streams at points within state owned land, a Temporary Revocable Permit (TRP) under 6 NYCRR § 190.9(a) is required in addition to the Part 329 permit. No treatments are made directly into wetlands. However, Article 24 (Freshwater Wetlands Act) has also been determined jurisdictional under the following circumstances: introduction of Bti upstream of the adjacent area of a wetland, if the Department is able to demonstrate that the pesticide will be transported into the wetland and will adversely affect the wetland. All treatments are made by applicators who have successfully completed a DEC approved training course specifically in the use of Bti.

The data shows the following Bti treatment information:

Bti Use - FLWF Townships			
Township (data is representative of entire Township)	Treatment Area (sq miles) Approximate	Stream Length (miles) Approximate	Amount of Product Used (gal) Approximate
Arietta (Piseco Lake)	40	130	36.4
Morehouse (Hoffmeister)	34	135	65.0
Stratford	36	37	9.6
Caroga (Caroga Lake)	50	120	100.0

2005 data except Town of Morehouse

WETLANDS

Approximately 8.1% (12,047 acres) of the unit is wetland based on federal and APA regulated wetland maps. These wetlands are of various shapes and sizes and occur mostly in low-lying areas. They range from less than one acre to more than 500 acres in size. Wetland areas possess great ecological, aesthetic, recreational and educational values. Their capacity to receive, store, and slowly release rainwater and snowmelt, helps them protect water resources by stabilizing water flow and minimizing soil erosion and sedimentation. Wetlands also act as "natural sinks" by removing pollutants from water entering these areas. Wetlands are one of the most productive habitats for fish and wildlife, and provide numerous opportunities for hunting, fishing, trapping, wildlife observation and photography.

All Adirondack Park wetlands that are one acre in size and larger, or any size wetlands adjacent to open water are protected under the 1975 New York State Freshwater Wetlands Act by the Adirondack Park Agency. The largest and most significant wetlands in the unit are found along Alder Brook, Vly Brook, Black Cat Outlet, Brayhouse Brook, Hart Vly Stream, Fourmile Brook, Mill Creek, Big Alderbed, East Canada Creek (near Powley Place), Sheriff Lake, Black Creek, Middle Sprite Creek, Good Luck Lake and Canada Lake drainages.

WETLAND COVER TYPES	ACRES	% TOTAL AREA
Persistent emergent	2,190	18
Forested, broad-leaved deciduous	529	4
Forested, evergreen	5,548	46
Forested, dead	125	1
Open water	223	2
Broad-leaved deciduous scrub/shrub	2,667	22
Broad-leaved evergreen scrub/shrub	288	2
Needle-leaved evergreen scrub/shrub	271	2
Unconsolidated bottom cobble/gravel	204	2
Unconsolidated Shore cobble/gravel	2	0
TOTAL	**12,047**	

CLIMATE

The area's climate can be best described as cool and moist. Seasonal conditions may very slightly throughout the unit due to such factors as latitude, altitude or elevation, distance and direction from large bodies of water, and normal storm patterns.

Summers tend to be warm with cool nights. Maximum day-time temperatures seldom exceed 90 degrees. Date of first killing frost in the fall is usually around late September. The growing season ranges from 135 days to 120 days. Winter temperatures can get as low as -20 to -30 degrees, with temperatures near zero common. Mean annual precipitation in water equivalent is between 40 and 50 inches per year; snowfall ranges from 80 to120 inches per year.

Prevailing winds are westerly, generally shifting toward the north in winter and toward the south in summer. The prevailing direction may be modified in some areas by topographic features. Extensive damaging winds are rare, but can occur when coastal storms move inland and when strong storm fronts move in from the west. Climate influence on local flora and fauna is minimal.

AIR QUALITY

The effects of various activities on the unit's air quality have not been sufficiently measured or determined. Air quality and visibility in the unit appears to be good to excellent, rated Class II (moderately well controlled) by federal and state standards. However, acid deposition has been a topic of controversy and concern. Air quality may be more affected by particulate matter blown from outside sources rather than from activities within the unit. Currently, efforts are being made nationwide to reduce emissions of sulphur dioxide and nitrogen oxide.

Air Resources and Atmospheric Deposition

The adverse effects of atmospheric deposition on the Adirondack environment has been documented by many researchers over the last two decades. While permanent monitoring sites have not been established in the

FLWF general observations of the effects of acidic deposition on the regional ecosystem are numerous and well documented.

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

Nitrogen deposition is now recognized with sulfur as an important contributor to effects on forest in some ecosystems, which occurs 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. It is also a potential contributor to adverse impacts in some low-elevation forests.

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. Recently, studies suggest 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.

Exposure to acidic clouds and acid deposition has reduced the cold tolerance of red spruce in the Northeast, resulting in frequent winter injury of current-year foliage during the period 1960-1985. Repeated loss of foliage due to winter injury and other related stresses 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, New England and the southern Appalachians. The high-elevation spruce-fir forest of the Adirondacks and Northern New England are identified as one of four areas nationwide with a sensitive ecosystem 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 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. 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 monitoring by DEC from 1992 through 1999, indicates that sulfates declined in a majority of lakes selected by the Adirondack Lakes 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 deposition 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 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. This adverse effect will continue unless further limits are placed on emissions of acid rain precursors.

Permanent Long-Term Monitoring (LTM) Sites
In 1987, as part of an Adirondack Park extensive survey, the Adirondack Lakes Survey Corporation (ALSC) surveyed a total of 16 waters in this unit. Summaries of those data can be found in Appendix E and at http://www.adirondacklakessurvey.org. Since 1992 the Adirondack Long-Term Monitoring (LTM) Program managed by the ALSC has been sampling water chemistry in 52 lakes across the Park on a monthly basis. Two of these waters are located directly within the boundaries of the FLWF. These waters include Jockybush Lake and G Lake. Annual summaries of the 22 chemical parameters collected are downloadable from the ALSC website.

OPEN SPACE
The natural landscape of the FLWF is an important element in the quality and character of the lives of many people in New York State. More than 100 years ago the people of New York led the country in understanding the significance of open land and the wisdom of setting aside certain areas to meet the public's needs. Early generations had the foresight to protect large tracts of the Adirondacks and Catskills through the creation of the Forest Preserve and what is now Article XIV, Section 1 of the New York State Constitution. Today, these same public lands provide a wide variety of economic, social, and environmental benefits to a multitude of people.

The FLWF provides us a place away from our normal routine where we can regain our perspective and creativity. It provides a place for recreation and relaxation, a place for enjoyment and study, and most

importantly, a place for interacting with the natural world around us. A simple drive down the Powley-Piseco Road is testament to this area's many benefits.

VEGETATION

The FLWF contains a wide array of plant communities which are determined in part by local variations in soil type, moisture and topography. These communities intergrade spatially and temporally to form a complex mosaic in the landscape that changes through time. Past events such as fire, wind, and logging may have also contributed to shaping the present day community structure.

Vegetative Cover Types

The plant community types listed below are known to exist within the unit. The communities are distinguished by physiognomy, composition of resident organisms, and ecological processes. All plants on State land are protected by General State Land Use Regulations (6 NYCRR §190.8). The accompanying species lists and associations are presented as a representative sample.

Beech-Maple Mesic Forest - A hardwood forest with sugar maple (*Acer saccharum*) and American beech (*Fagus grandifolia*) codominant. These forests occur on moist, well-drained, usually acid soils. Common associates are basswood (*Tilia americana*), American elm (*Ulmus americana*), white ash (*Fraxinus americana*), yellow birch (*Betula alleghaniensis*), Eastern hop hornbeam (*Ostrya virginiana*), and red maple (*Acer rubrum*). There are relatively few shrubs and herbs. Eastern hemlock (*Tsuga canadensis*) and red spruce (*Picea rubens*) may also be present at low densities. Example(s) - areas adjacent to West Canada Lake Wilderness.

Hemlock-Northern Hardwood Forest - A mixed forest that typically occurs on middle to lower slopes of ravines, on cool, mid-elevation slopes, and on moist, well-drained sites at the margins of swamps. Eastern hemlock (*Tsuga canadensis*) is codominant with any one to three of the following: American beech (*Fagus grandifolia*), sugar maple (*Acer saccharum*), red maple (*Acer rubrum*), black cherry (*Prunus serotina*), Eastern white pine (*Pinus strobus*), and yellow birch (*Betula alleghaniensis*). The dominant ground cover is witch-hobble (*Viburnum alnifolium*), with other various ferns, grasses and wild flowers present. On recently disturbed sites, aspen, birch and fire (pin) cherry tend to dominate. Example(s) - widespread throughout unit.

Spruce-Northern Hardwood Forest - A mixed forest that occurs on lower mountain slopes and upper margins of flats on glacial till. Codominant trees are red spruce (*Picea rubens*), sugar maple (*Acer saccharum*), American beech (*Fagus grandifolia*), yellow birch (*Betula alleghaniensis*), and red maple (*Acer rubrum*) , with scattered balsam fir (*Abies balsamea*). Striped maple (*Acer pensylvanicum*) and mountain maple (*A. spicatum*) are common subcanopy trees. Characteristic shrubs are witch-hobble (*Viburnum alnifolium*) and American fly honeysuckle (*Lonicera canadensis*). Example(s) - area around Blind Man's Vly, and the slopes of Big and Little Alderbed Mountains.

Spruce Flats - A mixed forest that occurs on moist sites along the borders of swamps and in low flats along lakes and streams. The dominant trees are red spruce (*Picea rubens*) or black spruce (*Picea mariana*), mixed with smaller numbers of yellow birch (*Betula alleghaniensis*), black cherry (*Prunus serotina*), hemlock (*Tsuga canadensis*), red maple (*Acer rubrum*) and beech (*Fagus grandifolia*). The shrub layer is sparse or patchy. Characteristic shrubs are Labrador tea (*Ledum groenlandicum*), sheep laurel (*Kalmia angustifolia*), and blueberries (*Vaccinium* spp.). Example(s) - widespread throughout unit.

Balsam Flats - A conifer forest that occurs on moist, well-drained soils of low flats adjoining swamps, gentle ridges, and knolls within swamps. The dominant tree is balsam fir (*Abies balsamea*), which occurs either in pure stands or in mixed stands with red spruce (*Picea rubens*) or black spruce (*Picea mariana*) and possibly a few yellow birch (*Betula alleghaniensis*), red maple (*Acer rubrum*), and black cherry (*Prunus serotina*).

The shrub layer is patchy and sparse; characteristic tall shrubs include witch-hobble (*Viburnum alnifolium*) and wild raisin (*V. cassinoides*). Example(s) - widespread throughout unit.

Sedge Meadow - This is a wet meadow community that has organic soils (muck or fibrous peat). Soils are permanently saturated and seasonally flooded. The dominant species is tussock-sedge (*Carex stricta*), usually with at least 50% cover. Other characteristic herbs include sedges (*Carex* spp.), bluejoint grass (*Calamagrostis canadensis*), sweetflag (*Acorus americanus*), spotted joe-pyeweed (*Eupatorium maculatum*), tall meadow-rue (*Thalictrum pubescens*), purple-stem angelica (*Angelica purpurea*), and bulrushes (*Scirpus* spp.). Example(s) - along West Branch Sacandaga River between Chub Lake and Shaker Place.

Shrub Swamp - This is an inland wetland dominated by shrubs that occurs along the shore of a lake or river, in a wet depression or valley not associated with lakes, or as a transition zone between marsh, fen, or bog and a swamp or upland community. Shrub swamps are very common and quite variable. They are dominated by alder(*Alnus incana* ssp. *rugosa*); and sometimes called an alder thicket. Common associates may include meadow-sweet (*Spiraea latifolia*), gray dogwood (*Cornus foemina* ssp. *racemosa*), swamp azalea (*Rhododendron viscosum*), willow (*Salix* spp.), buttonbush (*Cephalanthus occidentalis*), and arrowwood *(Viburnum recognitum*). Example(s) - along West Branch Sacandaga River between Good Luck Lake and Shaker Place.

Unique/Rare Plants

A review of the Natural Heritage Program database for rare plant species indicated that rhodora (*Rhododendron canadense)* may occur within the unit or adjacent areas in the appropriate habitat. Other species that are not listed as rare, but are identified as "exploitably vulnerable" because of their beauty or economic value and tendency to be picked include: pinkster azalea (*Rhododendron periclymenoides*), ginseng (*Panax quinquefolius*), bloodroot (*Sanguinaria canadensis*), the orchid family, nearly all the ferns, and many species in the lily family.

Rhodora - Rhodora (*Rhododendron canadense*) is classified as rare in New York State. Unlike other azaleas, the flowers of this species have a very short tube. Nevertheless, they are still prized for their beautiful clusters of large and colorful blossoms. Preferred habitats include bogs and wet woods. Management efforts will concentrate on protecting this species by maintaining at least a 100 foot buffer zone between structures and improvements and known rare plant sites.

All plant species that are classified as rare, endangered, threatened, or exploitably vulnerable are protected by the New York Protected Native Plants Regulations (6 NYCRR §193.3) and the Environmental Conservation Law (Section 9-1503). Any facilities or improvements that have the potential to directly impact a protected plant species will be closed or relocated immediately.

Forest Health

A combination of many factors can influence the health of a plant community. Physical factors tend to be weather related with notable examples being lightning fires, ice damage, severe winds, and flooding. A few areas in the FLWF were impacted by the "Blowdown of 1950." More recently the effects of drought during 2001 and 2002 impacted some tree species, ranging from slowed growth to weakened resistance to secondary pests. The harsh winter of 2003 resulted in the use of more road deicing agents than usual on area roads. Roadside conifers, especially Eastern white pines, may exhibit evidence of salt damage from this activity.

Biological factors are variable and include the effects of disease, insects, and wildlife (beaver impoundments and deer wintering areas) on the forest environment. Three major forest insects and one major disease described below have had an effect on this area (DEC-Forest Health Reports, NYS Forest Health: Summary Report of Conditions for 2003). The effects of acidic deposition were discussed previously.

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

Eastern Spruce Budworm - The Eastern spruce budworm (*Choristoneura fumiferana*) is considered to be one of the most destructive conifer defoliators in North America. Host species include balsam fir in addition to red, white, and black spruce. The last significant incidence of this pest within the Adirondack Park occurred in the mid 1970's. Populations of this insect, while currently not a problem, are being monitored throughout the northeast.

Forest Tent Caterpillar - The forest tent caterpillar (*Malacosoma disstria*) a native insect, may be found wherever hardwoods grow. Outbreaks have occurred at 10 to 15 year intervals with the last widespread outbreak in the late 1970's. Portions of St. Lawrence County were moderately to severely defoliated in 2003 through 2005, with additional outbreaks reported in northeast Jefferson, northern Lewis and other locations in Central New York. But no widespread outbreaks were reported for Herkimer, Fulton or Hamilton Counties. Favored hosts are sugar maple and aspen with birch, cherry, and ash also being utilized.

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

In addition to the major insect and disease problems listed above, Eastern spruce bark beetle (*Dendroctonus piceaperda*), Eastern larch beetle (*Dendroctonus simplex*), along with various forest declines, have impacted the vegetation within the unit and the surrounding areas. More recently in 2003, Pine shoot beetles (*Tomicus piniperda*) have been trapped in Hamilton County. This insect is a pest of many pine species but Scots pine is preferred. Serious damage and mortality from this insect has been reported from Halifax, but in New York and neighboring New England states, damage has been less. Federal quarantines restrict the movement of pine products from infested to non-infested counties.

To provide a factual basis for public policy and private ownership decisions, permanent forest inventory and analysis plots have been established by the U.S. Forest Service statewide, including forest preserve and private lands within the Adirondacks. These plots and the evaluation of the data collected at them, document and provide information on forest changes that might be caused by atmospheric deposition, soil nutrient loss, global warming, and/or various insect and disease factors. From 1985 to the present, significant research efforts have been underway to study the effects of atmospheric deposition on forest species, with support from federal and state agencies, forest industry, and other institutions. Data are still being evaluated to determine the link between air pollution and forest health.

Invasive/Exotic 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 have the potential 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. The Department shares 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 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. For more information refer to the following website: http://www.adkinvasives.com.

Terrestrial Invasive Plants - 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 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 this 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 unit and require resources to manage, monitor, and restore the site. 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 and then assess high risk areas and prioritize Early Detection Rapid Response (ED/RR) and management efforts.

Terrestrial Invasive Plant Locations - Terrestrial invasive plant species documented in, or within proximity to, Ferris Lake Wild Forest include the following: Purple loosestrife (*Lythrum salicaria*), Japanese knotweed (*Polygonum cuspidatum*) and Common Reed (*Phragmites australis*).

Terrestrial invasive plant infestations within DOT State Route ROW are referenced by the green Reference Markers (RM) positioned every 0.2 mile along State Routes within the Park. Example: State Route RM 86-1202-1172. Terrestrial infestations beyond NYS DOT ROW, along County, Town or back roads, or within backcountry settings are geo-referenced via a hand-held GPS unit utilizing NAD 83 Program for Zone 18. Example: 4911698North (N) 590545East (E). Infestations noted as High Priority should be strongly considered for containment and/or eradication controls. These infestations have multiple vectors or threaten sensitive communities within or adjacent to the infestation.

There is one (1) Purple loosestrife (*Lythrum salicaria*) infestation affecting this unit.

- At 4802224 N 520357 E a small Purple loosestrife infestation occurs within the fringe of private property and French Road right-of-way, Town of Morehouse.

There are seven (7) Common reed (*Phragmites australis*) infestations affecting this unit. All occur within the road right-of-way with the exception of the West Lake infestation.

- At State Route RM 10-2205-14 multiple, significant Common reed infestations occur within, and around the periphery of, the NYS DOT Arietta Stockpile facility. The geophysical location of the infestations, coupled with the shared jurisdictional usage of the facility, make it an imminent threat to the Ferris Lake, Shaker Mountain and Silver Lake units. Materials stockpiled, borrowed or extracted from this facility and utilized for road infrastructure, right-of-way or drainage improvement projects on State, County or Town roads within or in proximity to the three units will likely contain Common reed rhizome, plant parts and/or seed. APIPP is working with NYS DOT to mitigate these infestations.
- At State Route RM 10-2205-1129 Common reed occurs within DOT Right-of-Way.
- At State Route RM 8-2209-1049 Common reed occurs within DOT Right-of-Way.
- At State Route RM 8-2209-1081 Common reed occurs within DOT Right-of-Way.
- At State Route RM 8-2209-1027 Common reed occurs within DOT Right-of-Way.
- At 4803274 N 527384 E along Alder Brook Road ROW, Town of Morehouse.
- At 4779728 N 538304 E a significant Common reed infestation appears to occur within Forest Preserve fringe. The infestation is within 75 feet of the West Lake shoreline around the Canada Lake Protective Association's (CLPA) shared boathouse off of Point Breeze Road from State Route 29A. An ancillary and expanding infestation occurs just to the rear/east of the CLPA boathouse parking area and appears to be encroaching Forest Preserve. In order to determine ownership the Department will inspect the site and survey Forest Preserve boundary as it relates to this expanding infestation of Common reed.

There are eight (8) Japanese knotweed (*Polygonum cuspidatum*) infestations affecting the unit. All occur within either State Route or County and Town ROWs.

- At State Route RM 10-2205-1010 Japanese knotweed occurs within DOT Right-of-Way.
- At State Route RM 10-2205-1008 Japanese knotweed occurs within DOT Right-of-Way.
- At State Route RM 8-2209-1050 Japanese knotweed occurs within DOT Right-of-Way.
- At State Route RM 8-2209-1067 Japanese knotweed occurs within DOT Right-of-Way.
- At 4805466 N 521402 E along Mountain Home Road, Town of Morehouse.
- At 4805191 N 536574 E along South Shore Road, Town of Arietta.
- At 4805612 N 537542 E along Higgins Bay Road, Town of Arietta.
- At 4807472 N 536387 E along Old Piseco Road, Town of Arietta.

A map showing the terrestrial invasive plant species distribution is included in the Appendix H.

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

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 Ferris Lake Wild Forest has an assemblage of lakes and ponds with public access. Access points range from hard surface to hand launches. Aquatic invasive plants are primarily spread via human activities, therefore lakes with public access, and those connected to lakes with public access, are at higher risk of invasion. While a comprehensive survey for the presence of aquatic invasive plant species has not been completed at present, APIPP volunteers monitored Spy Lake and West Caroga Lake. Eurasian watermilfoil was detected in West Caroga Lake, but no other aquatic invasive plant infestations are documented in the unit to-date. The APIPP Park-wide volunteer monitoring program aims to maintain a long-term monitoring program on this and other lakes. All aquatic invasive species pose a risk of spreading via transport mechanisms which may include seaplanes, motorized and non-motorized watercraft (canoes, kayaks, jet skies, motor boats etc.) and associated gear and accessories.

Aquatic Invasive Plant 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 detected occurrences of aquatic invasive plants both within and adjacent to the unit.

- Eurasian watermilfoil is confirmed in the following lake within the Ferris Lake Wild Forest:
  West Caroga Lake 430813N 742945W

- Eurasian watermilfoil is confirmed in the following lake adjacent to the unit boundary:
  East Caroga Lake 430741N 742852W

A map showing the aquatic invasive plant species distribution is included in the Appendix H.

WILDLIFE

Field inventories of wildlife species have been conducted by DEC and other individuals on a broad ecosystem type basis and have included the FLWF in their scope. The species included in Appendix D were compiled

from various surveys and publications. These species are common to the Adirondack's and their populations within the unit are presumably at levels consistent with other areas of the Park.

Birds
The New York State Breeding Bird Atlas compiled by DEC and the Federation of NYS Bird clubs lists 145 bird species as occurring in Breeding Bird Atlas blocks that lie wholly or partially within FLWF; 17 possible breeders, 18 probable breeders, and 110 confirmed breeders. The Atlas deals with those species actually breeding and nesting. Species thought to occur occasionally, i.e. during periods of migration, are not shown in the Breeding Bird Atlas data. Breeding Bird Atlas data is found in Appendix D.

Birds associated with marshes, ponds, lakes and streams are numerous and include the common loon, American woodcock, great blue heron, green heron, Canada goose, and a variety of ducks. The most common ducks include the mallard, black duck, wood duck, common merganser, and hooded merganser. Birds of prey common to the unit include the barred owl, great horned owl, red-tailed hawk, sharp-shinned hawk, broad-winged hawk, and Northern Goshawk. Songbirds present include various species of woodpeckers, flycatchers, wrens, thrushes, vireos, warblers, blackbirds, finches, grosbeaks, and sparrows. Common upland game species include the wild turkey and ruffed grouse.

Mammals
The FLWF is home to a variety of large and small sized mammals. Some of the larger sized mammals include the white-tailed deer, moose, black bear, coyote, bobcat, raccoon, river otter, beaver, mink, varying hare, striped skunk, gray squirrel, porcupine, red fox, gray fox, muskrat, fisher, and marten. The smaller sized mammals include a variety of bats, shrews, moles, and mice, along with the ermine, long-tailed weasel, eastern chipmunk, and red squirrel.

Most species are distributed relatively evenly throughout the unit, although the populations of weasel, mink, muskrat, river otter, and beaver are concentrated near water, and the varying hare and red squirrel are mostly confined to spruce and fir stands. White-tailed deer populations tend to be highest in areas near recent disturbances with wintering areas occurring in lowland coniferous areas. A complete list of mammals believed to inhabit the FLWF is found in Appendix D.

Reptiles and Amphibians
The relatively short summers and long cold winters limit the number of species of reptiles and amphibians within the FLWF. Four species of turtles, eight species of snakes, seven species of salamanders, one species of toad, and eight species of frogs have been documented in the unit. Species found in marshes or ponds and along wooded streams include the following: turtles-snapping, painted, Blanding's; snakes-northern water, northern redbelly, eastern garter, northern brown; toads-American; salamanders-spotted, Jefferson, red-spotted newt, spring, two-lined, northern dusky; frogs-bullfrog, pickerel, green, wood, mink, northern leopard, gray treefrog, and spring peepers.

A few species can be found under logs and leaf litter on the forest floor or in forest openings. The species listed below do not require moist surroundings to survive: snakes-ringneck, milk, smooth green, black rat, eastern garter; salamanders-redback. A list of reptiles and amphibians believed to inhabit the FLWF can be found in Appendix D.

Endangered, Threatened, and Species of Special Concern
The Indiana bat is the only species listed on the New York State endangered species list that may be found in the FLWF. The only threatened species known to inhabit the unit is the northern harrier. Several other species that are listed as special concern which may be present in the unit include: American bittern, common loon, Cooper's hawk, northern goshawk, osprey, red-headed woodpecker, red-shouldered hawk, sharp-shinned hawk, vesper sparrow, eastern bluebird, whip-poor-will, small-footed bat, spotted salamander, and

the Jefferson salamander. Although not listed in the Breeding Bird Atlas data, recent bald eagle sightings in certain portions of the unit may indicate a possible nesting site.

Indiana Bat (myotis) - The Indiana bat (*Myotis sodalis*) is classified endangered in New York State. It's presence has not been documented in the unit, but species distribution maps indicate that it may exist in the Adirondack's wherever there are suitable conditions. Preferred habitats include caves in winter, man-made structures and possibly hollow trees in summer. Because bats hibernate in caves and mines, they are subject to flooding or ceiling collapses. The most serious problem for hibernating bats is believed to be disturbance by people exploring caves. Bats are sensitive to noise and light and can be aroused from their motionless state by passing cavers. If too many disturbances occur, the animals will not survive until spring. Outside of the hibernating season, factors which may be contributing to declines in the population probably vary. For instance, pesticide poisoning is believed to be contributing to the decline of some bat species.

Since the most vulnerable period in the life-cycle of the Indiana bat is during winter hibernation, management efforts will be concentrated on protecting bat wintering sites. If a bat hibernacula is discovered, a 100–300 meter buffer may be established around the area if necessary. This buffer zone may or may not be posted. A determination will be based on attracting the least amount of attention to the area while providing protection to the bats.

Bald Eagle - The bald eagle (*Haliaeetus leucocephalus*) is classified as threatened in New York State. They generally prefer undeveloped waterways with a good fishery and abundant large trees for nesting. Fish makes up a significant portion of an eagles diet. White pines are commonly chosen as nesting trees in the northeast, with eagles typically choosing the tallest in the area and locating the nest several feet down into the tree's branches, but with an excellent vantage from the nest. Bald eagle activity has been observed in the area in recent years, but a nesting site has not been confirmed. Management efforts will concentrate on protecting eagle nesting sites. When nests are discovered, a 100–300 meter buffer may be established around the nest if necessary. This buffer zone may or may not be posted. A determination will be based on attracting the least amount of attention to the nest while providing protection to the eagles.

Northern Harrier - The northern harrier *(Circus cyaneus*) is classified as threatened in New York State. This species has been confirmed nesting in the unit. Preferred habitats include generally open areas: tundra, grasslands and wetlands. Open wetland cover types are present within the unit. The same management efforts will apply to this species as with the bald eagle.

Common Loon - The common loon (*Gavia immer*) is a species of special concern in New York State. The characteristics of being a long-lived species and a predator at the top of the food chain make loons more susceptible to the accumulation of environmental toxins. Thus, this species is often used by scientists as an ecological indicator of the health of the environment and water quality. In addition, the loon has great public appeal, signifying remote, wild areas to people.

Numerous natural and anthropogenic (human) factors can impact the breeding population of loons. Natural predation of eggs and chicks is common and has been observed and documented on several different occasions within the Park. Airborne contaminants, including "acid rain", can cause the bioaccumulation of mercury, a neurotoxin, and a decreased food supply, which can potentially lead to decreased reproductive success. In addition, human disturbance (including paddling activity) can result in nest abandonment or direct injury to adult or juvenile birds. Shoreline use by campers, particularly on islands, has the potential to lead to the loss of nest site availability. The death of adult loons due to lead toxicity from the ingestion of lead fishing tackle accidentally lost by angers is a concern and has recently been documented in New York State. This concern has prompted the development of a voluntary sinker exchange program and new regulations banning the future sale of certain size lead sinkers in New York State. The effects of direct human impacts, such as disturbance or shoreline use, on breeding loons within this unit has not been

determined, but is presumed to be low due to the minimal number of improvements and facilities. Management efforts will concentrate on protecting loon nesting areas and habitat.

Northern Goshawk - The northern goshawk (*Accipiter gentilis*) is a species of special concern in New York State. Goshawks generally prefer coniferous forests, but can also be found around farmland, woodland edges, and open country in the winter. It is an uncommon visitor from the North, remaining mostly in the northern coniferous forests unless forced to move south by a periodic decline in the populations of the grouse that are a staple of its diet. They are fearless in defense of their nest and will boldly attack anyone who ventures too close. Goshawk populations seem to be directly influenced by prey abundance, i.e grouse populations. Since there are no specific provisions for wildlife management on Forest Preserve lands, vegetation manipulation for grouse propagation is not permissible. Therefore, management efforts will primarily concentrate on using the same techniques as with the bald eagle to protect identified nesting sites whenever possible.

Osprey - The osprey (*Panion haliaetus*) is a species of special concern in New York State. Ospreys have been observed in the unit, but no known nests have been found to date. If a nesting site is discovered within the unit, the same management efforts will apply to this species as with the bald eagle.

Small-footed Bat - The small-footed bat (*Myotis subulatus*) is a species of special concern in New York State. Preferred habitats include caves, mine tunnels, crevices in rocks, and buildings in or near forested areas. Like most bats, the small-footed bat's most serious problem is believed to be human disturbance during hibernation. Too many disturbances and the animals will not survive until spring. The same management efforts will apply to this species as with the Indiana bat.

Spotted Salamander - The spotted salamander (*Ambystoma maculatum*) is a species of special concern in New York Sate. These amphibians stay underground for most of their lives. They can occasionally be found (from spring to autumn) beneath stones or boards in moist environments or during wet weather. The spotted salamander is an early spring breeder that, under stimulus of warm rains, sometimes makes mass migrations to woodland ponds. Management efforts related to this species will focus primarily on protecting unit waters and water quality.

Jefferson Salamander - The Jefferson salamander (*Ambystoma jeffersonianum*) is a species of special concern in New York State. Like the spotted salamander, the Jefferson salamander stays underground most of its life. Thess salamanders congregate in numbers in temporary pools and ponds after early spring rains to breed. Finding specimens before or after breeding season is likely a matter of chance. Individuals may wander on rainy nights, but they take shelter before morning beneath boards , logs, stones, etc. The same management efforts will apply to this species as with the spotted salamander.

Extirpated Species

The elk, timber wolf (or red wolf), cougar, and wolverine are all animals that once inhabited the FLWF but have since disappeared from the Adirondacks and New York State. The mammals' disappearances were mostly attributed to unregulated harvest and habitat destruction in the nineteenth century; while the more recent bird disappearances (i.e. eagles and loons) can be attributed to pesticide abuse. The once extirpated moose population has started to reestablish itself through natural migration and projects have been conducted to reestablish the bald eagle and peregrine falcon.

Public Health Concerns

Chronic Wasting Disease (CWD) in White-tailed Deer - CWD is a rare, fatal, neurological disease found in members of the deer family (cervids). It is a transmissible disease that slowly attacks the brain of infected deer and elk, causing the animals to progressively become emaciated, display abnormal behavior, and invariably results in the death of the infected animal. Chronic Wasting Disease has been known to occur in

wild deer and elk in the western U.S. for decades and its discovery in wild deer in Wisconsin in 2002 generated unprecedented attention from wildlife managers, hunters, and others interested in deer. Chronic Wasting Disease poses a significant threat to the deer and elk of North America and, if unchecked, could dramatically alter the future management of wild deer and elk. However, there is no evidence that CWD is linked to disease in humans or domestic livestock other than deer and elk.

Giardiasis - This intestinal illness sometimes called "beaver fever" is caused by a microscopic parasite called *Giardia lamblia*. Even though many animals other than man can act as hosts, including the beaver, improper disposal of human excrement is one of the primary reasons for the increased numbers of this parasite in the interior.

Lyme Disease - This infection is caused by the bite of a deer tick carrying a bacterium, that often infects deer, field mice, humans and household pets.

West Nile Virus - This is a relatively new viral disease that is carried by birds and can be transmitted to humans through mosquito bites. It is often fatal to some species of birds, such as crows, but in most species it is not fatal. It can be fatal in humans, especially in those with compromised immune systems. The use of insect repellant can help reduce exposure to the virus by warding off potentially infected mosquitoes.

Rabies - Rabies is a viral infection that affects the nervous system of all mammals, including humans. It is usually transmitted by the bite of an infected animal to another. Like other viral infections, it does not respond to antibiotics and is almost always fatal once the symptoms appear. Major carriers of rabies include raccoons, skunks, bats and fox species, but all mammals can be potential carriers. Fortunately, no cases of rabies were confirmed in Hamilton County in either 2000 or 2001.

FISHERIES

The aquatic communities of the Adirondacks are a result of geological and human influences. Prior to human influence relatively simple fish communities were common. Human-caused changes in habitat and introduction of other fish species have altered those natural communities. Nonnative fishes are now widespread and many native species are now more widely distributed than they historically were; sometimes at the expense of other species. A few native species, notably brook trout and round whitefish, have declined. (See Individual Pond Descriptions and definitions of fisheries management classifications in Appendix E.)

Geological History

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 glaciers. Such species presumably had access to most Adirondack waters. About 13,000 B.P. (Before Present), glacial retreat exposed much of the southern Adirondacks. Formation of glacial Lake Albany and inundation of the great falls at Cohoes, Glens Falls, Hudson Falls and other barriers resulted in re-colonization of the Upper Hudson watershed by cold-tolerant Atlantian and eastern Boreal fishes. Around 12,300 B.P. further retreat of the glacier allowed drainage eastwards through the Mohawk Valley or "Rome Outlet," but this corridor provided little or no access to the Adirondack upland because glacial Lake Albany had already drained by this time and Lake George was isolated from Lake Champlain by a series of cascades and falls. "Regardless, some species were probably added to the Hudson-Mohawk ichthyofauna at this time, but they are poorly defined." (George, 1980) Around 12,000 B.P. the St. Lawrence Valley and the Laurentian Corridor opened for re-colonization of the Adirondacks via the Raquette River. Barriers and high gradient streams kept some lowland boreal species, such as northern pike, lake whitefish and burbot from colonizing the area. In general, waters low in the watersheds had the most diverse communities. The number of species present decreased progressing towards headwater, higher elevation sections. Chance and

variability in habitat complicated the trends. Consequently, a diversity of fish communities, from no fish to monocultures to numerous species, occurred in various waters.

Human Influences

Detailed documentation of the historic fish communities in the FLWF is not available. Extensive fishery survey data was first collected in the 1930's, decades after the massive stockings and introductions of the late 1800's. Reviewing work by Mather (1884) and others from the late 1800's, George (1980) has summarized what is known. Appendix E presents information on species known to be native, native-but-widely-introduced (NBWI), and nonnative.

Brook trout, however, were particularly successful at colonizing and thrived in the relative absence of competing and predacious fishes. George (1980) states:

> "Under primeval conditions, the brook trout was nearly ubiquitous in the Adirondacks. Its agility, great range in size and facility in rapidly flowing water allowed it to spread widely, perhaps even concurrently with the demise of the glaciers, thus explaining its presence in unstocked waters above currently impassible waterfalls."

Further evidence that brook trout were generally widespread in the unit can be garnered directly from Mather (1884). In his paper Adirondack Fishes with Descriptions of New Species, from Researches made in 1882, Mather published some information about the distribution of fishes obtained by making public inquiries. These inquiries were in the form of 15 questions that were published in Forest and Stream and also sent to various persons known to be familiar with Adirondack locales. The first question he posed was "What waters in the Adirondacks do not contain brook trout?" In response, Mr. C.P. Williams, President of Albany National Exchange Bank wrote the following: "I gladly reply to your list of numbered inquiries, and in doing so will confine myself to the waters of Jerseyfield Lake on the border of Hamilton and Herkimer Counties, and its neighboring streams and smaller lakes from three or four miles distant, unless otherwise stated. 1. I know of none which certainly do not contain the brook trout." [Over 24 lakes and ponds in the Ferris Lake Wild Forest are within a three mile radius of Jerseyfield Lake.] Two other respondents whose replies demonstrate their familiarity with the Ferris Lake area are Captain L.A. Beardsley and Watts T. Loomis, both of Little Falls, NY. Both men mention only Dexter and Spectacle Lakes as not containing brook trout, and only then because of the unwise introduction of chain pickerel. Considering the responses of these three men to the questions posed, it appears that virtually all the waters of the Ferris Lake Wild Forest contained brook trout prior to modern perturbations of man.

Another early source that demonstrates the ubiquitous presence of brook trout prior to the influence of man is Wallace's Guide to the Adirondacks, by Edwin R. Wallace (1884). In his colorful description of attractions in the Wilmurt Lake and West Canada Lake area (private and public lands which border the Ferris Lake unit), and the Ferris Lake area itself, he states the following, "From Wilmurt Lake it is 1½ E. (trail) to Big Rock Lake (1½ X 3/4) which affords beautiful scenery, fair trout-fishing and good deer-hunting. Thence it is 2 ½ m. N.E. by blind trail over a mountain to Metcalf Lake (2 X 1/3), discovered half a century ago by Col. Metcalf, the chum of Nat. Foster and Jock Wright. As an exception to the general rule, this lake contains no speckled trout."

Acid Precipitation

Acid precipitation is a serious threat to the aquatic communities in certain areas of the Adirondacks. The FLWF is one area that has been severely impacted. Fish species that are native to the unit are largely those typically associated with the Adirondack upland; however, area waters have been severely impacted by acid precipitation. Many waters that formerly contained fish populations are now devoid of fish life and the diversity of native species has been reduced.

Many brook trout fisheries in the Adirondacks have succumbed to the phenomenon of acid precipitation. The earliest survey data from the FLWF suggests that the problem may date back to the 1930's and earlier. Of the 85 lakes and ponds in the unit for which water chemistry information is available, 25% have pH values of less than 5.0. Only 15% have pH values of 6.0 or above. To illustrate the significance of these numbers, brook trout can survive pH levels ranging from about 4.0 to 9.5 and distilled water has a pH of 7.0. Because many of the unit's ponds have only sparse historical fisheries data, it is difficult to document the fish community changes associated with acidification. An indication of the devastation that acid deposition has wrought on the FLWF can be deduced from the early work of Mather (1884). As described above, there is evidence that virtually all of the approximately 24 lakes and ponds within a 3-mile radius of Jerseyfield Lake were known to contain brook trout at that time. Presently, eight of those lakes are known to be fishless, and several others for which data is lacking are likely fishless as well. Four of the other ponds which are lacking in fish community data have pH values of 5.0 or less. Only two of the 24 lakes are known to have pH values which exceed 5.5. Redlouse Lake, Boyer Lake and Black Creek Lake are other unit waters which best demonstrate a documented example of species decline.

Many species of minnows, most notably redbelly dace and blacknose dace, are intolerant of acid conditions (Gallagher and Baker, 1990). The dearth of minnows collected in FLWF waters during the early surveys of the 1930's may also indicate that acidification had already impacted much of the unit by that time.

Brook Trout Distribution

Eleven ponds currently support brook trout fisheries: Third Lake, Alder Brook Lake, G Lake, House Pond, Redlouse Lake, Franks Pond, Mud Lake (MH-P 816), Christian Lake, Jockeybush Pond, Iron Lake and North Branch Lake. Of these only House Pond, Alder Brook Lake and Mud Lake are believed to have populations which are sustained by natural reproduction. Survey analysis indicates that a few more waters may be capable of supporting brook trout as detailed in the individual pond narrative section in Appendix E.

Only four streams in the unit are currently stocked. These include East Canada Creek, Middle Sprite Creek, West Canada Creek and South Branch West Canada Creek.

Fish Distribution (other than brook trout)

One of the more common species in the unit is the chain pickerel. This species is reported by George (1980) to be introduced from the lowlands. Records indicate introductions to the area in 1842. The species was widespread in the unit when early survey work was done in the 1930's. Chain pickerel are less widespread in the unit now than 60 years ago due to pond reclamation with rotenone and acidification.

A very interesting member of the FLWF fish fauna is the creek chubsucker. During the New York State Biological Survey, conducted in the 1920's and 1930's, creek chubsuckers were collected from several waters in the Ferris Lake Wild Forest and the Shaker Mountain Wild Forest, which is adjacent and to the east. FLWF waters that were found to contain creek chubsuckers include Canada Lake, West Lake, Third Lake and Fourth Lake.

In the Adirondacks, creek chubsuckers were not collected from any of the other major river drainages, including the Hudson, during the intensive sampling effort of the New York State Biological Survey. This species continues to have a limited range in the Adirondacks of New York State and was found by the Adirondack Lake Survey Corp (ALSC) from only 17 of 1123 waters surveyed during the period 1984-1987, although ALSC did find populations in the Hudson and Black River drainages as well as the Mohawk Hudson. The restricted range of creek chubsuckers in the early 1900's suggests the Mohawk Valley or Rome Outlet avenue of introduction that George (1980) referred to.

Extirpated Species
There are no known extirpated fish species that were indigenous to area waters.

SIGNIFICANT HABITATS
Several areas within the unit which have been identified as important wildlife habitats include:

- **Deer Wintering Areas** - Six deer wintering areas have been identified: Fourmile Brook - Hurrell Vly, South Branch West Canada Creek, Morehouse Lake - Goldmine Stream, Northern Powley-Piseco Road, Jockeybush Lake, and Middle Sprite Creek.
- **Common Loon** - Nine Corner Lake, Spectacle Lake, G Lake, Sand Lake, Ferris Lake, Spy Lake, Diamond Lake, and Long Lake along with privately owned Kennels Pond (nesting), Pine Lake, and Sheriff Lake.
- **Historic Peregrine Falcon Nesting Sites** - T Lake Falls/nearby mountains (This nesting site may lie within the West Canada Lake Wilderness).
- **Great Blue Heron Rookery** - Big Marsh Mountain.

Bird Conservation Areas
Important Bird Areas (IBAs) represent the most important habitats for the survival of birds and the conservation of bird species. They can be important only in their home state or province, or can be of national and even global significance. IBAs have to have a high level of bird use, such as a large number or individuals or a high diversity of species, or they must be home to species of high conservation priority.

Audubon inaugurated the IBA Program in New York State in 1996. The IBA Program was formally adopted as one of a triad of habitat conservation strategies that make up the Partners in Flight (a loose coalition of conservation organizations, wildlife agencies, and other groups cooperating to further the aims of bird conservation in the United States and Canada) Bird Conservation Strategy, or "Flight Plan." In New York State, Audubon has collaborated with Partners in Flight state and regional coordinators to fit the IBA Program into the larger context of the Flight Plan, which includes developing physiographic area conservation plans, habitat goals for species and habitat types, and management recommendations for large landscape-level units.

In 1997, New York Sate created a model Bird Conservation Area (BCA) program based on Audubon's IBA program under §11-2001 of the Environmental Conservation Law of New York. The program is designed to safeguard and enhance bird populations and their habitats on selected state lands and waters. In November of 2001, New York designated the Adirondack mountain summits above 2,800 feet in Essex, Franklin, and Hamilton counties as the Adirondack Subalpine Forest Bird Conservation Area (BCA). The site was nominated because of its diverse species concentration, individual species concentration and its importance to species at risk, in particular the Bicknell's Thrush (special concern). The portion of the FLWF within Hamilton County does not exceed 2,800 feet in elevation, therefore no part of the wild forest is part of the BCA.

Deer Wintering Areas
A deer wintering area or deer yard is any piece of landscape where deer tend to concentrate during winter. Deer wintering areas typically have features which provide thermal benefits and/or mobility advantages during periods of cold and deep snow. In the Adirondacks, deer wintering areas are often associated with dense conifer cover which helps 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 wintering areas also have adjacent regenerating hardwood components which provide available woody browse during milder conditions.

Information provided by regional wildlife staff identified several historic deer wintering areas that are wholly or partially contained within the unit (see above significant habitats). Deer use the same areas annually, although the precise boundaries of these areas can change over time depending on winter weather and vegetative succession, so some of these areas may not hold deer every winter, and other areas may not have been identified.

Potential Deer Wintering and Spruce Grouse Habitat (See maps in the Appendix)
A GIS model of potential deer wintering habitats based on forest type, elevation, and slope was recently developed for the Adirondack (J. Gagnon and S. McNulty, Adirondack Ecological Center, 2005). The GIS potential deer wintering area habitat model was applied to the FLWF and surrounding areas. Initial results suggest that most of the potential deer wintering habitat lies outside historical area boundaries, primarily on nearby private land. Deer selection of wintering areas is not completely understood. However, the identification of areas of potential wintering habitat in the unit, combined with the recent findings of Hurst (2004), suggest that the current sizes and locations of deer yards within the unit may not reflect historical deer wintering area boundaries delineated by the Department in the 1960s and 1970s. Therefore, planning for the protection of deer wintering areas relative to recreational activities in the unit should consider the dynamic nature of these rather than the static representation of historical boundaries, and seek to update our understanding of wintering areas currently used by deer. The model was developed for the central Adirondacks and may be inaccurate along the periphery of the Park.

In addition to deer wintering habitat, GIS models were also developed for potential spruce grouse habitat (APA/Sun Plattsburg, 2004). Although potential spruce grouse habitat was identified within the FLWF, no spruce grouse have actually been observed within the FLWF based upon BBA data. The spruce grouse model is important not only for this species, but theoretically the whole suite of boreal forest birds and other wildlife that use lowland spruce-fir habitats.

Guidelines for Protection of Deer Wintering Areas
The maintenance and protection of deer wintering areas are important in maintaining deer in the northern portions of their range. Activities which substantially diminish the quality or characteristics of the site should be avoided, but this does not mean human use is always detrimental. Forest stewardship activities (including softwood harvest), pass through trails, and other uses can be compatible with deer yards if they are carefully considered.

The most important characteristic of an Adirondack deer wintering area is the habitat configuration making up a "core" and travel corridors to and from the core. The core is typically an area, or areas, of dense conifer cover used by deer in severe conditions. Travel corridors are dense but narrow components which allow access to food resources in milder conditions. Forest management conditions which afford protection of core sections and avoid fragmenting travel corridors are acceptable in many situations. Certain types of recreation trails, such as ski trails or snowmobile trails, particularly if the traffic is not prone to stopping or off-trail excursions, are not considered to have significant negative impacts on deer yards. These types of trails in or adjacent to deer wintering areas can provide firm, packed surfaces readily used by deer for travel during periods of deep snow. They can, however, also create access for free-roaming dogs if the location is close to human habitation; thus, trails should avoid deer yards in these situations. High levels of snowmobile or cross-country ski use can disturb deer and may cause them to run, placing higher energy demands on deer already stressed by winter. The following are some general guidelines to follow for protecting deer wintering areas.

- Maintain a minimum 100 foot forested buffer on either side of streams to protect winter habitat and travel corridors between core yard components.

- Avoid placement of heavily used ski trails through core segments of deer yards to reduce disturbance associated with skiers stopping to observe deer.

• Trails should not traverse core segments of deer yards in densely populated areas such as hamlets, villages, or along roadsides developed with human habitation because they provide access to free roaming dogs.

VISUAL/SCENIC RESOURCES

The FLWF is a very large, diverse, and interesting unit. Its many streams and scattered lakes are attractive and aesthetically pleasing. The most notable and well known water features are the "potholers" along the East Canada Creek and a series of small waterfalls along Goldmine Stream. There are also sections of several rivers that have been designated in ECL§15-2711 and classified under the APSLMP as wild, scenic or recreational (see below).

Another visually distinguishing characteristic is the unit's old growth spruce. Old growth spruce stands still exist and can be found along the Powley-Piseco Road, the north side of Alderbed Stream, around Blind Man's Vly, and on the slopes of Big and Little Alderbed Mountains. These "forest giants" are truly a spectacular sight.

Other special interest areas include the cliffs on Good Luck Mountain, Rooster Hill, and Panther Mountain. These cliffs provide excellent vistas with panoramic views of rolling hills dotted with lakes, ponds, swamps and vlys. The greatest period of aesthetic delight is probably during the fall coloration period, when the red maple blaze contrasts the drabness of the spruce and hemlock. The vista atop Tomany Mountain is no longer available since the removal of the fire tower.

TRAVEL CORRIDORS

Several sections of highway that pass through the unit are classified as travel corridors. A travel corridor is defined by the APSLMP as "that strip of land constituting the roadbed and right-of-way for state and interstate highways in the Adirondack Park...and those state lands immediately adjacent to and visible from these facilities."

The importance of major travel corridors to the character of a unit cannot be over-emphasized. The lands adjacent to these highways are most visible to the traveling public and often have an impact on the public's attitude and feelings toward a specific area. The following sections of state highway are classified as travel corridors and will be managed consistent with their classification:

Route	Terminal	Approx. Mileage
8	Southwest Park Boundary to unit boundary near Higgins Bay.	35
10	Southern Park Boundary to Route 8.	27
29A	Southwest Park Boundary to the Route 10 split near Caroga Lake.	13 (a)

(a) includes 4.50 miles dually designated as Route 10.

WILD, SCENIC AND RECREATIONAL RIVERS

Several sections of river that flow through the unit are classified under the Wild, Scenic and Recreational Rivers System Act (ECL Article 15, Title 27). The following sections are classified and will be managed consistent with their classification:

Wild Rivers

South Branch of West Canada Creek - approximately 3 miles of river from the West Canada Lake Wilderness boundary located just south of the confluence with Beaudry Brook to a footbridge crossing located approximately one mile up stream of The Floe (ECL §15-2714(1)(g)).

Scenic Rivers

East Canada Creek - approximately 20.9 miles of river from Powley Place to a point at which the creek intersects the Adirondack Park boundary near Sprite Creek at the southwest corner of lot 45, town of Oppenheim, Lott and Low's Patent (ECL §15-2714(2)(i)).

Recreational Rivers

South Branch of West Canada Creek - approximately 9.7 miles of river from the footbridge crossing one mile upstream of The Floe to the confluence with the Main Branch of West Canada Creek (ECL §15-2714(3)(bb)).

West Branch of the Sacandaga River - approximately 1.5 miles of river from the Silver Lake Wilderness boundary near the most downstream Route 10 bridge crossing to the most upstream Route 10 bridge crossing near Good Luck Lake (ECL §15-2714(3)(w)).

Pursuant to 6 NYCRR §666.6(f), upon the designation of a river in this system and until final boundaries are established, the provisions of 6 NYCRR Part 666 (the regulations implementing the Wild, Scenic and Recreational Rivers program) are applicable within one-half mile of each bank of the river. None of these rivers are known to have a current use which is in conflict with either the Wild, Scenic and Recreational Rivers Act (ECL Article 15, Title 27) or the implementing regulations.