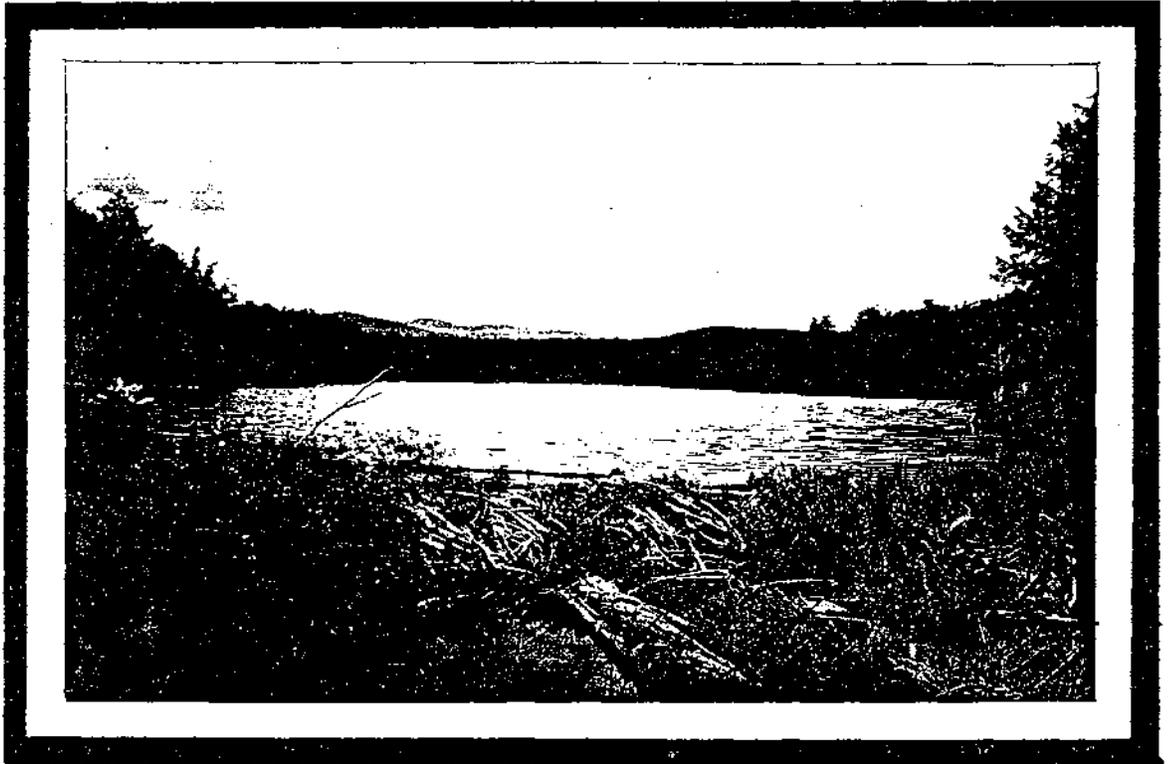


**DEC**  
Publication



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**WILLOWEMOC - LONG POND  
WILD FOREST  
UNIT MANAGEMENT PLAN**

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October 1991

**New York State Department of Environmental Conservation**



**WILLOWEMOC - LONG POND WILD FOREST**  
**UNIT MANAGEMENT PLAN**  
**OCTOBER, 1991**

New York State Department of Environmental Conservation

Mario Cuomo  
Governor

Thomas C. Jorling  
Commissioner



OCT 07 1991

TO: The Record

FROM: Thomas C. Jorling

RE: Unit Management Plan  
Willowemoc-Long Pond Wild Forest

The Unit Management Plan for the Willowemoc-Long Pond Wild Forest has been completed. It is consistent with the guidelines and criteria of the Catskill Park State Land Master Plan involved citizen participation, is consistent with the State Constitution, the Environmental Conservation Law, rules, regulations and policy. The Plan includes management objectives for a five-year period and is hereby approved and adopted.

cc: L. Marsh



WILLOWEMOC - LONG POND WILD FOREST

UNIT MANAGEMENT PLAN

PREFACE

Unlike the more mountainous regions to the north and east which typify the Catskills, the Willowemoc - Long Pond Wild Forest is an area of subdued terrain with several ponds and a diversity of wetlands. Adding to the unique character of this unit is a network of wood roads providing both access and an opportunity for a variety of outdoor recreation. Having only recently acquired (1987/89) a nearly 4,000 acre portion of this unit where most of this network of wood roads exist, a primary focus of this management plan is to propose appropriate recreational use of this trail network.

The following plan identifies the various resources, both natural and man-made, which make up the Willowemoc-Long Pond Wild Forest. It describes the historical and cultural influences which have shaped the character of the area. Issues and constraints affecting the unit are noted, and both goals and objectives have been developed which will govern the area's future management. The plan proposes specific projects to fulfill these goals and objectives. Although much of the information contained within this plan was developed by Department staff, public input was essential in the decision-making process.

This document represents management objectives rather than a work plan of commitments. Accomplishment of management actions outlined herein is dependent on legislative budget appropriations, and sufficient personnel to carry them out. However, where possible the Department will work with volunteer groups and pursue alternative funding sources to accomplish some of the proposed projects. For example, volunteers from the Livingston Manor area recently constructed three bridges on the snowmobile trail along the east side of Mongaup Pond, and volunteers from the NY-NJ Trail Conference have helped the Department maintain several of the hiking trails in the Catskills, including the Mongaup-Hardenburg Trail.

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Cover Photo: Long Pond - F. Gerty, Jr.

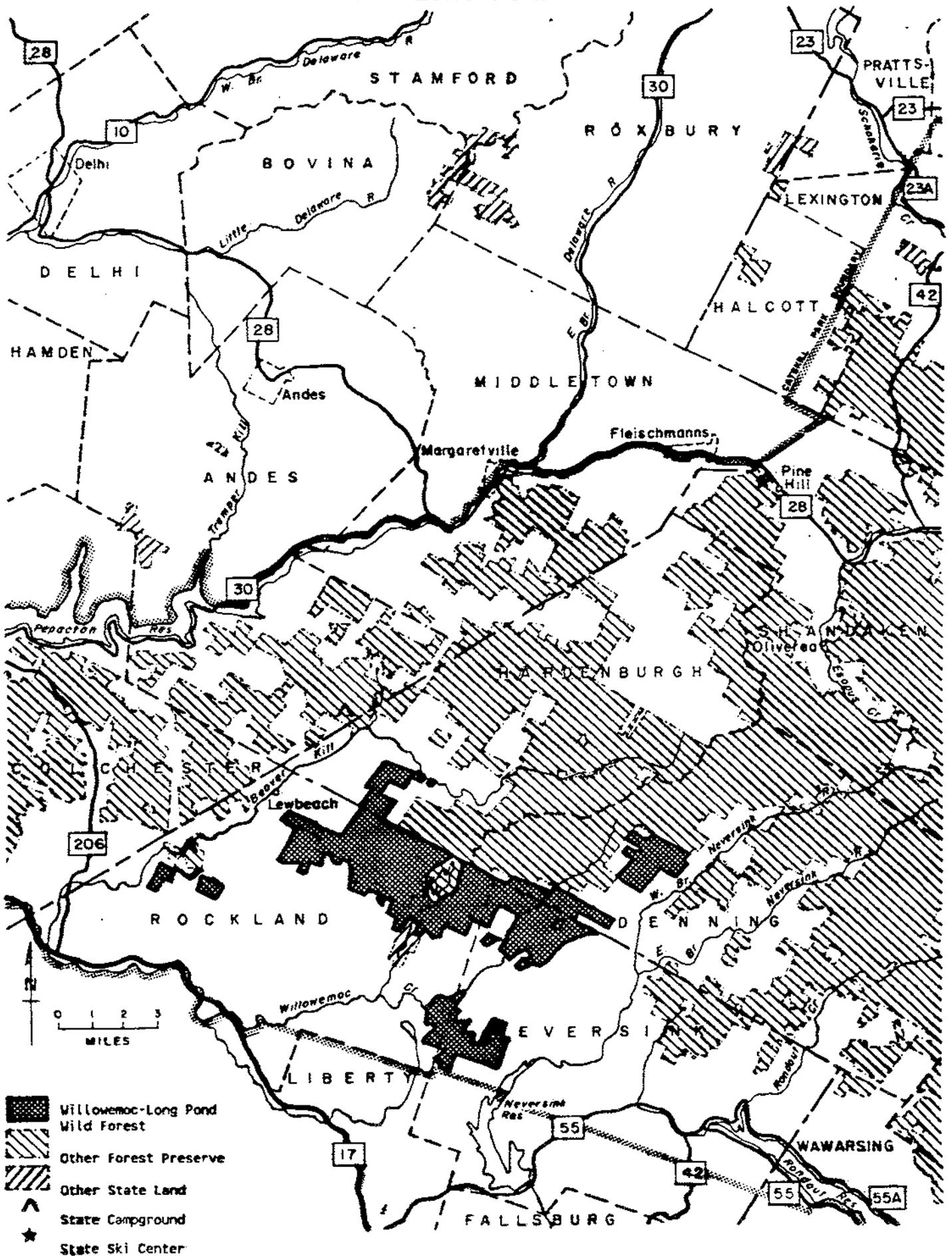
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# LOCATION OF WILLOWEMOC - LONG POND WILD FOREST





I.

**INTRODUCTION**

A. Area Description

1. Location

The Willowemoc - Long Pond Wild Forest is a management unit in the southwestern portion of the Catskill Park. It is made up of Forest Preserve lands in the Towns of Neversink and Rockland, Sullivan County and the Towns of Denning and Hardenburgh, Ulster County.

While most of the unit is made up of one large contiguous parcel, it also includes several smaller "detached" parcels (see Size). These lands are a part of the Hardenburgh Patent, Great Lots 4, 5, and 6 (the majority of the lands being in Great Lot 5).

The unit is bordered on the northeast by the Big Indian - Beaverkill Range Wilderness Area. Where the unit directly abuts this wilderness area no "on the ground" boundary exists.

The unit also abuts (nearly surrounds) the Mongaup Pond Campground - forest preserve land classified as an intensive use area. The campground's boundary is posted with "restricted area" signs which prohibit hunting (in the campground).

The Village of Lew Beach is approximately 3 miles west of the unit, Willowemoc is nearly the same distance south of the main unit (just north of the "Willowemoc" detached parcel), and Claryville is approximately 4 miles east of the unit. Livingston Manor, the closest village with significant amenities, is approximately 9 miles southwest of the unit. Liberty is about 18 miles to the south.

2. Access

There are four principle access points to the main body of this unit:

Round Pond Road (eastern end of unit).

From Liberty east on State Route 55, -- or from Napanoch west on State Route 55 -- to Curry. North on Sullivan County Route 19 to Claryville. West on Sullivan County Route 157 (changes to Ulster County Route 47 - West Branch Road) about 1.3 miles to Round Pond Road. West .6 miles on Round Pond Road to Black Bear Road. North on Black Bear Road.

Flugertown Road (eastern end of unit).

From Round Pond Road (above) continue west

past Black Bear Road into Sullivan County on what is now called the Pole Road approximately 4 miles to Flugertown Road. North on Flugertown Road.

Mongaup Road (Central part of unit). From Route 17/Livingston Manor (Exit 96) East on Sullivan County Route 81 six miles to DeBruce. North on Mongaup Road 2 miles to Fork. Left fork 1/3 mile to Frick Pond Parking Lot; right fork 1 mile to Mongaup Pond campground.

Shin Creek Road (northwest end of unit). From Livingston Manor North on Sullivan County Route 151 (Johnson Hill Road) about 10 miles to Lew Beach. East about 3.5 miles on Shin Creek Road.

Detached Parcel Access The Craige Clair detached parcel can be reached from the Craige Clair Road via the Beaverkill campground (direct access from the Craige Clair Road has not been developed). Johnson Hill Road provides access to the

Waneta Lake parcel. The western Beaverkill detached parcel can be reached by foot from forest preserve lands along the east side of the Shin Creek Road. The other two Beaverkill detached parcels are inaccessible. The Willowemoc detached parcel can be reached via several town roads including Conklin Hill Road, Parksville Road, Woodard Road and Aden Hill Road. The detached parcel north of Church Road is inaccessible. The forest preserve lands in Ulster County which include Fall Brook and Flat Brook can be accessed via the Black Bear Road or by foot via the now abandoned Tyler Place Road.

### 3. Size

This unit encompasses approximately 14,870 acres of Forest Preserve lands, most of which lie within one large, contiguous parcel. Eight smaller detached parcels in close proximity to the main parcel are included in this management unit. The size of each of these parcels can be found in Table 1.

The main unit is over 11 miles long and ranges from .5 to over 4 miles wide.

Table 1. Size of forest preserve parcels comprising the Willowemoc - Long Pond Wild Forest.

PARCEL NAME/DESCRIPTION	ACREAGE
Main Unit (Quick Lake, Frick Pond, Long Pond, Fir Brook)	11,268
Craigie Clair	235
Waneta Lake	251
Beaverkill (West)	29.9
Beaverkill (Central)	30.6
Beaverkill (East)	12.2
Willowemoc/Conklin Hill/Aden Hill	1,679
Church Road	48
Fall Brook/Flat Brook (Ulster County)	1,316
<b>Willowemoc - Long Pond Wild Forest TOTAL</b>	<b>14,869.7</b>

#### 4. Topography

This unit is not as mountainous as other areas in the Catskill Park. Streams and ponds are more prominent than peaks. While steep-sided ridges are common, elevations vary little more than 1,000 feet throughout the entire unit. The high point being 3,100 feet above sea level near the summit of Beech Mountain (the 3,118 foot summit being on private land adjacent to the unit).

B. History

The Lenni Lenape Indians, members of the Algonquin Indian nation, were probably the first to utilize the region for its plentiful fish and game. They developed the first transportation route into and through the area with their so called Sun Trail which followed the route of the sun (east - west) from the Hudson (Kingston) to the Susquehanna (Binghamton). They were also responsible for many of the area's place names, including Willowemoc, the name of a local group of Lenni-Lenape Indians, and Neversink, an Indian name with several possible meanings (a mean, mad river; a continual running stream which never sinks into the ground; a highland between waters or water between highlands) (Quinlan, 1873).

In 1706 the Indian sachem (wise man) Naisinos is said to have sold a large tract of land which included the Catskill Mountains to Johannes Hardenbergh for 60 pounds. Having thus cleared any title claims the Indians may have had with the area Hardenbergh then persuaded Queen Anne of England (in 1708) to grant him and his associates title to the region. This grant became known as the Hardenbergh Patent and encompassed nearly 2,000,000 acres.

Various disputes and survey problems followed which led to arguments over title to various lots within the patent. The uncertainty kept most settlers out of the region and the Catskills remained an undeveloped wilderness until the 19th century.

Construction of the Newburgh - Cohecton Turnpike in 1809 led to the first real opportunity for settlement of Sullivan County. Passing through Monticello and Bethel, it provided an essential link between the County and the commercial and banking center of the region (Newburgh) (Heidt, 1956).

The hamlet of DeBruce takes its name from James Desbrosses who owned most of the land in Great Lot 5 of the Hardenbergh Patent, which included most of the lands in the Willowemoc - Long Pond Wild Forest. Shortly after the Revolutionary War he and John R. Livingston, who owned much of Great Lot 4, began to encourage tenants to settle their lands. Debrosses died in 1811 and his lands were divided equally between his two daughters, Elizabeth Hunter and Charlotte Overing. Soon after acquiring the lands his wife inherited, John Hunter employed Abel Sprague to cut and make Hunter Road over the old Sun Trail of the Indians. Starting in Shin Creek, Sprague worked eastward until reaching Grahamsville. Completed in

1815, it brought many new settlers to the area (Tiffany, 1976; Quinlan 1873).

Farming was probably the first economic activity in the area (Schieppati 1990). Small sawmills soon arose and as transportation routes improved in the mid 1800's, the leather tanning industry expanded from the eastern Catskills into Sullivan County. Animal hides imported from Argentina were shipped to the Catskills where Hemlock (the bark of which was the source of tannin, an essential ingredient in the tanning process) were abundant.

In 1856 Stoddard Hammond and James Benedict contracted with John Hunter, Jr. for the bark on 35,000 acres of land and commenced construction of one of the most extensive tanneries in the County at DeBruce. Costing \$70,000 and employing 50-100 men, the tannery had the capacity to manufacture 60,000 sides of leather annually. To link the tannery with the toll road in Claryville, the owners constructed the Pole Road, a toll road constructed of logs laid side by side with their tops hewn flat. Each farmer along the road maintained 80 rods of the road and charged a toll for its use.

By 1864 there were 40 tanneries in Sullivan County, including one at Claryville and one at what is now the Beaverkill Campground. Thousands of

hemlocks were cut down and peeled of their bark annually and by the late 1880's all but the most inaccessible hemlock stands had been cut. Although some hemlock wood was utilized for bridge planking or other local uses, it is estimated that 95% of the barkless, fallen trees were left to rot in the woods (Kudish 1971). Faster growing, more light-tolerant hardwood species invaded areas where the hemlock had once dominated, setting the stage for the wood chemical industry which followed.

The Industrial Revolution in England and latter in the U.S. generated a need for certain chemicals used principally in the manufacture of woolen cloth. **In the mid 1800's a technique for making these** chemicals by destructively distilling hardwoods was introduced in the U.S. from Scotland. Within a few years acid factories were constructed in the western Catskills. Acid factories utilized hardwoods to manufacture wood alcohol, acetate of lime and charcoal.

The acid factory business was well suited to the Catskills. They required an abundance of hardwood timber as a raw material, large quantities of water to cool the distillation machinery and unskilled labor to harvest the raw material and work in the plants.

The distillation process used in the acid factories was relatively complex, and for a time was referred to as the "Secret Process." hardwoods (preferably birch, beech and maple) were cut into four foot lengths by independent wood cutters. Once cut, all pieces over six inches in diameter were split to assure complete carbonization. Horse teams with wagons or sleds were used to haul the wood to the factory yard where it was allowed to air dry. Once properly dried (usually for a year), it was carried into the factory and loaded into the retorts. A retort was an iron cylinder three and one half feet in diameter and eight feet long set horizontally in masonry above a fire box. One end of the retort was fitted with an airtight iron door, the other end was tapered and led to the condenser. Once charged with wood, the retort door was closed, locked and sealed with clay to be sure no air entered. A fire was then lit in the firebox (Coal or charcoal) and the temperature was slowly brought up to 520 degrees Fahrenheit and held there. As the wood gradually changed to charcoal, gases were produced which condensed in a copper still (condenser). The resulting pyroligneous acid was collected in wooden tanks (turns). This was then mixed to produce methanol and a crystalline powder known as acetate of

lime. These were the key products of the industry. They were usually shipped by rail to secondary manufacturers. Methanol was used in paint, varnishes, smokeless powder and later for antifreeze. Acetate of lime was converted to acetic acid which was used as an intermediate in the manufacture of textiles (color-fast dyes) and vinegar. It was also important in the photographic process and in the production of other chemicals such as acetone. Charcoal, a by-product of the early factories, was used in the manufacture of charcoal iron, as well as a fuel for the retorts in the factory. It was not until the 1940's that it became popular for cooking.

The King Brothers established the first acid factory in Sullivan County in 1878 at what is now appropriately called Acidalia. The next twenty years saw a massive expansion of the acid factory business. Small plants were built throughout Delaware and Western Sullivan County. Because wood was hauled to the plant by horse teams, and because it would not have been profitable to send these teams a long distance, wood was harvested within a close radius of the plant. When the nearby wood supply was exhausted, the factories would either be closed or dismantled and moved to an area with an abundant wood supply. In connection with their factories, most

owners also had a sawmill. The choicest logs were sent to the mill where as the low grade hardwoods were sent to the acid factory. In this fashion much of the area between Livingston Manor and Walton was completely stripped of wood.

"Harry" Treyz operated two acid factories in Sullivan County, one in Livingston Manor and one in Willowemoc. The Willowemoc plant was built in 1891. It had 24 retorts and employed 25 people. Fire destroyed the plant in 1925. Hammond and Fish operated factories in Grooville and DeBruce from 1880 to 1898.

Heavy demands for wood chemicals by World War I brought a temporary boom to the industry which at its peak consumed 190,000 cords of wood annually and employed 3,000 men in Delaware and western Sullivan County. However, German scientists working under pressure of war developed a synthetic substitute for the chemicals which were in great demand. While some factories survived by adopting new ways and developing new markets, by the end of World War II only a handful of plants were left. Interestingly enough, during the final years the only marketable product was charcoal, originally considered a "stepchild" of the industry (Myers, 1986).

Other wood using industries have had an important effect on the area as well. Saw mills in Lew Beach, Beaverkill, Craigie Claire, Grooville, Willowemoc and at the Outlet of Lake Juanita (Waneta) likely derived their raw material from lands now comprising this unit. The Sherwood Mill at Livingston Manor which produced table legs, Indian Clubs, dumbbells and baseball bats became a major wood-using mill in the region. Until 1900, all Spaulding baseball bats were made at Sherwood's plant. After a fire destroyed the mill in 1916, it was rebuilt to turn out first grade ten-pins of rock maple. In the 1880' and 1890's, Parksville was a center for quantity shipping of small spruce and fir trees that were sold in New York City as Christmas trees. When the local stock was depleted the industry died (Wakefield, 1970).

As each "era" in this unit's history can be traced to the development of a transportation route into the region (The Sun Trail, the Newburgh-Cochecton Turnpike, the Hunter Road and the Pole Road) in no case is this truer than that of the recreational industry. Development of the New York and Oswego Midland Railroad in 1873, later known as the New York, Ontario and Western Railroad -- not only opened the area to visiting fisherman, hunters

and other recreationalists, it actively encouraged its development. As Austin Francis noted in his book "Catskill Rivers," the railroads created an "accessible remoteness."

In 1878 railroad management had 1,500,000 brook trout and a large number of lake and California trout distributed throughout the region. More trout were stocked in successive years and in 1891 J. C. Anderson, passenger agent for the O. and W. Railroad made application to the State Fish Commission for 600,000 trout fry. That some year a bill to establish a fish hatchery in Sullivan County passed in the State Assembly and is said to have led to the creation of the DeBruce Hatchery on Mongaup Creek. Wakefield, in his book "To the Mountains by Rail" credits the Ontario and Western Railroad management with laying the groundwork for what has become one of the classic trout fishing regions in the world.

Wakefield also speculated on the creation of the **Beaverkill Public Campground:**

"On August 9, 1923, a young Boy Scout from Liberty, bound for a vacation day's enjoyment, was dismayed to see the lower Willowemoc's surface dotted with innumerable dead fish floating downstream. After due investigation . . . it was theorized that some sort of poison had been released from the acid factory at Willowemoc. Whether or not the negative publicity for the county was a factor is not known, but a positive follow-up was the

approval of the purchase of the locally known Beaverkill tannery farm in October, 1926, to be preserved as a state park and campsite area."

Of course the local people were well aware of the area's wealth of hunting and fishing resources, and took advantage of them long before the tourists arrived by rail. James Quinlan, in his "History of Sullivan County" tells a particularly interesting story about the area:

"Cyrus Dodge had a thrilling adventure with panthers at Long pond\*, a beautiful sheet of water once famous for its large trout, and for the number of deer found in its neighborhood. On a summer-afternoon he was watching for deer as they came to water, and stood under some large trees which grew on the shore. While thus engaged he heard a suspicious noise over his head, and looking up, saw a panther on a limb above him. The animal was watching him intently. Thinking there was no time to be wasted in observing its movements, Dodge brought the butt of his gun to his shoulder and fired. The report of the shot was followed by a dull thud at his feet, and the convulsive boundings of the dying panther, as well as the leaping of several lithe forms in the overhanging tree-tops. Dodge declared that the woods seemed to be alive with panthers, and he felt that he was in great peril. Knowing the aversion of the cat-tribe to water, he instantly sprang into the pond, and waded out to where it was waist-deep. As he loaded his gun, he counted no less than five panthers in the neighboring

\* The pond Quinlan refers to as Long Pond in this story is very likely what is now named Tennanah Lake (Town of Fremont) rather than the Long Pond within the Willowemoc - Long Pond Wild Forest. The present day Long Pond was never noted to have a significant trout fishery (E. Van Put).

trees. They were undoubtedly an old she-one and her young. The latter, although weaned and nearly full-grown, had not separated from their mother, but continued to follow her until fully able to provide for themselves. Dodge continued to load and fire until three more had bitten the dust. The other two he failed to see a second time. They were probably frightened by the report of the gun, and ran off. He then went on shore, skinned the four panthers, and struck a bee-line for home very sensibly concluding that deer-hunting in that quarter was too dangerous for enjoyment."

The 20th Century saw a rapid expansion of the summer resort business. Initiated with the rail service to the region, it intensified with the advent of the automobile. Today it is the prime industry in the county.

New York State began acquiring lands making up the Willowemoc - Long Pond Wild Forest as early as 1885, when several lots in the Town of Denning reverted to the state due to delinquent tax payments (see Figure 1). Most of the lands comprising this unit were acquired in the late 1920's and early 1930's with money from a land acquisition bond act approved by the voters of the State in the 1924 General Election. The majority of the lands acquired at that time were purchased from one owner - Elizabeth White of Cooks Falls, New York. Mrs. White, whose maiden name was Elizabeth Clark Leighton, was the daughter of Arthur Leighton who owned and operated several acid factories in the

region. Significant additions were made to the unit with money from the Park and Recreation Land Acquisition Bond Act of 1960, including the lands surrounding Mongaup Pond and Waneta Lake. The 1986 Environmental Quality Bond Act provided funding for the most recent additions to the unit. Lands west of Mongaup Pond, including portions of the former Beech Mountain Boy Scout Camp (including Frick Pond) and Quick Lake were purchased in 1987 and 1989 from the Open Space Institute (O.S.I.), a conservation group that conserves open space in land trusts. A conservation easement over lands that O.S.I. has retained immediately adjacent to the unit (the Beech Mountain Nature Preserve) was also acquired by New York State in 1989. Among other things, the easement provides for public access across the property on trails to be designated by O.S.I. and public fishing at Hodge Pond (subject to certain restrictions to be developed by O.S.I.). For more information regarding this easement, see Appendix D.



## II. INVENTORY, USE AND CAPACITY TO WITHSTAND USE

### A. Natural Resources

#### 1. Physical Resources

##### a. Geology

The Catskill Mountains have their origins in an ancient river delta upon which rivers from a prehistoric mountain range to the east were spreading gravel, sand and mud. This sediment accumulated to a depth of several thousand feet before deposition slowed as the mountains were worn low. Then, some two hundred million years ago, the delta as well as the surrounding sea-bottom of sedimentary rock began to rise to a level higher than the region of New England whence its constituents were derived. What followed was a period of erosion which is responsible for the present shape of the Catskills.

The seabottom rock (sandstone and shale) derived from much finer sediments than that of the delta, were less resistant to erosion, and gradually eroded away. The delta, being composed of cemented gravel or conglomerate, especially in the upper beds,

was very resistant to erosion. Thus the Catskills, particularly the eastern Catskills where the coarsest of gravel from the ancient river delta was deposited, were able to withstand the forces of erosion and maintain their elevation. To the west, as the sediments from the ancient ocean became finer and finer, the resulting plateau was more susceptible to the forces of erosion and consequently the plateau was worn down/eroded to a much greater degree.

The Willowemoc - Long Pond Wild Forest was once a part of the southwestern edge of the ancient delta, in a transition zone between the coarser and finer sediments. The unit was unable to resist the erosive forces of water and ice to the same degree as the three main Catskill ranges (Northeastern, central and southern escarpments) to the north and east. Yet it does contain the highest elevations in Sullivan County.

The unit's present topography is due to the erosive action of streams which deeply dissected the region both before and after the ice age. While glaciation during the

ice age did not significantly affect the Catskills as a whole, the southwest/northeast alignment of some of the valleys in this unit (an alignment which matched the movement of the glaciers) led to the formation of both natural lakes and broad valleys which were easily dammed to form man-made lakes.

b. Soils

The soils found in the Willowemoc -Long Pond Wild Forest were formed from glacial till that is dominantly sandstone and partly siltstone and shale. Most belong to the Willowemoc - Mongaup - Lewbeach Association. These soils are rolling to very steep in slope, moderately deep to very deep, moderately well drained and well drained, medium textured and often very rocky. However, some of the soils in this unit are poorly drained and are subject to ponding. Limitations to management are the seasonably high watertable, slow or very slow permeability, shallow depth to bedrock, stoniness and slope.

c. Terrain

Unlike most of the Catskill Forest Preserve management units, the Willowemoc - Long Pond Wild Forest does not include a named summit, despite its large size. While generally quite hilly, the majority of the lands within this unit do not vary in elevation more than 1,000 feet (nearly all of this unit falls within the 2,000 - 3,000 foot elevation range). Terrain ranges from long, steep sided ridges like that which dominates the western half of the unit, running east/west between Frick Pond and Quick Lake, to lower elevation wetlands, lakes and ponds like Long Pond where the surrounding terrain is relatively mild. Elevation extremes range from a high of 3,100 feet above sea level near the summit of Beech Mountain (the 3,118 foot summit being on private land adjacent to the unit) to a low of 1,580 feet above sea level along Conklin Brook on the eastern edge of the Conklin Hill detached parcel.

d. Water

Lands within this unit lie within the Delaware River watershed. North and Northwest slopes drain into the Beaver Kill (Shin Creek, Gee Brook). Southern slopes (Mongaup Creek, Butternut Brook, Fir Brook) feed the Willowemoc Creek and eastern slope drainages (Conklin Brook, Fall Brook and Flat Brook) flow into the Neversink River. All three of these rivers are tributaries to the Delaware River.

The unit includes four ponded waters:

- Waneta Lake - 30 acres, impounded by a man-made stone dam
- Quick Lake - 4 acres, impounded by beavers (remnants of a manmade concrete/earthen dam exist)
- Frick Pond - 6 acres, impounded by beavers
- Long Pond - 15 acres, natural lake whose level fluctuates with beaver activity

The higher elevation sections of the Neversink and Willowemoc drainages have been identified as being sensitive to acidic deposition. Long Pond has proven to be acidic, with pH values of 4.0 - 5.0 noted during August, 1966. Water quality is otherwise good throughout the unit.

e. Wetlands

Unlike other Catskill Forest Preserve units, wetlands are relatively common in the Willowemoc - Long Pond Wild Forest. Seventeen classified (greater than 12.4 acres) wetlands have been identified wholly or partially within this unit. The largest wetland (152 acres) is found along Fir Brook at the eastern end of the Unit. Another large (71 acres) wetland occurs on the Conklin Hill/Aden Hill detached parcel south of Willowemoc. A total of 413 acres within this unit have been classified as wetlands (see Wetlands Map, Appendix F).

2. Biological

a. Vegetation

The Willowemoc - Long Pond Wild Forest is almost completely forested. Exceptions include the four ponded waters within the unit, some of the seventeen wetlands found throughout the unit and a few small openings associated with past development.

The northern hardwood forest covers the greatest part of the unit, dominated by sugar maple and beech. Black cherry, while

occurring sporadically at the lower elevations, co-dominates with sugar maple along the higher ridges. Hemlock, white pine, white ash, yellow birch, red maple, big tooth aspen, basswood and red oak are also common, but only locally abundant. All of the lands within the unit have been cut over at one time or another, especially the recently acquired lands west of Mongaup Pond (See History).

The understory of the northern hardwood forest is dominated by beech, sugar maple, striped maple, black cherry and yellow birch seedlings. Witch hobble and witch hazel are also common. Ferns, including the New York fern and the hayscented fern, as well as various sedges, grasses and herbs make up the ground cover.

Several conifer plantations occur on old farmland within the unit. South of Mongaup Pond and east of Mongaup Road along Hunter Road are plantations of white and red pine as well as Norway Spruce. Further east on the north side of Hunter Road is an extensive larch plantation. On the former Wolf property, a part of the Conklin Hill

detached parcel, over 100 acres were planted with red pine, white pine, scotch pine, Norway spruce, white spruce and larch in the late 1920's. There are still some open fields on this property as well.

There are several open areas in the vicinity of Frick Pond which were formerly utilized by the Beech Mountain Boy Scout Camp. The area was farmed prior to the boy scouts, and the vegetation in this area reflects this past use as well. An old apple orchard is located just east of Frick Pond and some young sapling stands of pioneer hardwoods both west and south of the pond occupy lands which were likely cleared at one time for agricultural use.

Several logging roads and other dirt roads traverse the unit. Some of the roads traversing the ridge between Frick Pond and Quick Lake are quite wide (20 - 80 feet or more). These areas are dominated by sedges, grasses and ferns.

The Fir Brook Valley and associated wetlands fosters a relatively rare low elevation spruce - fir forest. This may be the westernmost outpost of red spruce in

the Catskills, as well as the southwesternmost limit for balsam fir (Kudish, 1985). While the Temporary Commission to study the Catskills designated the Fir Brook swamp as an area containing rare plants (Catskill Study Report No. 15 - Rare and Endangered Plants in the Catskills), botanist Michael Kudish noted no rare or uncommon plants in a June, 1985 survey of the area.

#### Rare Plants

No endangered or threatened plant species have been identified on lands of the Willowemoc - Long Pond Wild Forest. However, both the Northern Monkshood (*Aconitum noveboracense*) which is listed as threatened on the federal register, and Jacob's Ladder (*Polemonium vanbruntiae*) which has been nominated for listing as threatened on the federal register, have been found to inhabit lands adjacent to this unit. Because similar habitat for both these species does occur within the unit, it is possible that they may inhabit this unit.

Bagdon Environmental Associates, Inc., an environmental consulting firm in Delmar, New York undertook a significant plant habitat survey of the lands surrounding Hodge and Frick Ponds, as well as Quick Lake prior to New York State's purchase of these lands. While no protected native plants listed as endangered, threatened or rare (as per 6 NYCRR Part 193.3) were found, some uncommon plant species and communities were identified (see Bibliography and References, Section VI).

b. Wildlife

The area is located within the Catskill Peaks and Delaware Hills ecological zone and the wildlife which occur here are similar to those found in other areas of southeastern New York State. The northern hardwood forest favors black bear, snowshoe hare, wild turkey, gray squirrel, raccoon and porcupine. Early successional species such as white-tailed deer, cottontail rabbit and ruffed grouse occur, but at lower elevation, flatter terrain and more diverse vegetation.

Breeding species of birds include the pileated woodpecker, yellow-bellied sapsucker, red-breasted nuthatch, eastern phoebe, ovenbird, sparrows and warblers (see Wildlife Inventory, Appendix B).

With the exception of the Atlas of Breeding Birds in New York State (see Bibliography and References), a formal inventory of animal life has not been undertaken in recent years. However, Chambers in his handbook, "Integrating Timber and Wildlife Management" (1983), compiled an extensive listing of wildlife presumed to be in this ecological subzone, and qualified his listing, categorizing by forest type, forest stage and special habitat needs. Based on Chambers' criteria, 21 species of amphibians, 16 species of reptiles and 50 species of mammals possibly reside in the Willowemoc - Long Pond Wild Forest. Using both Chambers' criteria and the Atlas of Breeding Birds in New York State, some 134 species of birds may nest in the unit or utilize the Willowemoc Valley during migrations (See Appendix B, Wildlife).

There are no known endangered animal species which occur as residents of the area. Bald eagles, peregrine falcons and others may travel through the area during migrations. The red-shouldered hawk, determined to be Threatened by NYS DEC, may reside within or adjacent to this unit. As a threatened species it is fully protected under Environmental Conservation Law. However, according to the Natural Heritage Records, the red-shouldered hawk is not known to occur in this unit.

The eastern bluebird, common nighthawk, common raven, cooper's hawk, barn owl, grasshopper sparrow and vesper sparrow, as well as the smallfooted bat, spotted turtle, wood turtle, eastern hognose snake, Jefferson salamander, blue-spotted salamander and spotted salamander are all "Special Concern" species which may reside in this unit. Special Concern species are those native species which are not yet recognized as endangered or threatened, but for which documented evidence exists relating to their continued welfare in New York State. The Special Concern category,

while existing in DEC rules and regulations, does not in itself provide protection.

c. Fisheries

This unit contains four ponded waters with fish populations. Waneta Lake has been noted to contain largemouth bass, chain pickerel, pumpkinseed, yellow perch, brown bullhead and golden shiner. Long Pond has been noted to contain chain pickerel and golden shiner. No fish collections are on record for Quick Lake or Frick Pond, but they likely contain brown bullhead, golden shiner and chain pickerel.

Several perennial streams traverse the unit, including Fir Brook, Fall Brook, Flat Brook, Gee Brook, Shin Creek, Mongaup Creek, Willowemoc Creek, Butternut Brook, Conklin Brook and the outlet of Long Pond. Fish species found to inhabitant these waters include brown trout, brook trout, sculpin, blacknose dace, creek chub, American eel, smallmouth bass, longnose dace, golden shiner, pumpkinseed, yellow

perch, brown bullhead, white sucker, madtom, common shiner and cutlips minnow.

Nine unnamed perennial streams have also been identified within the unit. While no fish collection records were found, they likely contain brook trout, sculpin, blacknose dace and cutlips minnow. For a complete list of the fish species found in this unit, see the Biosurvey records in Appendix B.

No State or Federal endangered, threatened or special concern fish species have been documented within the boundaries of the unit.

### 3. Visual Resources

As with other forest preserve units, the Willowemoc - Long Pond Wild Forest is an important component of the watershed which makes the Catskill Park a unique resource in southern New York. The ponded waters within this unit provide natural openings by which portions of the region can be viewed. Opportunities for views also exist from the abandoned farmland within the unit, including Conklin Hill and Shin Creek. An occasional glimpse of the surrounding

area can also be had from the ridge between Frick Pond and Quick Lake.

4. Critical Habitat

Three deer wintering areas have been identified within the unit. Located around Mongaup and Frick Ponds, Fir Brook and Neversink/Fall Brook, these areas provide shelter and browse during the winter months (See Wetlands and Wildlife map, Appendix F).

The unit is also a part of the Catskill black bear range and provides necessary habitat for this species.

**The Fir Brook swamp (see Vegetation)** harbors both red spruce and balsam fir, both species nearing the extremes of their range in the Catskills.

5. Wild Forest

A wild forest area is a classification of forest preserve where the resources can sustain a somewhat higher degree of human use than a wilderness area. It may contain, within its bounds, smaller areas of land or water that are essentially wilderness in character, where the fragility of the resource or other factors

require wilderness management. A wild forest is further defined as an area which lacks the sense of remoteness of wilderness areas and which permits a wider variety of outdoor recreation.

The Willowemoc - Long Pond area has been designated a wild forest, rather than a wilderness, for several reasons, the most prominent being that it lacks the sense of remoteness essential to wilderness. The unit is made up of nine separate parcels (see Size). Sixteen town roads traverse the unit for a total distance of 17.2 miles. Seven private inholdings (private land completely surrounded by forest preserve land) are found within the unit, and access to all of these parcels is gained by crossing over forest preserve lands within this unit.

Because the topography of this unit is not as mountainous as other areas in the Catskill Park, and because an extensive road and trail network already exists, this unit can sustain a wider variety of outdoor recreation opportunities than could an area classified as wilderness.

B. Man-Made Facilities

1. Roads

a. Public Roads

- 1) Johnson Hill Road - 0.6 miles  
Borders west side of Waneta Lake parcel
- 2) Shin Creek Road - 1.5 miles
- 3) Beech Mountain Road - 0.25 miles
- 4) Mongaup Pond Road - 0.9 miles
- 5) Hunter Road - 1.0 mile
- 6) Terwilliger Road/Decker Road -  
0.45 miles
- 7) Flugertown Road - 1.7 miles
- 8) Pole Road - 0.7 miles
- 9) Basily Road - 3.2 miles  
Portions of this Town of Denning Road  
have not been maintained in recent  
years.
- 10) Black Bear Road - 3.2 miles
- 11) Tyler Place Road - 0.25 miles  
Borders east side of Flat Brook  
detached parcel. This Town of Denning  
road was qualified abandoned in 1925,  
after New York State acquired lot 132.  
Thus, the public has the right to  
utilize this road for access to forest  
preserve land.
- 12) Conklin Hill Road - 1.3 miles
- 13) Anderson Road - 0.15 miles
- 14) Parksville Road - 1.3 miles
- 15) Aden Hill Road - 0.25 miles
- 16) Woodard Road - 0.5 miles

b. Private Roads

1. Beech Mountain Nature Preserve access road (from Shin Creek Road) - 0.7 miles.

c. Private Landowner Access Easements (traversing forest preserve):

1. Hunter Road Access - The owner of lands south of Hunter Road and adjacent to forest preserve lands (West of Quick Lake) owns an easement allowing for access to the property from Hunter Road across forest preserve land. While the easement allows for construction of a road **within** the defined easement, no road has yet been constructed.
2. Panther Mountain Hunting Club Access - Owners of a private inholding in the Town of Denning (Lot 109 Connecticut Tract Great Lot 6) have a right of way across forest preserve lands from Flugertown Road to their property via **the now abandoned Peter Brocke Road** - 0.4 miles.
3. Buck Horn Hunting Camp Access - Owners of a private inholding in the Town of Neversink (portions of Lots 184 and 185, Great Lot 5) have a right-of-way across forest preserve lands from the Basily Road to their property via an abandoned town road - 0.4 miles.
4. Hodge Place Access - The owner(s) of lands in Lot 411, Great Lot 5 now or formerly of Oliver Hodge have a right-of-way one rod wide across forest preserve land in Lot 411 from County Route 151 to the brook or lake (Waneta) for the purpose of driving stock to and from said brook or lake, for the purpose of watering same, and for no other purpose; they also have the right to fence the one rod R.O.W.
5. Joscelyn Road Access - The owner(s) of lands in Lot 410, Great Lot 5 (just north of Waneta Lake) have the right of

ingress and egress to their lands via a 2 rod right-of-way which, in part, traverses forest preserve land - 594 feet.

6. Brandy Brook Hunting Club Access - The owners of lands north of the Pole Road (Lot 119, Connecticut Tract, Great Lot 6) utilize an old town road which crosses forest preserve lands (Lot 494, Great Lot 5) from the pole road to their property - 0.15 miles.

d. Private Landowner Access Roads (Traversing Forest Preserve):

There are several private inholdings as well as lands adjacent to forest preserve which do not have deeded access (to the property) yet the owners have developed access to their property across forest preserve lands. The following access roads (undeeded) have been identified in this unit:

1. Shin Creek Road Access - The owner of lands east of Shin Creek Road (Lot 207, Robinson Tract, Great Lot 6) utilizes a road which leaves the Shin Creek Road and heads east across forest preserve (Lot 202) to access the property - 423 feet.
2. Sand Pond Access - The owner of a private inholding in the Town of Denning which includes Sand Pond (Lot 114, Connecticut Tract, Great Lot 6) utilizes a road which originates on private property along the Flugertown Road and crosses forest preserve land (Lots 241 and 115) to access the property - 1.1 miles.

e. Forest Preserve Access Roads

1. Craigie Clair Detached Parcel Access - New York State owns a right of way from Craigie Claire Road (just north of the Lincoln Farm Road Junction) northeast to forest preserve land (Lot 404, Great Lot 5) for public access - 0.4 miles.
2. Joscelyn Road Access - New York State has a right-of-way (2 rods wide) over this private road which runs from Sullivan County Route 151 to Waneta Lake, for administrative purposes only - 400 feet.
3. Kaeter Road Access - New York State owns a 50 foot Right-Of-Way across Lot 180, Robinson Tract, Great Lot 6 to Lot 181 from the Shin Creek Road, commonly known as Kaeter Road, for public access - 766 feet.
4. Hunter Road Access - New York State has administrative access (but not public access) to the recently acquired lands around and including Quick Lake via Hunter Road - an abandoned Town Road (Town of Rockland) - 1.4 miles.
5. Shin Creek Farm Road Access - A woods road leaves the Shin Creek Road about 1 mile south of the Beaverkill Road and traverses forest preserve easterly 0.1 miles to an old farmsite (also forest preserve land).

2. Barriers

a. Waneta Lake

1. South end of Lake - Road access is blocked with rocks
2. North end - Boulders prevent vehicle access to the dam.

- b. Beech Mountain Road - Boulders block an old farm access road heading west from Beech Mountain Road (500 feet north of junction with Mongaup Pond Road).
  - c. Hunter Road Bridge - A large dirt pile prevents motor vehicles from utilizing the bridge.
  - d. Conklin Hill Road - Boulders prevent unauthorized use of a road which runs east to an old farm site.
  - e. Parksville Road - Boulders block the road heading west into forest preserve land from this road.
3. Trailheads (2):
- a. With maintained parking - none.
  - b. Without maintained parking (2):
    - 1 - Long Pond (Flugertown Road)
    - 2 - Claryville: Neversink/Hardenburg Trail
4. Hiking Trails ( $\pm$  14.45 miles):
- a. Neversink/Hardenburg Trail (yellow markers) - 5.1 miles
  - b. Long Pond/Beaverkill Ridge Trail (red markers) - 5.6 miles
  - c. Long Pond Spur (red markers) - .1 mile.
  - d. Mongaup/Willowemoc Trail (yellow markers) - 3.65 miles
5. Snowmobile Trails ( $\pm$  14.15 miles):
- a. Long Pond Trail (Black Bear Road/Basily Road Junction to Flugertown Road) - 3.2 miles.
  - b. Long Pond - North Loop Trail (Basily Road) - 1.5 miles.

- c. Long Pond Spur - 0.1 miles.
  - d. Mongaup/Willowemoc Trail (Flugertown Road to Mongaup Pond Snowmobile Trail) - 3.65 miles.
  - e. Mongaup Pond/Mongaup Creek Loop Trail (portions of which pass through the Mongaup Pond Campground) - 5.7 miles.
6. Horse Trails (3.2 miles):
- a. Neversink - Balsam Lake Mountain Trail (Round Pond to unit boundary - Black Bear Road) - 3.2 miles.
7. Cross Country Ski Trails
- None.
8. Unmarked Trails (20 miles):
- There are over 20 miles of unmarked woods roads traversing the newly acquired lands west of Mongaup Pond. Most are in good condition.
9. Trail Registers (1):
- a. Long Pond
10. Parking Lots - Forest Preserve Access (5):
- a. Within Unit (4)
    - 1. Waneta Lake (2):
      - + Northern - 5 cars
      - + Southern - 4 cars
    - 2. Black Bear Road - 2 cars
    - 3. Parksville Road - 3 cars
  - b. In Adjacent Management Units Which Serve This Unit As Well (1):
    - 1. Mongaup Pond (Mongaup Pond Campground) - 50 cars

11. Bridges (16):

- a. Frick Pond (6)  
\* One of which is a 275 foot long, winding stretch of boardwalk crossing a wet, swampy area.
- b. Mongaup Pond Snowmobile Trail - (4)
- c. Hunter Road (Mongaup Creek) - (1)  
Maintained by the Town of Rockland.
- d. Mongaup/Willowemoc Trail - (3)  
\* Including a 38 foot long bridge crossing Butternut Brook.
- e. Long Pond Trail - (1)  
\* Crosses Willowemoc Creek, 44 feet long.
- f. Flugertown Road (Willowemoc Creek) - (1)  
Maintained by the Town of Neversink

12. Culverts (68)

All on unmarked trails traversing newly acquired lands west of Mongaup Pond. Sizes range from 12 to 24 inches in diameter, both steel and black plastic.

13. Leantos (1)

- a. Long Pond

14. Outhouses (1)

- a. Long Pond - in poor condition.

15. Designated Camping Sites (17):

- a. Shin Creek - (6)
- b. Willowemoc Creek/Flugertown Road - (9)  
6 - accessible by motor vehicle/small camper  
3 - tents only
- c. Basily Road - (2)

16. Buildings - None

However, remains of buildings exist southeast of Frick Pond.

17. Dumps

a. Beech Mountain Boy Scout Camp Dump

A large dump containing assorted white goods, furniture, kitchen supplies, cans, bottles, etc. lies on the ridge west of Hodge Pond.

18. Gravestones (1):

a. Frick Pond - a gravestone in memory of Marjorie B. Lobdell (1922-1933) and Lyle S. Lobdell (1920-1933) lays just southeast of Frick Pond.

19. Dams (3):

a. ~~Waneta~~ Lake - laid up stone, constructed at the turn of the century. Structurally unsound.

b. Quick Lake - Concrete/earthen structure which has been completely taken over by beaver.

c. Frick Pond - Beaver dam fortified with iron pipes driven through the dam into the underlying pond bottom.

\* Long Pond beaver dam has not been "improved" by man.

20. Gravel Mines (2)

a. Conklin Hill Road

b. Beech Mountain Road

21. Utility Lines (± 7.3 miles):

a. Craigie Clair Detached Parcel

New York State Electric and Gas Corporation has "the right, privilege and authority to construct, reconstruct, extend, operate, inspect, maintain, and at its pleasure remove a pole line with the necessary wires, cross arms, guy wires, braces and other fixtures or appurtenances used or adopted for the transmission and/or for distribution of electric current and/or for telephone or telegraph communication for public or private use upon and over said land" (Lot 404, Great Lot 5). Together with the right to trim, **cut and remove trees** and brush to the extent necessary to clear said wires and pole line by at least 15 feet. No width is specified in the easement, but 150 feet is utilized - 0.6 miles.

b. Hunter Road

**New York State Electric and Gas Corporation has the right to construct, maintain, etc. an electric pole line over the lands formerly owned by Esther Karts (Lots 230, 231, 232, 233, 238, 477 and 480, Great Lot 5). The easement does not permit relocating the lines after they are completed. The lines run adjacent to or generally parallel with Hunter Road - 1 mile.**

c. East Delaware Aqueduct

The City of New York has a subsurface easement for water supply purposes across forest preserve lands in Great Lot 5.

d. West Delaware Aqueduct

The City of New York also has a subsurface easement for water supply purposes across forest preserve lands comprising the Conklin Hill detached parcel.

e. Parksville Road

New York State Electric and Gas Corporation owns an easement for a pole line over the lands, and/or the highway abutting or running through the lands formerly owned by Arthur Wolf (Lots 162 and 163, Great Lot 4).

f. Shin Creek Road

New York Telephone has a right of way for the purpose of telephone communication over forest preserve lands (Lot 203, Great Lot 6) adjacent to the Shin Creek Road - 0.6 miles.

g. Johnson Hill Road

New York State Electric and Gas Corporation owns an easement to construct and maintain electric line poles and lines, etc. over forest preserve lands on the east side and within 10 feet of Johnson Hill Road (Lots 410 and 411, Great Lot 5) - 0.6 miles.

h. Black Bear Road

New York State Electric and Gas Corporation owns an easement for a pole line over forest preserve lands in Lot 112, Great Lot 6 running parallel to the Black Bear Road - 0.2 miles.

i. Mongaup Pond Road

The Department owns and maintains a pole line which leaves the Beech Mountain Road at its junction with the Mongaup Road and runs northeast across forest preserve lands to the Mongaup Pond Campground - 1 mile.

j. Hodge Pond

A pole line runs along the Beech Mountain Road from its junction with Mongaup Pond Road northward to a private inholding, then northwesterly across forest preserve lands to Hodge Pond - 2.5 miles. The 2.2 mile section beyond the private

inholding is not provided for in an easement, and no longer services Hodge Pond.

22. Public Easements Traversing Private Land

a. Beech Mountain Nature Preserve Access Road

The public has the right to cross and recross the private road which runs southward from the Shin Creek Road to the Beech Mountain Nature Preserve.

b. Beech Mountain Nature Preserve Gatehouse Parcel

The public has the right to utilize a 50 foot wide right-of-way along the southerly and a portion of the westerly boundary line of the above described parcel for ingress and egress to forest preserve land.

The public may also utilize a 25 foot wide right-of-way along the easterly boundary of this private parcel for ingress and egress to forest preserve land.

c. Beech Mountain Nature Preserve

The public has the right to use this private property for scientific, educational and recreational purposes, including the right to fish in Hodge Pond, subject to the management of the Beech Mountain Nature Preserve (B.M.N.P. may require the public to obtain a permit to fish in Hodge Pond). The public also has the right to travel by foot (hiking, skiing and snowshoeing) on some of the trails which traverse this same parcel, subject to the management of this property.

23. Conservation Easements

New York State owns a conservation easement on lands comprising the Beech Mountain Nature Preserve. The easement limits the development and use of the property.

For more information on this end and other easements already mentioned, see Appendix D.

24. Signs

There are a total of 30 signs located within and/or adjacent to the unit (See Appendix C).

25. Supporting Facilities Outside the Unit

- a. Beaverkill Public Campground - 97 sites, open April 1 through Labor Day.
- b. Mongaup Pond Public Campground - 160 sites, open Mid-May through the big game season.\*
- c. DeBruce Environmental Education Camp provides weeklong environmental education programs for young people; June - August.
- d. Catskill Fish Hatchery, DeBruce.
- e. Fishing Access Site Parking Lots (7):
  - + Willowemoc Road (Sullivan County - Willowemoc Creek) - 8 cars
  - + Old Route 17 (Willowemoc Creek) - 20 cars
  - + County Route 81 (Willowemoc Creek) - 3 cars
  - + County Route 82 (Willowemoc Creek) - 10 cars
  - + Covered Bridge (Willowemoc Creek) - 2 cars
  - + DeBruce (Mongaup Creek) - 2:
    - Central - 7 cars
    - Southern - 6 cars
- f. Covered Bridge Private Campground - Conklin Hill Road. 70 sites, open April 1 - December 14.
- g. Willowemoc Private Campground - Pole Road, 3/4 mile east of Willowemoc. 119 sites, open May 1 - October 1.

All facilities can be found on the map in Appendix G.

\* **NOTE:** A large parking lot at the south end of the pond can be utilized to access the Willowemoc - Long Pond Wild Forest.

C. Cultural Resources

The New York State Archaeological Site Locations Map indicates that archaeological resources may be present in portions of the Willowemoc - Long Pond Wild Forest. Prior to any site disturbance associated with any of the projects proposed in this plan, the nature and extent of archaeological resources at that particular project site should be investigated.

D. Economic Impact

I. Economic Impact of State Ownership on Adjacent Private Land

Private lands adjacent to the Forest Preserve in ~~this unit~~ have in general become desirable properties. Landowners seeking privacy and solitude have protection from development. The State lands provide the unique opportunity of having a "backyard" on which they have no maintenance costs or taxes and yet affords access to a vast outdoor experience. Real estate prices have generally escalated for available properties.

Forest preserve lands are taxed by local jurisdictions. The taxes paid are an important source of revenue to these communities.

Some negative situations do exist occasionally where private lands are adjacent to State Lands. Noise pollution, trespass and littering are annoyances that may occur where hiking trailheads and parking lots are in close proximity to private holdings.

2. Economic Impact of Adjacent Private Lands on State Lands

Private holdings generally have slight economic impact on adjacent state lands. Boundary lines must be marked and maintained to prevent motor vehicle and timber trespass on state lands as well as to maintain the integrity of the forest preserve. Nearby vacation homes may compound the consequences of fire within the unit, necessitating stricter fire prevention and suppression activities.

E. Public Use

The public utilizes the Willowemoc - Long Pond Wild Forest for a variety of recreational pursuits, including camping, hunting, fishing, snowmobiling, hiking and snowshoeing. Actual public use figures for the unit are incomplete, as only one trail register has been in place to record public use, that at Long Pond. This register has been vandalized in the past and consequently some records are missing. Additionally, use of the trail

register is voluntary. However, the trail register tally for Long Pond (see Table 2) combined with observations from the Forest Rangers who patrol the area has helped to develop an estimate of use suitable for present management needs. This estimate is illustrated in Figure 2.

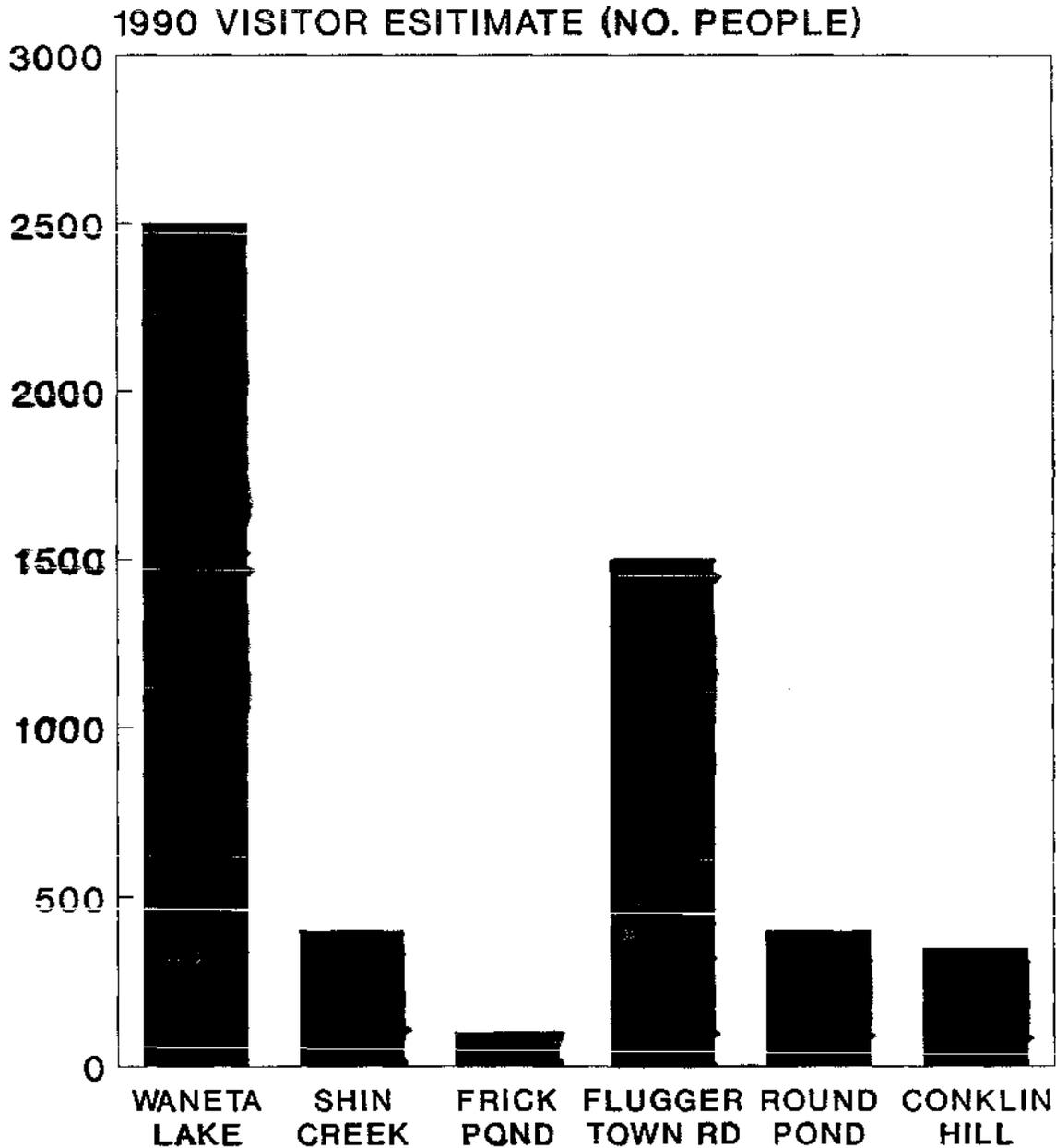
TABLE 2. WILLOWEMOC-LONG POND WILD FOREST TRAIL REGISTER TALLY

LONG POND (T-NEVERSINK, UTM 305432)

MONTH/YEAR	1986	1987	1988	1989	1990
January	159	15	30	26	7
February	43	18	40	18	10
March	19	24	28	11	19
April	19	53	16	34	9
May	74	48	36	79	31
June	67		66	15	35
July	68		60	12	50
August	35		13	156	80
September			14	35	63
October				39	36
November		32		18	21
December		9		8	0
Total	465	199	303	451	361

High use areas within the unit include Shin Creek, Willowemoc Creek (northern end of Flugertown Road) and Long Pond where camping is popular. Waneta Lake, once a very popular camping area, now receives only moderate use since camping has been prohibited within 150 feet of its shoreline. The Conklin Hill detached parcel is primarily utilized for hunting, as are the lands in Ulster County along Fall and Flat Brooks.

## FIGURE 2 WILLOWEMOC LONG POND PUBLIC USE



Willowemoc - Long Pond Access Points

Due to the relatively short period the State has owned the lands west of Mongaup Pond, public use has been very light in this part of the unit. However, with two attractive ponds and a network of wood roads to provide access, this area has the greatest potential for future use.

F. Capacity of the Resource to Withstand Use

The ability of this unit to withstand use is a function of its physical and biological resources as well as the type of use the area receives.

1. Land Resource

Soil characteristics play a major role in an area's ability to withstand use. Soils within this unit are generally well drained due to the terrain. However, erosion can be a problem on the steeper slopes unless provisions are made to direct water away from and off of trails. Water bars, drainage dips and ditches, and other devices can be used along with vegetation to stabilize trails.

In valley bottoms, upland benches, and other areas with little relief where drainage is poor, ponds, wetlands or seasonally muddy areas result. These areas are poorly suited to many types of recreation including horseback riding

or mountain biking unless significant drainage and/or trail hardening is undertaken. Trails should either be routed to avoid these areas or where this is not possible, they must be drained/hardened to prevent erosion and other adverse impacts.

The numerous riparian resources within this unit, especially the lakes and ponds, all have a limited capacity to accommodate the public's demand for camping. The ability of these areas to withstand use is dependent upon visitors adhering to New York State Rules and Regulations Part 190.3 which prohibits camping within 150 feet of water, except at areas so designated by the Department. Without strict compliance, soil compaction and erosion, degradation of vegetation, water pollution and a deterioration of the wild forest character of the area could result.

## 2. Wildlife Resource

Two types of visitor use are directly associated with wildlife; viewing or photographing wildlife and harvesting wildlife by hunting or trapping. There are no known animal species within the unit that cannot

tolerate the occasional presence of humans, and thus the ability of the unit to withstand non-consumptive wildlife related use is high.

White-tailed deer are the most commonly harvested wildlife species in the unit. Although the actual deer harvest from forest preserve lands within the unit is not known, the following is a breakdown of harvest from towns which occur within the unit.

DEER HARVEST FOR 1989

	<u>Adult Males</u>	<u>Total Deer</u>	<u>Buck/ Square Mile</u>
Deer Management Unit 60	2071	3244	3.4
Town of Neversink	331	546	3.8
Town of Rockland	402	682	4.2
Deer Management Unit 55	1011	1329	1.5
Town of Denning	162	213	1.5
Town of Hardenburgh	137	196	1.7

Black bear also occur within the unit and are harvested in relatively low numbers. The 1989-90 bear harvest was one each in the Towns of Rockland and Neversink and six each for the Towns of Denning and Hardenburg.

The 1988-89 Furbearer Harvests for towns within this unit based on pelt sealing are as follows:

	<u>Beaver</u>	<u>Bobcat</u>	<u>Otter</u>
Neversink	16	2	1
Rockland	34	1	4
Denning	2	1	0
Hardenburg	4	1	2

These numbers represent a relatively light harvest when compared to similar and/or adjoining townships. The current consumptive use of wildlife species by hunters and trappers in this unit appears too low to have any detrimental effect on their populations. While the impacts of "non-game" uses of wildlife populations is not well understood at this time, it appears that present use levels have not had a significant impact on the wildlife species found within the unit.

3. Fisheries Resource

Willowemoc Creek, Fir Brook and Waneta Lake are the most significant and heavily used fishery resources within the unit. While both Fir Brook and Willowemoc Creek are stocked with trout annually, none of the waters within this unit are prone to overharvest. However, waters

within this unit have been identified as being sensitive to acid deposition, especially in the spring during the snowmelt, due to the very low buffering capacity of the geology of the region. This situation is being monitored by this agency and others.

### III. MANAGEMENT AND POLICY

#### A. Past Management

Since 1895, management of forest preserve lands within the unit has been guided by the "forever wild" clause of the State Constitution (see Constraints). Specific management activities have generally related to fire prevention, fish and wildlife management and recreation. In 1985 the Department completed a Catskill Park State Land Master Plan which provided additional management guidelines, including the classification of forest preserve lands into four basic categories (Wilderness, Wild Forest, Intensive Use and Administrative) and the creation of management units. The Master Plan further directed the Department to complete individual management plans which would include specific management objectives for each unit.

Recreation management of this unit dates back to the marking of the Neversink - Hardenburgh hiking trail in the 1920's. The hiking trail to Long Pond and the Leanto at Long Pond were constructed in the 1950's. Both the Long Pond Trail and some old wood roads surrounding Mongaup Pond were marked for use by snowmobiles in the late 1960's, and links between Mongaup Pond, Long Pond and the Beaverkill Ridge Trail were added in the mid 1970's.

Camping has always been popular within the unit. In the late seventies Waneta Lake became a particularly popular informal camping area. Uncontrolled parking along Johnson Hill Road, garbage, target shooting and motor vehicle trespass of forest preserve lands resulted. The Department acted to control this use by constructing two small parking lots to provide appropriate access to the lake and eliminating camping within 150 feet of the lake shore. Camping along Shin Creek and Willowemoc Creek has also been a problem in the past and is now limited to designated sites only (within 150 feet of water).

Wildlife management in the unit has been limited to regulations controlling length of season, method of taking and bag limits. These regulations were developed for land areas much larger than the Willowemoc - Long Pond Wild Forest.

Past fisheries management have been primarily limited to the stocking of brook and brown trout. Specifically, Conklin Brook was stocked with brook trout and brown trout during the 1920's, both Fall Brook and Waneta Lake were stocked with brook trout and brown trout prior to 1935, and both Willowemoc Creek and Fir Brook are currently stocked each spring with brown trout yearlings. Waneta Lake was

experimentally stocked with brown trout from 1969 to 1972 with apparently poor holdover through the summer due to suboptimal temperature/dissolved oxygen conditions. Brook trout were experimentally introduced to Long Pond in 1969 with apparently poor results. All fishing regulations within the unit are currently the statewide general regulations, with no special harvest restrictions imposed.

B. Constraints and Issues

1. Constraints

This unit management plan has been developed within the constraints set forth by **Article XIV of the New York State Constitution, Article 9 of the Environmental Conservation Law, Title 6 of the Codes, Rules and Regulations of the State of New York, the Catskill Park State Land Master Plan and established policies for the administration of Forest Preserve lands developed by the Division of Lands and Forests.**

2. Issues

Numerous issues are of concern to the public and the Department in development of this plan:

a. Increased Demand for Recreation

The New York Statewide Comprehensive Outdoor Recreation Plan (1988) forecasts a significant increase in the demand for outdoor recreation. Fastest growing activities will be cross-country skiing, hiking, fishing and camping. Local residents have also expressed a strong interest in snowmobiling and dog sledding. All-terrain bicycling (mountain bicycling) has become very popular throughout the region in recent years. The Willowemoc - Long Pond Wild Forest is well suited to these activities and this plan should consider ways in which the unit might provide additional opportunities to satisfy this demand without environmental degradation.

b. Access/Parking

Access to this unit is limited due to the lack of parking - only 4 parking lots serve this unit, all on detached parcels. There is no provision for parking in the main unit.

The so called Church Road detached parcel (48 acres) is presently inaccessible, both by the public and the Department as it is completely surrounded by private land. This is also true of the Beaverkill central (30.6 acres) and Beaverkill east (12.2 acres) detached parcels.

The right of way providing access to the Craige Clair Detached Parcel has not been defined/marked "on the ground" and thus the public is unable to utilize it.

c. Snowmobile Trail Conditions

Most of the snowmobile trails within this unit are in poor condition. They are generally rocky to very rocky and require an abundant snowcover to be utilized. Significant improvements are

necessary to provide an attractive snowmobile trail system. A severe windstorm in the fall of 1990 has left a portion of the Mongaup - Willowemoc Snowmobile Trail unusable.

d. Boundary Lines

Boundary lines associated with the recently acquired lands west of Mongaup Pond are unclear. These lines need to be blazed, marked and posted.

e. Forest Preserve Trespass

There are two undeeded private landowner access roads traversing forest preserve lands within this unit (see Man-made Facilities, 1-d). The legality of these roads should be determined and illegal roads should be closed.

f. Acquisition

There are several private inholdings within the unit which would

enhance the wild character of the area  
if owned by the State.

C. Goals and Objectives

1. Goals

- a. Protect and preserve the natural resources of the unit.
- b. Provide a variety of outdoor recreation opportunities without degrading the resource or impairing the wild forest atmosphere.

2. Objectives

a. Land Management Objectives

1. Maintain boundary lines to clearly identify public ownership and discourage trespass on private lands.
2. Selectively acquire additional lands contiguous to the unit which will consolidate the state's holdings, simplify boundary lines and/or protect unique areas, provide additional or improved access and otherwise enhance the area.
3. Adequately protect the unit from wildfire.
4. Eliminate incompatible uses which detract from the wild-forest character of the unit.

5. Maintain and construct facilities (parking areas, bridges, etc.) in strict conformance with DEC specifications and policies.

b. Wildlife Management Objectives\*

1. Maintain all native wildlife species at levels compatible with their natural environment.
2. Maintain hunting, trapping and other wildlife - related recreational activities.

\* Future management objectives may be identified based upon the ongoing Wildlife Program Management System.

c. Fisheries Management Objectives

1. Perpetuate the native fish populations in all streams and ponded waters occurring within the unit.
2. Provide an average catch rate of 0.5 fish/hour, or a harvest of 0.1 pounds of fish/hour in all stocked trout streams within the unit.

d. Public Use Management Objectives

1. Improve trail conditions within the unit.
2. Provide additional trails which would improve access to the western half of the unit and connect with the trails traversing the eastern portion of the unit.
3. Provide for a variety of trail uses within the unit, including hiking, cross-country skiing, snowmobiling, dog sledding horseback riding and all terrain bicycling.
4. Provide appropriate parking areas to facilitate access to the unit.
5. Monitor the intensity of permitted public recreational use of the unit and the condition of the unit as it relates to public use. Take appropriate steps to prevent overuse/degradation of the area.
6. Control adverse and illegal uses through enforcement of the Environmental Conservation Law and Department Rules and Regulations.
7. Educate visitors to use and enjoy the wild forest without adverse environmental impacts.

e. Water Quality Management Objectives

1. Protect the waters of the Unit from pollution by controlling public use of the stream corridors and pond/lake shorelines. (lands within 150 feet of water).

#### IV. PROJECTED USE AND MANAGEMENT PROPOSED

##### MANAGEMENT OVERVIEW

The Department will provide for an increase in recreational use of the unit by expanding upon the existing trail network and providing appropriate trailhead parking. Two trail systems will be developed. One system will only accommodate "primitive uses" - hiking, cross-country skiing and snowshoeing. The other will allow for more intensive recreational use, including snowmobiling, dog sledding, horseback riding and all terrain (mountain) bicycling.

For the purposes of this plan, these more intensive recreational use trails will be termed "multiple use trails." Throughout this plan, the term "multiple use trail" shall mean a trail designated for use by snowmobiles, dog sleds, cross-country skiers and snowshoers when the trail is covered by snow and/or ice, and for use by horseback riders, all terrain (mountain) bicyclers and hikers during the frost-free period of the year. The Department may close these trails to horseback riders and all terrain bicyclers during muddy periods of the year, especially in the spring. Multiple use trails will be marked with snowmobile trail markers. "Primitive use trail" shall mean a trail designated for use by hikers, cross-country skiers and snowshoers only. They will be marked with hiking trail markers.

The principle trailhead for the primitive trail system will be developed just south of the private inholding at the southern end of the Beech Mountain Road (the Beech Mountain Nature Preserve's Gatehouse Parcel). Here a parking lot and appropriate signage will be constructed to provide access to the network of woods roads west of Mongaup Pond, some of which will be designated and marked as primitive use trails.

The principle multiple use trailhead will be located within the Mongaup Pond Campground, utilizing an existing parking lot at the south end of the pond. Smaller secondary parking lots providing additional access to this trail system will be developed along the Flugertown Road, the Shin Creek Road, and at the Round Pond/Basily Road Junction. Some additional trails will be constructed to provide access from the above mentioned parking lots to the existing trails (east of Mongaup Pond) and the trails west of Mongaup Pond. However, most of the proposed trails for both this network (multiple use trails) and the primitive trail network will utilize woods roads and trails which already exist on the property. Only a few new trails will have to be constructed. Many of the existing trails will be improved.

In the trail proposals which follow, there are a few instances where primitive trail users will be "sharing"

the trail with multiple use trail users. These trails (old wood roads) are wide enough to accommodate shared use if the various users show courtesy and respect for each other. This situation will be monitored. If shared use results in conflicts, the Department may choose to limit the trail to one type of use at any one time. This could mean alternating use (example - odd days for skiers, even days for snowmobilers) or redesignating the trail to a single use and finding an alternative for other users.

Designated camping sites will continue to be utilized along Shin Creek and Willowemoc Creek. In addition, two sites will be designated near Frick Pond and one near Quick Lake. A leanto will be constructed on the ridge between Frick Pond and Quick Lake. A brochure will be printed to provide information about the trails and camping opportunities within the unit. Details of this proposed management scenario follow.

A. Facilities Development and or Removal

PROJECT #1: Construct a "Frick Pond Trailhead Parking Lot" to accommodate ten cars just south of the private inholding at the southern end of the Beech Mountain Road (the Beech Mountain Nature Preserve's Gatehouse Parcel). Define with large

rocks to prevent motor vehicle trespass of adjoining forest preserve lands. For use by primitive trail users only - no snowmobile or horse trailers. Erect a trail register next to the already existing information board to monitor use of the trails in this area.

PROJECT #2: Construct a "Long Pond Trailhead Parking Lot" to accommodate 15 cars on the east side of the Flugertown Road, .8 miles north of the Pole Road (see Facilities Map, Appendix G). Define with large rocks. To be utilized by all forest preserve visitors, but will be especially useful for snowmobilers. (A new trail is proposed to connect this parking lot with the existing Long Pond Snowmobile trail - see Public Use Management Recommendation #12). Erect a trail register and information board to monitor use and educate users.

PROJECT #3: Construct a "Round Pond Trailhead Parking Lot" to accommodate ten cars at the intersection of the Black Bear Road with the Baisly Road, .2 miles north of Round Pond. Define with rocks. To be utilized by all forest preserve visitors, including hikers using the Neversink/Hardenburgh and Long Pond Trails and

snowmobilers using the Long Pond Snowmobile Trail. Erect a trail register and information board to monitor use and educate users.

PROJECT #4: Construct a "Shin Creek Trailhead Parking Lot" to accommodate ten cars along the north side of the Shin Creek Road, approximately 150 feet east of Keator Road. Define with rocks. Intended for use by both horse/all terrain bicycle and primitive use trail users wishing to access the unit via the horse/all terrain bicycle trail proposed in Section C. Public Use Management and Controls, Recommendation #21. Erect a trail register and information board to monitor use and educate users.

PROJECT #5: Remove the building remains southeast of Frick Pond. All clean wood will be burned, remaining masonry and other non-combustible materials will be buried on site.

PROJECT #6: Remove 2.2 miles of utility line and poles which run from the Beech Mountain Nature Preserve Gatehouse Parcel to Hodge Pond. The line is no longer used and detracts from the wild character of the area.

PROJECT #7: Consolidate the old Beech Mountain Boy Scout Camp Dump which lies on the ridge west of Hodge Pond. Much of the discarded materials in this dump could be crushed and/or consolidated with motorized equipment. While the shallow soils here do not allow for burial, once consolidated a minimal amount of soil from the surrounding area could be used to reduce the visual impact of the dump and aid in decomposition.

PROJECT #8: Erect a leanto along the ridge between Frick Pond and Quick Lake. Although an exact location has not been determined, it would be located off of a multiple use trail, on a spur trail of at least 150 feet so as to allow use by all trail users. A leanto would provide shelter in a remote location within the unit, thus enabling a wider range of people to use the area. An outhouse would also be erected in association with this leanto.

PROJECT #9: Construct one small (five-car) parking lot along the Shin Creek Road (west side) to provide campers, hunters and others an appropriate departure point when accessing forest preserve land (See Facilities Map, Appendix G). The parking lot would be located near lands which were once farmed and are still partially open and well suited for camping (Lot 202). It would be defined with rocks to prevent motor vehicle trespass of the adjacent forest preserve land.

PROJECT #10: Monitor the use of the old farm road accessing forest preserve lands in Lot 200 (Great Lot 6) from the Shin Creek Road. This access has been utilized in the past for motor vehicle camping, especially during the big game hunting season, without abuse. However, because there is potential for motor vehicle trespass and subsequent abuse, this area will be closely monitored. If abuse occurs, the Department will construct a 5 car parking lot where this road leaves the Shin Creek Road and barricade access to the road beyond this point for all but foot travel. Funding for this parking lot will be included in the budget for year five.

B. Maintenance and Rehabilitation of Facilities

PROJECT #1: Rehabilitate the Waneta Lake Dam. The dam is structurally unsound. Water leakage, combined with an inadequate spillway which has resulted in frequent overtopping of the dam, has caused significant stone displacement. A private drive in the northeast side of the dam is often flooded as well. The proposed rehabilitation will include a 195 foot long concrete structure 1.5 feet higher than the existing dam, a new spillway (100 ft x 2.2 ft) and an earthen berm abutting the eastern side of the dam.

PROJECT #2: Maintain the Long Pond leanto. This leanto is located well away (320 feet) from the shore of Long Pond and enables a variety of users to enjoy the area. It will require significant improvements including a new roof.

PROJECT #3: Rehabilitate the outhouse which serves the Long Pond leanto.

PROJECT #4: Work with the Town of Rockland to rehabilitate the Hunter Road bridge crossing Mongaup Creek. This bridge is in very poor condition and a large mound of soil has been used by the town to prevent all but foot traffic across the bridge.

However, erosion and further deterioration has made even foot travel risky. Snowmobile travel across the bridge is dangerous and continued use of the snowmobile trail here requires significant improvements. The Department will not require a rehabilitated bridge to be passable by motor vehicle, and would encourage one which would be narrow enough to discourage all but foot and snowmobile use.

PROJECT #5: Do not alter or maintain the dams on Quick Lake, Frick Pond and Long Pond. Beaver dams dominate all three of these ponded waters. Failure of any of these dams would not result in any significant downstream damage. Their presence and natural origins add to the wild character of the unit.

PROJECT #6: Rehabilitate the Parksville Road Parking Lot. The existing lot is often muddy and should be resurfaced with a layer of gravel. Additional rocks are necessary to define the lot and prohibit motor vehicle trespass of the adjacent forest preserve lands.

PROJECT #7: Maintain the two parking lots at Waneta Lake. These lots will occasionally require grading and repair as well as litter pick up. An information board will be erected at the northern parking lot - see Public Use Management and Controls, Project #23.

C. Public Use Management and Controls

PROJECT #1: Designate the following three concentric loop trails as primitive use trails (see Facilities Map, Appendix G):

- Frick Pond Loop. Follow wood road heading northwest from proposed Frick Pond Trailhead parking lot to southern end of Frick Pond. A woods road completely encircles the pond; 2.1 miles.
- Frick Pond/Beech Mountain Road Loop. Utilize Frick Pond Loop Trail to north end of pond at trail junction. From junction head northeast to Beech Mountain Road, then south on Beech Mountain Road to return to trailhead; 4.0 miles.
- Hodge Pond Loop. Utilize Frick Pond Loop Trail to southwest end of Frick Pond at trail junction. From junction continue west to trail junction. Turn south to next junction, then turn north and ascend ridge. At dump site trail junction turn east to Hodge Pond. Skirt south

end of Hodge Pond on a trail easement which traverses the private Beech Mountain Nature Preserve to Beech Mountain Road. Turn south, leave private property and link up with Frick Pond/Beech Mountain Road Loop Trail back to trailhead; 6.1 miles.

Because all three of the above loop trails overlap one another to some extent, the total mileage of wood roads to be marked as primitive use trails would be 8.3 miles. A 0.2 mile section of the Hodge Pond Loop trail will be shared with multiple use trail users (including snowmobilers) - see Project #5.

PROJECT #2: Designate a primitive use trail to run west from the above mentioned Hodge Pond Loop Trail to Quick Lake via already existing woods roads (see Facilities Map, Appendix G); 4.1 miles. (Note: total distance from proposed Frick Pond Trailhead to Quick Lake would be 7.2 miles). Two segments of this route totaling approximately 1.25 miles would be shared with multiple use trail users - see Project #5.

PROJECT #3: Integrate management of this unit with the adjacent Mongaup Pond Campground Intensive Use

Area by utilizing the campground's parking facilities at the south end of the pond for access. A large parking lot on the west side of the service road near the southern end of Mongaup Pond is well suited to provide access for the snowmobile trail system which presently traverses this unit. It is also an appropriate trailhead location for a new multiple use trail linking the present trail system to the proposed trails west of Mongaup Pond (see Projects #4, 5, 6 and 7).

Mongaup Pond Campground is not open for camping during the winter months and the parking lot is not presently utilized during this period. The Department will allow horseback riders and other multiple use trail users to utilize this parking lot for access to the unit during the rest of the year. During the campgrounds season of operation (May - December) visitors will be required to pay the campground's day-use fee to utilize this trailhead parking lot.

PROJECT #4: Construct a multiple use trail from the north end of Mongaup Pond south westward to a wood road north of Frick Pond (see Facilities Map, Appendix G); 2.7 miles. This trail will provide a link between an already established trail network

east of Mongaup Pond and the newly acquired lands to the west. Some old logging roads may be utilized for parts of this trail, but much of this trail proposal will require intensive work, including grading with motorized equipment to create a safe and attractive multiple use trail with provisions for drainage to prevent erosion. A bridge will be constructed across Sucker Brook. Where this trail crosses the Beech Mountain Road/Frick Pond Loop Trail (twice) and again where it meets the Hodge Pond Loop Trail, both signs and barriers will be erected to prohibit snowmobilers and horse back riders from using primitive use trails.

PROJECT #5: Designate a multiple use trail utilizing existing wood roads from the wood road northwest of Frick Pond (see Project #4 above) to Quick Lake; 6.0 miles (see Facilities Map, Appendix G). The route follows wood roads that are generally in very good condition and will require little more than marking and blowdown removal for use. Three sections of the proposed route utilize wood roads which will also be marked for primitive use. This sharing of trails has been limited to areas where the only other alternative would have been new trail construction. Appropriate signage will be erected to alert users of

the "shared" trail and physical barriers (posts) will be erected to prevent snowmobilers and horseback riders from using trails designated for primitive trail use. This effort should minimize conflicts between users and allow for a "multiple use" of the area. Total distance from the northend of Mongaup Pond to Quick Lake would be 8.7 miles.

PROJECT #6: Designate an alternative horse trail/all terrain bicycle route to the proposed route to Quick Lake (Project #5) which would stay on the ridge west of Frick Pond rather than dropping to the west and reclimbing the ridge (see Facilities Map, Appendix G). The proposed route utilizes existing woods roads over the entire 1.9 mile route. Much of this proposed route transverses elevations in excess of 2,700 feet. Because the Catskill Park State Land Master Plan prohibits snowmobile trails above this elevation this trail will not be open to snowmobile use until such time as the Master Plan is amended (See I. Catskill Park State Land Master Plan Amendments Recommended).

PROJECT #7: Construct an alternative multiple use route from Quick Lake east to tie back into the already proposed multiple use trail (Project #5) near the halfway point between Quick Lake and Frick Pond - 3.1 miles. The existing "Old Hunter Road" as well as other woods roads will be utilized and only approximately 1.5 miles of new trail will have to be constructed. However, where new construction is necessary, it will require intensive work, including grading with motorized equipment to create a safe and attractive route with provisions for drainage to prevent erosion.

PROJECT #8: Erect a gate at the forest preserve boundary west of Quick Lake on Hunter Road to prevent motor vehicle trespass of forest preserve lands.

PROJECT #9: Relocate the western end of the Mongaup/Willowemoc snowmobile trail. This trail, which was generally rocky and rough, was made impassable by a severe windstorm in the Fall of 1990. The new route will leave the Mongaup Pond Loop Trail approximately .5 miles north of the original trail and traverse the ridge (southeasterly) in a more gradual way than the original trail, tying back into the original trail at the top of the ridge. This new

route would involve 0.9 miles of new trail construction, requiring tree cutting and grading with motorized equipment to create a safe and attractive route with provisions for drainage to prevent erosion. 0.7 miles of the original trail would be abandoned.

PROJECT #10: Improve the Long Pond snowmobile trail and the Mongaup Pond/Mongaup Creek snowmobile trail. While these trails do not require the intensive work necessary on the Mongaup/Willowemoc Trail, some eroded sections of trail need improvement. Drainage must also be provided for several wet/muddy areas. A short trail relocation (.2 miles) of the northern spur of the Long Pond Trail is necessary to avoid a large wet area which has been flooded by beavers. The new route will leave the Basily Road just east of a private inholding and head westward to rejoin the Basily Road south of the private inholding. A bridge will be necessary where the relocated trail crosses a branch of the Willowemoc Creek.

PROJECT #11: Erect a gate on the Long Pond snowmobile trail just west of the private inholding south of the Basily Road (see Facilities Map, Appendix G). The gate will be utilized to prohibit

motor vehicle use of this trail. It will be opened during the winter months when the trail is covered with snow sufficient enough to allow for snowmobile travel.

PROJECT #12: Construct a snowmobile trail from the proposed parking lot on the Flugertown Road (Facilities Development Project #2) to the existing Long Pond Snowmobile Trail - 1.5 miles. The trail will traverse forest preserve lands east of the Flugertown Road (see Facilities Map, Appendix G). Motorized equipment will be necessary to create a safe and attractive trail with provisions for drainage.

PROJECT #13: Designate a short snowmobile spur trail from the Long Pond Trail to the eastern shore of Long Pond - .2 miles (see Facilities Map, Appendix G). This new trail will allow additional access to the pond at an appropriate location. An unmarked trail already exists and requires little more than marking to be utilized.

PROJECT #14: Construct 2.5 miles of new snowmobile trail from the Hunter Road/Terwilliger Road Junction northeast to the Mongaup/Willowemoc snowmobile trail,

.25 miles west of Butternut Brook. This will involve tree cutting and grading with motorized equipment to create a safe and attractive route with provisions for drainage to prevent erosion. Some culverts and fill will be necessary. This addition will create a 7-8 mile (depending on the exact route) loop originating at Mongaup Pond. **Note:** The section of Hunter Road connecting this new trail with the Mongaup Creek Loop Trail has been designated a snowmobile trail by the Town of Rockland and is no longer plowed or maintained by the Town.

PROJECT #15: Abandon the Neversink/Balsam Lake Mountain Horse Trail. The northern end of this trail which passes through the Balsam Lake Mountain Wild Forest has been abandoned, as portions of the trail near the headwaters of the Beaverkill have deteriorated to the point that they are no longer suitable for horse travel. As was noted in the Balsam Lake Mountain Wild Forest Unit Management Plan, the level of use by equestrians on this trail is very low.

PROJECT #16 DESIGNATED CAMPSITES: Designate two primitive campsites near Frick Pond and one near Quick Lake. Because both of these areas were only

recently acquired by New York State there are no user-established campsites. This provides the Department with an excellent opportunity to choose appropriate campsite locations for users which will minimize the impact campers have on either of these areas. An outhouse will be erected to serve the campsites at Frick Pond.

The existing designated campsites near Willowemoc Creek and Shin Creek will continue to be utilized. However, two of the designated campsites along the Shin Creek will be eliminated upon completion of the Forest Preserve access parking lot to be constructed northeast of these sites on the Shin Creek Road (Facilities Development, Project #9). The new parking lot will provide access to an area better suited for camping. No campsites will be designated in this area -- camping will only be permitted 150 feet or more from road and water.

PROJECT #17: Survey, clear and mark the right-of-way from the Craige Clair Road to the Craigie Clair detached parcel - 0.4 miles. This right-of-way was never defined when the property was acquired. It will be cleared and marked to allow for foot access. Appropriate signs will be posted to inform visitors that they are on a public right-of-way traversing

private property and that they must respect the private landowner's rights by staying on the right-of-way.

PROJECT #18: Continue maintenance of the Neversink/Hardenburg Hiking Trail. However, the trailhead will be relocated from Claryville to the proposed parking lot at the junction of the Black Bear Road and the Basily Road, shortening the trail within this unit from 5.1 miles to 3.0 miles. This trail is entirely on a town road (within this unit) and requires little more than marking.

PROJECT #19: Erect a gate where the Mongaup Pond/Mongaup Creek snowmobile trail meets Hunter Road. The gate would be utilized to prohibit motor vehicle use of the snowmobile trail. It will be open during the winter months to allow for snowmobile travel.

PROJECT #20: Erect two gates on the Beech Mountain Road (abandoned). One gate will be erected on forest preserve land just south of Hodge Pond, the other on forest preserve land just north of the private inholding southeast of Frick Pond (the gatehouse

parcel). These gates are necessary to prohibit unauthorized motor vehicle use of the road.

PROJECT #21: Construct 1.4 miles of new horse/all terrain bicycle trail from the Shin Creek Road south to connect with the proposed multiple use trail between Frick Pond and Quick Lake (Project #5). This proposal will require intensive work, including grading with motorized equipment to create a safe and attractive route with provisions for drainage, as well as a bridge crossing Shin Creek. It will provide the only access to both the multiple use and primitive use trail systems from the north end of the unit. However, because the proposed route traverses a ridge above 2700 feet in elevation, it will not be open to snowmobilers. Should the Catskill Park State Land Master Plan be amended to allow for snowmobile trails above 2700 feet in elevation (see Catskill Park State Land Master Plan Amendments, p. 94), this trail could be designated as a multiple use trail to allow for snowmobile use. A trailhead parking area is proposed in Section A. Facilities Development and or Removal, Project #4.

PROJECT #22: Abandon the "Upper Mongaup Loop" Snowmobile Trail (.5 miles). This loop, at the

northeast end of the Mongaup Pond/Mongaup Creek Snowmobile Trail traverses a very wet, muddy area. The low level of use and the marginal utility of this trail do not warrant the extensive work which would be necessary to solve the existing drainage and erosion problems.

PROJECT #23: Construct an Information Board at Waneta Lake (northern parking lot) to educate users as to the rules and regulations governing use of the area.

#### D. Fish and Wildlife Management

##### 1. Fisheries

All waters within this Wild Forest unit will continue to be managed under current statewide general regulations, with no special harvest restrictions imposed. Both the Willowemoc Creek and Fir Brook will continue to be stocked with brown trout yearlings on an annual basis. Non-trout fish populations in the ponded waters will be managed as self-sustaining, with no supplemental stocking warranted.

2. Wildlife

No wildlife management projects are planned specifically for the Willowemoc - Long Pond Wild Forest. The area falls within Wildlife Management Unit #11 and Deer Management Units 55 and 60. The management of wildlife populations within the Willowemoc - Long Pond Wild Forest will be limited to the hunting and trapping regulations developed for these broader management units.

The proposed parking facilities and trail additions have been sited to avoid critical wildlife habitat, including deer wintering areas. However, the Department will monitor winter conditions and during severe winters the Department may close some or all of the snowmobile trails within this unit for as long as the Regional Wildlife Manager deems appropriate.

E. Wild, Scenic and Recreational Rivers

There are no water courses in this unit classified under the provisions of the Wild, Scenic and Recreational Rivers Act, Title 15 of the Environmental Conservation Law.

F. Fire Management

The Department is charged with protection from fire in the Willowemoc - Long Pond Wild Forest under provisions of Article 9 of the Environmental Conservation Law. The Towns of Hardenburgh, Denning, Rockland and Neversink are all fire towns. The policy of the Department is to extinguish all fires regardless of cause, land classification or ownership. This policy will dictate the fire management program for the Willowemoc - Long Pond Wild Forest.

Fire detection has been primarily handled by the Red Hill Fire Tower Observer. This tower was one of the few to be staffed and maintained in 1990. It is recommended that the tower continue to be staffed and maintained for fire detection as well as communication purposes. Fire prevention, detection and suppression is the responsibility of the Forest Ranger assigned to the Livingston Manor, Hardenburgh, Ellenville and Neversink ranger districts.

G. Administration

1. Staffing

The Willowemoc - Long Pond Wild Forest falls within four forest ranger districts - Livingston Manor, Hardenburgh, Ellenville and Neversink. The most dominant, positive impact on this unit has been the presence of each of these Forest Rangers. They are the Department's day to day field managers, watching over the area, interacting with the public, enforcing the Department's Rules and Regulations as well as Environmental Conservation Law, and undertaking fire detection and suppression. Their continued presence is essential in the management of this unit.

PROJECT #1: Supplement Forest Ranger patrols of this unit with a seasonal Assistant Forest Ranger. As previously recommended in the Balsam Lake Mountain Wild Forest Unit Management Plan, this person will be hired from April 1 to December 15 of each year and provided with a vehicle to patrol this unit, the Balsam Lake Mountain Unit and Crystal Lake. The work week will be scheduled so as to include weekends and holidays when public use is highest.

Current staffing in the Division of Operations is inadequate to undertake the necessary trail, parking lot, leanto and sign maintenance. Additional staff will be required to accomplish this work as well as to undertake the various projects proposed in this plan.

PROJECT #2: Hire four maintenance assistants to work under the supervision of the existing Trails Supervisor. Two of these maintenance assistants will be hired on a full time basis, the other two on a seasonal basis (May 15 - December 15). Their time will be spent on this unit, the Balsam Lake Mountain Unit, the Peekamoose Unit and Crystal Lake. Regular maintenance of these areas will greatly improve their appearance as well as their ability to provide a safe recreational environment.

The existing regional staff for fish and wildlife management is adequate to handle all present and proposed management activities requiring their input and assistance.

The current supervisory staff is not adequate to manage this and the other Forest Preserve units in Region 3.

PROJECT #3: The Preserve Manager position, vacant since September, 1990 should be filled as soon as possible to coordinate unit management planning and implementation, forest preserve management and land acquisition within the region.

2. Education

PROJECT #1: Develop a brochure describing the Willowemoc - Long Pond Wild Forest for public distribution. A map of the unit, rules and regulations governing the area's use, an explanation of the trail system and minimum impact camping techniques will be included. Post at all trailhead information boards.

PROJECT #2: Erect and maintain information boards at each trailhead. Each board may vary depending on the needs associated with their location, but all should contain the following:

- Map of the area with trailhead location clearly marked
- Rules and Regulations governing public use
- Proper methods of human waste disposal
- Information on Giardia and alternatives for treating water

- Emergency phone numbers as well as the names, addresses and phone numbers of local Forest Rangers and the Department's regional headquarters..

Both brochures and information boards are useful tools for educating users, but the most effective method is the personal contact which the Forest Ranger and the Assistant Forest Ranger provides (see Staffing).

#### H. Land Acquisition

There are seven private inholdings (private land completely surrounded by state land) within or adjacent to this unit. While none of these parcels cause conflict in the unit, they should be considered for acquisition should they become available in the future, or perhaps a conservation easement might adequately protect/enhance their relationship with the unit.

In addition, there are three detached parcels of state land which have no access. The Department should pursue acquisition of adjacent private land which would provide access to any of these parcels if any such lands become available.

I. Catskill Park State Land Master Plan Amendments

RECOMMENDATION: The Master Plan should be amended to allow for the establishment and maintenance of snowmobile trails on forest preserve lands in excess of 2,700 feet in elevation. The present elevation limitation for snowmobiles does not allow the Department to consider the unique characteristics of each unit.

J. SEQR Requirements

The actions proposed in this unit management plan will not result in any significant environmental impacts and thus a negative declaration was filed, a copy of which can be found in Appendix A.

V. SCHEDULE FOR IMPLEMENTATION/BUDGET

The following schedule will be implemented over the five year period of the plan, if funding is provided. Estimated costs are in addition to normal program funding.

<u>YEAR</u>	<u>PROJECT</u>	<u>ESTIMATED COST</u>
I	Construct a 10 car parking lot and establish a Frick Pond Trailhead on the Beech Mountain Road. Erect a trail register.	\$ 4,670
	Consolidate and cover the old Beech Mountain Boy Scout Camp dump.	\$ 3,000
	Rehabilitate the Waneta Lake Dam (Funds were allocated in the 1989/90 Budget for this project).	\$ 300,000
	Replace the Outhouse at Long Pond.	\$ 300
	Designate/mark 12.4 miles of woods roads west of Mongaup Pond as primitive use trails.	\$ 1,600
	Establish a multiple use trailhead at an existing parking lot at Mongaup Pond and erect a trail register and information board.	\$ 900
	Construct 2.7 miles of multiple use trail from Mongaup Pond to a wood road north of Frick Pond.	\$ 14,500
	Designate/mark 6.0 miles of woods roads west of Mongaup Pond as multiple use trails.	\$ 1,000
	Relocate 0.9 miles of Mongaup/Willowemoc Snowmobile Trail.	\$ 4,300

<u>YEAR</u>	<u>PROJECT</u>	<u>ESTIMATED COST</u>
I cont	Erect barriers at 9 trail junctions to prohibit snowmobilers/horses from utilizing primitive use trails.	\$ 2,500
	Designate two primitive campsites at Frick Pond and one near Quick Lake.	\$ 150
	Erect an Outhouse at Frick Pond.	\$ 300
	Designate 1.9 miles of woods roads for use as a horse/all terrain bicycle trail (alternate route to Quick Lake).	\$ 200
	Improve the Long Pond Snowmobile Trail (3.2 miles) including .4 miles of new trail construction (.2 mile spur to eastern shore of Long Pond and .2 mile trail relocation, including new bridge).	\$ 10,000
	Rehabilitate the Hunter Road Bridge crossing Mongaup Creek.	\$ 4,000
	Assistant Forest Ranger (1/3 time; April 1 to December 15) - and vehicle.	\$ 7,600
	Preserve Manager (10% of time)	\$ 3,600
	Maintenance Crew (4 person crew; 2 full time, 2 seasonal {May 15 - December 15} - 1/5 time) and vehicle.	\$ 18,900
	Annual maintenance materials.	\$ <u>4,000</u>
	TOTAL EXPENSES FOR YEAR I	\$ 381,520

<u>YEAR</u>	<u>PROJECT</u>	<u>ESTIMATED COST</u>
II	Construct a 15 car parking lot on the Flugertown Road. Define with rocks.	\$ 7,000
	Establish the above parking lot as the Long Pond Trailhead. Erect an information board and trail register.	\$ 2,200
	Construct 1.5 miles of snowmobile trail from the Long Pond Trailhead Parking Lot to the existing Long Pond snowmobile trail.	\$ 3,000
	Erect a gate on the Long Pond Snowmobile Trail, east of Long Pond.	\$ 1,500
	Construct an Information Board at Waneta Lake.	\$ 1,200
	Abandon the Upper Mongaup Snowmobile Trail Loop (0.5 miles).	\$ 200
	Erect a gate at the forest preserve boundary west of Quick Lake on Old Hunter Road.	\$ 1,900
	Survey, clear and mark the 0.4 mile Craige Clair Right of Way.	\$ 3,500
	Remove the building remains southeast of Frick Pond.	\$ 1,500
	Assistant Forest Ranger (1/3 time; April 1 to December 15).	\$ 4,450
	Preserve Manager (10% time)	\$ 3,800
	Maintenance Crew (4 person crew; 2 full time, 2 seasonal {May 15 - December 15} - 1/5 time) and vehicle.	\$ 16,800
	Annual Maintenance Materials.	\$ 5,000
	<b>TOTAL EXPENSES FOR YEAR II</b>	<b>\$ 52,050</b>

<u>YEAR</u>	<u>PROJECT</u>	<u>ESTIMATED COST</u>
III	Construct a 10 car parking lot at the Basily/Black Bear Road Junction. Define with rocks.	\$ 5,500
	Establish a "Round Pond Trailhead" at the above parking lot. Erect an information board and trail register.	\$ 2,400
	Remove 2.2 miles of utility lines between Frick and Hodge Ponds.	\$ 3,000
	Construct 2.5 miles of new snowmobile trail from the Hunter Road/Terwilliger Road junction to the Mongaup/Willowemoc Trail near Butternut Brook.	\$ 14,000
	Erect two gates on the Beech Mountain Road.	\$ 3,000
	Assistant Forest Ranger (1/3 time; April 1 to December 15).	\$ 4,580
	Preserve Manager (10% time)	\$ 4,000
	Maintenance Crew (4 person crew; 2 full time, 2 seasonal {May 15 - December 15} - 1/5 time).	\$ 17,300
	Annual Maintenance Materials.	\$ 5,250
		<hr/>
	TOTAL EXPENSES FOR YEAR III	\$ 59,030

<u>YEAR</u>	<u>PROJECT</u>	<u>ESTIMATED COST</u>
IV	Construct a 10 car parking lot on the Shin Creek Road. Define with rocks.	\$ 6,000
	Establish the above parking lot as the Shin Creek Trailhead. Erect an information board and trail register.	\$ 2,700
	Construct 1.4 miles of multiple use trail from the Shin Creek Trailhead to the Frick Pond/Quick Lake Multiple Use Trail.	\$ 8,700
	Improve the Mongaup Pond/Mongaup Creek snowmobile trail (5.7 miles).	\$ 4,000
	Erect a gate where the Mongaup Pond/Mongaup Creek snowmobile trail meets Hunter Road.	\$ 1,500
	Assistant Forest Ranger (1/3 time; April 1 to December 15).	\$ 4,760
	Preserve Manager (10% Time)	\$ 4,250
	Maintenance Crew (4 person crew; 2 full time, 2 seasonal {May 15 - December 15} - 1/5 time).	\$ 17,990
	Annual Maintenance Materials.	\$ 5,510
	<hr/>	
	TOTAL EXPENSES FOR YEAR IV	\$ 55,410

<u>YEAR</u>	<u>PROJECT</u>	<u>ESTIMATED COST</u>
V	Rehabilitate the Parksville Road parking lot. Define with rocks.	\$ 1,000
	Construct two 5-car parking lots on the Shin Creek Road. Define with rocks.	\$ 7,000
	Erect a lean-to and outhouse on the ridge between Frick Pond and Quick Lake.	\$ 15,000
	Construct 1.5 miles of multiple use trail and designate/mark an additional 1.6 miles of woods road as multiple use trail to create a 3.1 mile alternative route to Quick Lake.	\$ 8,500
	Assistant Forest Ranger (1/3 time; April 1 to December 15).	\$ 4,950
	Preserve Manager (10% time).	\$ 4,500
	Maintenance Crew (4 person crew; 2 full time, 2 seasonal {May 15 - December 15} - 1/5 time).	\$ 18,750
	Annual Maintenance Materials.	\$ 5,790
		<hr/>
	TOTAL EXPENSES FOR YEAR V	\$ 65,490
	TOTAL ESTIMATED COST FOR 5-YEAR PLAN	<u>\$ 613,500</u>

## VI. BIBLIOGRAPHY AND REFERENCES

- Andrle, Robert F. and Janet R. Carroll. The Atlas of Breeding Birds in New York State. Cornell University Press, Ithaca, New York, 1988.
- Bagdon Environmental Associates, Inc., Beech Mountain Resource Inventory Final Report, Delmar, New York, 1987.
- Bagdon Environmental Associates, Inc., Beech Mountain Natural Significant Plant Habitat Survey Report, Delmar, New York, 1987.
- Bagdon Environmental Associates, Inc., Rare Plant and Wildlife Survey - Quick Lake Parcel, Preliminary Report, Delmar, New York, 1988.
- Bagdon Environmental Associates, Inc., Winter Deer Concentration Area Survey - Beech Mountain, Delmar, New York, 1988.
- Bennet, John and Seth Masia, Walks in the Catskills, Eastwoods Press, Inc., New York, 1974.
- Chambers, Robert E., Integrating Timber and Wildlife Management, State University of New York College of Environmental Science and Forestry, Syracuse, New York, 1983.
- Considine, Thomas and Thomas Frieswyk, Forest Statistics for New York, U.S.D.A. Forest Service Resource Bulletin NE-71, 1982.
- Evers, Alf. The Catskills - From Wilderness to Woodstock, 1972.
- Ferguson, Roland and C. E. Mayer. The Timber Resources of New York, U.S.D.A. Forest Service Resource Bulletin NE-20, 1970.
- Francis, Austin M., Catskill Rivers, Winchester Press, NJ, 1983.
- Heidt, William, Frances J. Knapp's 103 Years, Sullivan County Historical Society, Jeffersonville, NY, 1956.
- Hoffer, Audrey and Elizabeth Mikols, Unique Natural Areas in the Catskill Region, Catskill Center for Conservation and Development, Inc., 1974.
- Kudish, Michael, Ph.D. Catskill Soils and Forest History, Catskill Center for Conservation and Development, Inc., 1979.
- Kudish, Michael, Ph.D., personal correspondence, May 20, 1990.

- Kudish, Michael, Ph.D. Vegetational History of the Catskill High Peaks, State University of New York College of Environmental Science and Forestry, Ph.D., 1971.
- Lueck, Thomas J., "Conservationists Turn to Tough Tactics," The New York Times, February 26, 1989.
- McAllister, Lee and Myron Steven Ochman, Hiking the Catskills, New York - New Jersey Trail Conference, 1989.
- Myers III, Franklin Daniel, The Wood Chemical Industry in the Delaware Valley, Prior King Press, Middletown, NY, 1986.
- New York State Department of Environmental Conservation. Balsam Lake Mountain Wild Forest Unit Management Plan, 1989.
- New York State Department of Environmental Conservation. Beaverkill Public Campground Final Unit Management Plan, Division of Operations, Bureau of Recreation, Albany, New York, 1990.
- New York State Department of Environmental Conservation. Catskill Park State Land Master Plan, 1985.
- New York State Department of Environmental Conservation. Cultural Resources Investigation of the Beaverkill Public Campground, Town of Rockland, Sullivan County, New York. Bureau of Recreation, Division of Operations, July 30, 1990.
- New York State Department of Environmental Conservation, Division of Fish and Wildlife - Information Resources Section. Natural Heritage Maps and Data, 1990.
- New York State Department of Environmental Conservation, Division of Fish and Wildlife - Nongame Unit. Checklist of the Amphibians, Reptiles, Birds and Mammals of New York State, Including Their Protective Status, 1987.
- New York State Department of Environmental Conservation. Trail Construction and Maintenance Manual, Division of Operations, 1982.
- New York State Department of Environmental Conservation. Tree Cutting Policy on Forest Preserve Lands, Organization and Delegation Memorandum #84-06, 1984.
- New York State Office of Parks, Recreation and Historic Preservation, People, Resources, Recreation: 1988-1993 New York Statewide Comprehensive Outdoor Recreation Plan, Albany, New York, 1988.

New York State Office of Parks, Recreation and Historic Preservation, State of New York Snowmobile Trail Plan, Albany, New York, 1989.

Quinlan, James Eldridge, History of Sullivan County, Beebe and Morgans Co., Liberty, NY, 1873.

Rich, John Lyon. Glacial Geology of the Catskills, New York State Museum Bulletin No. 299, December, 1934.

Temporary State Commission to Study the Catskills. Forest Resources of the Catskill Region, State University of New York, College of Environmental Science and Forestry, 1974.

Tiffany, Lena O. B., Pioneers of the Beaverkill Valley, Village Printer, Laurens, NY, 1976.

U.S.D.A. Soil Conservation Service, Soil Survey of Sullivan County, New York, U.S. Government Printing Office, 1989.

U.S.D.A. Soil Conservation Service, Soil Survey of Ulster County, New York, 1979.

Wadsworth, Bruce, Guide to Catskill Trails, Adirondack Mountain Club, Inc., 1988.

Wakefield, Manville B., To the Mountains by Rail, Wakefair Press, Grahamsville, NY, 1990.



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A P P E N D I C E S

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State Environmental Quality Review  
FULL ENVIRONMENTAL ASSESSMENT FORM

**Purpose:** The full EAF is designed to help applicants and agencies determine, in an orderly manner, whether a project or action may be significant. The question of whether an action may be significant is not always easy to answer. Frequently, there are aspects of a project that are subjective or unmeasurable. It is also understood that those who determine significance may have little or no formal knowledge of the environment or may be technically expert in environmental analysis. In addition, many who have knowledge in one particular area may not be aware of the broader concerns affecting the question of significance.

The full EAF is intended to provide a method whereby applicants and agencies can be assured that the determination process has been orderly, comprehensive in nature, yet flexible to allow introduction of information to fit a project or action.

**Full EAF Components:** The full EAF is comprised of three parts:

- Part 1:** Provides objective data and information about a given project and its site. By identifying basic project data, it assists a reviewer in the analysis that takes place in Parts 2 and 3.
- Part 2:** Focuses on identifying the range of possible impacts that may occur from a project or action. It provides guidance as to whether an impact is likely to be considered small to moderate or whether it is a potentially-large impact. The form also identifies whether an impact can be mitigated or reduced.
- Part 3:** If any impact in Part 2 is identified as potentially-large, then Part 3 is used to evaluate whether or not the impact is actually important.

**DETERMINATION OF SIGNIFICANCE—Type 1 and Unlisted Actions**

Identify the Portions of EAF completed for this project:     Part 1     Part 2     Part 3

Upon review of the information recorded on this EAF (Parts 1 and 2 and 3 if appropriate), and any other supporting information, and considering both the magnitude and importance of each impact, it is reasonably determined by the lead agency that:

- A. The project will not result in any large and important impact(s) and, therefore, is one which will not have a significant impact on the environment, therefore a **negative declaration will be prepared.**
- B. Although the project could have a significant effect on the environment, there will not be a significant effect for this Unlisted Action because the mitigation measures described in PART 3 have been required, therefore a **CONDITIONED negative declaration will be prepared.\***
- C. The project may result in one or more large and important impacts that may have a significant impact on the environment, therefore a **positive declaration will be prepared.**

\* A Conditioned Negative Declaration is only valid for Unlisted Actions

Willowemoc-Long Pond Wild Forest Unit Management Plan

Name of Action

New York State Department of Environmental Conservation

Name of Lead Agency

Frederick J. Gerty, Jr.

Regional Forestry Manager

Print or Type Name of Responsible Officer in Lead Agency

Title of Responsible Officer

*Frederick J. Gerty, Jr.*  
Signature of Responsible Officer in Lead Agency

*William J. Ambrose*  
Signature of Preparer (if different from responsible officer)

March, 1991

Date

# PART 1—PROJECT INFORMATION

## Prepared by Project Sponsor

NOTICE: This document is designed to assist in determining whether the action proposed may have a significant effect on the environment. Please complete the entire form, Parts A through E. Answers to these questions will be considered as part of the application for approval and may be subject to further verification and public review. Provide any additional information you believe will be needed to complete Parts 2 and 3.

It is expected that completion of the full EAF will be dependent on information currently available and will not involve new studies, research or investigation. If information requiring such additional work is unavailable, so indicate and specify each instance.

NAME OF ACTION <b>Application of the Willowemoc-Long Pond Wild Forest Unit Management Plan</b>			
LOCATION OF ACTION (Include Street Address, Municipality and County) <b>Towns of Hardenburgh and Denning, Ulster County &amp; Town of Rockland &amp; Neversink, Sullivan Co.</b>			
NAME OF APPLICANT/SPONSOR <b>NYS Department of Environmental Conservation Region 3</b>		BUSINESS TELEPHONE <b>(914) 255-5453</b>	
ADDRESS <b>21 South Putt Corners Road</b>			
CITY/PO <b>New Paltz</b>		STATE <b>NY</b>	ZIP CODE <b>12561</b>
NAME OF OWNER (if different)		BUSINESS TELEPHONE <b>( )</b>	
ADDRESS			
CITY/PO		STATE	ZIP CODE
DESCRIPTION OF ACTION <b>Implementation of the Willowemoc-Long Pond Wild Forest Unit Management Plan - see plan for proposed management projects.</b>			

Please Complete Each Question— Indicate N.A. if not applicable

### A. Site Description

Physical setting of overall project, both developed and undeveloped areas.

1. Present land use:     Urban     Industrial     Commercial     Residential (suburban)     Rural (non-farm)  
                                Forest     Agriculture     Other \_\_\_\_\_

2. Total acreage of project area:    14,870 acres.

APPROXIMATE ACREAGE	PRESENTLY	AFTER COMPLETION
Meadow or Brushland (Non-agricultural)	<u>50</u> acres	<u>50</u> acres
Forested	<u>14,352</u> acres	<u>14,351.3</u> acres
Agricultural (Includes orchards, cropland, pasture, etc.)	<u>0</u> acres	<u>0</u> acres
Wetland (Freshwater or tidal as per Articles 24, 25 of ECL)	<u>413</u> acres	<u>413</u> acres
Water Surface Area	<u>55</u> acres	<u>55</u> acres
Unvegetated (Rock, earth or fill)	_____ acres	<u>.7</u> acres
Roads, buildings and other paved surfaces	_____ acres	_____ acres
Other (Indicate type) _____	_____ acres	_____ acres

3. What is predominant soil type(s) on project site? Willowemoc-Mongaup-Lew Beach Association
- a. Soil drainage:     Well drained 70 % of site     Moderately well drained 27 % of site  
                                Poorly drained 3 % of site
- b. If any agricultural land is involved, how many acres of soil are classified within soil group 1 through 4 of the NYS Land Classification System? \_\_\_\_\_ acres. (See 1 NYCRR 370).
4. Are there bedrock outcroppings on project site?     Yes     No
- a. What is depth to bedrock? 0 - > 5 (in feet)

5. Approximate percentage of proposed project site with slopes:  0-10% 10 %  10-15% 30 %  
 15% or greater 60 %
6. Is project substantially contiguous to, or contain a building, site, or district, listed on the State or the National Registers of Historic Places?  Yes  No
7. Is project substantially contiguous to a site listed on the Register of National Natural Landmarks?  Yes  No
8. What is the depth of the water table? 1-5-6+ (in feet)
9. Is site located over a primary, principal, or sole source aquifer?  Yes  No
10. Do hunting, fishing or shell fishing opportunities presently exist in the project area?  Yes  No
11. Does project site contain any species of plant or animal life that is identified as threatened or endangered?  
 Yes  No According to New York Natural Heritage Program Maps and Data  
 Identify each species \_\_\_\_\_
12. Are there any unique or unusual land forms on the project site? (i.e., cliffs, dunes, other geological formations)  
 Yes  No Describe \_\_\_\_\_
13. Is the project site presently used by the community or neighborhood as an open space or recreation area?  
 Yes  No If yes, explain it is public land with hiking and snowmobile trails
14. Does the present site include scenic views known to be important to the community?  
 Yes  No Willowemoc Creek, Conklin Brook Fall Brook, Flat Brook
15. Streams within or contiguous to project area: Shin Creek, Gee Brook, Mongaup Creek, Butterut Brook,  
Fir Brook  
 a. Name of Stream and name of River to which it is tributary Delaware River
16. Lakes, ponds, wetland areas within or contiguous to project area:  
 a. Name Waneta Lake, Quick lake, Frick Pond, Long Pond, and 17 wetlands  
 Size (In acres) 468 (total)
17. Is the site served by existing public utilities?  Yes  No  
 a) If Yes, does sufficient capacity exist to allow connection?  Yes  No N/A  
 b) If Yes, will improvements be necessary to allow connection?  Yes  No N/A
18. Is the site located in an agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304?  Yes  No
19. Is the site located in or substantially contiguous to a Critical Environmental Area designated pursuant to Article 8 of the ECL, and 6 NYCRR 617?  Yes  No
20. Has the site ever been used for the disposal of solid or hazardous wastes?  Yes  No

## B. Project Description

1. Physical dimensions and scale of project (fill in dimensions as appropriate)
- a. Total contiguous acreage owned or controlled by project sponsor 14,870 acres.
- b. Project acreage to be developed: 0.7 acres initially; 0.7 acres ultimately.
- c. Project acreage to remain undeveloped 14,869.3 acres.
- d. Length of project, in miles: N/A (If appropriate)
- e. If the project is an expansion, indicate percent of expansion proposed \_\_\_\_\_ %;
- f. Number of off-street parking spaces existing 14; proposed 69.
- g. Maximum vehicular trips generated per hour N/A (upon completion of project)?
- h. If residential: Number and type of housing units:
- |            | One Family | Two Family | Multiple Family | Condominium |
|------------|------------|------------|-----------------|-------------|
| Initially  | _____      | _____      | _____           | _____       |
| Ultimately | _____      | _____      | _____           | _____       |
- i. Dimensions (in feet) of largest proposed structure 8 height; 8 width; 12 length. (LEANTO)
- j. Linear feet of frontage along a public thoroughfare project will occupy is? N/A ft.

2. How much natural material (i.e., rock, earth, etc.) will be removed from the site? 0 tons/cubic yards
3. Will disturbed areas be reclaimed?  Yes  No  N/A
- a. If yes, for what intended purpose is the site being reclaimed? \_\_\_\_\_
- b. Will topsoil be stockpiled for reclamation?  Yes  No
- c. Will upper subsoil be stockpiled for reclamation?  Yes  No
4. How many acres of vegetation (trees, shrubs, ground covers) will be removed from site? 0 acres.
5. Will any mature forest (over 100 years old) or other locally-important vegetation be removed by this project?  
 Yes  No
6. If single phase project: Anticipated period of construction \_\_\_\_\_ months, (including demolition).
7. If multi-phased:
- a. Total number of phases anticipated 5 (number).
- b. Anticipated date of commencement phase 1 9 month 91 year, (including demolition).
- c. Approximate completion date of final phase 8 month 96 year.
- d. Is phase 1 functionally dependent on subsequent phases?  Yes  No
8. Will blasting occur during construction?  Yes  No
9. Number of jobs generated: during construction 4; after project is complete 4.
10. Number of jobs eliminated by this project 0.
11. Will project require relocation of any projects or facilities?  Yes  No If yes, explain \_\_\_\_\_
12. Is surface liquid waste disposal involved?  Yes  No
- a. If yes, indicate type of waste (sewage, industrial, etc.) and amount \_\_\_\_\_
- b. Name of water body into which effluent will be discharged \_\_\_\_\_
13. Is subsurface liquid waste disposal involved?  Yes  No Type \_\_\_\_\_
14. Will surface area of an existing water body increase or decrease by proposal?  Yes  No  
Explain Waneta Lake Dam Rehabilitation will not result in a change in lake's surface area
15. Is project or any portion of project located in a 100 year flood plain?  Yes  No
16. Will the project generate solid waste?  Yes  No
- a. If yes, what is the amount per month \_\_\_\_\_ tons
- b. If yes, will an existing solid waste facility be used?  Yes  No
- c. If yes, give name \_\_\_\_\_; location \_\_\_\_\_
- d. Will any wastes **not** go into a sewage disposal system or into a sanitary landfill?  Yes  No
- e. If Yes, explain \_\_\_\_\_
17. Will the project involve the disposal of solid waste?  Yes  No
- a. If yes, what is the anticipated rate of disposal? \_\_\_\_\_ tons/month.
- b. If yes, what is the anticipated site life? \_\_\_\_\_ years.
18. Will project use herbicides or pesticides?  Yes  No
19. Will project routinely produce odors (more than one hour per day)?  Yes  No
20. Will project produce operating noise exceeding the local ambient noise levels?  Yes  No
21. Will project result in an increase in energy use?  Yes  No  
If yes, indicate type(s) \_\_\_\_\_
22. If water supply is from wells, indicate pumping capacity \_\_\_\_\_ gallons/minute.
23. Total anticipated water usage per day \_\_\_\_\_ gallons/day.
24. Does project involve Local, State or Federal funding?  Yes  No  
If Yes, explain NY State

**25. Approvals Required:**

		Type	Submittal Date
City, Town, Village Board	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____	_____
City, Town, Village Planning Board	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____	_____
City, Town Zoning Board	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____	_____
City, County Health Department	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____	_____
Other Local Agencies	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____	_____
Other Regional Agencies	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____	_____
State Agencies	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>DEC Commissioner</u>	_____
Federal Agencies	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____	_____

**C. Zoning and Planning Information**

- Does proposed action involve a planning or zoning decision?  Yes  No  
 If Yes, indicate decision required:  
 zoning amendment     zoning variance     special use permit     subdivision     site plan  
 new/revision of master plan     resource management plan     other \_\_\_\_\_
- What is the zoning classification(s) of the site? Wild Forest
- What is the maximum potential development of the site if developed as permitted by the present zoning?  
N/A
- What is the proposed zoning of the site? Wild Forest
- What is the maximum potential development of the site if developed as permitted by the proposed zoning?  
N/A
- Is the proposed action consistent with the recommended uses in adopted local land use plans? N/A  Yes  No
- What are the predominant land use(s) and zoning classifications within a 1/4 mile radius of proposed action?  
N/A
- Is the proposed action compatible with adjoining/surrounding land uses within a 1/4 mile?  Yes  No
- If the proposed action is the subdivision of land, how many lots are proposed? \_\_\_\_\_  
 a. What is the minimum lot size proposed? \_\_\_\_\_
- Will proposed action require any authorization(s) for the formation of sewer or water districts?  Yes  No
- Will the proposed action create a demand for any community provided services (recreation, education, police, fire protection)?  Yes  No  
 a. If yes, is existing capacity sufficient to handle projected demand?  Yes  No
- Will the proposed action result in the generation of traffic significantly above present levels?  Yes  No  
 a. If yes, is the existing road network adequate to handle the additional traffic?  Yes  No

**D. Informational Details**

Attach any additional information as may be needed to clarify your project. If there are or may be any adverse impacts associated with your proposal, please discuss such impacts and the measures which you propose to mitigate or avoid them.

**E. Verification**

I certify that the information provided above is true to the best of my knowledge.

Applicant/Sponsor Name William Rudge Date 3/27/91  
 Signature *William Rudge* Title Sr. Forester

If the action is in the Coastal Area, and you are a state agency, complete the Coastal Assessment Form before proceeding with this assessment.

## Part 2—PROJECT IMPACTS AND THEIR MAGNITUDE

Responsibility of Lead Agency

### General Information (Read Carefully)

- In completing the form the reviewer should be guided by the question: Have my responses and determinations been **reasonable**? The reviewer is not expected to be an expert environmental analyst.
- Identifying that an impact will be potentially large (column 2) does not mean that it is also necessarily **significant**. Any large impact must be evaluated in PART 3 to determine significance. Identifying an impact in column 2 simply asks that it be looked at further.
- The **Examples** provided are to assist the reviewer by showing types of impacts and wherever possible the threshold of magnitude that would trigger a response in column 2. The examples are generally applicable throughout the State and for most situations. But, for any specific project or site other examples and/or lower thresholds may be appropriate for a Potential Large Impact response, thus requiring evaluation in Part 3.
- The impacts of each project, on each site, in each locality, will vary. Therefore, the examples are illustrative and have been offered as guidance. They do not constitute an exhaustive list of impacts and thresholds to answer each question.
- The number of examples per question does not indicate the importance of each question.
- In identifying impacts, consider long term, short term and cumulative effects.

### Instructions (Read carefully)

- a. Answer each of the 19 questions in PART 2. Answer **Yes** if there will be **any** impact.
- b. **Maybe** answers should be considered as **Yes** answers.
- c. If answering **Yes** to a question then check the appropriate box (column 1 or 2) to indicate the potential size of the impact. If impact threshold equals or exceeds any example provided, check column 2. If impact will occur but threshold is lower than example, check column 1.
- d. If reviewer has doubt about size of the impact then consider the impact as potentially large and proceed to PART 3.
- e. If a potentially large impact checked in column 2 can be mitigated by change(s) in the project to a small to moderate impact, also check the **Yes** box in column 3. A **No** response indicates that such a reduction is not possible. This must be explained in Part 3.

### IMPACT ON LAND

1. Will the proposed action result in a physical change to the project site?  
 NO     YES

#### Examples that would apply to column 2

- Any construction on slopes of 15% or greater, (15 foot rise per 100 foot of length), or where the general slopes in the project area exceed 10%.
- Construction on land where the depth to the water table is less than 3 feet.
- Construction of paved parking area for 1,000 or more vehicles.
- Construction on land where bedrock is exposed or generally within 3 feet of existing ground surface.
- Construction that will continue for more than 1 year or involve more than one phase or stage.
- Excavation for mining purposes that would remove more than 1,000 tons of natural material (i.e., rock or soil) per year.
- Construction or expansion of a sanitary landfill.
- Construction in a designated floodway.
- Other impacts 10.9 miles of new trail construction, 6 parking lots totaling 0.7 acres

2. Will there be an effect to any unique or unusual land forms found on the site? (i.e., cliffs, dunes, geological formations, etc.)  NO     YES

- Specific land forms: \_\_\_\_\_

1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact Be Mitigated By Project Change	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No





- Construction activity would excavate or compact the soil profile of agricultural land.
- The proposed action would irreversibly convert more than 10 acres of agricultural land or, if located in an Agricultural District, more than 2.5 acres of agricultural land.
- The proposed action would disrupt or prevent installation of agricultural land management systems (e.g., subsurface drain lines, outlet ditches, strip cropping); or create a need for such measures (e.g. cause a farm field to drain poorly due to increased runoff)
- Other impacts: \_\_\_\_\_

**IMPACT ON AESTHETIC RESOURCES**

11. Will proposed action affect aesthetic resources?  NO  YES  
(If necessary, use the Visual EAF Addendum in Section 617.21, Appendix B.)

Examples that would apply to column 2

- Proposed land uses, or project components obviously different from or in sharp contrast to current surrounding land use patterns, whether man-made or natural.
- Proposed land uses, or project components visible to users of aesthetic resources which will eliminate or significantly reduce their enjoyment of the aesthetic qualities of that resource.
- Project components that will result in the elimination or significant screening of scenic views known to be important to the area.
- Other impacts: \_\_\_\_\_

**IMPACT ON HISTORIC AND ARCHAEOLOGICAL RESOURCES**

12. Will Proposed Action impact any site or structure of historic, pre-historic or paleontological importance?  NO  YES

Examples that would apply to column 2

- Proposed Action occurring wholly or partially within or substantially contiguous to any facility or site listed on the State or National Register of historic places.
- Any impact to an archaeological site or fossil bed located within the project site.
- Proposed Action will occur in an area designated as sensitive for archaeological sites on the NYS Site Inventory.
- Other impacts: \_\_\_\_\_

**IMPACT ON OPEN SPACE AND RECREATION**

13. Will Proposed Action affect the quantity or quality of existing or future open spaces or recreational opportunities?

Examples that would apply to column 2  NO  YES

- The permanent foreclosure of a future recreational opportunity.
- A major reduction of an open space important to the community.
- Other impacts: ~~The project will result in an increase in recreational opportunities (30 miles of recreational trails)~~

	1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact Be Mitigated By Project Change	
• Construction activity would excavate or compact the soil profile of agricultural land.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• The proposed action would irreversibly convert more than 10 acres of agricultural land or, if located in an Agricultural District, more than 2.5 acres of agricultural land.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• The proposed action would disrupt or prevent installation of agricultural land management systems (e.g., subsurface drain lines, outlet ditches, strip cropping); or create a need for such measures (e.g. cause a farm field to drain poorly due to increased runoff)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Other impacts: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>IMPACT ON AESTHETIC RESOURCES</b>				
11. Will proposed action affect aesthetic resources? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES (If necessary, use the Visual EAF Addendum in Section 617.21, Appendix B.)				
Examples that would apply to column 2				
• Proposed land uses, or project components obviously different from or in sharp contrast to current surrounding land use patterns, whether man-made or natural.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Proposed land uses, or project components visible to users of aesthetic resources which will eliminate or significantly reduce their enjoyment of the aesthetic qualities of that resource.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Project components that will result in the elimination or significant screening of scenic views known to be important to the area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Other impacts: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>IMPACT ON HISTORIC AND ARCHAEOLOGICAL RESOURCES</b>				
12. Will Proposed Action impact any site or structure of historic, pre-historic or paleontological importance? <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES				
Examples that would apply to column 2				
• Proposed Action occurring wholly or partially within or substantially contiguous to any facility or site listed on the State or National Register of historic places.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Any impact to an archaeological site or fossil bed located within the project site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Proposed Action will occur in an area designated as sensitive for archaeological sites on the NYS Site Inventory.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Other impacts: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>IMPACT ON OPEN SPACE AND RECREATION</b>				
13. Will Proposed Action affect the quantity or quality of existing or future open spaces or recreational opportunities?				
Examples that would apply to column 2 <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES				
• The permanent foreclosure of a future recreational opportunity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• A major reduction of an open space important to the community.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
• Other impacts: <del>The project will result in an increase in recreational opportunities (30 miles of recreational trails)</del>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No

**IMPACT ON TRANSPORTATION**

14. Will there be an effect to existing transportation systems?  
 NO  YES

Examples that would apply to column 2

- Alteration of present patterns of movement of people and/or goods.
- Proposed Action will result in major traffic problems.
- Other impacts: \_\_\_\_\_

**IMPACT ON ENERGY**

15. Will proposed action affect the community's sources of fuel or energy supply?  
 NO  YES

Examples that would apply to column 2

- Proposed Action will cause a greater than 5% increase in the use of any form of energy in the municipality.
- Proposed Action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two family residences or to serve a major commercial or industrial use.
- Other impacts: \_\_\_\_\_

**NOISE AND ODOR IMPACTS**

16. Will there be objectionable odors, noise, or vibration as a result of the Proposed Action?  
 NO  YES

Examples that would apply to column 2

- Blasting within 1,500 feet of a hospital, school or other sensitive facility.
- Odors will occur routinely (more than one hour per day).
- Proposed Action will produce operating noise exceeding the local ambient noise levels for noise outside of structures.
- Proposed Action will remove natural barriers that would act as a noise screen.
- Other impacts: Snowmobiles produce noise which may adversely affect wildlife as well as other forms of recreation (X-C skiers)

**IMPACT ON PUBLIC HEALTH**

17. Will Proposed Action affect public health and safety?  
 NO  YES

Examples that would apply to column 2

- Proposed Action may cause a risk of explosion or release of hazardous substances (i.e. oil, pesticides, chemicals, radiation, etc.) in the event of accident or upset conditions, or there may be a chronic low level discharge or emission.
- Proposed Action may result in the burial of "hazardous wastes" in any form (i.e. toxic, poisonous, highly reactive, radioactive, irritating, infectious, etc.)
- Storage facilities for one million or more gallons of liquified natural gas or other flammable liquids.
- Proposed action may result in the excavation or other disturbance within 2,000 feet of a site used for the disposal of solid or hazardous waste.
- Other impacts: \_\_\_\_\_

1 Small to Moderate impact	2 Potential Large impact	3 Can Impact Be Mitigated By Project Change	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No

**IMPACT ON GROWTH AND CHARACTER OF COMMUNITY OR NEIGHBORHOOD**

18. Will proposed action affect the character of the existing community?  
 NO     YES

Examples that would apply to column 2

- The permanent population of the city, town or village in which the project is located is likely to grow by more than 5%.
- The municipal budget for capital expenditures or operating services will increase by more than 5% per year as a result of this project.
- Proposed action will conflict with officially adopted plans or goals.
- Proposed action will cause a change in the density of land use.
- Proposed Action will replace or eliminate existing facilities, structures or areas of historic importance to the community.
- Development will create a demand for additional community services (e.g. schools, police and fire, etc.)
- Proposed Action will set an important precedent for future projects.
- Proposed Action will create or eliminate employment.
- Other impacts: \_\_\_\_\_

1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact Be Mitigated By Project Change	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No

19. Is there, or is there likely to be, public controversy related to potential adverse environmental impacts?  
 NO     YES

**If Any Action in Part 2 Is Identified as a Potential Large Impact or If You Cannot Determine the Magnitude of Impact, Proceed to Part 3**

**Part 3—EVALUATION OF THE IMPORTANCE OF IMPACTS**

Responsibility of Lead Agency

Part 3 must be prepared if one or more impact(s) is considered to be potentially large, even if the impact(s) may be mitigated.

**Instructions**

Discuss the following for each impact identified in Column 2 of Part 2:

1. Briefly describe the impact.
2. Describe (if applicable) how the impact could be mitigated or reduced to a small to moderate impact by project change(s).
3. Based on the information available, decide if it is reasonable to conclude that this impact is **important**.

To answer the question of importance, consider:

- The probability of the impact occurring
- The duration of the impact
- Its irreversibility, including permanently lost resources of value
- Whether the impact can or will be controlled
- The regional consequence of the impact
- Its potential divergence from local needs and goals
- Whether known objections to the project relate to this impact.

(Continue on attachments)

617.21

ID#N3-00213-00042

## Appendix F

## State Environmental Quality Review

**NEGATIVE DECLARATION**

## Notice of Determination of Non-Significance

Project Number \_\_\_\_\_

Date \_\_\_\_\_

This notice is issued pursuant to Part 617 of the implementing regulations pertaining to Article 8 (State Environmental Quality Review Act) of the Environmental Conservation Law.

The New York State Department of Environmental Conservation, as lead agency, has determined that the proposed action described below will not have a significant effect on the environment and a Draft Environmental Impact Statement will not be prepared.

**Name of Action:** Implementation of the Willowemoc - Long Pond Wild Forest Unit Management Plan

**SEQR Status:** Type I   
Unlisted

**Conditioned Negative Declaration:**  Yes  
 No

**Description of Action:**

The plan identifies the various resources of the 14,870 acre Willowemoc-Long Pond Wild Forest, a part of the Catskill Forest Preserve. It also identifies the constraints and issues affecting the area, and develops a series of goals and objectives which will govern the area's future management. Specific projects proposed to fulfill these goals and objectives include the construction of six small unpaved parking lots and 10.9 miles of new snowmobile and horse trails. An additional 20.3 miles of existing wood roads will be designated and marked for recreational use. (12.4 miles for hiking, 7.6 miles for snowmobiling and 1.9 miles for horseback riding). 19.2 miles of existing recreational trails will be maintained. The plan will direct all management activities within the unit for a period of five years from the date of adoption.

**Location:** (Include street address and the name of the municipality/county. A location map of appropriate scale is also recommended.)

Sullivan County Towns of Rockland and Neversink, Ulster County Towns of Hardenburgh and Denning. New York State Forest Preserve lands designated as the Willowemoc-Long Pond Wild Forest.

**Reasons Supporting This Determination:**

(See 617.6(g) for requirements of this determination; see 617.6(h) for Conditioned Negative Declaration)

The area will be managed in accordance with the Wild Forest Guidelines established in the Catskill Park State Land Master Plan as well as the constraints set forth in Article XIV of the New York State Constitution and Section 9 of the Environmental Conservation Law.

The Commissioner's Organization and Delegation Memorandum #84-06 regarding tree cutting on Forest Preserve lands will be strictly adhered to when proposed trails and parking lots are constructed.

Deer wintering areas have been identified within the unit and all new snowmobile trails have been routed to avoid these areas. However, the Department will monitor winter conditions and in the event of a severe winter the snowmobile trails within the unit will be closed for as long as the Regional Wildlife Manager determines is necessary.

All trails and parking lots proposed have been sited to avoid the wetlands identified within the unit. Prior to any site disturbance, an archaeological investigation will be undertaken in areas identified by the NYS Archaeological Site Locations Map. Culverts, waterbars, switchbacks and drainage ditches will be utilized in both new trail construction and existing trail maintenance to mitigate soil erosion and compaction. Multiple use trails will be closed to horseback riders and mountain bike riders during wet, muddy conditions (typically in the spring) when the potential for erosion is severe. Parking lot construction will be minor (less than 1/2 acre total). They are intended to provide safe and appropriate access to public land. Information boards will be erected at trailhead parking lots to convey the rules and regulations governing the use of forest preserve land and to instruct users in techniques for minimum impact camping, proper human sanitation, precautions concerning Lyme disease and Giardia, etc.\*

**If Conditioned Negative Declaration, provide on attachment the specific mitigation measures imposed.**

For Further Information: . . . . .

Contact Person: William Rudge, Sr. Forester

Address: 21 South Putt Corners Rd., New Paltz, NY 12561

Telephone Number: 914-255-5453

**For Type I Actions and Conditioned Negative Declarations, a Copy of this Notice Sent to:**

Commissioner, Department of Environmental Conservation, 50 Wolf Road, Albany, New York 12233-0001

Appropriate Regional Office of the Department of Environmental Conservation

Office of the Chief Executive Officer of the political subdivision in which the action will be principally located.

Applicant (if any)

Other involved agencies (if any)

\*The Waneta Lake Dam Rehabilitation was previously assessed and determined not to have a significant adverse environmental impact on 8-20-90.

APPENDIX B - WILDLIFE.

Appendix B-1. Status and occurrence of New York amphibians in the Willowemoc - Long Pond Wild Forest, a part of the Delaware Hills and Catskill Peaks subzones, as listed in "Integrating Timber and Wildlife Management Handbook" (Chambers, 1983).

<u>SPECIES</u>	<u>STATUS in NY</u>
Jefferson Salamander	Special Concern
Blue-Spotted Salamander	Special Concern
Spotted Salamander	Special Concern
Red-spotted Newt	
Dusky Salamander	
Mountain Dusky Salamander	
Redback Salamander	
Slimy Salamander	
Four-toed Salamander	
Spring Salamander	
Red Salamander	
Two-lined Salamander	
Longtail Salamander	
American Toad	
Fowler's Toad	
Spring Peeper	
Gray Treefrog	
Bullfrog	Game Species
Green Frog	Game Species
Wood Frog	Game Species
Pickerel Frog	Game Species

Appendix B-2. Status and occurrence of New York reptiles in the Willowemoc - Long Pond Wild Forest, a part of the Delaware Hills and Catskill Peaks subzones as listed in "Integrating Timber and Wildlife Management Handbook" (Chambers, 1983).

<u>SPECIES</u>	<u>STATUS in NY</u>
Snapping Turtle	
Stinkpot	
Spotted Turtle	Special Concern
Wood Turtle	Special Concern/Game Species
Painted Turtle	
Northern Water Snake	
Brown Snake	
Redbelly Snake	
Common Garter Snake	
Eastern Ribbon Snake	
Eastern Hognose Snake	Special Concern
Ringneck Snake	
Black Racer	
Smooth Green Snake	
Rat Snake	
Milk Snake	

Copperhead and Timber Rattlesnake are also listed in Chambers but probably do not occur in unit.

Appendix B-3. Status and occurrence of breeding birds as listed in the "Atlas of Breeding Birds in New York State" (Andrie and Carroll, 1988)

PAGE : 1

IN THE WILLOWemoc - LONG POND WILD FOREST  
1980-1985 DATA - AOU CHECKLIST ORDER

COMMON NAME	SCIENTIFIC NAME	NEW YORK LEGAL STATUS	NATURAL HERITAGE PROGRAM STATE RANK
CONFIRMED BREEDERS			
Wood Duck	<i>Aix sponsa</i>	Game Species	S5
Mallard	<i>Anas platyrhynchos</i>	Game Species	S5
Common Merganser	<i>Mergus merganser</i>	Game Species	S5
Red-shouldered Hawk	<i>Buteo lineatus</i>	Threatened	S4
Broad-winged Hawk	<i>Buteo platypterus</i>	Protected	S5
Red-tailed Hawk	<i>Buteo jamaicensis</i>	Protected	S5
Ruffed Grouse	<i>Bonasa umbellus</i>	Game Species	S5
Wild Turkey	<i>Meleagris gallopavo</i>	Game Species	S5
American Crow	<i>Corvus brachyrhynchos</i>	Game Species	S5
Killdeer	<i>Charadrius vociferus</i>	Protected	S5
Spotted Sandpiper	<i>Actitis macularia</i>	Protected	S5
American Woodcock	<i>Scolopax minor</i>	Game Species	S5
Rock Dove	<i>Columba livia</i>	Unprotected	SE
Mourning Dove	<i>Zenaidura macroura</i>	Protected	S5
Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	Protected	S5
Chimney Swift	<i>Chaetura pelagica</i>	Protected	S5
Ruby-throated Hummingbird	<i>Archilochus colubris</i>	Protected	S5
Belted Kingfisher	<i>Ceryle alcyon</i>	Protected	S5
Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>	Protected	S5
Downy Woodpecker	<i>Picoides pubescens</i>	Protected	S5
Hairy Woodpecker	<i>Picoides villosus</i>	Protected	S5
Northern Flicker	<i>Colaptes auratus</i>	Protected	S5
Pileated Woodpecker	<i>Dryocopus pileatus</i>	Protected	S5
Olive-sided Flycatcher	<i>Contopus borealis</i>	Protected	S5
Eastern Wood-Pewee	<i>Contopus virens</i>	Protected	S5
Least Flycatcher	<i>Empidonax minimus</i>	Protected	S5
Eastern Phoebe	<i>Sayornis phoebe</i>	Protected	S5
Eastern Kingbird	<i>Tyrannus tyrannus</i>	Protected	S5
Tree Swallow	<i>Tachycineta bicolor</i>	Protected	S5
Bank Swallow	<i>Riparia riparia</i>	Protected	S5

BREEDING SPECIES OF : WILLOWemoc - LONG POND WILD FOREST  
1980-1985 DATA - AOU CHECKLIST ORDER

COMMON NAME	SCIENTIFIC NAME	NEW YORK LEGAL STATUS	NATURAL HERITAGE PROGRAM STATE RANK
Cliff Swallow	<i>Hirundo pyrrhonota</i>	Protected	S5
Barn Swallow	<i>Hirundo rustica</i>	Protected	S5
Blue Jay	<i>Cyanocitta cristata</i>	Protected	S5
Common Raven	<i>Corvus corax</i>	Protected-Special Concern	S4
Black-capped Chickadee	<i>Parus atricapillus</i>	Protected	S5
Red-breasted Nuthatch	<i>Sitta canadensis</i>	Protected	S5
White-breasted Nuthatch	<i>Sitta carolinensis</i>	Protected	S5
House Wren	<i>Troglodytes aedon</i>	Protected	S5
Winter Wren	<i>Troglodytes troglodytes</i>	Protected	S5
Golden-crowned Kinglet	<i>Regulus satrapa</i>	Protected	S5
Eastern Bluebird	<i>Sialia sialis</i>	Protected-Special Concern	S5
121 Veery	<i>Catharus fuscescens</i>	Protected	S5
Hermit Thrush	<i>Catharus guttatus</i>	Protected	S5
Wood Thrush	<i>Hylocichla mustelina</i>	Protected	S5
American Robin	<i>Turdus migratorius</i>	Protected	S5
Gray Catbird	<i>Dumetella carolinensis</i>	Protected	S5
Cedar Waxwing	<i>Bombycilla cedrorum</i>	Protected	S5
European Starling	<i>Sturnus vulgaris</i>	Unprotected	SE
Solitary Vireo	<i>Vireo solitarius</i>	Protected	S5
Yellow-throated Vireo	<i>Vireo flavifrons</i>	Protected	S5
Red-eyed Vireo	<i>Vireo olivaceus</i>	Protected	S5
Yellow Warbler	<i>Dendroica petechia</i>	Protected	S5
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>	Protected	S5
Magnolia Warbler	<i>Dendroica magnolia</i>	Protected	S5
Black-throated Blue Warbler	<i>Dendroica caerulescens</i>	Protected	S5
Yellow-rumped Warbler	<i>Dendroica coronata</i>	Protected	S5
Black-throated Green Warbler	<i>Dendroica virens</i>	Protected	S5
Blackburnian Warbler	<i>Dendroica fusca</i>	Protected	S5
Black-and-white Warbler	<i>Mniotilta varia</i>	Protected	S5
American Redstart	<i>Setophaga ruticilla</i>	Protected	S5
Ovenbird	<i>Seiurus aurocapillus</i>	Protected	S5
Northern Waterthrush	<i>Seiurus noveboracensis</i>	Protected	S5
Louisiana Waterthrush	<i>Seiurus motacilla</i>	Protected	S5

BREEDING SPECIES OF : WILLOWemoc - LONG POND WILD FOREST  
1980-1985 DATA - AOU CHECKLIST ORDER

COMMON NAME	SCIENTIFIC NAME	NEW YORK LEGAL STATUS	NATURAL HERITAGE PROGRAM STATE RANK
Common Yellowthroat	<i>Geothlypis trichas</i>	Protected	S5
Canada Warbler	<i>Wilsonia canadensis</i>	Protected	S5
Scarlet Tanager	<i>Piranga olivacea</i>	Protected	S5
Northern Cardinal	<i>Cardinalis cardinalis</i>	Protected	S5
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	Protected	S5
Rufous-sided Towhee	<i>Pipilo erythrophthalmus</i>	Protected	S5
Chipping Sparrow	<i>Spizella passerina</i>	Protected	S5
Field Sparrow	<i>Spizella pusilla</i>	Protected	S5
Savannah Sparrow	<i>Passerculus sandwichensis</i>	Protected	S5
Song Sparrow	<i>Melospiza melodia</i>	Protected	S5
Swamp Sparrow	<i>Melospiza georgiana</i>	Protected	S5
White-throated Sparrow	<i>Zonotrichia albicollis</i>	Protected	S5
Dark-eyed Junco	<i>Junco hyemalis</i>	Protected	S5
Bobolink	<i>Dolichonyx oryzivorus</i>	Protected	S5
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	Protected	S5
Common Grackle	<i>Quiscalus quiscula</i>	Protected	S5
Brown-headed Cowbird	<i>Molothrus ater</i>	Protected	S5
Northern Oriole	<i>Icterus galbula</i>	Protected	S5
Purple Finch	<i>Carpodacus purpureus</i>	Protected	S5
American Goldfinch	<i>Carduelis tristis</i>	Protected	S5
House Sparrow	<i>Passer domesticus</i>	Unprotected	SE
PROBABLE BREEDERS			
Canada Goose	<i>Branta canadensis</i>	Game Species	S5
American Black Duck	<i>Anas rubripes</i>	Game Species	S4
American Kestrel	<i>Falco sparverius</i>	Protected	S5
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	Protected	S5
Eastern Screech-Owl	<i>Otus asio</i>	Protected	S5
Great Horned Owl	<i>Bubo virginianus</i>	Protected	S5
Barred Owl	<i>Strix varia</i>	Protected	S5
Alder Flycatcher	<i>Empidonax alnorum</i>	Protected	S5
Great Crested Flycatcher	<i>Myiarchus crinitus</i>	Protected	S5

BREEDING SPECIES OF : WILLOWemoc - LONG POND WILD FOREST  
1980-1985 DATA - AOU CHECKLIST ORDER

COMMON NAME	SCIENTIFIC NAME	NEW YORK LEGAL STATUS	NATURAL HERITAGE PROGRAM STATE RANK
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	Protected	S5
Brown Creeper	<i>Certhia americana</i>	Protected	S5
Swainson's Thrush	<i>Catharus ustulatus</i>	Protected	S5
Northern Mockingbird	<i>Mimus polyglottos</i>	Protected	S5
Brown Thrasher	<i>Toxostoma rufum</i>	Protected	S5
Indigo Bunting	<i>Passerina cyanea</i>	Protected	S5
House Finch	<i>Carpodacus mexicanus</i>	Protected	SE
Red Crossbill	<i>Loxia curvirostra</i>	Protected	S3
Pine Siskin	<i>Carduelis pinus</i>	Protected	S5
POSSIBLE BREEDERS			
125 Great Blue Heron	<i>Ardea herodias</i>	Protected	S5
Green-backed Heron	<i>Butorides striatus</i>	Protected	S5
Turkey Vulture	<i>Cathartes aura</i>	Protected	S4
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Endangered	S1
Sharp-shinned Hawk	<i>Accipiter striatus</i>	Protected	S4
Tufted Titmouse	<i>Parus bicolor</i>	Protected	S5
Warbling Vireo	<i>Vireo gilvus</i>	Protected	S5
Blue-winged Warbler	<i>Vermivora pinus</i>	Protected	S5
Nashville Warbler	<i>Vermivora ruficapilla</i>	Protected	S5
Mourning Warbler	<i>Oporornis philadelphia</i>	Protected	S5
Grasshopper Sparrow	<i>Ammodramus savannarum</i>	Protected-Special Concern	S4
Eastern Meadowlark	<i>Sturnella magna</i>	Protected	S5

BREEDING SPECIES OF : WILLOWEMOC - LONG POND FOREST  
 BIRDS

ADDITIONAL POSSIBLE BREEDERS (as listed in "Integrating Timber and Wildlife Management Handbook", Chambers, 1983; not in Atlas of Breeding Birds)

COMMON NAME	SCIENTIFIC NAME	SUBZONE	NATURAL HERITAGE PROGRAM STATE RANK
Hooded Merganser	<i>Lophodytes cucullatus</i>	DH	
Northern Goshawk	<i>Accipiter gentilis</i>	DH & CP	
Cooper's Hawk	<i>Accipiter cooperii</i>	DH & CP	SC
Peregrine Falcon	<i>Falco peregrinus</i>	CP	E
Common Snipe	<i>Capella gallinago</i>	DH & CP	
Barn Owl	<i>Tyto gallinago</i>	DH	SC
Whip-Poor-Will	<i>Caprimulgus vociferus</i>	DH & CP	
Common Nighthawk	<i>Chordeiles Minor</i>	DH & CP	SC
Red-Headed Woodpecker	<i>Melanerpes erythrocephalus</i>	DH	
Willow Flycatcher	<i>Empidonax traillii</i>	DH & CP	
Purple Martin	<i>Progne subis</i>	DH & CP	
Grey-Cheeked Thrush	<i>Catharus minimus</i>	CP	
Blue-Gray Gnatcatcher	<i>Polioptila caerulea</i>	CP	
Worm-Eating Warbler	<i>Helmitheros vermivorus</i>	CP	
Golden-Winged Warbler	<i>Vermivora chrysoptera</i>	CP	
Cerulean Warbler	<i>Dendroica cerulea</i>	CP	
Blackpoll Warbler	<i>Dendroica striata</i>	CP	
Yellow Breasted Chat	<i>Icteria virens</i>	DH & CP	
Hooded Warbler	<i>Wilsonia citrina</i>	CP	
Vesper Sparrow	<i>Poocetes gramineus</i>	DH & CP	SC

DH = Delaware Hills  
 CP = Catskill Peaks

## Appendix B-4.

Status and occurrence of New York mammals in the Willowemoc - Long Pond Wild Forest, a part of the Catskill Peaks and Delaware Hills subzone as listed in "Integrating Timber and Wildlife Management Handbook" (Chambers, 1983).

<u>SPECIES</u>	<u>STATUS*</u>	<u>SPECIES</u>	<u>STATUS*</u>
Virginia Opossum		Eastern Chipmunk	
Masked Shrew		Gray Squirrel	GS
Smoky Shrew		Red Squirrel	
Longtail Shrew		Southern Flying Squirrel	
Water Shrew			
Plumy Shrew			
Least Shrew		Northern Flying Squirrel	
Shorttail Shrew		Beaver	GS
Starnose Mole		Deer Mouse	
Hairy-tailed Mole		White-footed Mouse	
Little Brown Bat		Southern Bog Lemming	
Keen's Bat		Southern Red-Backed Vole	
Small-footed Bat	SC	Meadow Vole	
Silver-haired Bat		Woodland Vole	
Eastern Pipistrelle		Muskrat	GS
Big Brown Bat		Meadow Jumping Mouse	
Red Bat		Woodland Jumping Mouse	
Hoary Bat		Porcupine	
Black Bear	GS	Snowshoe Hare	GS
Raccoon	GS	Eastern Cottontail	GS
Whitetailed Deer	GS	Mink	GS
Fisher	GS	Shorttail Weasel	GS
River Otter	GS	Longtail Weasel	GS
Striped Skunk	GS	Coyote	GS
Red Fox	GS	Gray Fox	GS
Bobcat	GS	Woodchuck	GS
Opossum	GS		

\*Status = status in New York State,  
 SC = Special Concern  
 GS = Game Species

Appendix B-5:

Fish Species occurring in the waters of the  
Willowemoc - Long Pond Wild Forest based upon  
historical surveys from 1936-1989.

SPECIES

Blacknose dace  
Longnose dace  
White sucker  
Common shiner  
Golden shiner  
American eel  
Sculpin  
Creek chub  
Cutlips minnow  
Madton  
Pumpkinseed  
Chain pickerel  
Yellow perch  
Brown bullhead  
Smallmouth bass  
Largemouth bass  
Brown trout  
Brook trout

APPENDIX C - SIGN INVENTORY

<u>LEGEND</u>		<u>ARROW*</u>	<u>MARKER*</u>	<u>LOCATION</u>
"Fall Brook Leanto Long Pond Leanto Balsam Lake Mtn. 11.95 mi."	4.85 mi. 4.05 mi. 11.95 mi."	R	Y	Round Pond
"Long Pond Leanto Mongaup Pond	3.75 mi. 7.25 mi."	L	R	Basily/Willowemoc Rd. Jct.
"Round Pond	.3 mi."	R	Y	Basily/Willowemoc Rd. Jct.
"Round Pond	.3 mi."	R	Y	Basily/ Willowemoc Rd. Jct.
"Fall Brook Leanto Quaker Clearing Balsam Lake Mt. 11.65 mi."	4.55 mi. 8.90 mi. 11.65 mi."	R	Y	Basily/Willowemoc Rd. Jct.
"Long Pond Leanto West Access & Parking Area Via South Loop Complete Loop	1.8 mi.  2.6 mi. 4.1 mi."	L	S	Basily Road
"East Access & Parking Area	2.0 mi."	R	S	Basily Road
"West Access & Parking Area Via North Loop Long Pond Leanto Via North Loop	1.5 mi. 2.3 mi."	R	S	Basily Road
"Snowmobile Trail"		R	S	Various Locations
"Snowmobile Trail"		L	S	Various Locations
"East Access & Parking Area"	3.8 mi."	R	S	Long Pond Spur Tr. Jct.
"West Access & Parking	.8 mi."	L	S	Long Pond Spur Tr. Jct.
"Long Pond Leanto	.1 mi."	L		Long Pond Spur Tr. Jct.

<u>LEGEND</u>	<u>ARROW*</u>	<u>MARKER*</u>	<u>LOCATION</u>
"Long Pond Trailhead Parking Area"			Fluggertown Road
"Mongaup Pond Snowmobile Trail 3.0 mi. Mongaup Pond - Hardenburg Parking Area via Mongaup Pond 10.5 mi."	L		Fluggertown Road
"Mongaup Pond Snowmobile Trail 3.0 mi. Mongaup Pond - Hardenburg Parking Area via Mongaup Pond 10.5 mi."	R		Fluggertown Road
"Mongaup Pond Snowmobile Trail 2.5 mi. Long Pond/Beaverkill Mongaup Pond Campsite 3.5 mi."	R	Y	Ridge Trail Jct.w/ Mongaup/ Willowemoc Trail
"Long Pond Snowmobile Trail .5 mi. Long Pond Leanto 1.3 mi."	R	R	Ridge Trail Jct. w/Mongaup/ Willowemoc Trail
"Hardenburg Road 6.1 mi. Mongaup Pond 5.8 mi."	L	R	Ridge Trail Jct. w/Mongaup/ Willowemoc Trail
"Camping Prohibited within 150 Feet of Road, Trail or Water except at designated locations"			Various Locations
Trail	R		Beech Mountain Road
Information Board			Beech Mountain Road
Motor Vehicles Prohibited			Various Locations
State Land Boundary Private land beyond this point			Various Locations
"Upper Mongaup Loop .5 miles"	R	S	Southern Jct. w/ Mongaup Pond Trail

<u>LEGEND</u>	<u>ARROW*</u>	<u>MARKER*</u>	<u>LOCATION</u>
"Lower Mongaup Loop .3 miles Mongaup Pond .6 miles Campsite Entrance and Parking Area 2.0 miles"	L	S	Southern Jct. w/ Mongaup Pond Trail
"Mongaup Pond Parking Area and Campsite 4.2 miles"	R	S	Southern Jct. w/ Mongaup Pond Trail
"Upper Mongaup Loop .5 miles"	L	S	Northern Jct. w/Mongaup Pond Trail
"Lower Mongaup Loop .3 miles Campsite Entrance and Parking Area 4.5 miles"	R	S	Northern Jct. w/Mongaup Pond Trail
"Mongaup Pond .3 miles Campsite Entrance and Parking Area 1.7 miles"	L	S	Northern Jct. w/Mongaup Pond Trail

\* Arrow: R = Right, L = Left

\* Marker: R = Red, Y = Yellow, S = Snowmobile Trail Marker (Red)

APPENDIX D - EASEMENTS

Proceeding 5818 LIBER 1371 PAGE 539  
DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION  
E-CFP SULLIVAN 75.6

CONSERVATION AND TRAIL USE EASEMENT  
(Beech Mountain Nature Preserve)

This Easement, made this 30<sup>th</sup> day of March, 1989,  
between Open Space Institute, Inc., a not-for-profit corporation  
organized and existing under the laws of the State of ~~Delaware~~ Bennington, with  
an office at 122 East 42nd Street, New York, New York 10168, Grantor,

and

THE PEOPLE OF THE STATE OF NEW YORK, acting through the  
Department of Environmental Conservation with its principal office at  
50 Wolf Road, Albany, New York 12233-0001, Grantees.

WHEREAS the Grantor is the owner in fee simple of certain real  
property hereinafter more fully described in Schedule A attached  
hereto, and hereinafter referred to as the Protected Property; and

WHEREAS, the People of the State of New York have recognized the  
benefit of providing for the protection, maintenance and preservation  
of the natural environment and have enacted the Environmental Quality  
Bond Act of 1986 and have implemented the Environmental Quality Bond  
Act of 1986 by enacting Article 52 of the Environmental Conservation  
Law; and

WHEREAS, the Legislature of the State of New York has declared  
the public policy of the State to be conservation, preservation and  
protection of its environmental assets and natural and man-made  
resources, and in furtherance thereof, has enacted Article 49, Title  
3, of the Environmental Conservation Law, hereinafter called "the  
Conservation Law", to provide for and encourage the limitation and  
restriction of development, management and use of real property  
through conservation easements; and

WHEREAS, the Grantees hold fee title to certain real property  
(hereinafter more fully described in Schedule B, annexed hereto and  
made a part hereof and referred to as the "Benefited Property"),  
which Benefited Property adjoins the Protected Property and which was  
conveyed to the Grantees by the Grantor by deed of even date  
herewith; and

WHEREAS, the Protected Property in its present natural, scenic,  
open space and wooded condition has substantial and significant  
natural resource value by reason of the fact that it has not been  
subject to any extensive development or exploitation, and its value  
will not be affected by the continued maintenance in their present  
condition of such structures and facilities as presently exist; and

WHEREAS, the Protected Property and the Benefited Property are  
appurtenant to one another so that any change in the present natural,  
scenic, open space and wooded condition of the Protected Property  
would have an effect on the natural, scenic, open space and wooded  
condition of the Benefited Property; and

WHEREAS, the Grantor and the Grantees recognize the value and  
the special character of the Catskill Park in which both the  
Protected and Benefited Properties are located and the Grantor and  
the Grantees have, in common, the purpose and objective of protecting  
and conserving the inherent, natural, tangible and intangible values  
of the Protected Property as a natural, aesthetic, scientific and  
educational resource; and

WHEREAS, the Benefited Property adjoins and is otherwise in close proximity to forest preserve property within the Catskill Park of the Grantees held prior to the date of the conveyance hereinabove described; and

WHEREAS, in view of the foregoing and pursuant to the provisions of the aforementioned Article 49 of the Environmental Conservation Law, the Grantees have determined it to be desirable and beneficial and have requested the Grantor, for itself and its successors and assigns to grant a Conservation Easement to the Grantees pursuant to a certain Land Purchase Agreement, in order to restrict the further development of the Protected Property while permitting compatible uses thereof; and

WHEREAS, the Grantee is purchasing this easement, with moneys received by the State of New York from the sale of bonds pursuant to the Environmental Quality Bond Act of 1986;

WHEREAS, the Protected Property consists of the Gatehouse Lot and the Beech Mountain Nature Preserve, including a portion of a certain road known as "Mongaup Road" that runs generally northeasterly from the Nature Preserve, all as shown on a certain map more fully identified in Schedules A and B, a copy of which shall be filed in the office of the Sullivan County Clerk simultaneously with the recording of this easement; and

WHEREAS, the Grantor has caused to be created Beech Mountain Nature Preserve and Biological Research Station, Inc., a New York not-for-profit corporation, to manage the Nature Preserve for scientific, educational and recreational purposes,

NOW, THEREFORE, in consideration of the sum of SEVEN HUNDRED SEVENTY-FIVE THOUSAND AND 00/100 DOLLARS (\$775,000.00) and other good and valuable consideration paid by the Grantees, the receipt of which is hereby acknowledged by the Grantor, and the mutual covenants contained herein, the parties agree as follows:

1. Grant of Easement: Grantor hereby grants to Grantees a conservation easement over the Protected Property which shall encumber the Protected Property forever to the extent provided herein.

1.1 Description and Condition of the Protected Property. Grantor and Grantees agree that the map entitled "Subdivision of Lands at Beech Mountain, showing land to be conveyed to the State of New York (Parcels I and II) and lands proposed to be incorporated into the Beech Mountain Nature Preserve, Town of Rockland, Sullivan County, New York State", dated July, 1988 and last revised on December 20, 1988 by David T. Mance, Jr., Licensed Land Surveyor, Registration 49277 and filed in the Albany Office of the New York State Department of Environmental Conservation as Map No. 10,693, herein called "the Map", and "Report of Physical Inspection of Protected Property" accurately and completely describe the natural, scenic, open space and wooded condition of the Protected Property on the date hereof and may be used for that purpose by either party hereto in any subsequent action or proceeding hereunder. Each party has been furnished a copy of the Map and the "Report of Physical Inspection of Protected Property", on which each has agreed that such Map and report accurately and completely describe the Protected Property as of the date of this easement.

1.2 Grant of Easements of View and Use. Grantor grants to Grantees the right to view the Protected Property in its natural, scenic, open space and wooded condition as exists on the date of this grant and as will exist hereafter as a result of natural evolutionary processes and uses permitted by the terms of this Agreement. Grantor further grants to the Grantees for the benefit of the public the right to use the Protected Property for scientific, educational and recreational purposes, including the right to fish in

Hodge Pond, all subject to the reasonable management and programs of the Beech Mountain Nature Preserve and Biological Research Station, Inc., its successors and assigns.

1.3 Grant of Trail Use Easement. Grantor grants to Grantees and the public an easement for travel by foot on the trails on the Protected Property shown on the Map, and on such other trails as shall be determined from time to time hereafter by agreement of the Grantor and the Grantees. The right to use such trails shall be limited to the width of the trails and shall be solely for hiking, skiing, snowshoeing and other travel by foot consistent with the use of the Protected Property as otherwise provided herein. Grantor shall have the right from time to time, subject to the approval of the Grantees (which approval will not be unreasonably withheld), to close or otherwise limit access to any trail for such length of time as the Grantor determines may be reasonably necessary for maintenance and repair, and to protect the trails from misuse or overuse, from damage by fire, drought or other disaster or threat thereof, or under any circumstance in which the failure to do so might constitute a threat to the tranquility, public health, safety and welfare or to the natural, aesthetic, scientific, educational or recreational resources of the Protected Property. The terms hereof shall be strictly construed, and nothing herein shall be deemed a grant to the Grantees or the public of the right to use any portion of the Protected Property other than its designated trails and for those purposes set forth in 1.2 above.

1.4 Grant of Trail and Road Use Easement for Emergency and Administrative Purposes.

Grantor grants to Grantees an easement for vehicular and foot travel on the trails and roads on the Protected Property for administrative and emergency purposes. Use of such trails and roads for administrative purposes shall be subject to the rights of the Grantor to close or otherwise limit access to any trail or road as set forth in 1.3 hereinabove, and to keep trails and roads unplowed in winter.

2. Restrictions Applicable to the Protected Property.

The following restrictions apply to the Protected Property:

2.1 Subdivision. The Protected Property shall not be divided or subdivided.

2.2 Use. The Nature Preserve shall be used only for scientific, educational and recreational activities. No commercial or industrial use shall be permitted.

2.3 Structures. No permanent or temporary structure may be erected or maintained on the Protected Property except for the following:

- (a) On the Gatchouse lot, the single-family residential dwelling that presently exists and appropriate accessory structures;
- (b) On the Nature Preserve,
  - (i) The cabin-type dwelling that presently exists near the summit of Beech Mountain, and its presently existing accessory structure;
  - (ii) Two cabin-type dwellings similar to the existing one near the summit of Beech Mountain with appropriate accessory structures to be constructed on existing cleared sites or at such other locations as the Grantor and Grantees shall agree;

- (iii) A headquarters building with appropriate facilities for visitors to the nature preserve, and appropriate accessory structures;
- (iv) A single-family residential dwelling and appropriate accessory structure to be used as a residence for a nature preserve employee;
- (v) A building for boat storage and a dock;
- (vi) Tent platforms and lean-to's; and
- (vii) Such other structures as the Grantor and Grantees shall agree.

(c) Such permanent or temporary structures as are necessary or appropriate for roads and trails, such as bridges, culverts, railings, fences and gates.

(d) A dam on Hodge Pond, if appropriate under 2.2.

Any structure shall be sited, constructed and landscaped so as to be aesthetically compatible with the surroundings.

Any structure may be maintained, renovated, removed or replaced, provided the resulting structure shall otherwise comply with the terms of this Agreement.

2.4 No Mobile Homes. Mobile homes and house trailers are prohibited.

2.5 Height and Size Limitations. Each dwelling, including any dwelling that replaces a presently existing dwelling, shall have a maximum floor area of 1,750 square feet and a maximum height of twenty-five (25) feet. The headquarters building shall have a maximum floor area of 10,000 square feet and a maximum height of thirty-five (35) feet. All other structures shall have a maximum floor area of 500 square feet and a maximum height of fifteen (15) feet. Height shall be measured from average finished grade to peak of roof.

2.6 Utilities. The installation of wells, septic systems, electric and other utility distribution lines shall be permitted in connection with the permitted structures and shall be designed and sited to blend as much as practicable with the environment.

2.7 Grading. Any structure or improvement shall be designed to relate to existing slopes and contours. Any grading shall blend into the natural topography of the parcel and shall be limited to the minimum necessary for roads, trails, driveways, parking areas and foundations.

2.8 Exterior Appearance.

(a) No billboard of any kind shall be permitted. No illuminated signs shall be permitted. No signs of any kind shall be permitted except those of professional quality and size which either are customarily used for posting, to mark a trail, roadway or structure, or are otherwise appropriate for nature preserve activities.

(b) Any antenna or outdoor fixture shall be unobtrusive.

2.9 Garbage Disposal. No outdoor storage or disposal of garbage or refuse shall be permitted except for temporary storage in

enclosed and screened receptacles. Garbage or refuse may not be dumped or burned and shall be regularly removed.

2.10 Chemicals. No pesticide, herbicide or other chemical treatment for land, vegetation or animals shall be used unless its use is necessary (as shall be jointly determined by the Grantor and the Grantees), safe for humans and will not contaminate any source of drinking water.

2.11 Nuisance. No visual, aural or olfactory nuisance shall be maintained.

2.12 Hunting and Trapping. No hunting or trapping shall be allowed except to the extent the Grantor determines is necessary to prevent disease or to maintain a desirable ecological balance. Any such determination shall be made after consultation with the Department of Environmental Conservation.

2.13 Fishing. No fishing shall be allowed other than in Hodge Pond as provided for hereinabove in 1.2.

2.14 Trails, Roads and Parking Lots. The Grantor shall have the right to construct new trails, roads and parking lots. The Grantor shall have the right to maintain, repair, abandon or relocate any trail, road or parking lot.

2.15 Off-Road Vehicles. No off-road vehicles, including a snowmobile, motor bike or all-terrain-vehicle shall be used except for maintenance, maple sap collecting, patrol or emergency purposes.

2.16 Timber. No cutting or removing of trees or other natural landscaping shall be permitted, except: (i) to remove those trees which are fallen, dead, diseased or dangerous; (ii) to provide for the construction of structures or improvements allowed under this Agreement; (iii) to maintain views, trails, roads and existing open spaces; and (iv) subject to approval of the Grantees, to create new views and open spaces.

2.17 Mining. No quarry, gravel pit, surface or subsurface mining or drilling shall be permitted, except from the existing quarry for road and trail maintenance.

2.18 Livestock. No livestock shall be permitted.

2.19 Streams. No diversion or damming of springs or streams shall be permitted except as may be approved jointly by the Grantor and the Grantees or to the extent required by law.

2.20 Hodge Pond. No alteration of Hodge Pond shall be permitted, except that the Grantor may take all necessary action to preserve or adjust water levels and the purity of the water, and to prevent or repair damage caused by erosion of its shoreline. No motor boats shall be allowed.

2.21 Laws. All applicable laws and regulations shall be complied with, including, but not limited to, those relating to construction, sewage disposal, mining, hunting, fishing and trapping.

3. Reserved Rights. Grantor reserves for itself and its successors in interest with respect to the Protected Property all rights with respect to the Protected Property, including, without limitation, the right of exclusive use, possession and enjoyment of the Protected Property and the right to sell, transfer, lease, mortgage or otherwise encumber the Protected Property, all subject to the terms of this Agreement and the maintenance on the Nature Preserve of a biological research station at which environmental education programs are conducted.

4. Additional Covenants:

4.1 Enforcement. Grantees may enforce this Agreement in law or equity pursuant to the provisions of Article 49, Title 3, of the Conservation Law and as otherwise permitted by law against any or all owners of the Protected Property. If there is a violation of any of the provisions of this Agreement, Grantees shall notify the party in violation who shall promptly cure the violation by (a) ceasing the violation or (b) restoring the Protected Property to the condition before the violation or (c) both, as the case may be. If, within 30 days of the receipt of written notice from the Grantees by the party in violation, such party shall have failed to commence action to cure the violation, or, having commenced such action within such 30 day period shall thereafter have abandoned such action or shall have failed to complete such action within a reasonable time after commencement, Grantees shall have the right, but not the obligation, to (i) enter upon the Protected Property and cure the violation, and (ii) to seek all actions and proceedings at law and equity, including injunctive relief, to cause such violation to be cured. The owner shall reimburse Grantees for all costs and expenses incurred, including legal fees whether in or out of court and the cost of legal fees and proceedings brought to cure the violation or to collect such reimbursement. Failure to enforce any restriction or covenant herein contained shall in no event be deemed a waiver of a right to do so thereafter as to the same violation or breach or as to one occurring prior or subsequent thereto.

4.2 Amendment. This Agreement may be amended only by agreement in writing between the Grantee and Grantor duly recorded in the Office of the Clerk of Sullivan County. Any such amendment shall be consistent with the basic purpose of this Agreement and shall comply with Article 49, Title 3, of the Conservation Law.

4.3 Further Acts. Each party shall perform any further acts and execute and deliver any documents, including amendments to this Agreement which may be reasonably necessary to carry out the provisions of this Agreement or which are necessary to qualify this instrument as a conservation easement under Article 49, Title 3, of the Conservation Law or any regulations promulgated pursuant thereto.

4.4 Encumbrance by Conservation and Trail Use Easement. Any subsequent conveyance including, without limitation, the transfer, lease or mortgage of the Protected Property, shall be subject to this Agreement, and any deed or other instrument evidencing or effecting such conveyance shall contain language substantially as follows: "This (conveyance, lease, mortgage, easement, etc.) is subject to a Conservation and Trail Use Easement Agreement which runs with the land and which was granted to The People of the State of New York, dated \_\_\_\_\_, 1989, and recorded \_\_\_\_\_, 1989, in the Office of the Clerk of Sullivan County at Liber \_\_\_\_\_ of Deeds at Page \_\_\_\_\_." The failure to include such language in any deed or instrument shall not however affect the validity or applicability of this Agreement.

4.5 Title. Grantor represents and warrants that it has good and marketable fee title to the Protected Property.

4.6 Consent. Whenever action hereunder is conditioned on the Grantees' consent, approval or agreement, such shall not be withheld unreasonably.

4.7 Taxes and Assessments. Each owner of the Protected Property shall pay all taxes and assessments lawfully assessed against the Protected Property owned by such owner.

4.8 Severability. Invalidation of any provision of this Agreement, by court judgment, order, statute, or otherwise, shall not affect any other provision, which shall be and remain in force and effect.

4.9 Validity. This Agreement is intended by the Grantor and the Grantees to be a valid legal instrument and to qualify as a conservation easement under both the common law and the Conservation Law. The failure of this Agreement to qualify as a conservation easement under the Conservation Law shall not affect its validity under the common law.

4.10 Binding Effect. This Agreement binds and inures to the benefit of the parties and their respective successors and assigns. The provisions of this Agreement shall run with the land and shall be binding on each owner of and party entitled to possession or use of, the Protected Property for so long as such party is the owner or entitled to possession or use thereof and only with respect to the Protected Property owned by such party or to which such party shall be entitled to possession or use, but nothing herein shall relieve any such party from any liability arising hereunder during the period that such party was the owner or entitled to possession or use of the Protected Property. As used in this Section 4.11, the "owner" shall include the owner of any beneficial or equitable interest in all or a part of the Protected Property.

4.11 Transfer of Title. Grantor agrees, within five years from the date hereof, to establish or cause to be established on the Protected Property a biological research station at which will be conducted environmental education programs. If Grantees determine, at any time after five years from the date hereof, that the use of the Protected Property as a biological research station and the conduct thereon of environmental education programs either have not begun or, having begun, have ended, Grantees shall so notify Grantor and the then title holder of record of the Protected Property. Within six months from the receipt of such notification by Grantor and the then title holder of the Protected Property, either (a) sufficient evidence shall be provided to establish that Grantees' determination is incorrect as of the date of such notice, or (b) the then title holder of record shall execute and deliver to Grantees a deed conveying fee title to the protected property to Grantees or their designee for no consideration. Notwithstanding the foregoing, even if insufficient evidence is provided, the parties may agree on a plan for the continued operation of the Nature Preserve.

IN WITNESS WHEREOF, the parties have executed this instrument as of the day and year first above written.

OPEN SPACE INSTITUTE, INC.

BY: Thomas Inghart  
Its: Executive Director

THE PEOPLE OF THE STATE OF NEW YORK  
by Thomas C. Jorling, Commissioner  
of Environmental Conservation

BY: Langdon Marsh  
Langdon Marsh  
TITLE: Executive Deputy Commissioner



(36) NORTH 03° 51' 34" WEST 195.04 feet, thence  
(37) NORTH 10° 22' 51" EAST 98.66 feet to the point of  
beginning.

CONTAINING 37.21 more or less acres.

TOGETHER WITH the right of the public to cross and recross lands being retained by the Grantor and known as the Mongaup Road which borders Parcel II on the westerly side and separates said Parcel II from the most northerly section of Parcel I. The public shall have the right to cross and recross the said Mongaup Road parcel for purposes of free and unrestricted travel between the said above described Parcels I and II.

Parcel I and Parcel II and their additional easement areas are shown on a certain map entitled, "Subdivision of Lands at Beech Mountain, showing lands to be conveyed to the State of New York (Parcels I and II) and lands proposed to be incorporated into The Beech Mountain Nature Preserve, Town of Rockland, Sullivan County, New York State" dated July 1988 and last revised on December 20, 1988, by David T. Mance, Jr., Licensed Land Surveyor, Registration No. 49277, and filed in the Albany Office of the New York State Department of Environmental Conservation as Map No. 10,693, a copy of which map is to be filed and/or recorded in the Sullivan County Clerk's Office simultaneously with the filing and/or recording of this Conservation and Trail Use Easement.

A TRUE RECORD ENTERED 4/6/89  
4:13 P.M. JOE PURCELL, CLERK

APPENDIX H

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ADDRESSES AND PHONE NUMBERS

REGION 3 OFFICE:

N.Y.S. D.E.C.  
21 South Putt Corners Road  
New Paltz, NY 12561  
(914) 255-5453

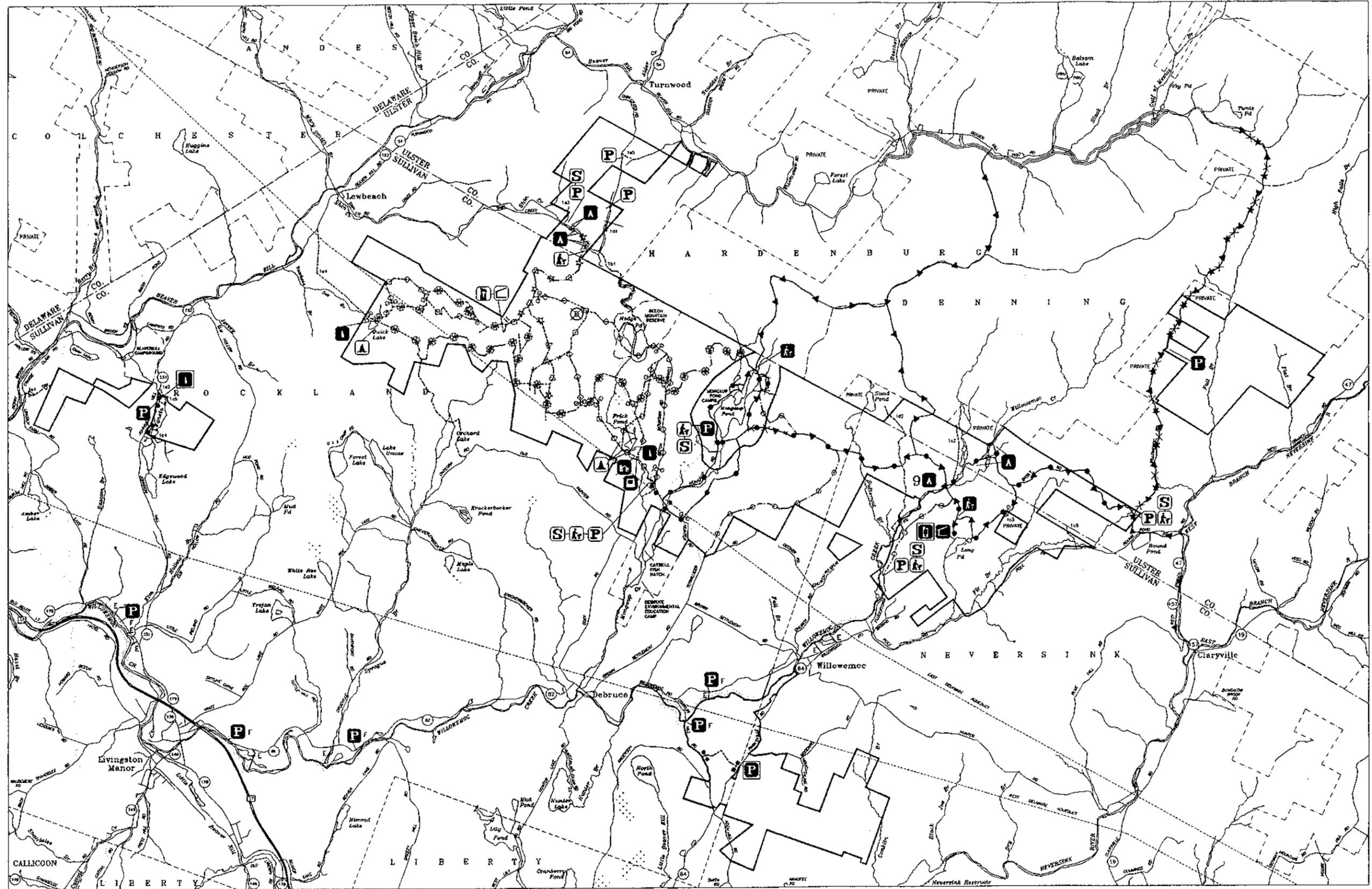
FOREST RANGERS:

Town of Rockland  
Anthony Lenkiewicz  
RD 2 Old Route 17  
Livingston Manor, NY 12758  
(914) 439-5242

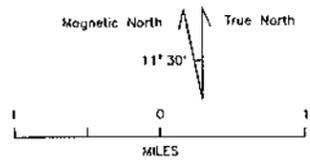
Town of Hardenburgh  
Robert Marrone  
Star Route  
Lew Beach, NY 12753  
(914) 439-4141

Town of Neversink  
Herbert Lepke  
Mutton Hill Road  
Neversink, NY 12765  
(914) 985-7744

Town of Denning  
Robert Zurek  
P. O. Box 124  
Claryville, NY 12725  
(914) 985-2215

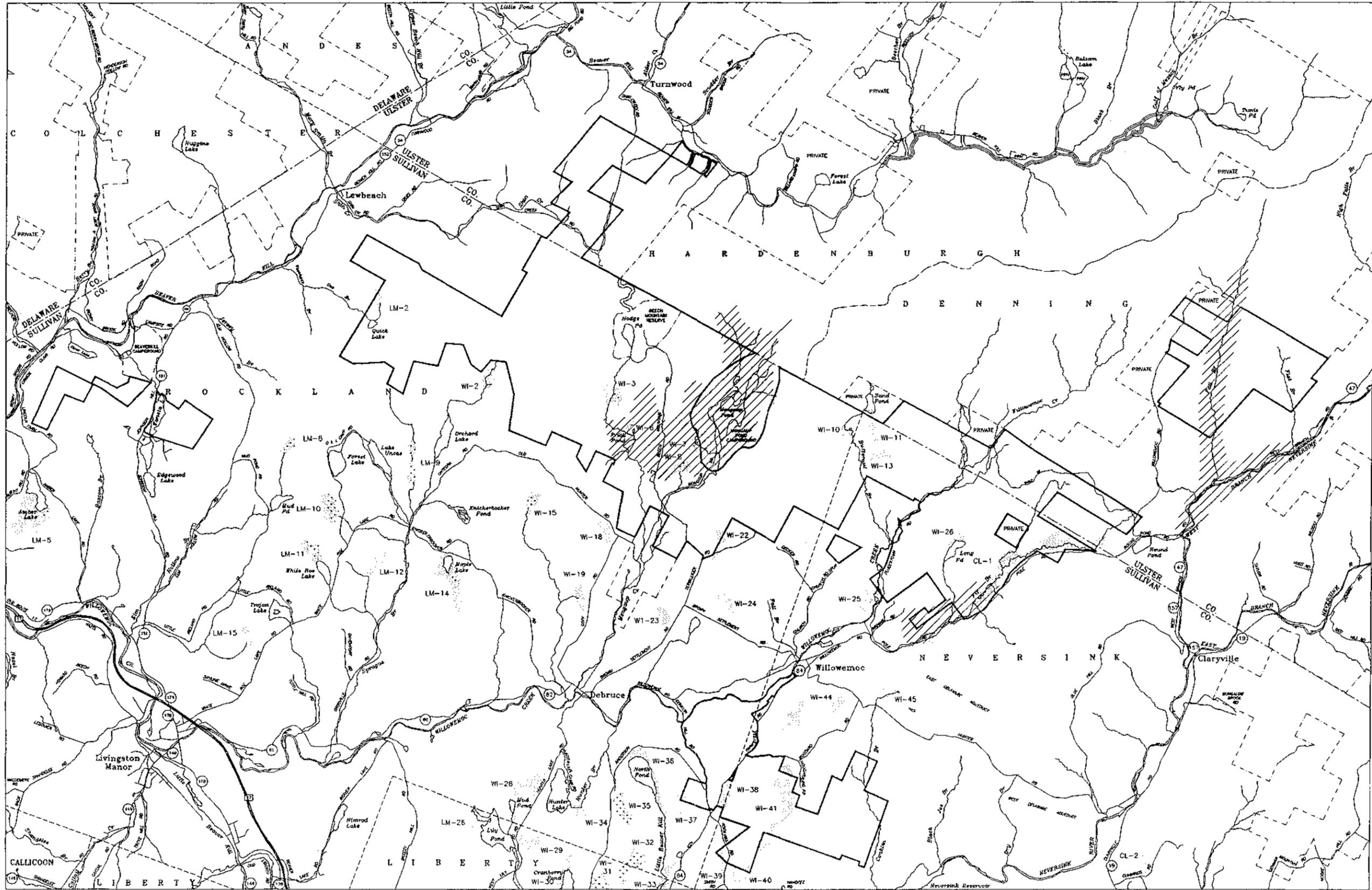


<b>EXISTING FACILITIES</b> —●— Foot Trail —●— Snowmobile Trail —●— Horse Trail --- Private Roads or Rights-of-Way (See P.36 of UWP) 1c1		<b>FACILITIES PROPOSALS</b> —X— Abandon Foot/Snowmobile Trail —X— Abandon Horse/Mainain Foot Trail —●— Construct Multiple Use Trail —●— Construct Horse/Bicycle Trail —●— Construct Snowmobile Trail —●— Designate as Primitive Use Trail —●— Designate as Multiple Use Trail —●— Designate as Horse/Bicycle Trail —●— Construct Foot Access —●— New Gate / New Barricade		<b>NEW FACILITIES</b> P New Parking Lot R New Trail Register S New Sign Board L New Leanto P New Pit Privy A New Designated Campsite B Remove Building Remains D Consolidate Dump P Rehabilitate Parking Lot L Rehabilitate Dam U Replace Pit Privy	
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WILLOWemoc - LONG POND WILD FOREST

WETLANDS WILDLIFE



Wetland  
Deer Wintering Area

