



Division of Lands & Forests

**SIX NATIONS
UNIT MANAGEMENT PLAN
FINAL**

Schuyler County towns of Orange, Dix, Tyrone and Reading
Steuben County towns of Bradford, Hornby, Campbell and Erwin

November, 2013

Lead Agency:
NYS Department of Environmental Conservation
Region 8 Sub-Office
7291 Coon Rd.
Bath, New York 14810

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GOVERNOR



JOE MARTENS
COMMISSIONER

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

MEMORANDUM

TO: The Record
FROM: Joseph J. Martens *JJM*
DATE: *Oct. 30, 2013*
SUBJECT: Final Six Nations UMP

The Unit Management Plan for the Six Nations unit has been completed. The Plan is consistent with Department policy and procedure, involved public participation and is consistent with the Environmental Conservation Law, Rules and Regulations. The plan includes management objectives for a ten year period and is hereby approved and adopted.

NYS Department of Environmental Conservation's Mission

“The quality of our environment is fundamental to our concern for the quality of life. It is hereby declared to be the policy of the State of New York to conserve, improve and protect its natural resources and environment and to prevent, abate and control water, land and air pollution, in order to enhance the health, safety and welfare of the people of the state and their overall economic and social well-being.” - Environmental Conservation Law 1-0101(1)

PREFACE

It is the policy of the New York State Department of Environmental Conservation (NYS DEC) to manage state lands for multiple benefits to serve the people of New York State. This Unit Management Plan (UMP) is the first step in carrying out that policy. The plan has been developed to address management activities on this unit for the next 10 year period. Some management recommendations may extend beyond the 10 year period.

Factors such as budget constraints, wood product markets, and forest health problems may necessitate deviations from the scheduled management activities.

Green Certification

In 2000, New York State DEC-Bureau of State Land Management received Forest Stewardship Council® (FSC®) certification under an independent audit conducted by the National Wildlife Federation - SmartWood Program. This certification included 720,000 acres of State Forests in DEC Regions 3 through 9 managed for water quality protection, recreation, wildlife habitat, timber and mineral resources (multiple-use). To become certified, NYS DEC had to meet more than 75 rigorous criteria established by FSC. Meeting these criteria established a benchmark for forests managed for long-term ecological, social and economic health. The original certification and contract was for five years.

By 2005 the original audit contract with the SmartWood Program expired. Recognizing the importance and the value of dual certification, the Bureau sought bids from prospective auditing firms to reassess the Bureaus State Forest management system to the two most internationally accepted standards - FSC and the Sustainable Forestry Initiative® (SFI®) program. However, contract delays and funding shortfalls slowed the Departments ability to award a new agreement until early 2007.

Following the signed contract with NSF-International Strategic Registrations and Scientific Certification Systems, the Department was again audited for dual certification against FSC and additionally the SFI program standards on over 762,000 acres of State Forests in Regions 3 through 9. This independent audit of State Forests was conducted by these auditing firms from May until July 2007 with dual certification awarded in January 2008.

State Forests continue to maintain certification under the most current FSC and SFI standards. Forest products derived from wood harvested off State Forests from this point forward may now be labeled as

“certified” through chain-of-custody certificates. Forest certified labeling on wood products may assure consumers that the raw material was harvested from well-managed forests.

NYS DEC is part of a growing number of public, industrial and private forest land owners throughout the United States and the world whose forests are certified as sustainably managed. The Department’s State Forests can also be counted as part a growing number of working forest land in New York that is third-party certified as well managed to protect habitat, cultural resources, water, recreation, and economic values now and for future generations.



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The Unit Management Planning Process

New York State’s management policy for public lands follows a multiple use concept established by New York’s Environmental Conservation Law. This allows for diverse enjoyment of state lands by the people of the state. Multiple use management addresses all demands placed on these lands, such as: watershed management, timber management, wildlife management, mineral resource management, rare plant and community protection, recreational use, taxes paid, and aesthetic appreciation. For more information regarding the Unit Management Planning (UMP) process please refer to the *Strategic Plan for State Forest Management* (SPSFM) at www.dec.ny.gov/lands/64567.html.

In this plan, an initial resource inventory and other information is provided, followed by an assessment of existing and anticipated uses and demands. This information is used to set goals and management objectives. Management actions tables provide an estimated cost and timetable for accomplishing these objectives.

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Acknowledgments

The Six Nations Unit Management Planning Team would like to gratefully acknowledge the efforts of all those who contributed to this plan. We particularly would like to thank the following people for information and review they provided:

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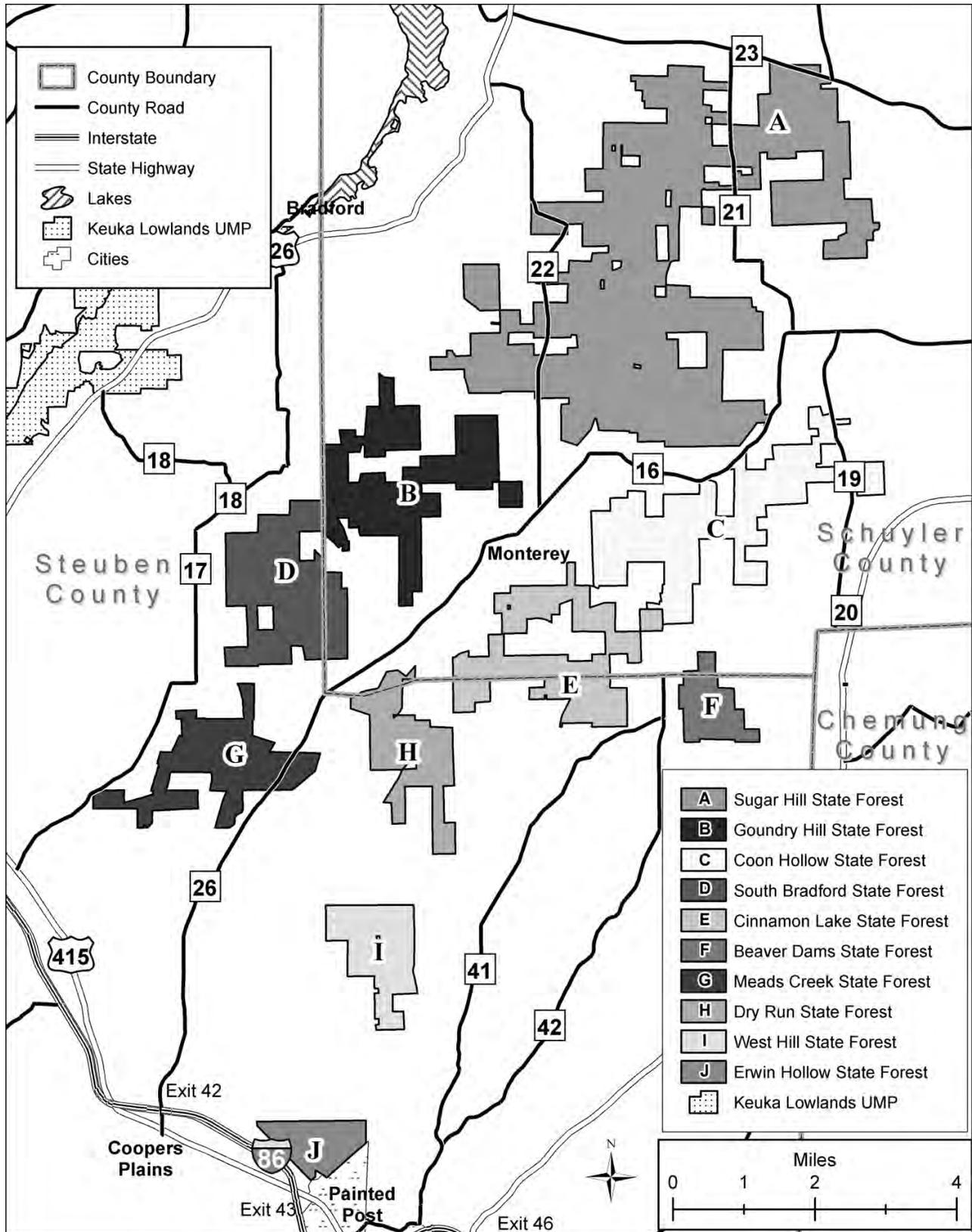
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SIX NATIONS UNIT LOCATION MAP



Additional maps located in Appendix M: Maps starting on page 231.

INTRODUCTION

History of State Forests and Wildlife Management Areas

Forest lands outside the Adirondack and Catskill regions owe their present character, in large part, to the impact of pioneer settlement. Following the close of the Revolutionary War, increased pressure for land encouraged westward expansion. Up to 91% of New York woodlands were cleared for cultivation and forage.

As the less fertile soils proved unproductive, they were abandoned, and settlement was attempted elsewhere. The stage of succession was set and new forests of young saplings re-occupied the ground once cleared.

The State Reforestation Law of 1929 and the Hewitt Amendment of 1931 set forth the legislation which authorized the Conservation Department to acquire land by gift or purchase for reforestation purposes. These state forests consisting of not less than 500 acres of contiguous land were to be forever devoted to “reforestation and the establishment and maintenance thereon of forests for watershed protection, the production of timber, and for recreation and kindred purposes”. This broad program is presently authorized under Article 9, Title 5, of the NYS Environmental Conservation Law.

In 1930, Forest Districts were established, and the tasks of land acquisition and reforestation were started. In 1933, the Civilian Conservation Corps (CCC) was begun. Thousands of young men were assigned to plant millions of trees on the newly acquired state forests. In addition to tree planting, these men were engaged in road and trail building, erosion control, watershed restoration, forest protection, and other projects.

During the war years of 1941-1945, little was accomplished on the reforestation areas. Plans for further planting, construction, facility maintenance, and similar tasks had to be curtailed. However, through postwar funding, conservation projects once again received needed attention.

The Park and Recreation Land Acquisition Act of 1960 and the Environmental Quality Bond Acts of 1972 and 1986 contained provisions for the acquisition of state forest lands; these lands would serve multiple purposes involving the conservation and development of natural resources, including the preservation of scenic areas, watershed protection, forestry, and recreation.

Wildlife management areas in New York, like state forests, have a varied history of acquisition. Many were gifted to the New York State by the Federal Government or other cooperating public or private organization. Some parcels were purchased with Bond Act funds or Federal Aid in Wildlife Restoration Program funds. The latter which is commonly called the Pittman-Robertson Act is a federal fund supported by hunters from their purchase of hunting licenses, firearms and ammunition.

Today there are over 775,000 acres of State Forests, 840,000 acres of Conservation Easements, and over 200,000 acres of Wildlife Management Areas throughout the state. The use of these lands is important to the economy and to the health and well-being of the people of the state.

History of Six Nations Unit Management Area

Ten state forests make up the Six Nations Management Unit located in Schuyler and Steuben Counties. The Six Nations Unit Management Plan was prepared by a committee of Lands and Forests, Wildlife, Forest Ranger, and other staff at the Region 8 NYS DEC office. Benefits such as water quality, a variety of healthy wildlife, and recreational enjoyment are insured by selectively varying the types and growth stages of vegetation within this unit, maintaining grasslands, and enhancing wetland areas.

The state forests covered under the Six Nations Unit Management Plan have seen numerous changes in the landscape. About 5,000 years ago, a semi-nomadic people drifted into western New York. Only two or three sites have been discovered where they stayed permanently. The most famous is the site on Lamoka Lake, a short distance from Sugar Hill. Remains indicate that acorns, small game, deer, bear and turkeys made up a large part of their diet.

One can only speculate that the “Lamoka People” used the forests of Sugar Hill as a hunting and gathering area. Later, the Iroquois Nation of the Seneca, Cayuga and Onondaga Indians flourished here, using the area for hunting and small settlements. In 1779, George Washington sent an army, under General Sullivan, to suppress all Iroquois Indians settlements and crops in the Finger Lakes area after the Native Americans sided with the British in the Revolutionary War. The suppression of the Iroquois opened the area to white settlers, many of whom were awarded land in lieu of wages for serving in the Revolutionary War.

In 1788, Oliver Phelps and Nathaniel Gorham purchased 2,600,000 acres from the State of Massachusetts, which owned all the land known as “western” New York. The pre-emption line delineated the boundary between New York and “western” New York. The pre-emption line ran through the eastern portion of Sugar Hill State Forest. In 1790, they sold 1,250,000 acres to Robert Morris, who sold 750,000 acres to William Pulteney. Colonel Charles Williamson was the chief land agent for the Pulteney purchase. He sub-divided the Pulteney tract and sold by contract to individual homesteaders.

Settlers came to the valleys in the early 1800's, followed by farmers looking to clear the hillsides for farms. European immigrants competed with settlers moving west from Vermont, Massachusetts, Connecticut, New Jersey and eastern New York for offers of large tracts of land for farming. The first farm in the Town of Orange was settled in 1802 by Henry Switzer. Asa, Uriah and Levi Nash settled the first farm in Hornby, on Hornby or Cinnamon Lake in 1814. Sugar Hill was settled in 1819.

Almost all land in Schuyler and Steuben Counties was cleared of tree growth to make way for crops or pasture land for grazing. A walk in most woodlots shows evidence of stone fences or old hedgerows. Lands not cleared for crops were cut for wood to supply the water powered sawmills that sprang up all over the area. This early timber industry supplied wood via railroads and canals all over the eastern United States. A maple sugar industry existed on Sugar Hill in the 1820's and possibly later. Local farmers got together and tapped, gathered sap and boiled syrup communally, each receiving syrup on shares based on hours worked. Mormon Church Founder, Brigham Young, was documented to have visited the syrup operation during the late 1820's to preach, along with his brother, Phineas Young, who was a local resident.

The settlement of Six Nations Hill and the Six Nations school house, near Sugar Hill, was constructed in 1844. The hill and school house are reported to have been named in honor of the Dutch, English, French, German, Irish and American Indian inhabitants of the area, not after the Iroquois confederacy. The school house still stands today.

The farming boom was short-lived however. After one or two generations, the heavy clay soils and short growing season discouraged farming. Many farmers moved on to settle the midwest, Oregon and Washington territories. The Depression of the 1930's bankrupted many of the marginal hillside farms in this area of New York. Much of this abandoned land reverted to brush and tree growth.

The State Reforestation Law of 1929 and the Hewitt Amendment of 1931 set forth the legislation which authorized the Conservation Department to acquire land by gift or purchase for reforestation areas. These lands were to be forever devoted to “reforestation and the establishment and maintenance thereon of forests for watershed protection, production of timber, and for recreation and kindred purposes.” In 1930, forest districts were established and land acquisition and reforestation were started. In 1935, as part of President Roosevelt's Works Progress Administration (WPA), a Civilian Conservation Corps (CCC) camp was opened on Sugar Hill State Forest on Pine Creek Road, Town of Orange, Schuyler County. Employees of the camp, along with employees of the New York State Conservation Department's Bureau of Reforestation, were responsible for the planting of millions of trees on the newly acquired state forests. Other projects included: road and fire break building and maintenance; insect and disease control; and forest fire fighting. One of the final tasks of the CCC camp was to construct the 75-foot tall fire tower on Sugar Hill. The CCC camp was closed on October 31, 1941, due to the pending outbreak of World War II.

In 1958, the State Department of Corrections opened the Camp Monterey Conservation Work Camp. The prison camp was built on Sugar Hill State Forest land in the Town of Orange. It was located on Evergreen Hill Road because the old CCC camp was located on a busy road. Initially, the prison had 50-60 inmates and 30-40 employees. In 1987 it was converted into a Shock Corrections Facility. Today it has the capacity for 300 inmates and provides employment for up to 200 people. The inmates provide labor for numerous projects on the state forest land and to neighboring towns and parks.

The Park and Recreation Land Acquisition Act of 1960, and the Environmental Quality Bond Acts of 1972 and 1986 contained provisions for the acquisition of state forest lands. These lands serve multiple purposes involving the conservation and development of natural resources, including the preservation of scenic areas, watershed protection, forestry and recreation.

During the 1960s, the major management impetus was reforestation of the newly acquired Bond Act properties. State forest crews machine-planted over thousands of seedlings during this period. The 1970s saw the forest maturing and an emphasis shift from acquisition and reforestation to management and stewardship. During the 1980s, a significant change occurred in the land ownership patterns on private lands in the vicinity of the unit. Farms were subdivided, and new seasonal and full-time residences were built.

The trend toward subdivisions or fragmentation of surrounding lands is expected to continue. Six Nations is several large blocks of state-owned land. As such, it will become an even more valuable public asset in the future.

Goundry Hill State Forest

This is the first state forest of Schuyler County, starting with proposals A, B and C that were acquired in 1932, under the 1929 State Reforestation Law. Proposal A was about 147 acres; B was about 236 acres; and C about 126 acres, for a total of 509 acres, just above the 500 acre minimum. All were purchased for \$4 per acre. Additional acres were added under the Reforestation Law in 1936, 1939, 1941 and 1952. Then in 1964 an additional 204.5 acres were added under the Park and Recreation Land

Acquisition Act of 1960, bringing Goundry Hill State Forest to its current size of approximately 2,112 acres.

In 1932 the first part of Goundry Hill State Forest was purchased by the State of New York. In 1935 Town of Orange Town Superintendent of Highways issued a letter stating that the northern portion of Corbett Hollow was officially abandoned. Given the fact that New York State had acquired lands for which Corbett Hollow Road was the only access indicates that the road was used by the public in order to gain access to public lands, and had in fact, not been abandoned. This factual and legal presumption is supported by Highway Law §205-b. Therefore, in 1935 when the Town Superintendent of Highways of the Town of Orange filed a certificate of abandonment pursuant to Highway Law §234 (now Highway Law §§ 205--abandonment, and 205-b--qualified abandonment) for Corbett Hollow Road, it could have done no more than qualified abandoned Corbett Hollow Road. This is because Corbett Hollow road is necessary for ingress or egress from both privately and publicly owned lands.

As mentioned above, the qualified abandoned section appears to start before the state forest boundary, resulting in a mix of private and state ownership along the abandoned sections. In the years since 1935, on several occasions, NYS DEC has repaired the road in as far as the turn around, including across the private sections. In recent years one of the neighbors has posted the road against trespass, in spite of the above, and their deed stating that Corbett Hollow Road is a right of way for lands held behind.

See Appendix L: Known Official Road Abandonments for a scanned copy of Certificate of Abandonment and letters for both the 1935 and 1980 abandonments, as well as a list of abandoned roads provided to NYS DEC in 1962.

In 1972 construction of the Finger Lakes Trail was authorized on Goundry Hill State Forest. Maintenance has been continued by the volunteers of the Finger Lakes Trail Conference under the Adopt-A-Natural-Resource Program. In 1992 it was designated as a segment of the North Country National Scenic Trail, a 3200-mile trail which extends from New York to North Dakota.

The Town of Orange officially abandoned 6.84 miles of road in 1980, most of which impacted access to state forest land, including Guiren Rd on Goundry Hill State Forest. This also impacted several privately owned lands along Guiren Rd.

Sugar Hill State Forest

This is the largest single state forest within Region 8. In 1933, under the 1929 State Reforestation Law, the first 27 proposals for Sugar Hill State Forest were purchased, for a total of about 2,050 acres. They ranged in size from about one acre to over 200. With the exceptions of the war years of 1943 and 1944, additional acres were added every year up until 1950, all for \$4 per acre. Two proposals totaling about 60.7 acres were added under the Park and Recreation Land Acquisition Act in 1964 and 1965. Most of the proposals were purchased from individuals or families, but the proposal that the Fire Tower and Sugar Hill Recreation Area was constructed on was purchased from the Glen National Bank in 1936.

In 1935 camp S-123 of the Civilian Conservation Corps (CCC), was established on Pine Creek Rd, on the western side of Sugar Hill State Forest. Records indicate they did an experimental seeding of pin cherry, choke cherry, birch and white ash seeds that first year. In 1936 they planted 1,266.1 acres of red pine, Japanese larch, Norway spruce, black locust, and/or white pine, for a total of approximately

1,719,650 trees. They also seeded 30.5 acres to black walnut, black cherry, birch, red oak, and/or hickory. That camp was later closed on October 31, 1941, with the pending start of WW II, so later plantings were done by inmates and/or NYS DEC staff. Additional acres were planted between 1937-1940, 1958-1967, 1969, 1972, 1974-1976, the most recent in 1986.

The Sugar Hill Fire Tower was constructed in 1941 by the CCC, for the purpose of wildfire detection, and was staffed until 1979. The 75 foot tall structure was made obsolete by the advent of aerial surveillance. In a 1991 ceremony, celebrating its 50th year in existence, the tower was designated a historic landmark by the American Forestry Association, and listed on the National Historic Lookout Register. It is currently one of the last fire towers in New York State readily accessible to the public and affords a 15-mile vista in all directions.



This photo was taken on July 29, 1936, of a grader being pulled by a tractor working on truck trail 202-1 by a crew out of S-123. This truck trail is still in use today, and is now the northern end of Maple Lane, and S-123 was the CCC camp located on Pine Creek Rd. Two sections of this road were re-located by the CCC, the remainder following old town road.

In 1953 NYS DEC was approached about allowing the Watkins Glen Grand Prix to run on Maple Lane Truck Trail, as well as spectator seating and concessions on the adjoining land, due to concerns over safety and fire they were not issued a permit. That year the race ended up being run on town roads in the neighboring town of Dix. A permanent circuit was built off of town roads in 1956, and is now known as the Watkins Glen International Racetrack. On race or practice days, engine noise can be heard from the Sugar Hill Recreation Area.

In the mid 1960's the Town of Orange indicated that Maple Lane had never been officially abandoned, and maintenance was turned back over to the town in late November 1968.

In 1962 the Town of Orange provided a list of roads abandoned between 1925 and 1930, see Appendix L: Known Official Road Abandonments for a scanned copy. Unfortunately road names and land owners have changed over the years, resulting in uncertainty of the exact location of these roads.

The Town of Orange officially abandoned 6.84 miles of road in 1980, most of which impacted access to state forest land. Including the roads of Parks Hollow, Sickler, Webb and Yorski, all located on, or near, Sugar Hill State Forest. Several of these also have privately owned lands along them.

In 1943 flood waters took out an iron bridge over VanZandt creek, located not far from the current location of the VanZandt Lean-to, the iron from the bridge was salvaged for use in the war effort.

At least twice there have been rumors of gold on the land adjacent to Sugar Hill Rd. the first was pre NYS DEC ownership, circa 1890, the second in 1968. At that time a Mr. Peterkin applied for a mining permit on four of the proposals, and an analysis of some soil borings was conducted. A letter dated August 28, 1968 concluded with: "...Mr. James F. Davis, Acting State Geologist, to obtain his scientific

opinion concerning the alleged finding of valuable minerals. Mr. Davis has recently replied that amounts of copper, silver, arsenic, and mercury as reported on the Geochemical Lab Report are approximately the average concentration of the earth's crust." In other words, there is no gold on Sugar Hill State Forest.

Coon Hollow State Forest

The majority of this state forest was purchased between 1937 and 1942, with another small addition in 1947, all for \$4 per acre. Proposal V was purchased in 1942 as part of bankruptcy proceedings. In 1963 about 17 acres was added under the Park and Recreation Land Acquisition Act. A very small addition, of 1.3 acres, was added in 1977 for additional access to Coon Hollow Rd.

The CCC was quite active on this state forest in the early days. In 1935 camp S-123 was established on Pine Creek Rd, in nearby Sugar Hill State Forest. In 1940 they planted 1 acre of Scotch pine and Japanese larch to control erosion. Then in 1941, 21.5 acres were planted with white spruce. In 1958, the State Department of Corrections opened Camp Monterey Conservation Work Camp on nearby Sugar Hill State Forest. The inmates provide labor for numerous projects on state forest land and to neighboring towns and parks. Inmates planted 119 acres on this forest in 1961, 205 acres in 1962, with additional planting in 1963, 1964, and 1967.

South Bradford State Forest

This is one of the first state forests in Steuben County, the initial purchases were made in 1932 of proposals A, B, C, D, E, F, G, H and I for a total of about 1,007 acres. One indication of the poor economic times is that proposal A was purchased from the Rochester Savings Bank, not an individual. Additional acres were added in 1936-1939, 1941 and 1945 under the Reforestation Act. In 1964 about 81 acres was added under the Park and Recreation Land Acquisition Act.

Between 1938-1941 most of the existing hardwood stands on South Bradford State Forest were thinned by CCC crews. In the late 1930's Dennis Rd was connected to Van Fleet Rd by a Truck Trail constructed by CCC crew, at least part of this new road followed and upgraded existing farm lanes. In addition they planted over 1.7 million tree seedlings on South Bradford State Forest in 1935, 1940 and 1941. A great deal of experimental planting was carried out on this unit, with stands of Douglas fir, and Siberian larch surviving to the present. A considerable quantity of black cherry was also planted, although very little has survived.

This area has also been involved in mineral extraction. Natural gas wells were drilled in the 1940's. There has been a great deal of gas exploration and development on this unit within the last few years as well.

West Hill State Forest

West Hill State Forest was purchased in two sections. The first in 1936, was about 684 acres and cost \$2,739.68. About 202 acres were added in 1963 as part of the Park and Recreation Land Acquisition Act.

While the Civilian Conservation Corps (CCC) did conduct activities in this forest, tree planting was not undertaken by the CCC at this location. Most of tree planting was done by Department crews from the mid 1950's to the mid 1960's.

There is a fairly extensive cemetery (West Hill Cemetery) located on private lands near the center of the forest. Immediately adjacent to the cemetery is a school house lot for Hornby District #8. In 1944 and 1945 portions of the existing hardwood forest was commercially thinned. In 1964 the western end of Rogers Rd was straightened, resulting in a small sliver of West Hill State Forest being located on the south side of that section of the road. Also in 1964, about 70,000 white spruce seedlings were planted.

Beaver Dams State Forest

Beaver Dams State Forest was acquired between 1937 and 1939 from several different owners, all for a price of \$4 per acre.

The Town of Orange officially abandoned 6.84 miles of road in 1980, most of which impacted access to state forest land. These include Moody Rd to Beaver Dams State Forest, which was taken (by condemnation) by the state for public access at that time.

Dry Run State Forest

Dry Run State Forest was purchased from several owners, starting in 1937, with the most recent acquisition being in 1951. In all cases the purchase price was \$4 per acre.

This is a picture of a feeder stream to Dry Run. It, and several others, runs through the center of Dry Run State Forest. One might say that Dry Run ... isn't (dry, of course)! It is one of the nicer small streams of the area, with shear walls of wet shale hosting large expanses of bright green moss. There are also areas where the banks are not so steep, making it easier to get into, and out of, the stream.

Local legend tells us that Dry Run was a source of waterpower for the early settlers in this neighborhood. Unfortunately, we have not been able to uncover historical records which point to any state forest properties being involved in the water power era ... even though there are building foundations in close proximity to the stream.

While the CCC did conduct activities on this forest, tree planting was not undertaken by the CCC at this location. Most of tree planting was done by NYS DEC and inmate crews during the immediate post Korean War era (1956 - 1959).



Erwin Hollow State Forest

Located near the southern boundary of Erwin Hollow State Forest is a stone silo. The original wooden roof (which was teepee shaped, reportedly looking rather like a "coolie hat") was destroyed long ago. The stonework is still rather nicely preserved.

In addition to the silo there is a large barn foundation, the remnants of a stock-watering pond, several concrete watering troughs, and foundations for numerous farm outbuildings. The residence for this set of buildings was evidently a bit removed from the barns and cattle operation.

The State of New York acquired this property in 1938 from Frank C. Platt, for \$4 per acre. The Platt family was socially prominent in the Painted Post area. Frank Platt served in the New York Assembly, representing the Painted Post area, from 1900 – 1905.

We have reason to believe that this farm was, at one time, a good one. Frank Platt received a bronze medal from the St. Louis Pan American Exposition in 1904 for oats grown on this property. The Platt farm encompassed all of this state forest (over 500 acres). This was quite an accomplishment when one considers the lack of mechanization in farming at that time. You can read more about the Platt family farm at the website for the Painted Hills Genealogical Society.

If you look carefully along the northern boundary of Erwin Hollow State Forest, you will see a gap in the trees. What's going on here? Is this some kind of road?

Not exactly ...



What you are looking at is the remains of the New York Transit (sometimes called the National Transit) pipeline. It was the first long distance oil pipeline in New York, carrying crude oil from Olean, NY to Bayonne, NJ. It was initially completed in 1881, and enlarged in 1882, 1884, and 1889. The New York Transit Co. was a subsidiary of Standard Oil Company of New York.

This pipeline required great innovation and much “new” engineering to be successful. The pipe sections are 6” in diameter and 21 feet long and coupled together with “screw joint” couplers, much as you might see in your home plumbing system (although much larger, of course!). Almost the entire original pipe is still in place; in the ground.

At its peak (1900 – 1919) this line consisted of four parallel 6” pipes, and was capable of moving 50,000 barrels (or 2,100,000 gallons) of crude oil per day.

This pipeline was used to transport oil from 1881 until 1927. A decrease in production from the western New York and Pennsylvania oil fields, as well as competition from a growing oil tanker fleet (which moved Gulf Coast and West Coast crude oil to the New Jersey refineries) was the ultimate cause of its demise.

In 1927 the line was cleared of crude oil and sold to a subsidiary of Columbia Gas Transmission; Home Gas Co. of Binghamton, NY for use as a natural gas pipeline. It served in this capacity until 1974 when it was replaced by Columbia Gas Transmission's A-5 pipeline which was built on a roughly parallel right – of – way.

Remnants of this pipeline can be found on other state forest properties in Region 8, including Turkey Ridge State Forest and Greenwood State Forest. More information about it is available in the book *Empire Oil*, published by Dodd, Mead & Co. of New York, NY in 1949. Western New York newspaperman John Herrick wrote this book. The original book has been out of print for quite some time. However, reproduction copies are available from the Bolivar – Richburg Oil History Museum, and from Interlibrary Loan (the David Howe Memorial Library in Wellsville has a number of copies).

Meads Creek State Forest

The first purchase offer for this state forest was made under the State Reforestation Law, and occurred in 1936, for \$4 per acre. The majority of the property was purchased by 1950, all at \$4 per acre. The most recent addition was made in 1963, when \$500 purchased 33.5 acres under the Park and Recreation Land Acquisition Act.

The Civilian Conservation Corps (CCC) assisted with development work in this forest. However, most of the tree planting was done post World War II (1946-1955) by NYS DEC and inmate crews. CCC activities focused on fire control and road work.

Meads Creek was an important source of water power early in Steuben County history. However, none of the mill sites are located on current state forest properties. Meads Creek is also a classified trout stream.

Cinnamon Lake State Forest

Cinnamon Lake State Forest was one of the earlier state forests in Steuben and Schuyler counties, with the first parcels being purchased by New York State in 1932. Additional acres were acquired in 1933, 1936-1937, 1939-1940, 1942, and 1948-1950, all for \$4 per acres. The most recent addition was proposal AA, when in early 1965, 37 acres were added under the Park and Recreation Land Acquisition Act, for a purchase price of \$1,100.

Standing hay was sold off of the open field of proposal AA in 1965 and 1966, before being planted to red pine in 1967.

Early plantings were done by the Works Projects Administration (WPA). In 1932 the WPA planted 4,659 dogwood, viburnum and grape, and 392.85 acres of Norway spruce, red pine, and some white ash. Then in 1934, they planted 65.7 more acres. After CCC camp S-123 was established on nearby Sugar Hill State Forest, the CCC crews planted trees on Cinnamon Lake State Forest in 1938-1939, and 1941. Then after the Monterey Correctional Facility was opened inmates provide labor for numerous projects on state forest land, including planting 63 acres in 1963, 20 acres in 1964, with additional planting in 1967, 1977, 1985, 1988 and 1993 on Cinnamon Lake State Forest.

The Norway spruce on Forks Rd was planted in 1932, then thinned and sold for Christmas trees in 1943, '45 and '47. That same stand was thinned in 1957, 1959, 1960 and 1961, with the most recent thinning occurring in 1998 with a sale price of \$4,738.33.

The Town of Orange officially abandoned 6.84 miles of road in 1980, most of which impacted access to state forest land, including Gas Well and Duran Rd on Cinnamon Lake State Forest, and in this case, also impacting privately owned lands along Duran Rd.

INFORMATION ON THE UNIT

Identification

The approximately 21,724 acre Six Nations Unit is comprised of ten state forests. For management purposes, each state forest was consecutively numbered in the order in which they were purchased in each county.

Table 1- Acreage and Boundary Line of State Land

Name	State Forest Number	Acreage	Boundary Line (Total Exterior)	Est. Road Frontage
Goundry Hill State Forest	Schuyler Reforestation Area #1	2,112	19.2 miles *	about 4.6 miles
Sugar Hill State Forest	Schuyler Reforestation Area #2	9,085	58.5 miles	about 24.7 miles
Coon Hollow State Forest	Schuyler Reforestation Area #4	2,456	22.8 miles*	about 3.9 miles
South Bradford State Forest	Steuben Reforestation Area #3	1,819	11.0 miles*	about 3.6 miles
West Hill State Forest	Steuben Reforestation Area #5	887	6.7 miles	about 4.7 miles
Meads Creek State Forest	Steuben Reforestation Area #7	1,452	13.5 miles	about 3.9 miles
Beaver Dams State Forest	Steuben Reforestation Area #9	534	4.8 miles	no road
Dry Run State Forest	Steuben Reforestation Area #13	1,062	10.9 miles	about 2.7 miles
Erwin Hollow State Forest	Steuben Reforestation Area #14	531	4.1 miles	about 0.9 miles
Cinnamon Lake State Forest	Steuben-Schuyler Reforestation Area #1	1,786	19.2 miles*	about 6.6 miles
	Total	21,724 acres	170.1 miles	about 55.6 miles

*About 0.4 miles are common line between Goundry Hill and South Bradford State Forests and about 0.4 miles are common line between Cinnamon Lake and Coon Hollow State Forests.

Geography

The Unit is located in the Towns of Bradford, Campbell, Erwin and Hornby, in Steuben County and the Towns of Dix, Orange, Tyrone and Reading in Schuyler County. It is located west of Watkins Glen, NY and north of Corning, NY. On the north, it is bounded by Schuyler County Route #23, on the east by New York State Route #414 and Schuyler County Route #19, on the south by New York State Route #17 and on the west by Steuben County Route #17. Table 2 lists the towns where the individual units

fall. Meads Creek Rd/Steuben County Route 26/Schuyler County Route 16 bisects the middle of the unit, providing access to all of it.

It is located mostly in the Susquehanna River Basin with a small portion in the Southeastern Lake Ontario Basin. Local watersheds for this unit are the Meads Creek watershed, Lower Cohocton watershed, Glen Creek watershed and small portions are in the Mud Creek, Post Creek and Catherine Creek watersheds.

Ecoregions are areas of ecological similarity, which are defined by similarities in soil, physiography, climate, hydrology, geology and vegetation. The Unit is located primarily within the New York High Allegheny Plateau (HAP) Ecoregion, with a small sliver of Sugar Hill State Forest within the New York Great Lakes (GL) Ecoregion. Many northern species and communities reach their southern limit in HAP, while many southern species extend into the ecoregion but not beyond. The HAP ecoregion is mostly located along the southern tier of New York and the northern tier of Pennsylvania. The GL Ecoregion extends from northeastern Minnesota across to north central New York, and south to northern Indiana and Ohio.

The southern end of the Six Nations Unit is adjacent to the Corning / Painted Post urban area and extends approximately 15 miles to the north. Painted Post sits off exit 43 on US Interstate 86/State Route 17, Meads Creek Rd is exit 42, the next one to the west.

Elevations on the Six Nations Unit range from approximately 960 feet on Meads Creek State Forest to 2,090 feet on Sugar Hill State Forest. Approximately 10 miles to the northeast lies Seneca Lake at 445 feet above sea level.

Table 2 - Towns of the Six Nations Unit

Name	Town(s)	County
Goundry Hill State Forest	Orange	Schuyler
Sugar Hill State Forest	Orange, Dix, Tyrone, Reading	Schuyler
Coon Hollow State Forest	Orange, Dix	Schuyler
South Bradford State Forest	Bradford, Orange	Steuben and Schuyler
West Hill State Forest	Hornby	Steuben
Meads Creek State Forest	Campbell	Steuben
Beaver Dams State Forest	Hornby, Orange	Steuben and Schuyler
Dry Run State Forest	Hornby, Orange	Steuben and Schuyler
Erwin Hollow State Forest	Erwin	Steuben
Cinnamon Lake State Forest	Orange, Hornby	Steuben and Schuyler

Climate

The average length of the freeze-free growing season on the unit is 140 days. The average daily high temperature in winter is 34° F and the average daily minimum temperature is 15°F. In summer, the

average daily high temperature is 80°F and the average daily minimum temperature is 55°F. Plateau summits are markedly cooler than the lowland farming areas.

Annual precipitation averages 36 inches. Precipitation is well distributed throughout the year and is usually adequate for all crops. Average seasonal snowfall is 70-75 inches. In winter snow depths vary greatly with elevation, but on the average, snow depths are measurable for 3 months. Monthly totals of 8 to 20 inches of snow are common from December through March. Sunshine occurs for 65% of daylight hours in the summer and 30% in the winter. The prevailing wind is from the west to southwest. Average wind speed is at its highest, 12 mph, in February.

Climatic data is supplied by the United States Department of Agriculture (USDA) Natural Resource Conservation Service.

Adjacent Land - Existing Uses

The lands immediately adjacent to the Six Nations Unit are largely in private ownership. Exceptions to this are as follows; a parcel of Schuyler County Forest within the exterior boundaries of Coon Hollow State Forest; and a parcel of land owned by the Village of Painted Post adjacent to Erwin Hollow State Forest and managed as a cemetery. Real property tax codes were used to create the following table.

Table 3 - Existing uses of adjacent property

Percent is calculated as number parcels in each class / number of total parcels. Given the distance between the various state forests we have chosen to display the totals and per cent composition for each state forest. For further information on the tax codes see Appendix C: Taxes.

State Forest	Number of Adjacent Parcels	% Agricultural (a)	% Residential (b)	% Abandoned Agricultural (c)	% Other (d)
Sugar Hill	192	15.0	53.9	34.7	3.6
Goundry Hill	59	3.4	54.2	40.7	1.7
Coon Hollow	81	9.9	54.3	24.7	11.1(e)
Beaver Dams	19	26.3	42.1	31.6	00.0
South Bradford	36	11.1	63.9	25.0	2.8
Dry Run	31	9.7	35.5	48.4	6.5
West Hill	33	3.0	57.6	36.4	3.0
Erwin Hollow	14	14.3	28.6	28.6	28.6(f)
Mead's Creek	56	8.9	71.4	19.6	00.0
Cinnamon Lake	63	9.5	54.0	33.3	3.2

- a) Agricultural parcels include any parcel classed in property ownership class 100
- b) Residential parcels include any parcel classed in property ownership class 200
- c) Abandoned Agricultural parcels include any parcel classed in property ownership class 300
- d) Other parcels include any parcel classed in any other property ownership class
- e) Includes three parcels assessed to Schuyler County (County Forest)
- f) Includes a parcel assessed to Village of Painted Post

There are industrial forest parcels adjacent to several of the state forests. These types of parcels do not make up a large percentage of either the total number of adjacent parcels or the adjacent acres.

For a somewhat more broad – scale, landscape level look at land uses and land cover we use the USGS Land Use and Land Cover data, clipped to the relevant town boundaries. This data discloses the following:

Table 4 - Land Use and Land Cover

Town	Forested	Agricultural	Other
Orange	78%	18%	4%
Bradford	94%	4%	2%
Campbell	72%	23%	5%
Hornby	75%	22%	3%

From both sources of data, and from anecdotal observations, we can make the following generalizations; all four towns are heavily forested; for the parcels immediately adjacent to the state forests, residential uses dominate, even though the parcels may be forested; and agricultural uses seem to have declined, and even among the parcels still in an agricultural use, intensity of use seems to have declined (changes from active cropland to vacant agricultural land or pasture are noted).

Taxes

State Forest lands acquired for reforestation purposes pursuant to Section 9-0501 of the Environmental Conservation Law are subject to taxation for all purposes except county tax.

Town tax and school tax are paid annually to the county clerk for distribution to the appropriate towns and school districts. State forests are valued as if privately owned and assessed in accordance with subdivision 1, Section 542 of the Real Property Tax Law.

State forest lands and multiple use areas less than 3000 acres acquired using monies from the Park and Recreation Land Acquisition Bond Act of 1960 are not subject to real property taxes. A total of about 636 acres of the Six Nations Unit were acquired using 1960 bond act funds and are therefore not subject to property taxes.

Appendix C: Taxes lists the taxes paid in 2005 on the lands of the Six Nations Unit Management Area. In that appendix, the entry for the taxes paid on South Bradford State Forest also include parts of Birdseye Hollow State Forest, which is not part of this unit management plan. Due to the way the tax information is displayed on the 2005 assessment roll, by county and town, it is not possible to sort out what taxes were paid on just South Bradford State Forest.

Further details may be found in Section 534 of the Real Property Tax Law.

Geology

Surface Geology

Background

Most surface geology in the Finger Lakes region and Southern Tier of New York was influenced by the processes of glaciation that occurred during the Pleistocene Epoch. Ice sheets from the last glaciation episode (Wisconsinan glaciation episode) retreated from the area approximately ten thousand (10,000) years ago, leaving behind numerous sedimentary deposits and surficial features; including elongated scour features. Some filled with water creating numerous lakes, small and large, some are now call the Finger Lakes.

Most soils and sediments in the region are related to past glacial activity, and subsequent weathering and erosion processes over the last 20,000 years. The underlying parent rocks (rocks that were subjected to the processes of glaciation, weathering and erosion) of this region are sedimentary rocks; specifically shale, sandstone and minor limestone that were deposited in shallow seas that existed in this region during the Devonian Period of the Paleozoic Era, approximately 370 million years ago. Any post Devonian rocks have been eroded from the region. The presence of rounded igneous and metamorphic clasts is indicative of past glacial activity transporting material into the region from the Canadian Shield to the north. For more info on the geology of New York State Forests, please see Chapter 1 of the *Strategic Plan for State Forest Management*, which can be found online at www.dec.ny.gov/lands/64567.html .

Six Nations Unit

The State lands included in this unit management plan have similar surface geologies. Surface sediments within the unit are primarily glacial till, except in the northeast end of the unit area, where glacial moraine sediments are found along the northeastern boundaries of Sugar Hill State Forest and Coon Hollow State Forest. The unit area is bisected by Meads Creek, which runs northeast to southwest, and has resulted in recent deposition of fluvial sands and gravels on those state lands that contain Meads Creek.

Bedrock outcrops and subcrops of Upper Devonian shales, siltstones, sandstones and minor limestones of the Westfalls Group are located intermittently on the sides and crests of ridges and hills in the State Forests of this unit. The only other bedrock Group that outcrops or subcrops within the unit is the older shales and siltstones of the Sonyea Group. The Sonyea Group is exposed only in the northeast portion of Sugar Hill State Forest at the northeast end of the unit. Outcrops of bedrock are most likely due to the erosion of overlying glacial sediments, causing the exposure of the bedrock.

Further information on the surface geology of the region is provided by the: Surficial Geologic Map of New York, New York State Museum - Geologic Survey - Map and Chart series #40, 1986.

Table 5 Surficial Geologic Material

Name	Surficial Geologic Material
Erwin Hollow State Forest	Glacial Till - Deposition of clays, silts and boulders beneath glacial ice Bedrock - Shales, silts and minor limestones of the Devonian Westfalls Group, intermittent outcrops/subcrops
West Hill State Forest	Glacial Till - Deposition of clays, silts and boulders beneath glacial ice Bedrock - Shales, silts and minor limestones of the Devonian Westfalls Group, intermittent outcrops/subcrops
Meads Creek State Forest	Glacial Till - Deposition of clays, silts and boulders beneath glacial ice Recent Fluvial Sediments - Sands and gravels Bedrock - Shales, silts and minor limestones of the Devonian Westfalls Group, intermittent outcrops/subcrops
Dry Run State Forest	Glacial Till - Deposition of clays, silts and boulders beneath glacial ice Recent Fluvial Sediments - Sands and gravels Bedrock - Shales, silts and minor limestones of the Devonian Westfalls Group, intermittent outcrops/subcrops
South Bradford State Forest	Glacial Till - Deposition of clays, silts and boulders beneath glacial ice Bedrock - Shales, silts and minor limestones of the Devonian Westfalls Group, intermittent outcrops/subcrops
Beaver Dams State Forest	Glacial Till - Deposition of clays, silts and boulders beneath glacial ice Bedrock - Shales, silts and minor limestones of the Devonian Westfalls Group, intermittent outcrops/subcrops
Cinnamon Lake State Forest	Glacial Till - Deposition of clays, silts and boulders beneath glacial ice Bedrock - Shales, silts and minor limestones of the Devonian Westfalls Group, intermittent outcrops/subcrops
Goundry Hill State Forest	Glacial Till - Deposition of clays, silts and boulders beneath glacial ice Recent Fluvial Sediments - Sands and gravels Bedrock - Shales, silts and minor limestones of the Devonian Westfalls Group, intermittent outcrops/subcrops
Coon Hollow State Forest	Glacial Till - Deposition of clays, silts and boulders beneath glacial ice Recent Fluvial Sediments - Sands and gravels Bedrock - Shales, silts and minor limestones of the Devonian Westfalls Group, intermittent outcrops/subcrops
Sugar Hill State Forest	Glacial Till - Deposition of clays, silts and boulders beneath glacial ice Glacial Moraine, Till & Kame - Deposition of clays / silts and sands, gravels & boulders Recent Fluvial Sediments - Sands and gravels Bedrock - Shales, silts and minor limestones of the Devonian Westfalls Group & shales and silts of the Devonian Sonyea Group intermittent outcrops/subcrops

Soils

Soils on this area are of the Mardin-Volusia-Lordstown association. Specific soil series occurring on the unit are described and mapped in the USDA publications, Soil Survey of Steuben County, New York and Soil Survey of Schuyler County, New York.

The major soil limitation which affects management is the depth of the soil to the hardpan, fragipan, or bedrock. The Chippewa, Volusia, and Mardin soils all have shallow fragipans which create seasonal wetness and restrict depth of rooting. In addition, much of the land acquired for state forest was subject to extensive soil erosion prior to acquisition. Top soil is lacking and coarse rock fragments are common at the soil surface.

Detailed soil information is contained in the above referenced publications. Digital data for soils information is currently available for both counties in this plan. Appendix M: Maps contains maps of the soil types.

Bedrock Geology

Background

Bedrock underlying the Finger Lakes region and Southern Tier of New York is inclusive of sedimentary rock units deposited in association with ancient seas and their marine-fluvial-deltaic environments of deposition during the Cambrian (550-500 million years ago (mya)), Ordovician (500-440 mya), Silurian (440-400 mya) and Devonian (400-350 mya) Periods of the Paleozoic Era.

Younger bedrock units deposited during the post-Devonian Periods (such as Mississippian and Pennsylvanian Periods) have been subsequently eroded away by erosional and glacial processes.

Underlying the Paleozoic rocks is pre - Paleozoic Era rocks or Pre-Cambrian rocks generally considered to be composed of igneous and metamorphic rocks. These rocks are generally referred to as Abasement rocks.

Six Nations Unit

All the State Forests within this Unit contain rock units (bedrock) outcropping or subcropping at or near the surface that are shales, siltstones, sandstones and intermittent limestones of the West Falls Group that were deposited during the Upper Devonian Period (approximately 350 - 400 million years ago). The northern most State Forest in this unit (Sugar Hill State Forest), in addition to the West falls Group, contains outcrops and subcrops of shales and siltstones from the older Sonyea Group.

Further information on the bedrock geology of the region is provided by the: Geologic Map of New York - Finger Lake Sheet - New York State Museum and Science Service - Map and Chart #15, 1970.

Numerous wells have been drilled into the subsurface of the areas within and surrounding the Six Nations Unit. Subsurface information about the bedrock (that does not outcrop) has been acquired through these wells. Three of these wells were drilled during 2000 and 2004 while exploring for oil and natural gas reserves in areas surrounding the State Forests contained in the Six Nations Unit Management Plan.

These three wells were drilled to vertical depths ranging from 8,770 feet to 10,458 feet into the subsurface, testing the Trenton and Black River Formations for natural gas in an area throughout and around the Six Nations Unit. The Trenton and Black River formations were deposited during the Middle Ordovician Period approximately 450 million years ago.

The northern most of the three wells was drilled on Sugar Hill State Forest in the Town of Orange. It encountered the top of the Devonian Tully Limestone at 1,520 feet, Onondaga Limestone at 2,530 feet, Oriskany Sandstone at 2,595 feet, Silurian Salt at 2,988 feet, Lockport Dolomite at 4,775 feet, Medina Sandstone at 5,427 feet, Queenston Shale at 5,657 feet, Trenton Limestone at 7,902 feet, and Black River Limestone/Dolomite at 8,648 feet. The well was drilled to a total depth of 8,770 feet during the summer of 2000.

The next well to the south was drilled on South Bradford State Forest in the Town of Orange. It encountered the top of the Devonian Tully Limestone at 2,373 feet, Onondaga Limestone at 3,322 feet, Oriskany Sandstone at 3,354 feet, Silurian Salt at 3,755 feet, Lockport Dolomite at 5,365 feet, Medina Sandstone at 6,007 feet, Queenston Shale at 6,198, feet, Trenton Limestone at 8,487 feet, and Black River Limestone/Dolomite at 9,236 feet. The well was drilled to a total measured depth of 11,675 feet (equal to a total vertical depth of 9,280 feet, since the well was drilled horizontal in the Black River Limestone/Dolomite) in the early part of 2004.

The southern most of the three wells was drilled on private land located south west of West Hill State Forest in the Town of Hornby. It encountered the Tully Limestone at 2,742 feet, Onondaga Limestone at 3,685 feet, Oriskany Sandstone at 3,732 feet, Silurian Salt at 4,208 feet, Lockport Dolomite at 5,943 feet, Medina Sandstone at 6,625 feet, Queenston Shale at 6,843 feet, Trenton Limestone at 9,248 feet, and Black River Limestone/Dolomite at 9,928 feet. The well was drilled to a total depth of 10,458 feet during the fall of 2000. (See Appendix I: Bedrock Cross Section for a drawing of this geologic cross section and Appendix M: Maps for locations of the well heads.)

Structure

Regional structure of the area is a homocline that dips (is becoming deeper) to the south-southwest at an average dip angle of approximately one degree or deepens 100 feet per each mile traveled to the south-southwest. The Geologic Map of New York - Finger Lakes Sheet #15, 1970, depicts progressively older rock units outcropping farther to the north, confirming the southern dip of strata in the region.

Linements, faulting and anticlinal/synclinal structures in the region generally trend in a northeast to southwest direction. North-south trending faults have also been identified in the region. These structures are thought to be due to compressional stress and resulting strain associated with plate tectonics and the opening of the Atlantic Ocean that began at the end of the Paleozoic Era. Structural reference is available at the Preliminary Brittle Structures Map of New York, New York state Museum-Map and Chart Series No. 31E, 1974.

Mineral Resources

Oil and Gas

Introduction

Sections 9-0507 and 23-1101 of the Environmental Conservation Law and State Finance Law authorize the Department of Environmental Conservation to make leases on behalf of the State for exploration, production and development of oil and gas on State lands. Proposals to lease parcels of Department of Environmental Conservation administered State lands for this purpose will be considered following public notice in the Environmental Notice Bulletin (ENB), and in local newspapers. Gas well

drilling, pipeline, and related road development must be in compliance with State Forest Tract Assessments, the *Strategic Plan for State Forest Management*, the *Generic Environmental Impact Statement* and the *Supplemental Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program*.

Oil and natural gas are valuable resources which can provide energy and revenue, as well as the opportunity for improvements to the existing infrastructure of the Six Nations Unit (such as improving safe and restricted access through upgrading existing roads, culverts and gates) and creation of grassy openings to enhance habitat diversity. As with any other human activity on State lands, oil and natural gas exploration and development can impact the environment.

In all areas covered by this Unit Management Plan; New York State manages the surface estate through the NYS DEC Division of Lands and Forests, and the mineral estate is managed through the NYS DEC Division of Mineral Resources.

For more information on the procedures of gas leasing, see the Mineral Resources section on page 101 and in the *Strategic Plan for State forest Management* at www.dec.ny.gov/lands/64567.html.

Historical Drilling & Production

The drilling of the first commercial oil and natural gas well in the United States occurred in northwestern Pennsylvania during the middle 1800's. The results of this drilling activity carried over into neighboring New York State. Eventually this activity extended into western New York and areas' surrounding what is now the Six Nations Unit.

Numerous wells have been drilled to depths ranging from 2000' to 3000', to test the Oriskany Sandstone for natural gas in the areas within and surrounding the Six Nations Unit. This drilling began in the 1930's and continued until the 1980's. Drilling was not successful until the 1950's.

During the late 1950's, natural gas was discovered approximately five miles north of the Six Nations Unit in the northwestern corner of Schuyler County at the Wayne Dundee Field. (See map in Appendix M: Maps) Commercial gas production was from the Oriskany Sandstone Formation that was deposited during the Lower Devonian Period. Gas was produced from depths of approximately 2,000 feet.

Following the discovery of the Wayne Dundee (Oriskany Sandstone) Field, many attempts were made to discover additional gas reserves in the Oriskany Sandstone from the areas surrounding the Six nations Unit. No additional commercial gas was discovered in the Oriskany Sandstone, and by 1980 operators had given up in their efforts to find gas reserves in the Oriskany Sandstone.

During 2003, the Department undertook a well plugging program to plug old Oriskany Sandstone test wells on State Lands in this unit that were drilled in the 1950's and subsequently abandoned, and considered orphaned in New York State. This program resulted in the plugging of three wells located on Cinnamon Lake State Forest. Two wells were originally drilled by Donovan, Incorporated in 1956 and 1959. One well was originally drilled by Flanigan Brothers in 1957. The three wells were plugged and abandoned by the State during September of 2003.

Fields drilled prior to 1986 are shown on the *New York State Gas Field Map - Department of Environmental Conservation - Division of Mineral Resources*, 1986.

Recent Activity

Drilling & Production

Natural gas has been discovered recently (2000 to present) from older and deeper Lower Ordovician age rocks of the Trenton / Black River Formations in the southwest corner of Schuyler County.

Trenton/Black River natural gas production has been established from natural gas fields within and surrounding the Six Nations Unit. These fields are the Sugar Hill Field, Sexton Hollow Field and the Meads Creek Field, which are located under Sugar Hill State Forest, Goundry Hill State Forest, and the South Bradford State Forest respectively, and extend under lands surrounding these State Forests. Six wells have been drilled that produced natural gas from the Trenton/Black River Formations on State Forest lands within this unit. These wells are the Fortuna Energy Incorporated-SRA 2 Well #1 (American Petroleum Institute (API) # 31-097-22,841-00), which is located on Sugar Hill State Forest. The Fortuna Energy Inc. - SRA 3 Well #1 (API# 31-097-23,072) and the Fortuna Energy Inc. - SRA 3 Well #2 (API# 31-097-23,101) which are located on South Bradford State Forest, The Fortuna Energy Inc - Schuyler SRA 1 Well (API#: 31-101-26,017), the Fortuna Energy Incorporated - Grand Prix # 1A Well (API#: 31-097-22,829), and the Fortuna Energy Incorporated - Grand Prix # 2 Well (API#: 31-101-22,830) which are all located on Goundry Hill State Forest. (See Appendix M: Maps).

Located on Sugar Hill State Forest is the Fortuna Energy Inc. - SRA 2 Well #1 (American Petroleum Institute (API) # 31-097-22,841-00). This well was drilled to a total depth of 8,770 feet during the summer of 2000. It was tested at a rate of 30 million cubic feet of gas per day from the Black River Formation in September of 2000.

On South Bradford State Forest in the Town of Orange is the Fortuna Energy Inc. - SRA 3 Well #1 (API# 31-097-23,072). This well was drilled to a total measured depth of 11,675 feet (equal to a total vertical depth of 9,280 feet, since the well was drilled horizontal in the Black River Limestone/Dolomite) in the early part of 2004. It was tested at a rate of 17 million cubic feet of gas per day from the Trenton / Black River Formations in May of 2004.

In addition, numerous wells have been drilled and produced natural gas from the Trenton/Black River Formations on lands surrounding the State Forests within this unit. In many instances the State has received royalties from these wells due to their proximity to State lands.

It is estimated that the natural gas extracted from these State lands within this unit through 2009 will be greater than 25 billion cubic feet. This is enough gas to supply the needs of 25,000 average households in the northeast for more than 10 years and has put over 19 million dollars into New York State's General Fund. Gaining access to these gas reserves has disturbed less than 50 acres of the more than 21,000 acres contained in this unit (less than 1/2% of 1/2% of the land in the unit). At the same time this activity has been managed by the State to provide greater access for the public to the unit lands and greater open spaces to enhance the habitat diversity of the unit at no monetary cost to residents of New York.

Marcellus Shale gas production has been established from seven wells on private lands that are in proximity to this unit. Most of these wells are located on lands that are between State Forests. These wells are producing natural gas from depths ranging from 2,500' to 3,500'. Cumulative annual natural gas production was less than 10,000 mcfg per well during 2007 through 2009.

Exploration & Drilling

Exploration for natural gas in the Trenton / Black River Formations continues to expand into the southern tier of New York State. It is likely that drilling for natural gas in the Trenton/Black River formations will continue.

Recent interest in the shallower Marcellus Shale as a gas producing formation has resulted in a number of wells being drilled on private lands to test this formation for natural gas. It is likely that drilling for natural gas in the Marcellus Shale will continue. (See Appendix M: Maps)

Leasing Activity

Initial title review indicates the State owns the mineral estate under all areas covered by this unit, with the qualification that mineral reservations may exist and no expressed or implied warranty of title is being offered in this document.

All State Forest lands in the Six Nations Unit have been under oil/gas lease contracts at some time during the past ten years. Leases on the mineral estate under Beaver Dams State Forest, and Dry Run State Forest were terminated in 2008. Leases under Coon Hollow State Forest and part of West Hill State Forest terminate in 2011 under the primary term of their respective lease agreements because drilling or production operations did not commence on those State lands or lands pooled with those State lands prior to the lease expiration date in 2011. All other State Forests in this unit, including Sugar Hill State Forest (both 2A and 2B), Goundry Hill State Forest (1A and 1B), West Hill State Forest (5B), South Bradford State Forest, Cinnamon Lake State Forest, Meads Creek State Forest, and Erwin Hollow State Forest are currently held by production under the secondary term of their respective lease agreements. State oil and gas leases are normally for a period of five years (primary term) or as long as oil or gas is produced from the property in commercially paying quantities (secondary term).

Pipeline Activity

NYS DEC, pursuant to ECL § 9-0507, may lease State lands for the construction and placement of oil and gas pipelines only if a portion of the mineral resources to be transported was extracted from State lands. Pipeline and road development must be in compliance with State Forest tract assessments, the *Strategic Plan for State Forest Management*, and the *Generic Environmental Impact Statement and Supplemental Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program*.

Pipelines will be located immediately adjacent to Public Forest Access Roads. The location of the roads and pipelines will be in compliance with tract assessments. Pipelines may be located in stands managed for closed canopy conditions only along pre-existing roads that intersect such area. Additional surface disturbance associated with such construction will be considered only in areas other than stands which are managed for relatively unbroken canopy conditions. Areas managed for unbroken canopy conditions may be referred to using various terms such as “uneven-aged,” “uneven-aged variable retention,” “all aged,” “high canopy,” “closed canopy” or others.

Pipeline development on State land will not be permitted if NYS DEC determines that it creates a significant long-term conflict with any management activities or public use of the State Forests, or with other management objectives in this plan. All pipelines will be gated to restrict motorized access, and if

necessary hardened crossings or bridges will be installed, to allow heavy equipment access across pipelines. These requirements will be satisfied by the Lessee.

Exceptions to the above guidance must be approved by the Division of Lands and Forests, in consultation with the Division of Mineral Resources.

Future Leasing Activity

Due to recent drilling and production activity in western New York, the State may again receive requests to nominate lands contained in this unit for oil and gas leasing. In the event of this occurrence, the procedures outlined in the Mineral Resources section on page 101 will be used. For further information contact the NYS DEC Mineral Resource staff, Region 8, 6274 East Avon-Lima Road, Avon, New York 14414. For more information on the procedures of gas leasing, see the Mineral Resources section and also the *Strategic Plan for State forest Management* at www.dec.ny.gov/lands/64567.html.

Mining

Sand, Gravel & Hard Rock

There are no mining contracts, permits, or operations located within the limits of any of the State Forests associated with this Unit. The closest State Forest which is also home to an active sand and gravel operation is The NYSDEC's Division of Operations 2.25 acre gravel mine located in the Birdseye Hollow State Forest, west of the Town of Bradford in Steuben County. Under Article 7 of the New York consolidated Laws/Public Lands, any citizen of the United States may apply for permission to explore and/or extract any mineral on State lands. However, current Department policy is to decline any commercial mining application(s) associated with lands in this Unit.

As stated above, there are no permitted mines within State Land associated with the Six Nations Unit. However, there are a number of permitted sand and gravel operations surrounding these lands. Hard rock quarries are not found. To the west of the Six Nations Unit area there are 10 active sand and gravel mine's under permit by NYS DEC. They range from approximately 2 to 3 miles away. The closest is approximately 1.8 miles west of the Sugar Hill State Forest (Town of Tyrone, Schuyler County). As with most of the mining operations in the area, the materials being mined are glacial till, kame, esker and outwash sand and gravel deposits. The Life of Mine Area (land approved by the NYS DEC for mining purposes) for this mine is 26.5 acres. The material is excavated above the water table, processed (crushed and screened) and stockpiled on site before it is loaded into trucks and removed from the site.

The closest mine site to the east of the Six Nations Unit area is located in the Town of Dix, Schuyler County. This sand and gravel operation is over 4 miles away from the Sugar Hill Sate Forest. The material mined in this area is similar to glacial deposits which are mined to the west. All other permitted mining operations are located approximately 4 miles or more from the Six Nations Unit.

Timber and Vegetation

Green Certification of State Forests

In 2000, New York State DEC-Bureau of State Land Management received Forest Stewardship Council® (FSC®) certification under an independent audit conducted by the National Wildlife Federation - SmartWood Program. This certification included 720,000 acres of State Forests in DEC Regions 3 through 9 managed for water quality protection, recreation, wildlife habitat, timber and mineral resources (multiple-use). To become certified, the NYS DEC had to meet more than 75 rigorous criteria established by FSC. Meeting these criteria established a benchmark for forests managed for long-term ecological, social and economic health. The original certification and contract was for five years.

By 2005 the original audit contract with the SmartWood Program expired. Recognizing the importance and the value of dual certification, the Bureau sought bids from prospective auditing firms to reassess the Bureaus State Forest management system to the two most internationally accepted standards - FSC and the Sustainable Forestry Initiative® (SFI®) program. However, contract delays and funding shortfalls slowed the Departments ability to award a new agreement until early 2007.

Following the signed contract with NSF-International Strategic Registrations and Scientific Certification Systems, the Department was again audited for dual certification against FSC and additionally the SFI program standards on over 762,000 acres of State Forests in Regions 3 through 9. This independent audit of State Forests was conducted by these auditing firms from May until July 2007 with dual certification awarded in January 2008.

State Forests continue to maintain certification under the most current FSC and SFI standards. Forest products derived from wood harvested off State Forests from this point forward may now be labeled as “certified” through chain-of-custody certificates. Forest certified labeling on wood products may assure consumers that the raw material was harvested from well-managed forests.

NYS DEC is part of a growing number of public, industrial and private forest land owners throughout the United States and the world whose forests are certified as sustainably managed. The Department’s State Forests can also be counted as part a growing number of working forest land in New York that is third-party certified as well managed to protect habitat, cultural resources, water, recreation, and economic values now and for future generations.

Current Vegetative Types and Stages

Plant communities are by nature dynamic and ever changing. Young stands of trees get older, and species composition changes with time. Disturbances from fire, wind, insects, disease, timber harvest, and other land-use practices have been an important part of the history of New York forests and have determined the composition and structure of today’s forests. By applying different forest management or silvicultural practices, land managers can affect change in vegetative types and stages and associated use by wildlife. The production of forest products is a clearly stated goal in the Reforestation Law of 1929 and is consistent with the proposed management actions in the Six Nations Unit. Future management is covered in the Timber and Vegetation Management section on page 63 and in Appendix F: Timber Management and Appendix M: Maps. For more information regarding timber management on State

Forest please refer to Chapters 2 and 6 of the *Strategic Plan for State Forest Management* at www.dec.ny.gov/lands/64567.html.

Six Nations Unit vegetation contains a mix of species, but is dominated by northern hardwood, oak, transition hardwood, and pioneer hardwood, mostly pole sized (6 to 11 inch diameter) natural hardwood forests. The dominant species of trees are red, white and black oak, sugar and red maple, other species present to a lesser extent include; hickories, ash, aspen, birches, beech, and apple.

Northern hardwood forests predominate on the north facing slopes and oak-hickory forests occupy the south facing slopes. Past man-made disturbances have created even more diversity. Many of the formerly agricultural fields, for example, have reverted back to pioneer forest types comprised of aspen, red maple and white pine. There are fewer seedling/sapling and sawtimber stands on the unit than there are pole size stands. These stands are typically even-aged. (All of the trees in a stand are approximately the same age.) Non-forest land consists of wetland, pond, road, recreation, grassland and brushy cover.

The softwood component is well balanced. The conifer segment is largely plantation, mostly red pine, Norway spruce, white pine, and larch, most of the Scotch pine has died. Hemlock and white pine comprise most of the natural conifer stands. In addition, many of the hardwood forest stands have a softwood component made up of white pine and/or hemlock.

Most of the rest of the stands fit into either the category of transition hardwoods or pioneer hardwoods. Common species include red oak, red maple, aspen, basswood, white ash, and sugar maple. Former agricultural fields have reverted back to pioneer forest types. There are no significant areas of brushy or grassy upland meadows.

The following tables (Tables 6 and 7) list vegetative types and stages for the Six Nations Unit. These records are estimated from the most recent inventories available. With 10 State Forests in the Six Nations Unit, the inventory process is spread out over many years. South Bradford and Cinnamon Lake State Forests were inventoried in 1997, Beaver Dams and Goundry Hill State Forests were completed in 1998, Dry Run State Forest was 1999, Meads Creek State Forest 2000, West Hill State Forest in 2003, Coon Hollow State Forest in 2007 and Sugar Hill State Forest were completed in 2010. Current division policy requires that a forest inventory be conducted every 10 years and whenever stands are changed by any silviculture operation or by the forces of nature. Forest stands that have not been inventoried within the last 10 years will require reinventory prior to any silvicultural treatment. Forest inventory is accomplished by a statistical analysis of stands. Samples are taken from random locations (called plots) within each stand. Information collected during a forest inventory includes, among other items, species, forest type, tree density, forest health issues, topography, drainage, previous management, and site limiting factors. The required number of plots for each stand varies according to the variability of the stand, subject to a minimum number.

Table 6 Vegetative Types and Stages for the Six Nations Unit
(Table based on inventory data gathered in 1997, '98, '99, 2000, '06, and 2007.)

Vegetative Type	Acres by Size class				Total (Acres)	% of Total
	0-5 in	6-11 in	12+ in	Other		
Natural Forest Hardwood	1,326	6,846	4,988		13,160	60.6%

Vegetative Type	Acres by Size class				Total (Acres)	% of Total	
	0-5 in	6-11 in	12+ in	Other			
Natural Forest Conifer/Conifer Hardwood*	10	1,051	1,074		2,135	9.8%	
Plantation	206	4,272	993		5,471	25.2%	
Wetland				403	403	1.8%	
Ponds				14	14	0.1%	
Open/Brush				105	105	0.5%	
Other				436	436	2.0%	
	Total (Acres)	1,542	12,169	7,055	958	21,724	
	% of Total	7.1%	56.0%	32.5%	4.4%		100%

*Total percent of all conifer species is 33%, or more, of the total for the stand.

Changes in the Vegetative Types and Stages Between 1998 and 2010

As can be seen from table 6 and 7, change has happened in the time between the writing of these Unit Management Plans. Some of that change is a result of how inventory is done, and the computer programs used to crunch the numbers. For example West Hill State Forest was inventoried in 1964, 1988 and 2003. In 1988 inventory was recorded in the field on paper, then transferred to a DOS computer program in the Bath office, since 2006 it is recorded in the field on a hand held data recorder, then electronically transferred via the internet to servers in Albany. How the maps are created has also changed. It used to be hand drawn on aerial photos, and dot grids used to calculate acreage. Now it is digitally drawn using ArcGIS on the computer over top of corrected aerial photos. Then the computer program calculates acreage to a much more accurate degree. In 2003 it was in transition, in that data was recorded in the field on paper, but the maps were created on the computer.

In addition, small ponds, roads, and small parking lots used to be included in the adjoining stand acreage, and are now separated out. One 11 acre shallow water impoundment/wetland complex was constructed on Sugar Hill State Forest. Additional acres of wetland, and some of the pond, are a result of beaver activity and better type mapping.

The timber vegetation has grown. The number of acres with an average tree size 12 inches or better (sawtimber size) has almost doubled, and the number of acres of seedling/sapling has dropped dramatically from 3,668 to 1,542. How this impacts future timber management will be discussed in the Timber and Vegetation Management section on page 63.

The numbers of acres of plantation decreased for two reasons. Some of it died and collapsed and converted to native seedling on its own, some was harvested and re-grew to (mostly hardwood) seedlings. Natural forest conifer changed dramatically, mostly due to changes in how much conifer is needed to qualify as natural forest conifer vs. natural forest hardwood.

Table 7 Vegetative Types and Stages as reported in the 1998 Six Nations Unit Management Plan
(Some differences are a result of technology and inventory changes, but general trends can be seen.)

Vegetative Type	Acres by Size class				Total (Acres)	% of Total	
	0-5 in	6-11 in	12+ in	Other			
Natural Forest Hardwood	1,921	5,776	3,200		10,897	50.1%	
Natural Forest Conifer/Conifer Hardwood*	181	2,246	858		3,285	15.1%	
Plantation	1,566	4,384	539		6,489	29.9%	
Wetland				83	83	0.4%	
Ponds							
Open/Brush				631	631	2.9%	
Other				339	339	1.6%	
	Total (Acres)	3,668	12,406	4,597	1,053	21,724	
	% of Total	16.9%	57.1%	21.2%	4.8%		100%

* Natural Forest Conifer/Conifer Hardwood - Either of 2 leading species of softwood

High Conservation Value Forest (HCVF)

High Conservation Value Forests are those portions of State Forests which have known high conservation values that NYS DEC feels should take precedent over other land use and management decisions. Areas identified as having exceptional values may be harvested, but management activities must maintain or enhance the high conservation values present. Currently, HCVFs are assigned to one or more of five land classifications, four of which may be found on State Forests:

- 1) Rare Community - Forest areas that are in or contain rare, threatened or endangered ecosystems.
- 2) Special Treatment - Forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, and refugia).
- 3) Cultural Heritage - Forest areas fundamental to meeting basic needs of local communities (e.g. subsistence, health) and are critical to their traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).
- 4) Watershed - Forest areas that provide safe drinking water.

As of the writing of this plan, the Six Nations Unit contains five identified areas of HCVF, all classified as Special Treatment. Sugar Hill State Forest has slightly more than six acres, Cinnamon Lake

State Forest has slightly more than one acre and Erwin Hollow State Forest has three totaling less than two acres. See www.dec.ny.gov/lands/42947.html and Appendix M: Maps.

Everywhere is part of one watershed or another, from the tip of the Adirondack Mountains to the shores of Long Island, some areas drain directly into a drinking water reservoir, others much more indirectly. In addition, the founding legislation for the State Forest system, the State Reforestation Law of 1929 also listed watershed protection, so number 4) Watershed applies to all of the of the Six Nations Unit, however none of the acres on this unit directly feed into a water reservoir and thus no acres were separated out. See also the *Strategic Plan for State Forest Management* (www.dec.ny.gov/lands/64567.html) and Wetlands and Water Resources, Watershed and Wetlands Protection, and Timber and Vegetation Management sections for further information on watershed protection.

Significant Plants and Communities

The Six Nations Unit contains one rare plant, it was found in disturbed habitat along a ravine, and the adjacent forest was dominated by Eastern hemlock, white pine and yellow birch in the canopy. Associated sub-canopy species include common polypody, marginal wood fern, American fly honeysuckle, chokecherry and striped maple. Other vegetation found on the site includes goldenrod, *Rubus* sp. and jewelweed. The Six Nations Unit contains no significant ecological communities tracked by the New York State Natural Heritage Program.

Forest Matrix Blocks and Least Cost Path Corridors

The identification of large, unfragmented forested areas, also called matrix forest blocks, is an important component of biodiversity conservation and forest ecosystem protection. Changes in both land use and climate will stimulate the alteration of movement patterns and range shifts for many species as they respond to changes in habitat availability and configuration along with changes in temperature, precipitation and the distribution of other species.

Research that combines data from natural, dynamic disturbance processes (e.g., fires, tornados, downbursts, icestorms, etc.) with the habitat needs of forest dwelling species in the Northeast U.S. has generated suggestions for how large forest blocks need to be in order to provide adequate blocks of continuous closed forests space for maintaining viable populations of a number of species. The two principal factors used to assess and recommend an appropriate size for proposed conservation areas of forested ecosystems, within a given ecoregion, are the home range of wide-ranging animal species and historical patch sizes that result from natural disturbance events within the landscape. Based on these assessments, a set of priority matrix forest blocks have been identified within four of the terrestrial Ecoregions within New York.

Securing connections between major forested landscapes and their imbedded matrix forest blocks is important for the maintenance of viable populations of species, especially wide-ranging and highly mobile species, and ecological processes such as dispersal and pollination over the long term. Identifying, maintaining, and enhancing these connections represents a critical adaptation strategy if species are to shift their ranges in response to climate change and other landscape changes. Various nonprofit, state, and federally funded connectivity modeling efforts have been completed or are underway around New York State. Using these models, least cost path (LCP) corridors between

identified matrix forest blocks have been predicted. An LCP corridor represents the most favorable dispersal path for forest species based on a combination of percent natural forest cover in a defined area, barriers to movement, and distance traveled.

One of those forest blocks covers most of the Six Nations Unit Management Plan Area, and West Hill and Erwin Hollow State Forests are adjacent to, or under a LCP corridor. See Appendix M: Maps and Chapter 2 of the *Strategic Plan for State Forest Management* at www.dec.ny.gov/lands/64567.html. Those acres of the Six Nations Unit that are outside the Forest Matrix Block will still be primarily managed for forest, along with all the other things listed in the GOALS AND OBJECTIVES chapter.

In addition, this plan does not, and cannot, cover any actions or activities on private land within the Forest Matrix Block but outside the boundaries of the Six Nations Unit. For assistance in managing your own forest, please contact the NYS Bureau of DEC Private Land Services for help. Visit www.dec.ny.gov/lands/4972.html or call the Bath or Avon offices.

Fish, Wildlife and Habitat

The fish, wildlife and their habitats found here are products of the landscape's history. Like many places in the southern tier of New York the coming of the Europeans in the 1700s and the decline of Native American cultures set the stage for widespread changes in the distribution and richness of wildlife resources. Timbering, farming along with unregulated exploitation of fish and wildlife resources, caused the disappearance of many wildlife species including most big game animals as well as native brook trout and other creatures of pristine and wild environments. Over the course of time emphasis on timber harvest and farming changed with the availability of resources and markets. Most of the forests were cut heavily, some burned and most of the land cleared for farming and pasturing. Streams filled with sediments. Wetlands were filled. Wild fires were suppressed. Very little of the landscape was left untouched.

In the 1930s the depression set the stage for the landscape pendulum to swing in a different direction. A very large portion of the area started to revert back toward the mature hardwood forests as farms failed. Young forests lacked significant age to provide timber products. Wildlife species that could quickly colonize these habitats rapidly moved back onto the landscape. Cottontail rabbits and other farm wildlife species diminished as dwellers of young forests such as grouse and deer took advantage of the unoccupied niches.

Today forests have matured and wildlife species are those commonly associated with such habitats. Today bears, white-tailed deer, bobcat, bald eagles, beavers, otter and fisher roam where farm wildlife species ventured at the beginning of the 20th century.

Six Nations Unit lies on the northern edge of the Central Appalachian Ecological Subzone immediately south of the Finger Lakes Highlands. This subzone encompasses an area of approximately 8,830 square miles, with elevations between 1000-2000 feet above sea level. The landscape is dominated by reverting farm lands and occasional dairy farms. Habitat present for wildlife provides numerous structural types from old field and brush land, to mature forest. Wetland environs are generally lacking, but natural succession continues to result in the reappearance of wetland plant associations on previously farmed lands.

The Six Nations Unit is located primarily within the New York High Allegheny Plateau Ecoregion (HAP), with a small sliver of Sugar Hill State Forest within the New York Great Lakes Ecoregion (GL). Many northern species and communities reach their southern limit in HAP, while many southern species extend into the ecoregion but not beyond. The HAP ecoregion is defined by high elevation features at the northern end of the Appalachian Plateau. Most of this ecoregion is above 1200 feet. The general land form of the area is mid-elevation hills separated by numerous narrow stream-cut valleys. One of the main features of the ecoregion is an abundance of rivers and streams. The Delaware, Susquehanna, and Allegheny Rivers and their many tributaries cover the entire ecoregion. These three different drainages contribute to the high overall aquatic diversity in the ecoregion. The northern and eastern portions of the ecoregion were glaciated, including the area of the Six Nations Unit.

State lands within the Six Nations Unit are contained within Wildlife Management Unit (WMU) 8W. Deer buck take objectives (BTOs - an index to deer population size) are set by citizen task forces for each WMU. The current BTO for 8W is 3.8 bucks per square mile. Black bear are firmly established in WMU 8W and continue to see a long term increase in hunting harvest.

The general area is home to at least one NY State threatened animal species. Some of the management activities occurring within the unit are directed to improving habitat for this species.

See the Fishing section; page 39, for a discussion on the current fish populations and locations on the Six Nations Unit. Appendix B: Animals of the Six Nations Unit Management Plan Area lists animals that may be found on the Six Nations Unit and Appendix H: Wildlife Harvest for recent wildlife harvest data.

Species of Greatest Conservation Need

The State Wildlife Grants program provides funds for conservation efforts aimed at preventing fish and wildlife populations from declining, reducing the potential for these species to be listed as endangered. In order to access these grant funds, New York State was required to develop a Comprehensive Wildlife Conservation Strategy (CWCS) that focuses on the “species of greatest conservation need.” This includes those species that are deemed rare, imperiled and those for which status has not been established. NYS DEC staff produced a list of 537 species of greatest conservation need. The list of species is certainly not exhaustive, but includes those species for which systematic assessments had been made by staff of the NYSDEC Division of Fish, Wildlife and Marine Resources and the New York Natural Heritage Program. For further information on how the list was compiled, visit the web site www.dec.ny.gov/animals/9406.html which also has the entire list of species. Appendix B: Animals of the Six Nations Unit Management Plan Area lists the Species of Greatest Conservation Need on the Six Nations Unit.

Wetlands and Water Resources

Aquifers

Information about aquifers comes from two GIS data sets maintained by NYS DEC as part of the Master Habitat Databank. These sets are titled as “Primary Aquifers” and “Unconsolidated Aquifers @ 250K”.

As per the above data sets, the Six Nations Unit does not overlay any primary aquifers, although Erwin Hollow State Forest is immediately adjacent to the Corning aquifer.

Adequate protection of all aquifers is assured by using Best Management Practices for water quality. Further information on these BMPs is provided by the publication: New York State Forestry Best Management Practices for Water Quality: BMP Field Guide.

Wetlands

Information about wetlands comes from two GIS data sets maintained by NYS DEC as part of the Master Habitat Databank. These sets are titled as “New York Regulatory Freshwater Wetlands” and “National Wetlands Inventory”. Considerable further information has also been developed from personal observation by NYS DEC staff.

As per the above datasets: The only NYS regulated wetland located on the Six Nations Unit is a small portion of Cinnamon Lake State Forest is overlain by wetland BF-1 as shown in the New York Regulatory Freshwater Wetlands coverage. This wetland is described as a Lacustrine, limnetic wetland with unconsolidated bottom, which is permanently flooded and believed to be controlled by a dike or other impoundment structure. This feature is a portion of, and associated with, Cinnamon Lake.

In addition, there are numerous small wetland features identified in the National Wetlands Inventory coverage.

Table 8: National Wetlands Inventory – small wetland features located on the Six Nations Unit

Wetland Type	Number of Each Type	Acres of Each Type
Emergent Wetland	24	16.3
Forested / Shrub Wetland	39	102.1
Pond	9	5.6
Lake	1	1.5
Riverine	5	9.3
Totals	78	134.8

Please see also Appendix M: Maps for spatial information and site specific data.

In the fall of 2008, the Upper Susquehanna Coalition (USC) constructed a vernal pool/wetland complex near Fish Hill Road in Compartment I on Sugar Hill State Forest. The objective of this particular project was to provide breeding habitat for amphibian species. The project was very specifically designed not to support fish populations. The work was under a Temporary Revocable Permit (TRP) issued by NYS DEC to the Upper Susquehanna Coalition.

The USC, established in 1992, is a network of county natural resource professionals who develop strategies, partnerships, programs, and projects, to protect and enhance the headwaters of the Susquehanna River and Chesapeake Bay watersheds. The USC is comprised of representatives from 16 counties in New York and 3 in Pennsylvania.

USC members include Soil and Water Conservation Districts in NY and Conservation Districts in PA. Each member has signed a Memorandum of Understanding that reflects their endorsement of the development of non-point-source projects on a watershed basis. Through shared projects and regular meetings, the USC has maintained cooperation between its members and its many partners.

Wetlands, though sometimes difficult to define, are easily accepted as valuable assets to the watersheds involved. They have many widely recognized benefits including flood attenuation, water quality improvement, wildlife habitat, and groundwater recharge. Wetlands come in many shapes and sizes, some more obvious than others; however our ability to notice them has nothing to do with how important they are to the environment.

One wetland type that is particularly easy to overlook is the vernal pool. Vernal Pools (vernal meaning spring) in the Northeast are generally found in forests and are typically wet on a seasonal basis. In addition to being only seasonally wet, they tend to be extremely small, usually only fragments of an acre in size. No matter how inconspicuous they are, their contribution to the forest ecosystem in which they are found is monumental. Spotted Salamanders (up to 8 inches long), Wood Frogs, and many other amphibians depend on these pools as breeding sites and rarely entrust their larvae anywhere else.

Streams

This unit is located in the Chemung River basin, with tributaries flowing into the Conhocton River, and the Oswego River basin, with tributaries flowing into Catharine Canal. The streams within the unit management area range from intermittent, meaning that stream flow does not occur year round, to high quality trout streams with year round flow. There are over 22 miles of streams on the State Forests within the unit supporting fish. Over four miles of stream on Dry Run, Meads and Van Zandt creeks support trout.

Ponded Waters

There are numerous unnamed vernal pools, small dugouts, water holes, and other small seasonal ponds located throughout the Unit. They provide valuable habitat for reptiles and amphibians, such as salamanders and frogs, but do not support fish. The volume and depth of water varies seasonally, with some drying up during the summer, and others holding water year round.

The only major lake or pond found partially within this unit is Cinnamon Lake. This lake is approximately 22.7 acres and is about 20 feet deep at its deepest point. The outlet is located on the south end and flows into Dry Run.

Spencer Pond is a one acre, warm water, man-made fishing pond on Tower Hill Road. Wood duck and mallards commonly visit the site for resting and nesting habitat. About three dozen water holes were developed by the Civilian Conservation Corps and are scattered about the unit. Generally, these are shallow ponds, circular in shape and six feet in diameter. Many are filled in with organic material and in

various states of disrepair. Several species of wildlife use these ponds. Frogs and salamanders are often found since these sites meet their reproductive needs and are free of predatory fishes.

See also the inventory of streams and ponded waters in Appendix E: Water Resources.

Special Management Zones

Special Management Zones are areas around specific water features (intermittent streams, vernal pools, wetlands, etc.) where management must be modified as compared to what is permissible in the general forest zone. See Appendix M: Maps for maps showing computer generated locations of these zones, the actual configuration of the zones can only be done during sale layout, following field reconnaissance, which is beyond the scope of this plan. See also the Fish, Wildlife and Habitat, Fish and Wildlife Habitat and, Watershed and Wetlands Protection sections for further details. In 2006 a new forest inventory system was implemented, which allows identification of areas receiving special management considerations.

Roads

The State Forest Transportation system provides for both public and administrative access to the unit. The Six Nations Unit is readily accessed by a combination of Town, County and State Highways and public forest access roads. Some portions of these roads are not maintained for winter travel. Maintenance of some town roads has been abandoned. Many of the abandoned roads are used as hiking, snowmobile or horse trails. Roads and trails are constructed to standards that will provide reasonably safe travel and to keep maintenance costs at a minimum. There are six types of transportation corridors providing different levels of access, depending on the standards to which they are constructed. NYS DEC reserves the right to limit access to state lands when public safety issues occur.

The next several paragraphs give brief descriptions of the six types of roads that can be found on State Land.

Public Forest Access Roads - Permanent, unpaved roads which may be designed for all-weather use depending upon their location, surfacing and drainage. These roads provide primary access for administration and public use within the unit. The design standards for these roads are those of the Class A and Class B access roads as provided in the Unpaved Forest Road Handbook (8/04).

Haul Roads - Permanent, unpaved roads which are not designed for all weather travel, but may have hardened or improved surfaces with artificial drainage. They are constructed according to best management practices primarily for the removal of forest products, providing limited access within the unit by log trucks and other heavy equipment. These roads may or may not be open for public motor vehicle use, depending on management priorities and objectives. They may serve as recreational access corridors, but are not maintained according to specific standards or schedules. The design standards for these roads are below those of the Class B access roads as provided in the Unpaved Forest Road Handbook.

Access Trails - Temporary, unpaved roads which do not provide all weather access within the unit. They are not designed for long term and repeated use by heavy equipment. These corridors were originally constructed for the seasonal removal of forest products by skidding to landings or other

staging areas. Constructed according to best management practices, these trails may be used to support other management objectives such as recreational access corridors. Maintenance is limited to activities which minimally support seasonal access objectives.

Recreational Trail - Unpaved recreational corridors which do not provide all weather access within a unit, and are designed to achieve specific recreational access objectives. Constructed according to best management practices, and following accepted regional standards for design, these trails may be used to support multiple types of seasonal recreation access. Maintenance is limited to activities which minimally support the access objectives and design.

Public Road - Permanent, paved or unpaved roads primarily designed for motor vehicle travel which are maintained by federal, state or local government. These roads may or may not provide year round access.

Rights-Of-Way - Permanent, paved or unpaved roads which allow the Department access to state forest properties while crossing private land, or, corridors across state forests allowing access to private in-holdings.

The public forest access roads and haul roads are all maintained by the NYS DEC and the access trails that are accessible by mower are also maintained. The public forest access roads are open to the public use all year round but are not maintained during the winter months. The haul roads and access trails are used by the public for hiking, biking, cross country skiing, snowshoeing and horseback riding. The public forest access roads, haul roads and some of the access and recreation trails are used by the NYS DEC for administrative access. There are also many other unmarked trails in the unit connecting some of the access trails.

Rights of Way, Concurrent Use & Occupancy, and Deeded Exceptions

Sugar Hill State Forest - A private right-of-way exists in proposal "T". This ROW is for access from Maple Lane to a 13-acre parcel currently owned by Cotton-Hanlon Company, Inc. This ROW has no specific deeded location or dimensions.

Sugar Hill State Forest – A private right of way exists in proposal C5. Starting at the private in holding then out along Pine Knob Rd.

Beaver Dams State Forest - Pursuant to Section 3-0305 of the ECL, a permanent easement for public access connects Beaver Dams - Monterey Road to Beaver Dams State Forest. This easement over the abandoned Moody Road is 49-1/2 feet wide by 685 feet long.

Meads Creek State Forest - A "Concurrent Use and Occupancy" document between Steuben County and NYS DEC is dated February 3, 1989. This document is for the purpose of bridge construction and highway realignment and covers 1.9-acres in Proposal "A" and "H".

Goundry Hill, Sugar Hill and Coon Hollow State Forests - New York State Gas and Electric Company own a 150' wide transmission line. This ROW accommodates the Bath-Montour Falls 115 KV line. Mileage is as follows; Goundry Hill State Forest has 1.1 miles, Sugar Hill State Forest has 1.9 miles, Coon Hollow State Forest has 0.4 miles for a total of 3.4 miles.

Goundry Hill State Forest - In 1932 the first part of Goundry Hill State Forest was purchased by the State of New York. In 1935 Town of Orange Town Superintendent of Highways issued a letter stating

that the northern portion of Corbett Hollow was officially abandoned. Given the fact that New York State had acquired lands for which Corbett Hollow Road was the only access indicates that the road was used by the public in order to gain access to public lands, and had in fact, not been abandoned. This factual and legal presumption is supported by Highway Law §205-b. Therefore, in 1935 when the Town Superintendent of Highways of the Town of Orange filed a certificate of abandonment pursuant to Highway Law §234 (now Highway Law §§ 205–abandonment, and 205-b--qualified abandonment) for Corbett Hollow Road, it could have done no more than qualified abandoned Corbett Hollow Road. This is because Corbett Hollow road is necessary for ingress or egress from both privately and publicly owned lands.

Towers

Two radio towers, and the fire tower, are located in the Sugar Hill Recreation Area on Sugar Hill State Forest. The larger tower is owned and maintained by NYS DEC for radio communications between NYS DEC staff. The smaller tower is owned and maintained by the Federal Government. The fire tower is maintained by NYS DEC as a historical building, but no longer used for fire detection.

In order to provide better emergency response to the nearby Watkins Glen International Racetrack, Schuyler County requested the placement of a radio transmitter on the top of the NYS DEC tower, and as no more can be safely placed up there, requested constructing another tower at that location. However, NYS DEC does not have the legal authority to authorize such construction, plus that is an intensely used recreation area. In 2009 the New York State Legislature approved a land swap between a section of Schuyler County owned land adjacent to Coon Hollow State Forest for some of Sugar Hill State Forest along Tower Hill Rd.

There may be the potential for generating electricity with windmills or the construction of towers for radio, cell etc. transmission, in the area of the Six Nations Unit. There are currently no windmills, or applications for windmills, for power generation on the Six Nations Unit. NYS DEC does not have the legal authority to authorize the construction of windmills, new power lines, or commercial towers on the lands covered by this unit management plan. However, this plan does not cover any actions or construction on any adjacent privately owned lands. For more information on fire towers and other historic and cultural resources, see Chapter 3 of the *Strategic Plan for State Forest Management*, found online at www.dec.ny.gov/lands/64567.html.

DEC and DOC Facilities

Located at the intersection of Donovan Hill Rd and Evergreen Hill Rd on Sugar Hill State Forest is the DEC Sugar Hill Maintenance Center and State Department of Corrections and Community Supervision, Monterey Shock Incarceration Correctional Facility. This plan does not cover activities taking place within the grounds of the Shop or Correction Facility.

Recreation

The unit provides an abundance of recreational opportunities within a two hour drive of metropolitan Rochester and Syracuse. The cities of Corning and Geneva are within an hour drive. Consequently, recreational use can be concentrated with some seasonal variation.

Many of the recreation facilities started out as farm lanes, skid road, town roads, log landings, gas well pad sites, etc. After they were no longer used for the original purpose they were converted to recreational use. On occasion, as part of the active timber management, sections of multiple use trail, roads, parking lots, primitive campsites, etc may need to be temporarily closed to public use.

Recreation Opportunities Include:

- Hunting
- Trapping
- Hiking
- Wildlife observation
- Camping
- Mountain biking
- Snowmobiling
- Cross country skiing
- Snowshoeing
- Picnicking
- Photography
- Nature study
- Orienteering
- Running
- Archery Tournaments
- Horseback riding
- Fishing

Depositing or leaving rubbish or waste material is prohibited. Cutting, removing, or destroying any living, or standing dead trees or plants is prohibited. Users are requested to extinguish all fires completely. Hunting, trapping, and fishing are allowed only during legal season, consult the NYS DEC Hunting and Trapping, and the Fishing Regulations Guides for seasons, hours, and bag limits.

Off-Road Vehicle Use

There are no designated Off-Road Vehicle (ORV) trails on this Unit. New York State Vehicle and Traffic Law prohibit All Terrain Vehicle (ATV) use on Public Highways which, by definition, also include Public Forest Access Roads. ATV and ORV riding is not a specific program offered on Public Lands owned in fee and managed by the NYS DEC. Existing management actions, poor soils, conflicts with other uses, impacts on neighboring residents, safety concerns, maintenance costs and challenges, and existing issues with illegal ATV and ORV use were some of the factors which have prevented the NYS DEC from developing ORV or ATV trails in the past. However, people with qualifying mobility impairments who possess a valid permit from the NYS DEC may operate ATVs on specifically designated and signed accessible trails. For more information regarding ATV access to State Forest please refer to the *Strategic Plan for State forest Management*, found online at www.dec.ny.gov/lands/64567.html.

Gates are used to restrict motor vehicle access to the trails and roads of both state forests and wildlife management areas.

Camping

Overnight camping is permitted on State Forests. Camping is not allowed within 150 ft. of any road, trail, spring, stream, pond, or other water source unless it is a designated campsite, see page 36 for a list of designated sites. For groups of less than 10 people and for up to 3 days, no permit is required. Longer stays, up to 14 days, and/or larger groups are allowed to camp with a free permit obtained from the NYS

DEC Forest Rangers, at the Bath sub-office. Regardless of location, camping sites must be left in a neat, clean, and sanitary condition.

Sugar Hill Recreation Area

The primary day-use area on the Six Nations Unit is the Sugar Hill Recreation Area located on Tower Hill Road at the northern end of Sugar Hill State Forest. The area is very popular with horse riders, campers, hikers, hunters, field archers, and fire tower aficionados. The facilities located at the Sugar Hill Recreation Area include a fire tower and observers cabin, maintenance building, picnic pavilion, bathroom facility, potable drinking water, a 9 acre open field for camping, picnic tables, fire rings, 16 stall horse barn and a ramp so that people with disabilities may more easily mount their horses. There is no fee for use of the facilities at Sugar Hill Recreation Area. Approximately 40 miles of multi-use horse trail/snowmobile trail spread in all directions from the Sugar Hill Recreation Area. The Finger Lakes Trail, a 560 mile hiking trail that is maintained by the Finger Lakes Trail Conference (www.fingerlakestrail.org), crosses just south of the Sugar Hill Recreation Area.

The Sugar Hill Fire Tower was erected in 1941 by the Civilian Conservation Corps, is 75 feet tall, and was staffed until 1979. It is currently one of the last fire towers in New York State readily accessible to the public and affords a 15-mile vista in all directions. In 1991, it was listed on the National Historic Lookout Register, celebrating its 50th year in existence.

A Field Archery Course is located in the Fire Tower vicinity and is maintained primarily by the New York Field Archers and Bowhunters (<http://members.localnet.com/~archery1/>). It currently consists of 5 courses of 28 targets each, and 3 with less than 28 targets. At one time there were 12 courses, of 28 targets each, but many have not been used in years, and have re-grown to trees and brush. Most target locations do not have a backstop, and as the existing “permanent” backstops fall apart they are being removed. When in use for tournaments, temporary targets are placed, and then removed at the end of the competition. The course is one of three regular sites of the National Field Archery Tournament and is the home of other State and regional field archery tournaments.

In the spring of 2001 a total of 30 red and white oak were planted in the Fire Tower Recreation Area. In 2006 a total of 6 red and sugar maple and in 2007 a total of 7 red oak and white pine were planted. Survivorship has been poor, due to the heavy public use, high deer population and harsh winter conditions on top of the hill. In the spring of 2010 only 20 were still living, but most should survive to replace the existing trees as they die.

Other Designated Camping Sites & Recreation Areas

As stated earlier, camping is not allowed within 150 ft. of any road, trail, spring, stream, pond, or other water source unless it is a designated campsite. The following is a list of designated sites, by state forest, for the Six Nations Unit. See also the Recreation and Other Facilities Maps in Appendix M: Maps. Most parking lots are also designated camping sites, but not all camping sites are also parking lots. Unpaved parking lots had a layer of gravel added, although it may have been decades ago at this point. Most of these are semi-flat spots along the side of the road, the only places with fire rings or picnic tables are the Sugar Hill Recreation area and the Lower Evergreen Hill Parking Lot.

Sugar Hill State Forest

- Lower Evergreen Hill Parking Lot at junction with A-Trail consists of an unpaved parking area with capacity of ten vehicles, 5 picnic tables, 4 concrete fire pits, two wooden covered horse stalls with capacity for 2 horses in each and a small pit privy. There is no potable water on site, but Meads Creek flows 50 feet away to provide water for horses.
- Evergreen Hill Road Site #1 consists of an unimproved log landing with capacity of two vehicles.
- Evergreen Hill Road Site #2 at junction with A-Trail consists of an unpaved parking lot at the end of a 100 foot driveway with capacity of 3 vehicles.
- Sugar Hill Road Site near junction with Mohawk Trail consists of an unimproved log landing with capacity of 2 vehicles.
- Maple Lane Site #1 consists of an unimproved log landing with capacity of 5 vehicles.
- Maple Lane Site #2 near junction with C-Trail log landing with capacity of 1 vehicle.
- Maple Lane Site #3 at junction with B-Trail and the Finger Lakes Trail hiking trail consists of an unpaved parking area with capacity of 2 vehicles.
- Spencer Pond at the north end Cayuga Trail and Tower Hill Road consists of an unpaved parking area with capacity of 3 vehicles, a roadside one acre pond, and an area to pitch tents in a pine grove a short walk from the parking area, one picnic table and a pit privy.
- Tower Hill Road Site #1 at junction of Fire Tower Access Road consists of an unpaved parking area with a capacity of 10 vehicles.
- Tower Hill Road Site #2 at the south end of Cayuga Trail consists of an unpaved parking area with a capacity of 8 vehicles.
- Tower Hill Road Site #3 at junction of Seneca Trail consists of an unpaved parking area with a capacity of 4 vehicles.
- County Route 23 Site consists of an unpaved parking area with a capacity of 3 vehicles.
- County Route 21 Site at junction of Seneca Trail consists of an 11 acre mowed field.
- Templer Rd Site across creek from Templer Rd consists of a small creek side clearing, no high water access parking for one roadside.
- VanZandt Hollow Site at junction of Templer Road and near crossing of the Finger Lakes Trail hiking trail consists of an unpaved parking area with a capacity of 3 vehicles.
- Switzer Hill Road Site #2 at junction of D-Trail and E-Trail consists of an unimproved log landing with a capacity of 2 vehicles.
- Randall Road Site near junction of D-Trail consists of an unimproved log landing with a capacity of 2 vehicles.

Goundry Hill State Forest

- Switzer Hill Road Site #1 near junction of the Finger Lakes Trail consists of an unpaved parking area at site of old gas well, with a capacity of 4 vehicles.
- Guerin Road Site consists of an unpaved parking area with a capacity of 4 vehicles.
- Corbett Hollow Site near junction of Oneida Trail and the Finger Lakes Trail consists of an unpaved parking area with a capacity of 4 vehicles.

Coon Hollow State Forest

- Coon Hollow Road Site consists of an unimproved log landing with a capacity of 2 vehicles.
- Chambers Road Site consists of an unimproved log landing with a capacity of 2 vehicles.

Cinnamon Lake State Forest

- Cinnamon Lake Parking Lot consists of an unpaved parking area with a capacity of 4 vehicles.
- Hornby Rd Haul Rd consists of an unimproved log landing with a capacity of 4 vehicles.
- Forks Road Parking Lot consists of an unpaved parking area with a capacity of 4 vehicles.

Dry Run State Forest

- Harrison Road Parking Lot consists of an unpaved parking area with a capacity of 2 vehicles.
- Wildcat Hollow Parking Lot consists of an unpaved parking area/log landing with a capacity of 8 vehicles.

West Hill State Forest

- West Hill Rd near the intersection of the Crystal Hills Trail branch of the Finger Lakes Trail, on the east side of the road, consists of an unpaved parking lot/log landing with a capacity of 3 vehicles.

Erwin Hollow and Beaver Dams State Forests

- None

Meads Creek State Forest

- Wixon Rd Parking Lot consists of an unpaved parking area with a capacity of 3 vehicles.
- Hoppers Bridge parking lot and log landing consists of two unpaved areas each with a capacity of 5 vehicles.

South Bradford State Forest

- CCC Rd Campsite consists of an unimproved log landing with a capacity of 3 vehicles.
- Bailey Rd Parking Lot consists of an unpaved parking lot with a capacity of 2 vehicles.

Lean-to's

Six Adirondack-style lean-to's are located throughout the northern part of the Six Nations Unit to accommodate camping. Lean-to's must be shared to its capacity on a first-come, first-use basis, with no exclusive reservation allowed. Three were constructed in the mid-1960's, and three were constructed in the early 2000's, two by NYS DEC, and one by the Finger Lakes Trail Conference. The pit privy at Parks Hollow Lean-to has collapsed, but the rest have functioning pit privies near them.

Sugar Hill State Forest has 5: Buck Settlement Lean-to-on the Finger Lakes Trail north of Templar Rd. and near Glen Creek; Parks Hollow Lean-to on Mohawk Trail, north of Sugar Hill Rd; The Twin

Lean-to's (Sugar Hill Lean-to #1 and #2) - on Seneca Trail, south of the Fire Tower Recreation Area; and VanZandt Lean-to - on Seneca Trail, east of Tower Hill Rd.

South Bradford State Forest has the 6th lean-to: Moss Hill Lean-to along the Finger Lakes Trail, west of the C.C.C. Road.

Hunting and Trapping

Hunting and trapping are valuable wildlife management methods; see the Fish, Wildlife and Habitat and Vegetation sections. High deer populations can have major impacts to forest regeneration and understory vegetation. This can negatively impact plant and animal species diversity and richness. Hunting is popular on all state lands in the Unit. Both small and big game hunting opportunities exist. White-tailed deer is the primary big game species with black bear most commonly being taken incidental to deer hunting. Archery, muzzle loading, and shotgun seasons open annually in the fall. Permanent tree stands are prohibited. Also prohibited are any equipment that damages the trees, this includes screw in steps, eye hooks etc. Small game include; wild turkey, ruffed grouse, woodcock, squirrels, cottontail rabbit, and waterfowl. Hunting and trapping of furbearers also occurs. Due to the limited water habitats on this unit most trapping effort is directed toward fox, coyote, and raccoon.

Fishing

Fishing opportunities within the Unit range from extremely limited, to a few seasonally important fishing sites. Most of the streams located on the Unit are too small to be of any fishing significance, as most of the state forest properties are on top of the hills. Meads Creek is stocked annually with brown trout and provides good spring fishing opportunities. Portions of Dry Run, Erwin Hollow Brook, and Borden Creek contain wild brook trout and provide a unique fishery for these native trout, unfortunately most of the State Forests only bound these streams on their upper ends. The lower portions of some of the larger streams in the plan area may provide some limited fishing opportunities for warm water species such as largemouth bass, smallmouth bass, bluegills, pumpkinseeds, and chain pickerel. Fishing opportunities can also be found in Cinnamon Lake. Cinnamon Lake contains a typical warm water fishery, consisting of brown bullheads, yellow perch, chain pickerel, largemouth bass, black crappie, and pumpkinseeds all provide angling opportunities. Spencer Pond exists at the north end of Tower Hill Road on Sugar Hill State Forest. It was rehabilitated in the mid-1980's and is approximately one acre in size. The pond has bass and pan fish and offers enjoyable surroundings for picnicking.

Trails

There is an extensive trail system on two of the state forests of the Six Nations Unit, in addition to many old roads, and deer trails on the Unit to explore, some of these trails are currently marked and mapped, others are not. All trails on the Unit can be used for walking, running, cross-country skiing, and snowshoeing. Motorized vehicle use is prohibited, with the exception of snowmobiles on the Six Nations Trail System. There are no designated bike trails. See Appendix D: Facilities and Appendix M: Maps.

Six Nations Trail System

This is an approximately 40 mile multiple use trail system, with the primary use by horseback riders and snowmobilers. The main trailhead is the Sugar Hill Recreation Area. The trail system exists in its entirety on Sugar Hill and Goundry Hill State Forests. It was constructed in the 1960's by NYS DEC, in

some cases by connecting old town or farm lanes to each other, other sections were new construction. It is currently maintained NYS DEC staff and by volunteers from the Trail Tamers Snowmobile Club and five individual horseback riders, all under the Adopt-a-Natural-Resource program.

Portions of the trail system are in poor repair, with issues of excess mud, or erosion. In addition some sections are old road or farm lane that runs along the boundary line with adjoining private landowners. In recent years sections of A Trail, D Trail, Mohawk, Seneca and E Trail have been worked on.

Finger Lakes Trail

The Finger Lakes Trail traverses Sugar Hill, Goundry Hill and South Bradford State Forests and is maintained by the Finger Lakes Trail Conference (FLTC) under an Adopt-A-Natural Resource Agreement. Total trail mileage on the Six Nations Unit is approximately 15 miles. This portion of the Finger Lakes Trail was dedicated in 1992 as a segment of the North Country National Scenic Trail, a 3,200-mile trail which extends from New York to North Dakota. No snowmobiles, horses, bikes, or motorized vehicles are permitted on the trail.

Great Eastern Trail (Crystal Hills Trail)

The northern end of the Great Eastern Trail connects with the Finger Lakes Trail at the lean-to on South Bradford State Forest. This is still a trail under construction, but eventually will connect several existing trails from New York to Alabama, and maybe Florida, totaling more than 2,000 miles. In New York, the trail is known as the Crystal Hills Trail, a branch trail off of the Finger Lakes Trail. Under an Adapt-a-Natural-Resource Agreement the FLTC is responsible for construction and maintenance of this trail. In addition of South Bradford State Forest, this trail also crosses Meads Creek, West Hill and Erwin Hollow State Forests. Meads Creek State Forest also has Hoppers Bridge Spur trail connecting the Crystal Hills Trail to a parking lot on CR 26/Meads Creek Rd.

Application of the Americans with Disabilities Act (ADA)

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

The ADA requires a public entity to thoroughly examine each of its programs and services to determine the level of accessibility provided. The examination involves the identification of all existing programs and services and an assessment to determine the degree of accessibility provided to each. The assessment includes the use of the standards established by Federal Department of Justice Rule as

delineated by the Americans with Disabilities Act Accessibility Guidelines (ADAAG, either adopted or proposed) and/or the New York State Uniform Fire Prevention and Building Codes, as appropriate. The development of an inventory of all the recreational facilities or assets supporting the programs and services available on the unit was conducted during the UMP process. The assessment may establish the need for new or upgraded facilities or assets necessary to meet ADA mandates. NYS DEC is not required to make each of its existing facilities and assets accessible. New facilities, assets and accessibility improvements to existing facilities proposed in this UMP are identified in the GOALS AND OBJECTIVES section.

Access for Persons with Disabilities

Wheelchairs are allowed anywhere pedestrians are allowed on state lands. The Federal/ADA definition of a wheelchair is:

Wheelchair - A manually-operated or power-driven device designed primarily for use by an individual with a mobility disability for the main purpose of indoor, or of both indoor and outdoor locomotion. This definition does not apply to Federal wilderness areas; wheelchairs in such areas are defined in section 508(c)(2) of the ADA, 42 U.S.C. 12207 (c)(2).”

Currently there are no trails or roads that meet universal access requirements on the Six Nations Unit. In many cases the ground is not firm and stable enough, and/or the slope is too steep, and/or the path is too narrow.

While no ATV trails currently exist on this Unit, specific routes may be opened to allow ATV use by permitted persons with disabilities, pursuant to NYS DEC Commissioners Policy #3 (CP-3). This program is known as the Motorized Access Program for People with Disabilities (MAPPWD). A permit must first be obtained from NYS DEC. Individuals with qualifying disabilities may apply for a permit to operate an ATV and/or truck on trails designated by the NYS DEC. For further information, contact the NYS DEC at 7291 Coon Road, Bath, New York 14810. (See Appendix D: Facilities and Appendix M: Maps)

Table 9: Motorized Access Program for People with Disabilities (MAPPWD) trails within the Six Nations Unit

State Forest	Trail Name	Mileage (approx)	Seasonal Use Restrictions
Beaver Dams State Forest	Moody and Stephens Trails	1.5 miles	None
Cinnamon Lake State Forest	Gas Well Road	¾ mile	None
South Bradford State Forest	Dennis Rd Trail	1.2 miles	None
Goundry Hill State forest	Guerin Rd Trail	2.3 miles	None
Sugar Hill State Forest	A-Trail (part of) Onondaga and Seneca Trails (parts of)	1.7 miles 3.2 miles	Open for MAPPWD use October 1 st to December 31 st

Planned changes to the MAPPWD trails on the Unit are located in the Public Recreation and Use section of the GOALS AND OBJECTIVES chapter.

Archaeological Resources

This Unit contains several small areas listed as “archaeological sensitive areas” by the Office of Parks, Recreation, and Historic Preservation (State Historic Preservation Officer). In the interest of site preservation, the precise location of these areas will not be disclosed in this document. Education for the DEC professional staff as well as notification of the precise locations will be undertaken.

In general, Native American village sites in this region of New York occupied lands in a valley bottom position. As this unit occupies, primarily, a ridge and hilltop landscape position, the potential for village sites is not considered to be very high.

This area was probably used as a hunting and food gathering area by the Native American groups in residence at the time. Native American campsites related to this activity may be found.

Archaeological Site Protection

The archaeological sites located within this land unit as well as additional unrecorded sites that may exist on the property are protected by the provisions of the New York State Historic Preservation Act (SHPA - Article 14 PRHPL), Article 9 of Environmental Conservation Law and Section 233 of Education Law. Should any actions be proposed which would impact these sites they will be reviewed in accordance with SHPA, and the Seneca Nation of Indians Tribal Historic Preservation Office will be consulted. Unauthorized excavation and removal of materials from any of these sites is prohibited by Article 9 of Environmental Conservation Law and Section 233 of Education Law.

Archaeological Research

Any archaeological sites located on this land unit as well as additional unrecorded sites that may exist on the property will be made available for appropriate research. All future archaeological research conducted on the property will require the appropriate permits. Research permits will be issued only

after consultation with the New York State Museum and the Office of Parks, Recreation and Historic Preservation. Extensive excavations are not contemplated as part of any research program in order to assure that the sites are available to future researchers who are likely to have more advanced tools and techniques as well as different research questions.

Historic Sites

The State Forests in this Unit contain numerous cellar holes, barn foundations, stone lined water wells, permanent water sources constructed by the Civilian Conservation Corps (CCC), possible mill sites, and other features related to historic occupation during the historical agricultural period.

Please note: As noted above, unauthorized excavation and removal of materials from any of these sites is prohibited by Article 9 of Environmental Conservation Law and Section 233 of Education Law.

The following sites, from the historical era, located in the unit, are recognized as having historical significance:

- Sugar Hill State Forest - Sugar Hill Fire Tower
The Sugar Hill Fire Tower was constructed in 1941 for the purpose of wildfire detection. The 75 foot tall structure (believed to have been fabricated by the International Derrick Co.) was made obsolete by the advent of aerial surveillance. In a 1991 ceremony, the tower was designated a historic landmark by the American Forestry Association.
- Sugar Hill State Forest - Pine Creek CCC Campsite S-123
The Pine Creek Civilian Conservation Corps camp was in service from 1935 until 1941. The remains of the camp consist of roadbeds, hardwood seed beds, a stone fireplace, building sites, diversion ditches, and several large Norway spruce trees.
- Various locations, all state forests - CCC Waterholes
For fire control purposes, the CCC program constructed laid up stone waterholes which were either round or rectangular in shape, and approximately 100 square feet by 3 - 6 feet deep in size. Many were fed water from spring seep developments located along the uphill side.
- Various locations, all state forests - Stone walls and stump fences
Stone walls and stump fences bisect the entire area. They date back to the original clearing of land for agricultural purposes in the 1800's. While many of the stone walls are still in excellent condition, the stump fences have begun to deteriorate rapidly. The individual stumps from these fences were also popular, at one time, as yard decorations. Many stump fences have disappeared from state forests over the years.
- Erwin Hollow State Forest - Stone silo
A stone silo approximately 20 feet in diameter by 30 feet tall is located on Erwin Hollow State Forest. This also relates to early agricultural practices.

- Erwin Hollow State Forest - Standard Oil Company of New York (SOCNY) – Vacuum Pipeline

Portions of the SOCONY – Vacuum pipeline remain in place on Erwin Hollow State Forest. This structure was the first long distance petroleum pipeline built in New York State, extending from Bolivar, NY to Bayone, NJ.

NEEDS, ISSUES AND POLICY CONSTRAINTS

This plan strives to manage the diversity of the Six Nations Unit biological and social resources for multiple use to serve the needs of the people of New York State. In order to manage the Six Nations Unit for multiple use, NYS DEC must manage the ecosystem in a holistic manner while reconciling the many and sometimes conflicting demands on the ecosystem. This must be done within the framework of *Strategic Plan for State forest Management*, Environmental Conservation Law (ECL), rules and regulations, and NYS DEC policies and procedures.

Many issues, including public needs, form the basis for the objectives and management actions set forth in this plan. The NYS DEC recognizes that planning must be done today to ensure effective management in the future.

On the Six Nations Unit, many different issues and needs form the basis for the objectives and management actions set forth in this plan. As the need for open space and outdoor recreation increased over the past years, so too have the facilities on Six Nations been modified and expanded to meet that demand. The DEC recognizes that the future welfare of this area requires a focus towards the future. Planning must be done now to insure orderly and environmentally sound management in the future.

The ECL dictates that the lands within this unit be managed for “*watershed protection, the production of forest products and recreation and kindred purposes*”. Within these constraints, a need exists for protection, goods, services, and the perpetuation of open space.

In summation, a complex combination of needs, issues and constraints on these demands together with the inventory of available resources will form the basis for the goals, objectives, and subsequent management actions which comprise this plan. For more information regarding statewide management of State Forests please refer to the *Strategic Plan for State forest Management* at www.dec.ny.gov/lands/64567.html.

Funding

Currently NYS DEC's Bureau of State Land Management has limited budget to manage all of NYS DEC lands.

Funding, when available, is primarily derived from:

- Capital construction account (State General Fund monies)
- Rehabilitation & improvement account (State General Fund monies)
- Stewardship - Special Revenue Other (SRO) account. State forests only. Note: The primary source of revenue for the SRO account is from commercial sales of forest products on State Forests.
- Services in lieu of payment during commercial sales of forest products. (These services are limited to the specific location and certain activities where the sale occurs.)
- Environmental Protection Fund (EPF). This account is primarily funded from real estate transfer tax and other appropriations by the legislature. Appropriations from this fund may be used for a wide variety of projects including habitat enhancement for plants and animals, recreational

facilities and forestry improvements such as pre-commercial thinning, artificial regeneration, and control of invasive species.

- Conservation Fund. Wildlife Management Areas only. A state fund consisting primarily of income from the sale of sporting licenses, fines from penalties from fish and wildlife law violations, sale of products off lands administered by the Division of Fish, Wildlife and Marine Resources, and Return a Gift to Wildlife donations. Revenues attributable to the sale of oil and gas leases from Wildlife Management Areas are deposited into the Conservation Fund.
- Wildlife Restoration Program Funds. These are federal funds commonly referred to as Pittman-Robertson Funds. This is a federal program established from money received from excise taxes on the sale of sporting guns and ammunition. Use of land purchased, or activities funded, are federally regulated to certain activities.

Regional allocations from these accounts must be shared by all NYS DEC lands within the region. There is no specific budget established to manage an individual site. Funding is distributed based on priorities for all areas within the region. Tasks listed in the work schedule in this plan are contingent upon available funding and commitments associated with higher priority projects within the region.

Cooperative partnerships using the Adopt-A-Natural-Resource-Program or Volunteer Stewardship Agreements with private conservation organizations or other interested parties can be used to complete projects on the Six Nations Unit. These partnerships are a valuable supplemental source for providing needed services.

Summary of Identified Issues

As part of any unit management planning process, NYS DEC is committed to active citizen participation. To achieve that involvement, adjacent property owners, local government officials, media and others potentially interested in the management unit were identified. While public comments are accepted at any time, a formal citizen participation process began on December 15, 2008, when an introductory letter was sent to those identified on the Six Nations Unit Management Plan mail list. This letter briefly described the lands identified in the Unit Management Plan and potential topics to be covered by the plan. It also asked for verbal or written comments related to the Six Nations Unit Management Plan. A public scoping meeting was held January 22, 2009 at the Bath NYS DEC office. A total of 14 people attended the meeting, and 31 written comments were received. Public comments and staff-identified issues have been summarized below. See Appendix A: Public Comment for a complete list of public comments received as a result of the December 2008 letter.

The synopsis below each category is a compendium of all public comments. Individual comments may have been combined.

Access

Access to the Six Nations unit is necessary to ensure both public use and land management. From logging to hunting, bird-watching to maintenance, safe access by all users of the state forests is an essential element of management. It is NYS DEC policy to provide appropriate public and operational access to the Six Nations Unit. Restrictions on access may positively contribute to the natural character of state lands.

The following is a synopsis of public comments received related to Access.

One person asked for additional parking. Another asked increased access for people with disabilities. Another person asked DEC to place large boulders on West Hill Forest area to prevent people from driving into the woods. One person asked the state to keep the old abandoned road from South Bradford to the Dennis Road passable for hiking and horseback riding. Two commenters asked for loggers to fill in the ruts in skid trails. Another asked for a better map. One person asked that good timber management guidelines be applied and that Best Management Practices are enforced during logging events to ensure quality harvest especially during wet events. Three people asked that existing trails be re-configured to accommodate ATVs and snowmobiles. One person asked that the roads be ditched and crowned every five years. Two people asked that ATVs not be allowed. One person asked for log roads to become recreational trails for horses. One person asked that DEC contact the towns to keep the roads in better condition.

Staff identified issues:

Some portions of the town roads are seasonal and are not maintained for winter travel. Other roads have been officially abandoned; others have not been maintained in years. This lack of maintenance means portions of several State Forests are not accessible, except by foot. Some have continued to have vehicle traffic, others have not. (When a road is officially abandoned it may revert to whoever owns the property it crosses, subject to any outstanding deed restrictions.) For information on the status of most of the roads within the unit, see Appendix D: Facilities.

The State of New York owns a permanent easement for public access that connects Beaver Dams - Monterey Road (aka Hornby Rd) to Beaver Dams State Forest, this easement is currently impassable to vehicle traffic. In addition, no parking exists, except for one car at the very end of the "road". The entire east side of Erwin Hollow has no access due to a classified stream and steep hillside. The old farm lane (Stone Silo Access Trail) does not legally connect with any town road. Chambers Rd on Coon Hollow State Forest has not been maintained in years, and is used as a source of destructive "mudding". Several years ago the Town of Orange attempted to abandon a section of it, but failed.

Several roads may or may not be abandoned, which complicates use and law enforcement for those areas. An incomplete list includes: Wildcat Hollow on Dry Run State Forest; Love Rd, the northern portion of Maple Lane, name-unknown road located between Templar Rd and Locust Lane, Tuscarora Trail/Templers Access, and Pine Knob on Sugar Hill State Forest; Moss Rd/Cotton Hanlon's Access Rd on South Bradford State Forest.

The Town of Orange officially abandoned 6.84 miles of road in 1980, most of which impacted access to state forest land. These include Moody Rd to Beaver Dams State Forest, which was taken (by condemnation) by the state for public access at that time. Guiren Rd on Goundry Hill State Forest, Gas Well and Duran Rd on Cinnamon Lake State Forest, Parks Hollow, Sickler, Webb and Yorski on Sugar Hill State Forest. Several of these also have privately owned lands along them.

In 1932 the first part of Goundry Hill State Forest was purchased by the State of New York. In 1935 Town of Orange Town Superintendent of Highways issued a letter stating that the northern portion of Corbett Hollow was officially abandoned. Given the fact that New York State had acquired lands for which Corbett Hollow Road was the only access indicates that the road was used by the public in order to gain access to public lands, and had in fact, not been abandoned. This factual and legal presumption is supported by Highway Law §205-b. Therefore, in 1935 when the town superintendent of highways of

the Town of Orange filed a certificate of abandonment pursuant to Highway Law §234 (now Highway Law §§205–abandonment, and 205-b-qualified abandonment of roads accessing state owned land) for Corbett Hollow Road, it could have done no more than qualified abandoned Corbett Hollow Road. This is because Corbett Hollow road is necessary for ingress or egress of publically owned lands. In addition, over the years it has been regularly used by private landowners to access their parcels of land, on either side of Goundry Hill State Forest.

As mentioned above, the qualified abandoned section appears to start before the state forest boundary, resulting in a mix of private and state ownership along the abandoned sections. In the years since 1935, on several occasions, NYS DEC has repaired the road in as far as the turn around, including across the private sections. In recent years one of the neighbors has posted the road against trespass, in spite of the above, and their deed stating that Corbett Hollow Road is a right of way for lands held behind.

See Appendix L: Known Official Road Abandonments for copies of the Certificate of Abandonment and letters for both the 1935 and 1980 abandonments.

Placing gates or rock barriers on NYS DEC owned roads or trails can be controversial. Some are currently gated: Fire Tower Access Road, Duran Road, Gas Well Rd, Mohawk, several Well Head Access Roads, Guiren Road, Old Dennis Road Trail, and Seneca Trail. Others have been gated by private land owners. Some are not currently gated, but need to be.

Vegetation Management

Plant communities are by nature dynamic and ever changing. Young stands of trees get older, and species composition changes with time. Disturbances from fire, wind, insects, disease, timber harvest, and other land-use practices have been an important part of the history of New York forests and have determined the composition and structure of today’s forests. By applying different forest management or silvicultural practices, land managers can affect change in vegetative types and stages and associated use by wildlife. The production of forest products is a clearly stated goal in the Reforestation Law of 1929 and is consistent with the proposed management actions in the Six Nations Unit.

The demand for forest products from State Land has been reflected in a steady increase in prices paid for timber in recent years. This is especially true for hardwood sawtimber and veneer. The value of standing red oak sawtimber, for example, has increased six-fold since 1975. The demand for fuelwood and for softwood sawtimber has remained constant. The demand for pulpwood has never been strong in this part of the state. Management of the Six Nations Unit will minimize the threat of damaging fires, insects and diseases. (See also pages 251 through 256 of the *Strategic Plan for State Forest Management*.)

The following is a synopsis of public comments received related to Vegetation Management.

One adjacent property owner identified an area of dead trees. One person asked that lumber grade pine and American chestnut be planted. One person asked for no clearcutting. Another asked for more grass planting near camping areas. One person asked DEC to grant landowners access to collect firewood from dead and blown-down trees across streams. One person asked if branches could be piled or chipped to avoid tripping hazards.

Staff identified issues:

Staff identified needs such as maintaining areas of open grass and brush, as well as the creation of early successional seedling/sapling stands in order to ensure habitat requirements and continued forest production. Unique plants need to be encouraged and protected. Exotic and invasive plant species, such as Giant Hogweed and purple loosestrife, need to be removed whenever possible.

Water Resources

The Environmental Conservation Law (ECL) dictates that the State Forests within the Six Nations Unit be managed for watershed protection. This is also clearly consistent with Wildlife Management Area objectives and sound conservation practices and public desires. Best Management Practices for water quality are used for all silvicultural practices on state lands. These require specific conservation practices which protect soils and water quality during timber harvest. Well managed water resources have multiple benefits, including quality fish and wildlife habitats, aesthetically pleasing sites, ground water protection, and flood water retention.

The following is a synopsis of public comments received related to Water Resources.

Schuyler County Soil and Water Conservation District expressed concern over past logging events' impact to sediment load and erosion in a flashy watershed. Another person asked for more wetland management.

Staff identified issues:

Staff identified the need to continue to follow Best Management Practices for water quality and comply with Special Management Zone rules.

Wildlife and Fish Management

The Division of Fish and Wildlife is charged by Environmental Conservation Law to protect and maintain New York's rich and diverse ecosystems.

The following is a synopsis of public comments received related to Wildlife and Fish Management.

One person asked to reduce the number of deer management permits and to increase control of the coyote population. Another asked for bear dens and the introduction of fox squirrels. Another person asked to replenish native trout to upper Meads Creek.

Staff identified issues:

Staff identified the need to actively manage threatened species and associated habitats through enforcement, habitat management, monitoring, and research, and comply with guidance concerning High Conservation Value Forests (HCVF) found in the *Strategic Plan for State Forest Management*.

Public Recreation and Use

One goal of DEC management is to provide suitable opportunities for the public enjoyment of compatible recreational pursuits in a natural setting. DEC is charged under Environmental Conservation Law with guaranteeing that the widest range of beneficial uses of the environment is attained without

unnecessary degradation or other undesirable or unintended consequences. The public has an undeniable stake in identifying both “beneficial uses” and “undesirable consequences.” The recreational use of State Forest land is a clearly stated goal in the Reforestation Law of 1929 and is consistent with the proposed management actions in the Six Nations Unit.

The demand for “open space” is increasing as well as a demand for access to public land for non-consumptive uses of the forest environment such as nature study, cross-country skiing, bicycling, primitive camping, and hiking. The demand for consumptive use of the forest resources such as: hunting, trapping, berry picking, and mushrooming, has remained constant.

The following is a synopsis of public comments received related to Public Recreation and Use.

The public asked for more access for hikers, horseback riders and snowmobile riding. One person asked DEC to charge hikers, and campers to use state lands. Others wanted to know more about how DEC promotes the use of the land and how funds from sale of resources are utilized. Support was received for the inclusion of foot trails and the new Great Eastern Trail. One asked for better maintenance and signage for Finger Lakes Trail, to move trails away from archery fields, add a baseball diamond and additional horse stalls at the recreation area and a bathroom at Sugar Hill clearing.

One person asked to review language related to foot trails and mountain bike usage and another reinforced that thought. New York Field Archers and Bowhunters (NYFAB) provided a history of events at Sugar Hill and referenced a petition signed by 295 participants requesting that NYFAB continue to host the FUNANZA there. Another requested additional trail be designated as MAPPWD.

Staff identified issues:

Some portions of the Six Nations Unit have high recreational use, such as Sugar Hill State Forests Fire Tower Recreation Area and the Six Nations Trail System. Other sections of the Six Nations Unit have much less intensive public use, such as on Dry Run State Forest. The areas of high use can lead to conflict between user groups. User groups include, but are not limited to: hunters, horseback riders, hikers, snowmobile riders, archers, bicyclers and picnickers. Most issues relate to minimizing conflict between user groups and minimizing or fixing damage to the natural resource caused by the heavy public use.

An initial review of the trails indicates that many sections need some upgrading. Most are fine, but some sections are wet, some are steep, and some are located along boundary line with privately owned neighboring land. Different solutions will be needed in different locations, but include re-routing to a new location, building puncheons, adding gravel, re-working the ditches and/or waterbars, new creek crossings, or other trail improvements may be needed to create a better trail experience. In addition the 16 horse stalls at the Fire Tower Recreation Area can fill up quickly on a busy weekend.

There have been complaints regarding equestrian use at the Sugar Hill Recreation Area over the years. For example, horses and dogs running free, tethering horses to trees and excessive space used for paddocking.

Oil and Gas Leasing

Article 23, Title 11, Section 23-1101 of the Environmental Conservation Law and State Finance Law authorizes the Department of Environmental Conservation to make leases on behalf of the State for

exploration, production and development of oil and gas on State lands. Proposals to lease parcels of NYS DEC administered State lands for this purpose will be considered following public notice in the Environmental Notice Bulletin (ENB), and in local newspapers.

Oil and natural gas are valuable resources which can provide energy and revenue, as well as the opportunity for improvements to the existing infrastructure of the Unit (such as improving safe and restricted access through upgrading existing roads, culverts and gates) and creation of grassy openings to enhance habitat diversity. As with any other human activity on State lands, oil and natural gas exploration and development can impact the environment.

All State Forest lands in the Six Nations Unit have been under oil/gas lease contracts at some time during the past ten years. Leases on the mineral estate under Beaver Dams State Forest, and Dry Run State Forest terminated in 2008. Leases under Coon Hollow State Forest and West Hill State Forest will terminate under the primary term of their respective lease agreements in 2011 unless drilling or production operations commence on those State lands or lands pooled with those State lands prior to the lease expiration date in 2011. All other State Forests in this unit, including Sugar Hill State Forest (both 2A and 2B), Goundry Hill State Forest (1A and 1B), South Bradford State Forest, Cinnamon Lake State Forest, Meads Creek State Forest, and Erwin Hollow State Forest are currently held by production under the secondary term of their respective lease agreements. State oil and gas leases are normally for a period of five years (primary term) or as long as oil or gas is produced from the property in commercially paying quantities (secondary term).

Any development would be undertaken under terms and conditions of existing lease contracts. Recommendations outside the terms and conditions of current leases would be taken into account during future lease sales.

The following is a synopsis of public comments received related to Oil and Gas Leasing.

One person asked for more gas companies. Another asked that oil and gas leases be kept to a minimum.

Staff identified issues:

It is NYS DEC policy to recommend excluding operations in surface areas with sensitive habitats (stream banks, wetlands, steep slopes, rare communities etc.) or intensive recreational use. Sites likely to be excluded from drilling, production and/or other surface occupancy for mining, are listed in Appendix M: Maps. Any proposal for mineral development other than oil and gas would require additional SEQR review.

Cooperative Agreements

State funding to optimally maintain the Six Nations Unit often falls short of what is desired. There is a need to identify additional funding and actively search out cooperative agreements and partnerships to maintain roads and trails and other facilities in the Six Nations Unit.

NYSDECs formal cooperative programs, called the Adopt-a-Natural-Resource Stewardship Program, and the Volunteer Stewardship Agreements, encourages individuals and groups to undertake activities that meet management needs of state owned natural resources. Multiple benefits of such partnerships have been identified; serving as a means to complete work that helps preserve, maintain and

enhance natural resources at minimal cost to the New York State. It is also an opportunity for organizations, groups and individuals to show willing support for conservation efforts, large and small. Such efforts may involve the cleanup of vandalism, litter pick up, establishment or maintenance of trails, providing interpretive services for school groups and other citizens, management of fish and wildlife habitats and other positive benefits to the site and natural resources.

Current volunteer groups under Adopt-a-Natural-Resource agreements include the Finger Lakes Trail Conference, the Trail Tamers Snowmobile Club, several individual horse riders, and the Upper Susquehanna Coalition.

No comments were received related to Cooperative Agreements.

Open Space Conservation

New York State has been a leader in recognizing the value of open, undeveloped land and began a formal Open Space Conservation program in 1990. The comprehensive Open Space Plan has been revised every three years since 1992 to adapt to shifting conservation priorities. In June 2009, Governor Paterson approved a plan prepared by DEC and the Office of Parks Recreation and Historical Preservation, entitled, 2009 New York State Open Space Conservation Plan. It provides an integrated statewide strategy for land conservation by sustaining New York's ecological integrity and rich biodiversity. NYSDEC will consider the purchase of selected parcels from willing sellers when funding becomes available.

The following is a synopsis of public comments received related to Open Space Conservation.

The Finger Lakes Land Trust asks that DEC protect in-holdings and key parcels that link existing state lands through acquisition and use of conservation easements.

Staff identified issues:

It is not NYS DEC's objective to significantly enlarge the size of the State Forest Land ownership. Certain parcels will be considered for purchase if they improve access; consolidate public ownership by eliminating in holdings; enhance recreational opportunity; protect significant ecological area, especially within Forest Matrix Blocks; are scenically important; contain threatened or endangered species; are of exceptional historical or cultural importance; improve watershed protection; or resolve other issues. It should be clearly understood that NYS DEC intends to acquire these parcels from willing sellers as funding becomes available.

Aesthetics

In addition to providing open space and a place to experience wildlife and wild land, public lands should also be pleasing to the eye and soul. Scenic vistas, the use of natural materials, and attention to quality design and maintenance are important components of effectively managing the Six Nations Unit. The challenge is to attract users to the site without destroying what has drawn them there in the first place. There is a strong demand for natural areas which present visually appealing landscapes.

The following is a synopsis of public comments received related to Aesthetics.

One person asked that trash not be dumped on their adjacent property on Templar Road.

Staff identified issues:

Staff recommends that garbage pickup continue from state land, and encourage “Pack it in, Pack it out” and “Leave no trace.”

Cultural Resources and Historic Preservation

A walk in the woods will often reveal objects from past users of the area. These artifacts, such as stone walls, glass bottles or flint arrowheads should be left where they are. The illegal removal or destruction of historic or archaeological resources is a continual problem.

The following is a synopsis of public comments received related to Cultural Resources and Historic Preservation.

One person asked that markers be placed at former historic home sites with the names of the settlers. Another asked for the maintenance of historic stone walls

Current Known Illegal Use

Regular patrols are made by law enforcement officials such as Forest Rangers, Environmental Conservation Officers and even local Sheriff Deputies of the Six Nations Unit, and all other NYS DEC lands. But with the limited resources available it is difficult to stop all illegal activities such as:

- ATV and dirt bike use
- Off road driving
- Dumping / littering
- Vandalism
- Construction of permanent blinds and/or tree stands
- Harvest of ginseng and protected plants
- Cultivation of marijuana
- Poaching
- Underage drinking
- Boundary line encroachments / trespass
- Non-permitted use of state land

Whenever possible, fines or other punishments as the law allows are imposed. As money and other resources allow the damage is fixed, dumping is cleaned up and illegal plants are removed.

Policy Constraints

The laws, regulations, and policies listed below provide broad guidelines within which this plan is prepared. The Environmental Conservation Law of the State of New York is available to the public at local libraries, NYS DEC offices, from private vendors, and at www.dec.state.ny.us/website/regs/index.htm/ on the internet.

State Laws

- State Finance Law
- State Historic Preservation Act (SHPA) - Article 14 PRHPL

Environmental Conservation Law (ECL)

- ECL Article 8 - Environmental Quality Review
- ECL Article 9 - Lands and Forests
- ECL Article 11 - Fish and Wildlife
- ECL Article 15 - Water Resources
- ECL Article 23 - Mineral Resources
- ECL Article 24 - Freshwater Wetlands
- ECL Article 33 - Pesticides
- ECL Article 51 - Implementation of Environmental Quality Bond Act of 1972
- ECL Article 71 - Enforcement

New York Code Rules and Regulations (6NYCRR)

- Title 6
 - Chapter I - Fish and Wildlife
 - Chapter II - Lands and Forests
 - Chapter III - Air Resources
 - Chapter IV - Quality Services
 - Chapter V - Resource Management Services
 - Chapter VI - State Environmental Quality Review
 - Chapter VII- Subchapter A
 - Implementation of EQBA of 1972
 - Chapter X - Division of Water Resources

NYS DEC Policies

- Strategic Plan for State Forest Management
- Public Use
- Temporary Revocable Permits
- Motor Vehicle Use
- Timber Management
- Unit Management Planning
- Pesticides
- Prescribed Burns
- State Forest Master Plan
- Inventory
- Acquisition
- Road Construction
- Motorized Access Program for People With Disabilities (MAPPWD) (CP-3)
- Best Management Practices (Water quality)
- General Freshwater Wetlands Permit for Wildlife Management Area Management Activities
- Bureau of Fisheries Fish Stocking Policies
- Archaeological Site Protection
- Archaeological Research
- Volunteer Stewardship Agreements Policy
- Adopt a Natural Resource
- Memorandum of Understanding with BLM for FYO 2004/2005 (leasing of gas wells)
- ATV Policy for Public ATV Access to Recreation Programs

Special Management Zones
Plantation Management on State Forests
Rutting Guidelines
Retention on State Forests
Etc.

Federal Law

Americans with Disabilities Act
Federal Wetland Law 404 - Water quality
Federal Land Policy and Management Act of 1976 (FLPMA)
National Environmental Policy Act of 1969 (NEPA)
General Stormwater SPDES Permit.
Etc.

GOALS AND OBJECTIVES

Vision

The vision of this plan is to ensure the biological integrity, improvement and protection of the Six Nations Unit. This shall be done within the multiple use concept of management, which strives to serve the needs of the people of New York State by providing a broad based, biologically diverse ecosystem. Management will be considered over a broad geographical area, not only to ensure the biological diversity and protection of the ecosystem, but also to optimize the many benefits to the public that these lands provide.

The legal mandate enabling the Department of Environmental Conservation to manage state forests for multiple use is located in Article 9, Title 5, of the Environmental Conservation Law. Under this law, state forest lands shall be forever devoted to “reforestation and the establishment and maintenance thereon of forests for watershed protection, the production of timber, and for recreation and kindred purposes”.

As stated earlier, it is the policy of the NYS DEC to manage state forests for multiple use to serve the needs of the people of New York State. This management will be carried out not only to ensure the ecological enhancement and protection of the forest ecosystem, but also to optimize the many benefits to the public that forest land provides. Management of state forests will be directed toward those activities which will enhance the resources of the land. They will be carried out in a manner which reflects the lands capability for these uses and strives to optimize the benefits of state forests to the public.

NYS DEC lands within Six Nations Unit are unique compared with most private properties in the surrounding landscape. Private landowners have differing management objectives and property size is generally much smaller. State lands provide large expanses open to public recreation. State land management planning horizons extend over a very long time frame. This allows for a commitment to provide healthy and diverse ecosystems and to manage and enhance unique vegetative types.

To achieve the vision, this plan will provide specific management goals with measurable planning objectives. The objectives will be augmented and supported by a plan of action and a timetable. We have chosen, for planning purposes, to separate these into categories, while recognizing that they are interrelated.

Factors such as budget and staff constraints, wood product markets, and forest health problems may necessitate deviations from the scheduled management activities.

Following this chapter of the plan is a MANAGEMENT ACTIONS SUMMARY TABLE, this table is a summary of all the *Management Objectives and Actions for the Six Nations planning unit*. Each action has been given a priority code and an estimated cost for the 10 year plan period. The figures for the 10-year costs are *estimates* for budgetary planning purposes. Actual costs are determined at the time the action takes place. As required by New York State Policy, lowest acceptable bid will be used for all state contracts. Budgeted amounts are not directly allocated to these individual action costs, and actual amount received is likely to be much less than the total amounts indicated in the table. See the

Funding section on page 45 for further discussion on budgeting for this and other State lands under NYS DEC management.

Access

The management goal for access is to maintain an infrastructure system sufficient to manage the Unit's natural resources and provide for public use of the area. Access is a basic necessity for both public use and land management. The existing public road infrastructure provides adequate public access throughout most of the Unit.

Roads

Some portions of the town roads are seasonal and are not maintained for winter travel. Other roads have been officially abandoned; others have not been maintained in years. This lack of maintenance means portions of several State Forests are not accessible, except by foot. Some have continued to have vehicle traffic, others have not. (When a road is officially abandoned it may revert to whoever owns the property it crosses, subject to any outstanding deed restrictions.).

In the mid 1960's the Town of Orange indicated that Maple Lane had never been officially abandoned, and maintenance was turned back over to the town in late November 1968. However in recent years they have not done any maintenance from the intersection with Tower Hill Road south to the 90° turn, but NYS DEC has added gravel and graded it in an effort to keep the road drivable. That portion of the road does include two sections that were re-routed and constructed by the CCC crews. (See photo page 5) No paperwork can be found in the Bath NYS DEC office indicating that the Town of Orange has officially abandoned that section of Maple Lane, however they do appear to have abandoned maintenance. By default, it has become a Public Forest Access Road, and will be gated at both ends. The gates will be locked open most of the time. In most years they will be locked closed at the end of big game season, and re-opened in early April after the road will support vehicle traffic. NYS DEC reserves the right to close them at other times of the year to prevent damage to the resource.

In 1962 the Town of Orange provided a list of roads abandoned between 1925 and 1930, scanned copies are located in Appendix L: Known Official Road Abandonments. Unfortunately road names and land owners have changed over the years, resulting in uncertainty of the exact location of these roads. Baker Hill Rd (#4 on the list, ab. 1928) appears to be the road that used to run from CR 16 to Chambers Rd over Coon Hollow State Forest. Pine Knob Rd (#6 on list, 1929) appears to match the distance between the intersections with Aikens Rd and CR 21. For many years both sides of that intersection have been known as Sickler Rd. No name given, #5 on the list, may be the Schuyler Co. portion of Dennis Rd which crosses South Bradford State Forest.

In 1932 the first part of Goundry Hill State Forest was purchased by the State of New York. In 1935 Town of Orange Town Superintendent of Highways issued a letter stating that the northern portion of Corbett Hollow was officially abandoned. Given the fact that New York State had acquired lands for which Corbett Hollow Road was the only access indicates that the road was used by the public in order to gain access to public lands, and had in fact, not been abandoned. This factual and legal presumption is supported by Highway Law §205-b. Therefore, in 1935 when the Town Superintendent of Highways of the Town of Orange filed a certificate of abandonment pursuant to Highway Law §234 (now Highway Law § 205--abandonment, and 205-b--qualified abandonment) for Corbett Hollow Road, it could have

done no more than qualified abandoned Corbett Hollow Road. This is because Corbett Hollow road is necessary for ingress or egress from both privately and publicly owned lands.

As mentioned above, the qualified abandoned section appears to start before the state forest boundary, resulting in a mix of private and state ownership along the abandoned sections. In the years since 1935, on several occasions, NYS DEC has repaired the road in as far as the turn around, including across the private sections. In recent years one of the neighbors has posted the road against trespass, in spite of the above, and their deed stating that Corbett Hollow Road is a right of way for lands held behind. With a lot of engineering and construction work it would be possible to connect from Monterey-Sexton Hollow Rd across South Bradford and Goundry Hill State Forests to Corbett Hollow Rd. There is a lot of steep hill in between, and would be a very expensive project, because of this, the preferred method is to continue using the existing road.

The Town of Orange officially abandoned 6.84 miles of road in 1980, most of which impacted access to state forest land. Including the roads of Parks Hollow, Sickler, Webb and Yorski, all located on, or near, Sugar Hill State Forest, Guiren Rd on Goundry Hill State Forest, Gas Well and Duran Rd on Cinnamon Lake State Forest, and Moody Rd to Beaver Dams State Forest. Moody Rd was taken (by condemnation) by the state for public access at that time. This also impacted several privately owned lands along Guiren Rd. and Duran Rd.

Guiren Rd starts at Goundry Hill Rd, crosses through Goundry Hill State Forest, onto private land, then back onto Goundry Hill State Forest. The original road bed wanders over the hill and back onto private land, the drivable road transitions to Haul Rd and finally to MAPPWD trail. Along the way Guiren Rd passes by several private cabins in the private section, a cabin just over the line on private without legal road access, and an active gas well, finally ending at a scenic over look of Meads Creek Valley.

Duran Rd is along the boundary between Schuyler and Steuben Co, and is known as Duvall Rd in Steuben. Like Guiren Rd, it has both private and state ownership along it. In 2002, in cooperation with the neighboring interior private landowners, NYS DEC repaired the portion through Cinnamon Lake State Forest to Haul Rd standards, and gated both ends with double locks.

The State of New York owns a permanent easement for public access that connects Hornby Rd (aka Monterey-Beaver Dams Rd) to Beaver Dams State Forest, this easement is currently impassable to vehicle traffic. In addition, no parking exists, except for one car at the very end of the "road". The first 0.4 mile of road will be repaired to Public Forest Access Road standards, the remainder will be stabilized to prevent further erosion. A gate and a four car parking lot will be constructed near the end of the repaired section.

The entire east side of Erwin Hollow has no access due to a classified stream and steep hillside. The old farm lane (Stone Silo Access Trail) does not legally connect with any town road. Land or road ROW acquisition is the best way to solve this issue.

The middle section of Chambers Rd on Coon Hollow State Forest has not been maintained in years, and is used as a source of destructive "mudding". Several years ago the Town of Orange attempted to abandon a section of it, but failed. If the town of Orange succeeds in abandoning that part of that road NYS DEC will gate it at both ends and scout relocations to construct to Haul Road standards.

Several roads may or may not be abandoned, which complicates use, maintenance and law enforcement for those areas. An incomplete list includes:

- Dry Run State Forest - Wildcat Hollow (crosses private and connects to Duran Rd on Cinnamon Lake State Forest), McCloskey Rd, Hudson Rd,
- Sugar Hill State Forest - Love Rd, the northern portion of Maple Lane, name-unknown road located between Templar Rd and Locust Lane, Tuscarora Trail (aka Templers Access), Sickler Rd in the town of Reading, A-Trail headed east from Evergreen Hill Rd Campsite #2 and then south on Mohawk Trail until about the gas well, name unknown between Westerfield Rd and CR 16, southern end of Fish Hill Rd.
- South Bradford State Forest – portions of Moss Rd (aka Cotton Hanlon’s Access Rd), and Dennis Rd.
- Coon Hollow State Forest – Coon Hollow Access Trail used to connect to Chambers Rd, and name unknown that connected between Coon Hollow Access Trail and Chambers Rd.
- Goundry Hill State Forest – name unknown connected between Corbett Hollow and Nadjadi Rd/Yawger Hill Rd.

There are two deeded Rights of Way (ROW) for private landowners that cross Sugar Hill State Forest. One is over Pine Knob Rd, from the private in holding to Aikens Rd, the other is from Maple Lane across proposal T.

Three fords are used for crossing streams within the Six Nations Unit, all on roads that may, or may not have been abandoned. Two are located on Wildcat Hollow of Dry Run State Forest and one at the beginning of Coon Hollow Access Trail on Coon Hollow State Forest. Over the decades, Coon Hollow Access Trail has had several culverts washed out in high water events, and it is located to close to Coon Hollow Rd to have enough room for a bridge, so a vented concrete ford will be constructed. Additional permits and design layout is needed before construction starts. The two fords on Wildcat Hollow have more stable bottoms and receive very limited use, although the road has continued to be occasionally used for access by the private landowner(s) on the north side of Dry Run State Forest. At this time no plans for bridging or placing a culvert in place of these fords.

Parking

In some areas there is a need for additional parking to alleviate safety problems which occur when users park on existing road right-of-ways. Staff identified a need to create or improve / redesign parking areas at the following locations:

(See also Appendix M: Maps)

- Coon Hollow State Forest – Two areas along Coon Hollow Road, one area along County Route 19, and one area on Chambers Road.
- Goundry Hill State Forest – One area on Guerin Road near the existing well pad.
- West Hill State Forest – Redesign areas near north boundary along either side of West Hill Road.
- Meads Creek State Forest – Redesign area along County Route 26 to avoid having vehicles in the brook.
- Beaver Dams State Forest – Reconstruct old Moody Road with parking lot and gate for access from Hornby Road
- Dry Run State Forest – Develop current informal parking areas on Harrison Road and Duran Road.

- Sugar Hill State Forest – Improve area on County Route 23, including a pit privy to deal with the sanitation issue. It will be constructed out of sight of the road, but signed at the parking area. Improve County Route 21/Seneca Trail entrance, this is a large field for overflow parking and camping, the entrance road/trail needs gravel, the field will remain grass. Construct a new parking area at the end of (south) Love Rd, off of Cross Rd.

Gates/Barricades

Construction of gates restricting motor access to haul roads and access trails will continue. The costs to upgrade haul roads for public access are prohibitive. Access restrictions are needed to maintain the “backwoods character” of the land as well as protecting sensitive areas. NYS DEC reserves the right to limit access to state lands when public safety issues occur, or damage to the infrastructure or other resources is likely.

Staff has identified the need for additional gates and/or other barricades at the following locations:
(See also Appendix M: Maps)

- Sugar Hill State Forest
 - Pine Knob Road – install 2 gates (locked open for the majority of the year)
 - Maple Lane (north end)- install 2 gates (locked open for the majority of the year)
 - Maple Lane and Onondaga Trail – Replace rock with gate
 - Tower Hill Road and Seneca Trail – Replace existing gate
 - Old Love Road and CR 23 – Block with rocks
 - Evergreen Hill Road and A-trail (Evergreen Hill Rd Campsite #2) – install 2 gates
 - A-trail and Donovan Hill Rd – install 1 gate
- Goundry Hill State Forest
 - Guiren Road – install 1 gate on at beginning of Guiren Trail
- Beaver Dams State Forest
 - Moody Road – improve barricades on Stevens Road and south end of Moody Road.
 - Construct 1 gate at north Moody Road as part of reconstruction.
- Coon Hollow State Forest
 - Chambers Road – Barricade road if and when the Town of Orange abandons road.
 - Coon Hollow Access Trail – install 1 gate on the far side of the vented concrete ford.
- Cinnamon Lake State Forest
 - Hornby Rd Haul Road – install 1 gate (locked open for the majority of the year)
 - Cinnamon Lake Trail – install 1 gate
- Erwin Hollow State Forest
 - Erwin Hollow Access Trail – install 1 gate
- South Bradford State Forest
 - CCC Rd – install 1 gate (locked open for the majority of the year)

Area Signs

Most of the area signs are in good condition. Staff identified the following areas where signs are in need of repair or replacement or where additional signage is needed:

- Sugar Hill State Forest – Entrance to Sugar Hill Recreation Area
- Coon Hollow State Forest – County Route 19
- Meads Creek State Forest – County Route 26
- Dry Run State Forest – Near easterly end of Harrison Rd and near the Harrison Rd parking.

- South Bradford State Forest – Move sign from south end of CCC Rd to north end.

Boundary Line

The Six Nations Unit has about 170 miles of external boundary line. In addition to exterior boundaries the Unit contains about 56 miles of road frontage. (See Table 1, page 11) At the time of acquisition, or when a boundary dispute arises, licensed surveyors put pins in the ground at the corners, and blaze the trees along the boundary line. The blazes in the trees are painted yellow and posted with DEC State Forest signs. All road sides are signed within the state forests. Road sides are not painted, as this can give a false impression of where the actual boundary is located.

Current policy is to repaint the blazes and re-sign these boundaries every five to ten years to clearly delineate state forest lands. About 0.4 miles are common line between Goundry Hill and South Bradford State Forests, and about 0.4 miles are common line between Cinnamon Lake and Coon Hollow State Forests. These interior lines are not maintained. See the table below for a year by year schedule of this activity, by state forest. Staff identified no known issues with boundary line encroachment or trespass. However, should any such issues arise in the future; a re-survey of boundaries in question may be necessary.

There may well be instances that are not known at this time, however, development of new or additional facilities will only be under taken after due consideration in the Unit Management Planning process.

Table 10: Management Objectives and Actions for Access

Management Objectives		Mgt. Action #	Management Actions	Frequency of Action*
1	Identify need for additional access	1.0	Asses site(s)	As Needed
		1.1	Receive public comments	On-Going
		1.2	Solicit public comments	Every 10 yrs (as part of the UMP process)
2	Maintain roads	2.0	Inspect culverts	Annually
		2.1	Replace culverts on about a 25 year interval, or when failure occurs.	5 culverts per year
		2.2	Public Forest Access Roads - grade and maintain surface.	Every 2 years.
		2.3	Haul Roads - grade and maintain surface.	Every 5 yrs
		2.4	Mow roads right of way	Annually
3	Construct and/or repair roads	3.0	Construct vented concrete ford on Coon Hollow Access Trail	Year 2

Management Objectives		Mgt. Action #	Management Actions	Frequency of Action*
		3.1	Repair about 0.4 mile of Moody Rd to Haul Road standards	Year 8
		3.2	<i>If</i> the Town of Orange abandons Chambers Rd. – Stabilize erosion and relocate and/or repair to Haul Road standards	Only after Town of Orange abandons the road.
4	Construct additional parking lots	4.0	Locate and construct parking lots per the above list.	One per year
5	Maintain parking areas	5.0	Litter removal	At least annually.
		5.1	Maintain all parking areas	Every 5 yrs
		5.3	Maintain informational signs	Annually
		5.4	Mow all parking areas	Annually
6	Control access	6.0	Locate and construct gates per the above list.	Years 2, 4, 6, 8, 10
		6.1	Maintain gates and signs	Annually
		6.2	Enforce NYS DEC policies	On-Going
7	Identify state property boundary lines.	7.0	Paint and post boundaries about every 5 years.	Goundry Hill SF – Yrs 2 & 7 Sugar Hill SF – Yrs 3&8 Coon Hollow SF – Yrs 5&10 S. Bradford SF – Yrs 1 & 6 West Hill SF – Yrs 1 & 6 Meads Creek SF – Yrs 1& 6 Beaver Dams SF – Yrs 5& 10 Dry Run SF – Yrs 5& 10 Erwin Hollow SF – Yrs 5& 10 Cinnamon Lake SF – Yrs 1 & 6
		7.1	Identify and resolve boundary encroachment issues. (No currently known issues.)	As Needed
		7.2	Survey and blaze boundaries. (No currently known issues)	As Needed

Management Objectives		Mgt. Action #	Management Actions	Frequency of Action*
		7.3	Repair and replace area signs as they are vandalized or fade.	Year 5
		7.4	Place new area signs on Sugar Hill, Coon Hollow, Meads Creek and Dry Run State Forests. Move sign on S. Bradford State Forest.	Year 1

*Factors such as budget and staff constraints, wood product markets, and forest health problems may necessitate deviations from the scheduled management activities.

Timber and Vegetation Management

Plant communities are, by nature, dynamic and ever-changing. Young stands get older and species composition changes with time. Management of vegetation can accelerate or slow down these inevitable changes in vegetative types and stages. The Six Nations Unit Management Plan strives to maintain a balance of vegetative types and vegetative stages, the purpose of which is to enhance species diversity and abundance.

Staff has identified management objectives which strive to maintain a balance of vegetative types and stages. This balance is intended to enhance biodiversity, produce healthy and sustainable forest resources and enhance wildlife habitat diversity.

The Six Nations Unit is characterized by a variety of vegetative types. Northern hardwood forests predominate on the north facing slopes and oak-hickory forests occupy the south facing slopes. Past man-made disturbances have created even more diversity. Many of the formerly agricultural fields for example have reverted back to pioneer forest types comprised of aspen, red maple and white pine.

The identification of large, unfragmented forested areas, also called matrix forest blocks, is an important component of biodiversity conservation and forest ecosystem protection. One of those forest blocks covers most of the Six Nations Unit Management Plan Area. See Appendix M: Maps and Chapter 2 of the *Strategic Plan for State Forest Management* at www.dec.ny.gov/lands/64567.html.

Commercial Timber Sales

The primary method used to influence the timber and vegetation on State Land is the commercial sale of timber. Tables 6 and 7, listing vegetative types and stages, are located on pages 24 and 26 in the Timber and Vegetation section.

Timber resources include hardwood and softwood sawtimber, pulpwood, and firewood. Some of the factors affecting timber demand on the Unit include timber value, distance to markets, timber species and quality, the availability or scarcity of similar timber in the area, international trade policies and market demand.

The demand for timber on the Unit is part of the larger regional timber market which is part of the global market for wood products. For example - hardwood trees grown and cut on the Unit's State

Forests are often purchased by local loggers or sawmills, sawn into lumber at a mill within the region, and may eventually end up in a consumer product sold in Europe, Asia, or South America. The United States is a large part of the global market and has the highest per capita wood consumption of any nation on the planet. Wood products have been essential to the development of our country and continue to be an essential need of our society. As worldwide population continues to increase and the economies of other countries develop, there will be a continued long term increase in the global timber demand.

At the local scale, there is a somewhat different demand for wood products. While many local loggers supply larger mills with hardwood logs, lesser valued products such as hemlock or larch logs and firewood can be profitably cut and sold to local markets. Hemlock and larch are often sawn by small local band mills for use in barn construction. Firewood is cut by individuals for their own use or for resale to home owners.

The authority to sell forest products from NYS DEC administered lands is provided by the Environmental Conservation Law. To perpetuate the growth, health, and quality of the forest resources, the Department has implemented a sustained yield timber management program for State Forest lands.

The program is governed in part by a Timber Management Handbook which includes both policies and guidelines to insure that management is carried out in a deliberate and professional manner. The Timber Management Handbook directs and regulates the practice of timber management on NYS DEC lands. This handbook contains technical references, as well as direction on regulation, allowable cutting, silvicultural systems and procedures. For more information on forest management, see Chapters 2 and 6 of the *Strategic Plan for State Forest Management*, at www.dec.ny.gov/lands/64567.html.

Other sources of direction for NYS DEC timber and vegetation management activities include the *Strategic Plan for State Forest Management*, Commissioner's policies, Division directives and the guidance and thresholds established in the State Forest Commercial Sales Program Environmental Impact Statement (EIS). All timber management activities that may be carried out on this unit will comply with these guidelines and directives, as authorized under the Environmental Conservation Law. Direction is also given in the NYS DEC publication Best Management Practices for Water Quality, and in the recently issued Management Rules for Special Management Zones, Plantation Management on State Forests, Rutting Guidelines, and Retention on State Forests.

Forest areas that are considered for timber harvesting are prioritized based on the following criteria, in order of importance:

- 1) Adequate access
- 2) Present and future forest health concerns;
- 3) Current distribution of vegetative stages within the unit management plan area and surrounding landscape, including the Ecoregion habitat Gaps as per the *Strategic Plan for State Forest Management*;
- 4) Wildlife considerations;
- 5) Ability to regenerate stands (if a regeneration harvest);
- 6) Priority needs of management proposals that must be implemented from other unit management plans;
- 7) Market conditions;
- 8) Potential growth response of stands to treatment.

By law, any trees to be removed in a harvest must be designated, and paid for, prior to removal. Designation is made by NYS DEC forestry staff. After designation is completed, a fair market appraisal is conducted. No products may be sold at less than the fair market value. Forest stands are prioritized for treatment based on the criteria outlined above, and the desired future conditions identified by this Unit Management Plan. Prioritization is done by NYS DEC forestry staff, with input by wildlife staff.

The Environmental Conservation Law requires that different procedures are employed based on the appraised value of a timber sale. Sales that are appraised greater than \$10,000 are called “revenue sales” and sales that are appraised at less than \$10,000 are known as “local sales”. The New York State Comptroller must approve revenue sale contracts. The Regional Forester has the authority to execute local sale contracts. All sales valued at more than \$500 (and those less than \$500 which are thought to have “substantial public interest”) are publically advertised and competitively bid. Law requires that forest product sales can only be awarded to the highest responsible bidder. The Regional sub-office in Bath maintains a mailing list of prospective bidders for forest product sales. Those interested in receiving bid information should contact the Bath office.

Green Certification

In 2000, New York State DEC-Bureau of State Land Management received Forest Stewardship Council® (FSC®) certification under an independent audit conducted by the National Wildlife Federation - SmartWood Program. This certification included 720,000 acres of State Forests in DEC Regions 3 through 9 managed for water quality protection, recreation, wildlife habitat, timber and mineral resources (multiple-use). To become certified, NYS DEC had to meet more than 75 rigorous criteria established by FSC. Meeting these criteria established a benchmark for forests managed for long-term ecological, social and economic health. The original certification and contract was for five years.

By 2005 the original audit contract with the SmartWood Program expired. Recognizing the importance and the value of dual certification, the Bureau sought bids from prospective auditing firms to reassess the Bureaus State Forest management system to the two most internationally accepted standards - FSC and the Sustainable Forestry Initiative® (SFI®) program. However, contract delays and funding shortfalls slowed the Departments ability to award a new agreement until early 2007.

Following the signed contract with NSF-International Strategic Registrations and Scientific Certification Systems, NYS DEC was again audited for dual certification against FSC and additionally the SFI program standards on over 762,000 acres of State Forests in Regions 3 through 9. This independent audit of State Forests was conducted by these auditing firms from May until July 2007 with dual certification awarded in January 2008.

State Forests continue to maintain certification under the most current FSC and SFI standards. Forest products derived from wood harvested off State Forests from this point forward may now be labeled as “certified” through chain-of-custody certificates. Forest certified labeling on wood products may assure consumers that the raw material was harvested from well-managed forests.

NYS DEC is part of a growing number of public, industrial and private forest land owners throughout the United States and the world whose forests are certified as sustainably managed. The Department’s State Forests can also be counted as part a growing number of working forest land in New York that is third-party certified as well managed to protect habitat, cultural resources, water, recreation, and economic values now and for future generations.



Current and Future Vegetation Types and Stages

As noted above, the management objective is to strive to maintain a balance of vegetative types and stages. Presently, the State Forests within this unit do not have a balanced mix of vegetative stages, but do have an adequate mix of vegetative types.

In timber the different stages are divided into three size classes, seedling/sapling is up to 5 inches in diameter, pole timber is 6 to 11 inches and sawtimber is 12 inches and up. The most recent forest inventory data shows there is an over abundance of pole size timber making up about 56% of the acreage: the rest is split between the sawtimber size at about 33%, and the seedling/sapling size with only about 7%. Less than 1% of the Unit is classed as grass or brushy openings; and, about 4% was in the pond/wetland/other categories.

For a better distribution of stages, seedling/sapling acres should be created, and sawtimber encouraged, primarily out of the stands currently of pole size. It is to be expected that, at least some, pole sized stands will move to the sawtimber size class on their own as a result of growth.

There are opportunities to create some seedling/sapling acres by treating mature sawtimber areas, but this must be done with discretion to avoid reducing the total number of sawtimber acres by a significant amount. It is expected that some of the acreage listed as "plantation sawtimber" will be converted to "hardwood seedling – sapling" during this planning period, either through management actions or natural processes.

Stand composition and vegetative type are influenced by many things. For these forests the most important factors would be:

- 1) Site capability
- 2) Seed source
- 3) Past management
- 4) Deer Density

Please note that it is impossible to predict exactly what our percentages of the various types and stages will be at the end of this plan period. This is due to two factors:

- 1) The significant role played by natural forces in the type and stage exhibited by any stand.
- 2) The fact that most tree species do not lend themselves to management over a 10 year period. In some cases it may require 40 - 50 years before the results of any given management action can be adequately assessed.

Success in this objective will be measured simply by a decrease in pole timber acreage, with a corresponding increase in seedling / sapling acres or sawtimber acres.

There is a low percent of grassy/brushy openings, about 0.5%, which is a decrease of more than 2% from the 1998 Six Nations Unit Management Plan. Over the 10 years of this plan that amount should be increased to 1%, or an additional 112 acres.

Inventory

Division policy requires that a forest inventory be conducted every 10 years and whenever stands are changed by any silviculture operation or by the forces of nature. In addition, stands with inventory 10 years or older will be reinventoried before any silvicultural treatments is conducted. Forest inventory is the critical task in the vegetation management planning process, as it forms the basis for all science based vegetative management decisions in this plan.

Forest inventory is accomplished by a statistical analysis of stands. Samples are taken from random locations (called plots) within each stand. Information collected during a forest inventory includes, among other items, tree and shrub species and size, forest type, tree density, forest health issues, topography, drainage, previous management, and site limiting factors. The required number of plots for each stand varies according to the variability of the stand, subject to a minimum number.

Silviculture

When managing forests, foresters employ two silvicultural systems to mimic natural disturbance patterns and promote biodiversity, even-aged and all-aged management.

Even-aged Management

Trees in an even-aged stand originated at approximately the same time, either naturally or by planting. They grow, are cared for, may undergo various intermediate cuttings during their development, and they are ultimately removed in one or more major harvest cuts after which a new stand is released or established. Consequently, such a stand has a beginning and an ending time.

Even-aged management systems are important because they create young forests that are necessary for the survival of many plant and animal species. They favor the establishment of shade intolerant and mid - tolerant tree species such as cherry, oak, and ash. These species have some of the highest timber and wildlife values.

Even-aged management favors the establishment of many of the hard mast species that are critically important to wildlife. Over the years, the availability of hard mast producing trees has declined in the landscape, as a result of diseases which have severely impacted American Beech, Butternut, and American chestnut trees.

Actions taken under even - aged management systems might include

- 1) thinnings of young stands (likely to be non - commercial)
- 2) intermediate cuts of middle aged stands (usually commercial)
- 3) actions aimed at regenerating stands (generally commercial)
 - a) shelterwood (either two cut or three cut)
 - b) seed tree
 - c) final harvest (clear cut)

All-aged Management

The all-aged management system differs from the even-aged system in several ways. Instead of maintaining one dominant age condition in the stand, this system establishes and maintains many age groups ranging from seedlings and saplings to very large, mature trees.

All-aged management uses two different harvesting methods: single tree selection and group selection.

Single tree selection is used to maintain an unbroken forest canopy as desired in the all-aged forest areas. The single tree selection system removes individual trees throughout a forest stand, thereby minimizing disturbance to the forest canopy. The small opening created by single tree selection limits the amount of sunlight that can penetrate to the forest floor. As such, the single tree selection system encourages long-lived shade tolerant tree species such as sugar maple, and eastern hemlock.

Group selection removes small groups of trees, in an attempt to mimic natural disturbance regimes. Group sizes will vary depending on the species group being managed. As group size increases, the differences between this system and an even - age system begin to blur.

Current and Future Management

Due to the current vegetative types, stages, and species assemblages presented by these forests, we expect that the even - age system will continue to be the primary silvicultural system applied over this unit during this planning period. Note that this is only for this planning period, and may change as vegetative types and stages change.

A variety of silvicultural techniques will be used to manage the forests within this unit, including:

- 1) converting even-age stands to all-aged stands (where site and species assemblages are favorable)
- 2) thinning and regenerating, even-aged stands
- 3) establishing protection areas to maintain and enhance diversity
- 4) protecting ecologically sensitive areas such as stream banks, wetlands, and steep slopes from intensive management.

Protection areas receive special consideration whenever management activities, of any kind, are planned which may impact these areas. Examples include:

- 1) seasonal harvest limitations,
- 2) restrictions of type and/or size of harvesting equipment,
- 3) special considerations for access.

Some protection areas are managed specifically to restrict or prohibit management activities. These practices may also be employed on other areas not designated as protection forest whenever site or vegetation protection is needed. Examples include: poorly drained soils, slopes over 15%, presence of historical or archeological features, recreational use, wildlife considerations, and preparation for forest regeneration. As might be expected from the landscape position, wetlands are not a large proportion of these forests. Wetlands do represent unique habitat types, and require special management zones.

Oaks and American chestnut are native tree species on the Six Nations Unit. However, historical management and disease have discriminated against these species. The objective is to maintain and enhance well-adapted, native species in the Unit by using the most current silvicultural knowledge.

Difficulties with regenerating oak, conifer and other shade-intolerant and mid - tolerant species, have led to shade tolerant species such as Sugar and Red Maple becoming well-established. The presence of shade tolerant species will challenge the land managers' abilities to meet the overall vegetative goals of balancing forest types and stages.

The establishment of oak stands on these forests came about due to an unusual set of circumstances, which will be rather difficult to reproduce. When the time comes to regenerate these oak stands it may be necessary to use techniques (such as prescribed fire, scarification, pesticide, etc.) which are not well known in this area. Outreach to user groups (and the general public) will be critical in explaining the science behind these techniques, why they are required, and why it is critical to reproduce the existing oak stands. In some cases additional forms, plans, and/or SEQR may be required.

See also the discussion under Even Aged Management, above.

See Appendix F: Timber Management for a stand by stand listing of commercial timber sales planned for the 10 years of this Six Nations Unit Management Plan. Appendix M: Maps includes maps of the planned commercial treatments. This does not include any pre-commercial treatments for any stands. Pre-commercial is a stand treatment when the trees are too small to sell for profit, requiring the payment of someone to do the work. In addition, properly trained volunteers, or prison work crews, can also do the work. When prison work crews are available, or money to contract for work is available, the stands will be evaluated, starting with the ones in the seedling-sapling and pole timber sizes.

Special Management Zones, Retention on State Forests, and Rutting Guidelines

All silvicultural actions taken under this Unit Management Plan are also constrained by the *Strategic Plan for State Forest Management*, and policies for Special Management Zones, Forest Retention Guidelines, and Rutting Guidelines. Additional information available at: www.dec.ny.gov/lands/64567.html

The "Special Management Zones" establishes zones around specific features (intermittent streams, vernal pools, wetlands, etc.) where management must be modified as compared to what is permissible in the general forest zone. The actual configuration of the zones can only be done during sale layout, following field reconnaissance, which is beyond the scope of this plan. See also the Fish, Wildlife and Habitat, Fish and Wildlife Habitat and, Watershed and Wetlands Protection sections for further details. In 2006 a new forest inventory system was implemented, which allows identification of areas receiving special management considerations.

The "Retention on State Forests Policy" is a strategy for conserving biodiversity in stands managed for timber production. Retention and recruitment of snags, cavity trees, coarse woody debris (CWD), fine woody material (FWM) and other features will advance the structural and compositional complexity necessary for conserving biodiversity and maintaining long term ecosystem productivity.

The "Rutting Guidelines" provide a tool to assist NYS DEC staff when conducting a timber harvest or Temporary Revocable Permit (TRP) on State Forests. A well planned and laid out access system, utilizing appropriate best management practices (BMPs), concentrates site disturbance, soil compaction, and rutting to these limited corridors while protecting water quality and overall site productivity of the general harvest area.

Protection Forest

Per the “Timber Management Handbook” protection areas receive special consideration whenever management activities, of any kind, are planned which may impact these areas. Examples include:

- 1) seasonal harvest limitations,
- 2) restrictions of type and/or size of harvesting equipment,
- 3) special considerations for access.

Some protection areas are managed specifically to restrict or prohibit management activities. These practices may also be employed on other areas not designated as protection forest whenever site or vegetation protection is needed. Examples include: poorly drained soils (wetlands), slopes over 15%, presence of historical or archeological features, recreational use, wildlife considerations, and preparation for forest regeneration. Wetlands do represent unique habitat types, and require Special Management Zones.

Plantation Management

Most of the conifer plantations on this unit were planted between 1932 and 1968, with additional plantings as recently as 1993. Many of the existing red pine plantations on the Unit are reaching their biological maturity. On most sites tree crowns are thinning and many stands are experiencing mortality. Natural succession within these maturing plantations is likely to follow one of two very different pathways.

The first would be characterized by slow decline of the existing softwood overstory and a gradual release of the current crop of young seedling - sapling hardwoods in the understory.

The second would be characterized by the existing softwood overstory being removed by a single catastrophic event (i.e. ice storm, heavy late season snow, unusual wind event, aggressive insect attack, etc.). This pathway would result in a much more rapid release of species in the understory.

The composition of the understory is the key in both cases. Note that, particularly in the case of the second scenario, if the understory is dominated by shrub species, a forested stand may not be the result. Rather a shrub savannah may result which might (depending on site factors) slowly succeed to a young hardwood stand.

In both scenarios there is also the possibility that, if site factors are favorable, some of the softwood species from the original plantation may participate in the “new” stand. Anecdotal evidence suggests that we should expect this, at least through the seedling - sapling stage. Long term persistence of these species on these sites may be somewhat less likely. Data regarding this type of situation has not been gathered long enough to have much information on the likely outcome. See also the discussion relating to desired conifer component for this management unit.

The objective for managing these plantations should be to try to mimic the first scenario. The stand is thinned to a density which will allow the establishment of desirable tree species in the understory of the stand. This treatment is later followed by the removal of the rest of the softwood overstory, once the number of new, young, trees in the understory is sufficient to assure a “new” stand.

While this is the primary objective, it is recognize that, in spite of these efforts, there will be those situations where nature will take its course and the second scenario will be played out. Once the

catastrophic event occurs, the decision on salvaging the remaining woody material on the site will need to be made. This will be done on a case by case basis, depending on site and regeneration factors. It is impossible for us to estimate, at this time, the acreage which could be involved in salvage operations.

In all cases efforts will be needed to comply with the recently issued forest retention standards regarding the type and number of trees to be retained when doing this type of work.

Legacy Plantations

The CCC, and later work crews, established a legacy of sound stewardship on state forest land through the planting of millions of trees. Where possible, NYS DEC will designate some plantations to help carry on this legacy. Although no living creature lives forever, these plantations would be grown beyond economic maturity and maintained for as long as possible. Every effort will be made to not deliberately regenerate these stands, although thinning to improve the health of the trees will occasionally occur.

Conifer Component

Forest ecologists have identified conifers as an important component of the ecosystem. The establishment of conifers through planting has created a significant conifer component on these forests. Area in conifer plantations amounts to about 25% of the total. Area in natural conifer stands amounts to about 10% of the area.

Staff has not identified softwood plantations on this unit which serve as a habitat niche for native wildlife species. Most of the plantations do not occur on soil types which are conducive to success by plantation conifer species. Therefore, the plan is not proposing to replant any plantations. The better course is to allow these areas to succeed (either through management intervention or by natural forces) to native, natural, vegetation. This may, or may not, include a significant conifer component.

For the purposes of this plan a conifer natural stand is any stand where the conifer species compose more than 33% of the stand, and it was of natural origins, not planted. Care must be taken to assure that the conifer natural stands “reproduce to type”; no conversion of conifer natural stands should occur as a result of management actions. In many cases, particularly as regards stands dominated by Eastern Hemlock, this will amount to a modified all – aged treatment.

Stand regeneration efforts in these cases may stretch over a number of years. Staff has not attempted enough work in these kinds of situations to be able to state with assurance exactly how long this might take, but 30 years is probably a fair estimate.

It should also be noted that there is at least one aggressive insect pest which preys on Eastern Hemlock (Hemlock Woolly Adelgid). If this insect becomes a serious pest in this unit, all of the above discussion becomes a moot point, and all we will be able to do is to watch as the forest composition changes.

Sugar Maple Sap

The tapping of hard (sugar) maple trees for the production of maple syrup and sugar is a long standing traditional forest product of the northern hardwood forest. Traditionally sap is collected in

individual buckets at each tap, but modernized production uses a system of tubes connecting many trees to a centrally located collection tank.

The tapping of trees does no long term damage to the tree health, but does reduce the quality of the lumber produced due to discoloration of the wood. More sap is produced from a tree with many branches and leaves, but clean, knot-free wood is produced from trees with few lower branches, thus any one stand of hard maple can be managed for better maple syrup production or better lumber production, but not both.

Stands or collection of road side trees which do not have the potential for successful production of quality lumber or are reserved from harvesting could be considered for tapping. At this time the procedures for this process are under review, but Sugar Hill State Forest stand E-2 and Coon Hollow State Forest stands C-3, D-7, and D-10 are considered suitable for tapping.

Grass and Brush Management

Most of the Six Nations Unit is within one of the designated Forest Matrix Blocks, historically and into the future, maintaining forest habitat is a primary focus, however it does not completely exclude the presence and maintenance of other habitat types such as grassland, brush or wetland. Currently the Six Nations Unit has a low percent of grassy/brushy openings, about 0.5%, which is a decrease of more than 2% from the 1998 Six Nations Unit Management Plan. Over the 10 years of this plan that amount should be increased back up to 1%, or an additional 112 acres. Any one grassy opening should be 4 acres, or more, in size. The timing on clearing to create these openings will depend on funding, because of this, an exact year of action has not been picked.

Many of the current, and future, grassland area's on the Unit have a secondary function of providing additional locations for camping or other recreational uses, or as utility corridors for electricity, pipelines or gas wells. Grassland is a very transitory type. NYS DEC has a long time horizon to assure that this type of habitat community survives over a long time horizon.

Existing, and future, grassland and brushy opening will need to be maintained, or they will revert to forest. Grass needs to be mowed at least every 3 years, and brush hydro-axed about every 5 years. If it isn't mowed the grass converts to brush and then the brush grows into trees. The clock can be set back even more by converting brush to grass, which if the funding becomes available, may be done. Applying lime, or even more rarely fertilizer, can enhance the health of grasses over invasive plants such as goldenrod. Fire can also be used to maintain an area in grasses. Most warm-season type grasses grow the best following a fire. Additional paperwork, such as a burn plan and SEQR are required prior to doing a controlled burn.

Wetland and Ponds

There is a very small acreage of wetland and pond habitats on the Six Nations Unit, less than 2% of the total acres. See the Fish and Wildlife Habitat section for further details about the construction of dugouts and/or ponds.

Forest Health Threats

DON'T MOVE FIREWOOD! New York State regulations prohibit firewood from being brought into New York unless it has been heat treated to kill pests. The regulation also limits the transportation

of untreated firewood to less than 50 miles from its origin. Many other states have similar restrictions on firewood transportation across state boundaries. The reason for this is other than their own feet and wings, the primary way exotic invasive pests spread is by hitching a ride on un-treated firewood or shipping containers.

Some level of insect, disease and natural disaster are recognized as being a beneficial factor in shaping our vegetation. Various endemic and epidemic occurrences of insect, diseases, fires and storms periodically impact the vegetative communities of New York State, including the Six Nations Unit. The professional foresters of NYS DEC will continue to observe the effects of these factors which influence the vegetation on the unit. Native insect species such as Pear Thrips and Fall Cankerworms are cyclic in population and may be expected to impact vegetation at some time in the future as they have in the past. By closely monitoring these outbreaks management actions may be able to lesson undesirable impacts.

However, invasive exotic insects, fungi, animals, or plants can cause big problems. Some exotics, such as chestnut blight, and beech bark disease, invaded years ago, and have all but exterminated the chestnut and beech tree. The hope is to avoid this again, by closely monitoring for new arrivals, and if possible eliminating them from North America before they can spread. At the time of this writing, infestation of introduced insects invaders posing threats to New York's forests include: Emerald Ash Borer, Sirex Wood Wasp, Hemlock Woolly Adelgid, and the Asian Longhorned Beetle.

Insects, fungus, wind, ice or snow storms can all cause unexpected but devastating damage to stands of trees. In the event of such widespread damage occurring, a salvage cut may be the best action. A salvage cut removes the dead and/or dying trees, and functions as a regeneration cut on an even aged management that Mother Nature initiated. This cannot be scheduled at this time, but has the potential to completely re-arrange the cutting schedule in Appendix F: Timber Management. If this happens, there is the potential to be a lot more acres regenerated.

Invasive plants are also crowding out native species. Current exotic invaders include Purple Loosestrife, Buckthorn, Honeysuckle, Garlic Mustard, Giant Hogweed, Multiflora Rose, and Japanese Knotweed. Unfortunately, there are many more that are not listed here. As money and time allow, they will be monitored, and when found, management actions taken. Depending on the species and location, actions could include prescribed burns, pesticides, or mechanical removal.

Integrated Pest Management

The application of control methods will be determined using Integrated Pest Management (IPM). IPM is a science-based decision-making process that guides land managers when investigating a pest situation. The IPM approach determines the most appropriate and cost effective management solution for the specific pest situation. IPM includes identification of the pest, understanding the use and significance of a site or the importance of protecting unique resources, and education of the people involved. IPM also establishes pest tolerance levels and monitoring protocols. Then, with the help of technical experts and on a case-by-case basis, NYS DEC foresters develop an effective, site specific and low risk strategy to manage the pest. This includes altering conditions which attracted pests to the site in the first place. IPM often involves changing human behavior as well.

The following priorities will guide the application of control methods with varying degrees of environmental impacts. The most impactful methods hold the lowest priority and will not be applied

unless all higher priority methods are not effective. Low priority methods will be applied in concert with higher priority methods in order to increase effectiveness. As new technologies are developed, they will be incorporated into management actions following appropriate review and assessment.

1. **Silvicultural Remedies**
Changes in forest composition and structure may create conditions that are less favorable to some invasive species.
2. **Hunting**
Invasive and nuisance species can be kept in balance within the ecosystem by applying hunting as addressed within the Deer Management section of the *Strategic Plan for State Forest Management*.
3. **Mechanical Control**
Digging, pulling or cutting may be effective in altering site conditions to control invasives and directly controlling some plant species.
4. **Grazing**
Although many invasive plants may be resistant to applied scientific grazing, this method may be appropriate for some species. Grazing on State Forest lands would require the availability of an agricultural partner along with staff and funding resources.
5. **Biological Control**
Biological control is the science of reconnecting invasive plants with the specialized natural enemies that often limit their density in their native ranges. The U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) is responsible for controlling introductions of species brought into the United States for biological control of plants, in accordance with the requirements of several plant quarantine laws, the National Environmental Policy Act, and the Endangered Species Act. Petitions for release of plant biological control agents are judged by a Technical Advisory Committee, which represents the interests of a diverse set of federal and other agencies. (Van Driesche, et al. 2002)
6. **Herbicide Treatment**
All pesticide/herbicide use will conform to guidelines identified in the Active Forest Management section of the *Strategic Plan for State Forest Management*.

Emerald Ash Borer

Exotic invasive species from other continents can cause serious forest health threats. One such threat currently causing concern is the Emerald Ash Borer (EAB) (*Agrilus planipennis*). A native of Asia, it was first detected as a well established infestation in Michigan, USA and Ontario, Canada in 2002. In 2009 it was detected in New York, and in 2010 found in northern Livingston County and central Steuben County. Every year since more EAB infestations have been found, and unfortunately additional ones are expected in the future.

EAB infests all species of ash (*Fraxinus* spp.), and has devastated millions of ash trees in North America. Adult beetles leave distinctive D-shaped exit holes in the outer bark of the branches and the trunk. Adults are roughly 3/8 to 5/8 inch long with metallic green wing covers and a coppery red or purple abdomen. They may be present from late May through early September but are most common in June and July. Signs of infection include tree canopy dieback, woodpecker damage, yellowing, and browning of leaves.

Current efforts are pointed toward delineating the infestation area and slowing the insect's spread to other parts of the state. NYS DEC current planning is contained in a document called the "Emerald Ash Borer Management Response Plan" a.k.a. The SLAM Document (SLOW Ash Mortality), the goal of which is to keep as many ash trees alive as long as possible, in as much of New York State as possible, for as long as possible. Additional information can be found at: www.dec.ny.gov/animals/7253.html including a PDF of the SLAM Document.

The Six Nations Unit is well within the EAB quarantine, and about half of it is within 5-10 miles of the Steuben County infection that and thus is considered to be high risk of EAB attack. If (or when) EAB gets established in the area it will change the look of sections of the Unit. Ash is the number one tree species in 43 stands, and the number two species in 119 additional stands, for a total of about 3,278 acres, or about 15% of the Six Nations Unit. Ash is more common in the valley bottoms than the hill tops that make up most of this Unit, however white ash is still a common component in many.

Sirex Wood Wasp and Hemlock Woolly Adelgid

Often, stands that are stressed by overcrowding become susceptible to forest health threats. One forest health threat in that category is the Sirex wood wasp (*Sirex Noctilio*). The Sirex wood wasp is a devastating pest of pine plantations. It is native to Europe and Asia and has destroyed millions of pines in Australia, South America and South Africa. In September of 2004, a Sirex wood wasp was discovered in a research trap in Fulton, New York. An expanded trapping effort in 2006 confirmed the presence of Sirex in most counties in western New York.

Utilizing literature from around the world, NYS DEC has developed management direction in regard to dealing with the Sirex wood wasp. The literature suggests that dominant trees with a good crown ratio in managed/thinned stands experienced very little to no damage from Sirex. Unhealthy, suppressed and over-crowded trees in unmanaged stands, on the other hand, experienced mortality rates of up to 65% over a three year period in one study. As the infestation in New York is still young, we do not yet know what the impacts will be. Therefore, silvicultural management options, at this point in time, do not include consideration for liquidation cuts or work to convert stands to a non-pine species composition, unless this is a management objective for other valid silvicultural reasons. Periodic, judicious application of thinning operations to maintain stand densities at levels recommended in applicable stocking guides for optimum growth is currently NYS DEC's approach to silviculture in consideration of the potential threat of Sirex.

It should also be noted that there is at least one aggressive insect pest which preys on Eastern Hemlock (*Hemlock Woolly Adelgid*). If this insect becomes a serious pest in this unit, the earlier discussion on maintaining a 10% conifer component becomes a moot point, and all staff will be able to do is to watch as the forest composition changes.

Giant Hogweed and Japanese Knotweed

Giant Hogweed is an invasive exotic plant that can cause severe skin and eye irritation, painful blistering, permanent scarring and blindness. It can grow up to 14+ feet tall and has huge leaves and large showy clusters of white flowers. It is a native of the Caucasus Mountain region between the Black and Caspian Seas. It was introduced to Europe and the United Kingdom in the late nineteenth century

and to the United States in the early twentieth century as an ornamental garden plant, and is now in the wild in Western and Central New York.

State wide this plant is being tracked and eliminated where possible. If you see this plant, *don't touch it!* Additional information is available on www.dec.ny.gov/animals/39809.html. As of the writing of this plan there are no known infestations on the Six Nations Unit, however if it is found in the future mechanical or herbicide removal will be attempted.

Japanese Knotweed was originally imported as a garden plant in the 1880s, for its green foliage and August-blooming flowers. Instead, it spreads like crazy, growing quickly along forest edges, stream banks and disturbed areas. Growing to 10 feet tall, it spreads over large areas with dense growth and crowds out native plants. Once mostly found on the valley floor it is increasingly found on the hill tops. It is resistant to many herbicides, and easily re-sprouts from roots or stems when cut or mowed. Nevertheless, NYS DEC staff is attempting to minimize its impact on the Six Nations Unit.

White Tail Deer and Feral Swine

White tailed deer are a native species that has a higher population level on the landscape than what was around historically. Deer love to eat young tree seedlings, and by doing so, play a major role in the success or failure of establishing young forests, particularly those comprised of shade-intolerant species such as oak or cherry. In accordance with established procedures used by NYS DEC to determine deer management decisions, a reduction in the number of deer on the landscape by liberal harvest via hunting is encouraged.

The term feral swine is often used to describe all swine species that are living unconfined in the wild. The definition often includes domestic pigs or pet pigs that have been released or escaped captivity, Eurasian boar (wild boar native to Europe and Asia also called wild boar, razorback, and Russian boar) and hybrids of the two. Feral Swine are a highly adaptable, destructive, non-native species. Feral swine have the potential to become permanently established if action is not taken immediately. Due to their destructive feeding behavior feral swine have the potential to have a major impact to wild fauna and flora including forest regeneration. For further information on nuisance wildlife see the Fish and Wildlife Habitat section.

Table 11: Management Objectives and Actions for Timber and Vegetation Management

See Appendix F: Timber Management for a schedule of stands and management actions, maps in Appendix M: Maps and Table 6 Vegetative Types and Stages for the Six Nations Unit.

	Management Objectives	Mgt. Action #	Management Actions	Frequency of Action*
1	Maintain knowledge of forest stands.	1.0	Perform State Forest inventories	Every 10 yrs.
2	Maintain healthy vegetation	2.0	Practice Integrated Pest Management	On-Going

	Management Objectives	Mgt. Action #	Management Actions	Frequency of Action*
		2.1	Reduce Deer population, to reduce damage to the low growing vegetation (understory).	Annually
		2.2	If widespread damage occurs, evaluate the damaged stands for salvage cut or other management action.	After damage occurs.
		2.3	Deal with invasive exotic plants or animals. Specific actions will be based on species and location, but include prescribed burn, pesticide and mechanical removal.	After invasive is found.
		2.4	Mechanical or herbicide removal of Giant Hogweed.	Annually
		2.5	Herbicide removal of Japanese Knotweed.	Annually
3	Protect water and soil quality	3.0	During Timber and Vegetation Management, follow “Special Management Zones, Retention on State Forests, and Rutting Guidelines” and other Best Management Practices (BMP’s) for water quality, per NYS DEC’s “Timber Management Handbook”	On-Going
		3.1	Designate stands into the Protection Forest category that have factors that require special considerations.	On-Going
		3.2	See also “Watershed and Wetlands Protection” and/or “Fish and Wildlife Habitat”	On-Going
4	Strive to maintain a healthy balance of vegetative types and stages by developing the following vegetative balance:			
	Grassy/Brushy Openings (105 current acres, plus 112 additional acres)	4.0	Create about 112 acres.	By year 10
		4.1	Maintain grassy openings with a 3 year rotation of mowing (or annually). Or annual burn. (105 current acres)	At Least Every 3 yrs. (Or annually)

	Management Objectives	Mgt. Action #	Management Actions	Frequency of Action*
		4.2	Maintain brushy openings with a 5yr rotation of hydro-axing.	Every 5 yrs.
	All Age silviculture – about a 20 yr cutting rotation	4.3	Stand entry on 136 acres located on 8 stands	See schedule, Appendix F: Timber Management
	Even Age silviculture, Natural hardwood at about a 100 yr rotation Plantation softwood at about a 75 yr rotation	4.4	Regenerate 1,850 acres located on 61 stands	See schedule, Appendix F: Timber Management
		4.5	Thin 4,240 acres located on 152 stands	See schedule, Appendix F: Timber Management
5	No Access - For one or more reasons, some stands cannot be accessed with modern logging equipment, even though some of them could be treated.	5.0	If access improves through additional acres being purchased, or new types of logging equipment is developed, these stands will also be <u>evaluated</u> for silvicultural activities.	After access improves.
6	Pre-commercial thinning	6.0	If funding or staffing becomes available, the seedling/sapling and smaller pole size stands will be evaluated for pre-commercial thinning.	When funding and/or staffing are available.
		6.1	Implement “pre-commercial thinning” or silvicultural activities in “no access” stands, After evaluation per 5.0 and 6.0, add to schedule, Appendix F: Timber Management	After 5.0 or 6.0
7	Roads, ponds, wetlands etc.	7.0	Maintain per “Unit Maintenance and Facilities Management” and/or “Fish and Wildlife Habitat” and/or “Public Recreation and Use”	On-Going

*Factors such as budget and staff constraints, wood product markets, and forest health problems may necessitate deviations from the scheduled management activities.

Watershed and Wetlands Protection

The Reforestation Law of 1929 mandates watershed protection as one of the most basic goals of the state forest system. The Six Nations Unit contains only one New York State protected wetland and four miles of streams that support trout. Waterholes constructed by the CCC program together with several small wetlands and 22 miles of streams supporting fish, constitute a large portion of the water and wetland environs.

Compliance with the New York State Freshwater Wetlands Act (ECL Article 24) and the Water Resources Law (ECL Article 15, Title 5) is required by NYS DEC when conducting management activities or construction projects that involve regulated activities within protected wetlands, water bodies, or streams.

Special Management Zones, Retention on State Forests, and Rutting Guidelines combined with Timber Harvesting Guidelines are mandatory for all silvicultural practices on state lands, require specific conservation practices which protect soils and water quality. The ECL dictates that, among other purposes, State Forests within this Unit be managed for watershed protection, and sound conservation practices and public desires.

Regulated activities within protected wetlands, streams and waterbodies include such things as clear-cutting vegetation and construction of ponds or road crossings. Normal maintenance and repair of existing structures is generally exempt from permit requirements. Well-managed water resources have multiple benefits, including quality fish and wildlife habitats, aesthetically pleasing sites, ground water protection, and flood water retention.

Since water and wetland environs are generally lacking on the area, an objective is to identify areas with a potential and need for additional water resources. The need for small dug-outs and a larger wetland development is elicited in the objectives for “Wildlife and Wildlife Habitat”.

Table 12: Management Objectives and Actions for Watershed and Wetlands

Management Objectives		Mgt. Action #	Management Actions	Frequency of Action*
1	Protect water and wetland resources	1.0	Utilize Best Management Practices (BMPs) for water quality on timber sales; gas well site construction; recreation facilities; and any other construction.	On-Going
		1.1	Control erosion through proper road and trail maintenance.	See Access and Unit Maintenance and Facilities Management

Management Objectives		Mgt. Action #	Management Actions	Frequency of Action*
		1.2	Comply with the Water Resources Law, Freshwater Wetlands Act, and Federal wetlands regulations	On-Going
		1.3	Follow Objective 3 in Table 11: Management Objectives and Actions for Timber and Vegetation Management	On-Going
		1.4	Identify areas with potential and need for additional water resources	On-Going
		1.5	Construct new water features in upland areas	See Fish and Wildlife Habitat

*Factors such as budget and staff constraints, wood product markets, and forest health problems may necessitate deviations from the scheduled management activities.

Fish and Wildlife Habitat

The fish and wildlife habitat goals for the unit are to maintain and enhance habitat for fish and wildlife species and to provide public access for activities including hunting, fishing, trapping, hiking, bird watching and other compatible outdoor recreational pursuits.

Management for birds and mammals will largely be driven by the age of the specific forest stand and its species composition. Most of the area is dominated by pioneer hardwoods which are largely in younger age classes. Efforts need to continue to achieve a balance of age classes, so wildlife species diversity and abundance are maintained. This includes establishing new forests by clear cutting as well as maintaining older age classes via selective harvest. All can be accomplished by continued attention to harvest of forest products. Natural conifer stands are an important component of the predominantly hardwood stands in the unit and should receive consideration to insure that they remain as a component in future stands.

A significant portion of the forest is conifer plantations. Such tracts often support only a few species of wildlife, especially if they are comprised of only one conifer species. Vegetative management should encourage the conversion of plantations to naturally stocked stands of greater diversity. Most natural hardwood stands are adequately stocked with white pine and hemlock, greatly enhancing wildlife habitat. See also the Timber and Vegetation Management section.

There is a robust diversity of amphibian and reptile species to be found here. Management efforts include creation of dugouts for breeding and activity centers as well as protection of sensitive shallow pools in swamp and bog sites. Protection of all wetland environs should enhance these species as well as others.

Many species of wildlife, from turkeys to salamanders, require sufficient water resources. Although a number of seasonal streams and water holes built by the CCC can be found, a large portion of the forest is lacking water and wetland environs. Inventory of existing sources will help identify areas with the greatest need. Dug-outs will be created as opportunity arises. The creation of larger wetlands within the Unit should also be given strong consideration when the opportunities arise. Larger wetlands would positively impact waterfowl, aquatic furbearers and a variety of songbird species.

On occasion small ponds or dugouts may be constructed as part of a forest product sale; however the majority is likely to be constructed as part of a partnership with the Upper Susquehanna Coalition (USC). The USC is comprised of representatives from 16 counties in New York and 3 in Pennsylvania and is a network of county natural resource professionals who develop strategies, partnerships, programs and projects to protect and enhance the headwaters of the Susquehanna River and Chesapeake Bay watersheds. USC members include Soil and Water Conservation Districts in NY and Conservation Districts in PA. Each member has signed a Memorandum of Understanding that reflects their endorsement of the development of non-point-source projects on a watershed basis. Through shared projects and regular meetings, the USC has maintained cooperation between its members and its many partners.

Threatened species exist on portions of the Six Nations Unit. Efforts to identify, improve and/or create critical habitats need to continue. See Appendix B: Animals of the Six Nations Unit Management Plan Area for a list of known animal inhabitants of the Six Nations Unit.

Nuisance Wildlife

Special attention to deer management is warranted given the ability of high white tail deer populations to negatively impact vegetative species diversity, as well as the major role they play in the success or failure of establishing young forests, particularly those comprised of shade-intolerant species such as oak or cherry. In accordance with established procedures used by NYS DEC to determine deer management decisions, a reduction in the number of deer on the landscape by liberal harvest via hunting is encouraged.

The term feral swine is often used to describe all swine species that are living unconfined in the wild. NYS DEC's goal is to eradicate feral swine from New York's landscape. Feral swine in New York can have tremendous negative impacts on native plants, native wildlife, livestock, agriculture, and humans including:

- Eurasian boars eat hard mast (acorns and other nuts) and directly compete with deer, bear, turkey, squirrel and waterfowl for food.
- Eurasian boars consume the nests and eggs of ground nesting birds and reptiles.
- Eurasian boars will kill and eat fawns and young domestic livestock.
- Eurasian boars will eat almost any agricultural crop as well as tree seeds and seedlings.
- Their rooting and wallowing habits destroy crops and native vegetation, cause erosion, and negatively affect water quality.
- Eurasian boars have razor sharp tusks and can be aggressive toward humans and their pets.

- Eurasian boars carry and can transmit several serious diseases including swine brucellosis, *E. coli*, trichinosis, and pseudorabies to livestock and /or humans. Some of these diseases, if introduced to domestic swine, can decimate the pork industry.

A confirmed report of a single feral swine on Coon Hollow State Forest was received by NYS DEC in 2011. A few additional reports have been located in the general geographic area covered by this UMP but no additional reports from state lands have been received to date.

Table 13: Management Objectives and Actions for Fish and Wildlife Habitat

Management Objectives		Mgt. Action #	Management Actions	Frequency of Action*
1	Manage habitats for endemic wildlife species and public use	1.0	Conduct all forms of woody vegetation management to achieve balance forest structure.	See Timber and Vegetation Management
		1.1	Develop and maintain up to 300 small ponds and dugouts to act as amphibian activity centers.	At least 2 per year, and no more than 100 per year.
		1.2	Manage conifers in natural forests	On-Going
		1.3	Protect and enhance rare plant and animal communities	Annually
		1.4	Convert plantations to natural communities	See Timber and Vegetation Management
		1.5	Identify, protect, and improve habitat for threatened/ endangered species	On-Going
		1.6	Develop larger (>1 acre) wetland	At least once as part of 1.1
		1.7	Survey for, identify, protect, and improve habitat for Species of Greatest Conservation Need (SGCN)	On-Going, or as funding is available
		1.8	Monitor invasive exotic plants or animals. Specific actions will be based on species and location, but include prescribed burn, pesticide and mechanical removal.	After invasive is found. (see Timber and Vegetation Management)
2	Encourage public use to enjoy wildlife resources	2.0	Assist local groups in utilizing and protecting wildlife resources	Annually

Management Objectives		Mgt. Action #	Management Actions	Frequency of Action*
		2.1	Under the Adopt-a-Natural-Resource Program, and the Volunteer Stewardship Agreement, work with local and governmental groups to enjoy wildlife habitat by building ponds, observation decks, nesting structure etc.	As opportunities arise – See also Public Recreation and Use
3	Manage and reduce nuisance wildlife populations.	3.0	See action 2.1 in the Timber and Vegetation Management section - Manage deer population to reduce damage to the low growing vegetation (understory).	Annually
		3.1	Remove feral swine from the landscape.	When found

*Factors such as budget and staff constraints, wood product markets, and forest health problems may necessitate deviations from the scheduled management activities.

Public Recreation and Use

One goal of the NYS DEC is to “Connect New Yorkers to Nature” by providing suitable opportunities for the public enjoyment of compatible recreational pursuits in a natural setting. Recreational use, including hunting, is a dominant and important use of the state forests comprising the Six Nations Unit. Dispersed recreation will continue to be encouraged over the entire Six Nations Unit. Use is variable by season and location, but can be characterized as intensive at the Sugar Hill Recreation Area. Located on the northern portion of the Six Nations Unit, the Sugar Hill Recreation Area receives the most recreational use of any state forest land in Region 8. Hundreds of visitors have used the area during scheduled archery events and facilities for horseback riding, picnicking and camping attract visitors to the recreation area on a regular basis. Many users are demanding more and better facilities, such as those found in state parks. Development of new or additional facilities will only be undertaken after due consideration in the unit management planning process. Other than facilities specified in this Unit Management Plan, stewardship activities will be limited to maintenance and rehabilitation of existing facilities.

Outside of the Sugar Hill Recreation Area, recreation is “extensive” rather than “intensive” and many people have voiced a strong desire for this to continue. The Six Nations Trail System and the Finger Lakes Trail/North Country Trail both cross areas of unbroken forest which provides a more remote experience to those who desire some degree of solitude.

One goal is to provide suitable opportunities for public enjoyment of compatible recreational pursuits in a natural setting. Under Environmental Conservation Law, NYS DEC is charged with

managing for a wide range of beneficial uses that can be attained without excessive environmental degradation or undesirable consequences. The public has a role in identifying both “beneficial uses” and “undesirable consequences”. Recreational opportunities will be planned from a perspective of possibilities available throughout Region 8. For a list of facilities available on the Six Nations Unit see Appendix D: Facilities and Appendix M: Maps.

Wildlife-related recreation, including wildlife viewing, hunting, fishing and trapping, is a dominant and important use of the Six Nations Unit. Users are encouraged to adhere to ethical standards and consideration for other recreationalists. Additional opportunities may be planned to the extent that they are compatible with habitat integrity and financial resources.

A geocache may be placed on state forest land, provided that it is labeled with the owner's name and address and installed in a manner that does not disturb the natural conditions of the site or injure a tree.

Many of the recreation facilities started out as farm lanes, logging skid road, town roads, log landings, gas well pad sites, etc. After they were no longer used for the original purpose many were converted to recreational use. Occasionally, forest product sales may affect recreational facilities. Depending upon the sale, there may be an opportunity to enhance the recreational facility. Potential enhancements include: relocation of a trail, conversion of a skid trail to a recreational trail by grading and installing water control measures, creation of parking areas, installation of vehicle control barriers and other structures. An assessment of impacts and possible enhancements will be done with each and every sale. As part of the active timber management, sections of multiple use trail, roads, parking lots, primitive campsites, etc may need to be temporarily closed to public use.

Application of the Americans with Disabilities Act (ADA)

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

The Americans with Disabilities Act Accessibility Guidelines

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

Currently adopted ADAAG address the built environment: buildings, ramps, sidewalks, rooms within buildings, etc. The Access Board has proposed guidelines to expand ADAAG to cover outdoor developed facilities: trails, camp grounds, picnic areas and beaches. The proposed ADAAG is contained in 36 CFR Part 1195.

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

ADAAG Application

Current and proposed ADAAG will be used in assessing existing facilities or assets to determine compliance to accessibility standards. ADAAG is not intended or designed for this purpose, but using it to establish accessibility levels lends credibility to the assessment result. Management recommendations in this Unit are proposed in accordance with the ADAAG for the built environment, the proposed 36 CFR Part 1195 for outdoor developed areas, the New York State Uniform Fire Prevention and Building Codes, and other appropriate guiding documents. Until such time as the proposed ADAAG becomes an adopted rule which will apply to state governments, NYS DEC is required to use the best information available to comply with the ADA; this information includes, among other things, the proposed guidelines.

Trails

Public Forest Access Roads, Haul Roads and Recreational Trails combined with existing logging skid roads and utility lines form an excellent network to access recreational opportunities. Parking areas, informational signs and maps help identify and promote public enjoyment and compatible uses. See also Access and maps in Appendix M: Maps.

Off-Road Vehicle (ORV) or All Terrain Vehicle (ATV) trails will not be developed on this Unit. A number of factors have contributed to this decision. As stated in NYS DEC's *Strategic Plan for State Forest Management*, ATV riding is not a program offered on State Forests. The development of ATV access can be considered under this policy if it is necessary to provide access to programs and activities on the Unit. The large amount of current recreational use of many of the state forests on this Unit would result in conflict with ATV use. The other State Forests on the Unit without concentrated recreational use are too small to support an ATV trail system. Current illegal ATV activity has created management and maintenance challenges. In addition, soil conditions and steep slopes on this Unit are unsuitable for ATV use.

In the event another entity is establishing a legitimate public ATV trail system on lands adjacent to a State Forest, and a State Forest is needed to serve as a connecting link, or in the event that a State Forest road or trail could serve to connect already designated ATV trails open to the public, NYS DEC will

evaluate and consider the proposal. Any such trail proposal must comply with state law, department policy and regulations. If it is determined to be environmentally compatible, a connecting trail could be established on the State Forest. This would be dependent on the availability of sufficient funds to establish and maintain a sustainable trail. The State Forest based connector trail, if approved, must follow the shortest environmentally acceptable route available.

The inclusion of a connector trail in a UMP and the subsequent establishment of any such trail could only occur if it does not compromise the protection of the natural resources of the Unit, significantly conflict with neighbors of State Forests, nor interfere with other established recreational areas. Such designation shall only occur through the amendment or adoption of a UMP or another process which provides similar opportunities for public review and comments and full SEQRA review of the proposed designation.

Connector trails will be monitored to ensure that legal use does not lead to illegal off-trail use within State Forest lands or on neighboring private property. Should illegal use increase significantly adjacent to any connector trail, that trail will be subject to closure.

Six Nations Trail System

The Six Nations Trail System is about 40 miles of multiple use trail located on Sugar Hill State Forest and Goundry Hill State Forest. The primary users are horseback riders in the summer and snowmobile riders in the winter. However, other non-motorized use is encouraged. It is currently maintained NYS DEC staff and by volunteers from the Trail Tamers Snowmobile Club (<http://trailtamer-snowclub.com/index.html>) and three individual horseback riders, all the volunteers work under the Adopt-a-Natural-Resource program. As a multiple use trail different users must follow some basic trail etiquette in order to minimize conflicts. Basic trail etiquette includes; respect other trail users, pass on the right, hikers yield to horses, and bikers yield to both hikers and horses, and stay on marked trail (do not cause damage by heedlessly trampling trailside vegetation). Snowmobile trails in New York State open after big game season ends in each zone, and the ground is snow covered.

Many sections of trail are in poor repair, having either erosion issues, or are muddy. A systematic evaluation of the trail system needs to be undertaken to prioritize the needed repairs. The majority of the trails follow old farm lanes or town road, which is not always the best location for a dirt recreation trail. It is not uncommon for the resulting trail to be quite steep, which makes erosion control difficult, and travel uncomfortable for users. In addition, beaver have been quite active in Pine Creek, resulting in periodic flooding of D-trail and E-trail, other sections of those two trails are quite steep. There are many other small and large issues, after the trail system has been evaluated they will be prioritized, and as money and time allow, fixed. In some cases re-crowning and ditching may solve the problem; in other locations the better choice will be to relocate the trail entirely, and closing and stabilizing the old trail bed. The maps in Appendix M: Maps, and the following paragraphs, describe some of the known issues, and solutions, but additional steps will have to be taken after the evaluation.

The old farm lanes or roads that make up some of the trails usually followed boundary lines, this sometimes resulted in the trail running along, and half on, the privately owned neighboring properties. In recent years some of these trails have been moved away from the boundary, but sections still need to be moved. The exception to this may be Tuscarora Trail, the southern section of which follows old town road that used to run between CR 22 and Aikens Rd. The trail crosses over private land in between sections of Sugar Hill State Forest, and the southernmost section is also used by the private landowner to

access their property. That town road has not been maintained by the Town of Orange in years, but NYS DEC has no records of it being officially abandoned.

The largest section of boundary line trail is along what used to be Sickler and Pine Knob Rds, on both sides of CR 21, what is now called Seneca Trail. In 2009 a section of trail between Onondaga Trail and the open field was constructed as part of a timber sale skid trail. The section west from Onondaga trail was partially funded out of the snowmobile trail fund, and was usable in 2012. East of CR21 has not been fully scouted, or funded. North of the section of trail on the boundary line is a horrible at grade stream crossing, this will be closed and the new trail will cross farther upstream at the same time as the trail is moved off of the boundary line.

Two small trail additions have been requested by snowmobilers. Both would get the snowmobile traffic off of plowed road, one by going west of the short section of plowed Maple Lane, and the other is north from the Switzer Hill Rd Campsite #2. The plowed section of Maple Lane can be avoided by taking the seasonal (unplowed) section of Sugar Hill Rd, to Mohawk Trail to B-Trail and back to Maple Lane.

The Switzer Hill Rd section is for connecting to a snowmobile trail that crosses private land. A very short section of trail will be opened up, connecting the Six Nations Trail System to the old town road that runs along the boundary line at that location. The adopting snowmobile club is responsible for obtaining permission to cross the private property. In addition, the club will be responsible for constructing this trail under TRP, and future maintenance under AANR. This section of trail will not be multiple use, but snowmobile only, and if the trail across private land is closed, the trail across Sugar Hill State Forest will also be closed and allowed to revert back to forest.

The north shoulder of Tower Hill Rd will be cleared of brush and saplings, both to increase sight lines from the parking lot entrance and the trail heads and to provide a snow covered path for snowmobiles in the winter. It will not be official trail, no hardening etc; horseback riders can continue to use the road between the Fire Tower Access Rd and Cayuga Bypass Trail.

Some requests have been received to expand the Six Nations Trail System onto Cinnamon Lake and/or Coon Hollow State Forest. Currently there is a small section of snowmobile trail and MAPPWD trail on Cinnamon Lake. The first is maintained under an Adopt-a-Natural Resource Agreement (AANR) with the Trail Tamers Snowmobile Club, the second is located on an existing Haul Rd. Current staffing and funding levels are insufficient to maintain the existing Six Nations Trail System. The priority will be to maintain, and when possible, upgrade the existing trail system.

As these changes are made to the trail system, the brochure for the Six Nations Trail System will be updated.

Finger Lakes Trail

The Finger Lakes Trail (FLT) crosses over Sugar Hill, Goundry Hill and South Bradford State Forests. This trail crosses New York State from Allegany State Park to the Catskill Forest Preserve. It is a hiking only trail, no horse's or snowmobiles allowed. Several sections of the Finger Lakes Trail, including the part crossing the Six Nations Unit, are part of the North Country National Scenic Trail (NCT). The NCT crosses from North Dakota to eastern New York. In New York, it is maintained primarily by the Finger Lakes Trail Conference (FLTC) (www.fingerlakestrail.org)

In recent years the FLTC has done extensive work on the FLT, many miles of re-routing, and some puncheon building (raised wooden trail) or other similar work. There are still some sections of the trail that need some upgrading. At this point, most are fine, but some sections are wet, and some are steep; re-routing, building puncheons or other trail improvements may be needed to create a better trail experience. Exact locations and construction details would require approval by the Regional Forester or designee. Any major maintenance, re-routes or additions will be reviewed on an individual basis by NYS DEC and require approval of a Temporary Revocable Permit (TRP), or an amendment to the Adopt-a-Natural Resource Agreement or Volunteer Stewardship Agreement.

As of the writing of this plan, a trail is being scouted and constructed to connect the FLT with the Mid-State Trail of Pennsylvania, crossing over both NYS DEC land, NYS OPRHP land and privately owned land. This is the northernmost connector of the Great Eastern Trail (GET), an effort to connect about 10,000 miles of eastern US foot trails. In New York this trail is called the Crystal Hills Trail. This trail ends at the Moss Hill Lean-to on South Bradford State Forest. When completed, it will be possible to start on South Bradford State Forest, and end in Alabama. It also crosses Meads Creek State Forest, West Hill State Forest and Erwin Hollow. The Moss Hill Lean-to to McCarthy Hill Lean-to is a lengthy gap, locating one on West Hill State Forest is a possibility, but only if the Finger Lakes Trail Conference decides to construct and maintain it. The exact location of the lean-to or trail across these state forests must be approved by the NYS DEC Regional Forester, or his designee, before construction can take place. All construction, and maintenance, will be done by volunteers under the Adopt-A-Natural-Resource-Program, a Volunteer Stewardship Agreement and/or with a TRP.

Trails for People with Disabilities

Wheelchairs are allowed anywhere pedestrians are allowed on state lands. The Federal/ADA definition of a wheelchair is:

Wheelchair - A manually-operated or power-driven device designed primarily for use by an individual with a mobility disability for the main purpose of indoor, or of both indoor and outdoor locomotion. This definition does not apply to Federal wilderness areas; wheelchairs in such areas are defined in section 508(c)(2) of the ADA, 42 U.S.C. 12207 (c)(2).

Currently there are no trails or roads that meet universal access requirements on the Six Nations Unit. In many cases the ground is not firm and stable enough, and/or the slope is too steep, and/or the path is too narrow. Too steep a slope can be difficult to change, but firm and stable conditions can be created in many locations. If money becomes available for upgrading, the existing trails and roads will be evaluated for improving universal accessibility.

While no ATV trails currently exist on this Unit, specific routes may be opened to allow ATV use by permitted persons with disabilities, pursuant to NYS DEC Commissioners Policy #3 (CP-3). This program is known as the Motorized Access Program for People with Disabilities (MAPPWD). A permit must first be obtained from NYS DEC. Individuals with qualifying disabilities may apply for a permit to operate an ATV on trails designated by the NYS DEC. For further information, contact the NYS DEC at 7291 Coon Road, Bath, New York 14810. (See Appendix D: Facilities and Appendix M: Maps)

Several trails within the Six Nations Unit are MAPPWD trails. On Beaver Dams State Forest is Moody and Stephens Trails, approximately 1.5 miles in length. Cinnamon Lake State Forest has Gas Well Road, approximately ¾ mile in length. South Bradford State Forest has approximately 1.2 on Dennis Rd Trail. Goundry Hill State Forest has approximately 2.3 miles of MAPPWD trail on the

Guerin Rd trail. Sugar Hill State Forest has three trails designated as MAPPWD, a 1.7 mile section of A-trail, and about 3.2 miles of Onondaga and Seneca Trails adjacent to the Sugar Hill Recreation Area. Due to high use by horses in the summer, and snowmobiles in the winter, the trails on Sugar Hill State Forest are only open for MAPPWD use seasonally from October 1st to December 31st.

In the fall or spring following the final approval of this unit management plan the following trails will be added to the list: A-trail from Evergreen Hill Rd Campsite #2 east and south to Donovan Hill Rd. and Mohawk Trail from Sugar Hill Rd north to the Parks Hollow Lean-to. At that time the season for MAPPWD use on Sugar Hill State Forest will be increased to September 15th to December 31st and May 1 to 20th. This schedule should minimize conflicts with summer users starting with Memorial Day, and winter users after big game season closes and snowmobiles season starts.

Camping and Picnicking

DON'T MOVE FIREWOOD! New York State regulations prohibit firewood from being brought into New York unless it has been heat treated to kill pests. The regulation also limits the transportation of untreated firewood to less than 50 miles from its origin. Other than their own feet and wings, the primary way exotic invasive pests spread is by hitching a ride on un-treated firewood or shipping containers.

Under current State Forest policy, camping, and day use picnicking are acceptable recreational uses. Camping is not allowed within 150 ft. of any road, trail, spring, stream, pond, or other water source unless it is a designated camp site. See Camping page 35 for a list of designated sites. For groups of less than 10 people and for up to 3 days, no permit is required. Longer stays, up to 14 days, and/or larger groups are allowed to camp with a free permit obtained from the NYS DEC Forest Rangers, at the Bath sub-office. Regardless of location, camping sites must be left in a neat, clean, and sanitary condition.

Most designated sites proved a semi-level spot to get off the road, but no facilities, such as fire rings, or pit privies, are provided. Those that are also parking lots were graveled at some point in the past, those that were log landings may, or may not, have had gravel added, and may have limbs or log chunks piled nearby. Camp fires are allowed (except during period of extreme fire danger), use only dead and down wood and put out the fire completely before leaving.

The six lean-tos each have a picnic table, fire ring and pit privy. Parks Hollow Lean-to is poorly located, and needs to be removed and replaced at a location farther away from the stream and haul road. The Parks Hollow pit privy is in poor repair, it also needs to be and removed and replaced in a new location near the relocated lean-to.

Sugar Hill Recreation Area

As stated above, the Sugar Hill Recreation Area is intensively used for recreation by many different user groups. Including, but not limited to, horseback riders, hikers, snowmobilers, archers, campers and picnickers. As a result the field area around the Fire Tower and adjacent trails can get crowded, occasionally resulting in conflicts between users.

The Sugar Hill Recreation Area is located off of the town road called Tower Hill Rd a gate is located at the entrance to a Public Forest Access Road called Firetower Access Road. During winter months this gate is closed and locked to minimize damage to the road and building located in the recreation area. Sugar Hill State Forest is not closed, but unauthorized vehicle traffic along the road is not allowed.

Walking or riding horses past the gate is allowed. The gate will be opened the third Monday of May through the third Monday of October, provided the following conditions can be met: the water system in the restrooms is up and running to DOH standards, seasonal maintenance personnel have been approved for and hired, debris from any winter storms has been dealt with, Firetower Access Rd is dry and stable enough to support vehicle traffic, the field has been mowed, and the picnic tables and trash receptacles are out.

For early or late season use, if you plan on driving to the Sugar Hill Recreation Area, please contact the Bath Sub-office to confirm the status of the gate before starting your trip.

The Sugar Hill Recreation Area is an approximately nine acre recreation area. Of those nine acres, about three acres are available for camping, on a first come- first serve basis, about a half acre has picnic tables on it, the rest has buildings, roads, or is too uneven for camping. There is one designated camping spot, which is in the process of being made universally accessible.

The bathroom's exterior is incomplete, when the porch area is done it will have the large map, sign-in area, and brochures holder. At that point the existing kiosk will be removed.

Currently visitors can climb the steps of the fire tower, but not access the cabin on top. NYS DEC reserves the right to close the fire tower to visitors. The observers' cabin and maintenance building are also closed to general public use. Limited use by large groups will continue to be occasionally permitted under a TRP.

The picnic area has several fixed location picnic tables with grills and a pavilion with picnic tables. Two of the picnic tables have additional length and wider concrete pads under them for universal accessibility. Currently there is no hardened path to any of the tables, a hardened path will be constructed to the pavilion and to the table closest to the parking/bathroom area.

Before new rules and regulations are proposed for the Sugar Hill Recreation Area, behavior modification will be attempted by posting guidelines for visitors to the Sugar Hill Recreation Area. If problems continue, regulations may be enacted.

These guidelines will include the following:

1. Quiet hours from 10 PM to 7 AM.
2. Clean up after all your animals
3. No pets in bathrooms.
4. No smoking in any buildings, including stalls.
5. No horses in the picnic/Fire Tower area, or the side hill of the camping area.
6. No loose horses, dogs or other pets in the Sugar Hill Recreation Area.
7. No paddocks or electric fencing in camping or picnic area. Paddock and electric fence only in radio tower area.
8. No camper hookups to water spigot or electrical outlets.
9. No littering, use provided trash cans or "carry it in - carry it out".
10. No damaging live trees, including tying horses directly to them.

Horses

All horses must have a negative Coggins test. Currently there is one 16 stall horse shelter at the Sugar Hill Recreation Area, and two 2-stall horse shelters at the Lower Evergreen Hill Rd Parking Lot.

This can be expanded to include: one additional 10 stall horse shelter and if more spots are needed, one overhead 3 post picket line in the Sugar Hill Recreation Area; and four stalls worth of horse shelters at each of the two parking areas on Tower Hill Rd (near the Fire Tower Access Rd). The eight stalls worth of horse shelters will be either in sets of two, or sets of four, final decision on that will be based on locations, cost, and site requirements. The addition, the horse stall shelters will be built by an individual or group under a Temporary Revocable Permit (TRP), NYS DEC staff will provide approval of the location, design, paperwork, and ground preparation work at the approved location. A small display board/kiosk will be built on the side one of the horse shelters at both parking areas on Tower Hill Rd.

In addition, to improve sanitation and cleanup, an improved parking spot for the manure spreader will be built next to the existing horse stall shelter at the Sugar Hill Recreation Area. This will not be used for long term storage, but as a place for horseback riders to place manure until NYS DEC staff can remove it for spreading.

The grassy area around the radio tower will be designated as available for visitors to paddock their horses using temporary fences. It will be available on a first-come-first-served basis, but must be shared to its capacity. This area will no longer be available for spreading manure from the horse stall shelter, when possible it will be spread on other nearby grassland portions of Sugar Hill State Forest, or at dump sites along the trail system.

The accessible loading ramp located near the horse shelter is getting old, but appears to be able to last the 10 years of this plan. It will be monitored for safety, and repairs made as needed, but no replacement is planned at this point.

Archery

A Field Archery Course is located in the Fire Tower vicinity and is maintained primarily by the New York Field Archers and Bowhunters (NYFAB) (<http://members.localnet.com/~archery1/>). It currently consists of 5 courses of 28 targets each, and 3 with less than 28 targets. At one time there were 12 courses, of 28 targets each, but many have not been used in years, and have re-grown to trees and brush. Most target locations do not have a backstop, and as the existing “permanent” backstops fall apart they are being removed. When in use for tournaments, temporary targets are placed, and then removed at the end of the competition. The course is one of three regular sites of the National Field Archery Tournament and is the home of other State and regional field archery tournaments.

Part of the Massachusetts archery range is designated to be transferred to Schuyler Co in exchange for some land next to Coon Hollow State Forest. Schuyler County will be clearing the parcel and building a communications tower on it, resulting in the loss of some target locations. Any remaining targets, metal posts, markers, etc for that entire range need to be removed and allowed to re-grow to trees. With the full closer of this range the Cayuga Bypass Trail will not cross any archery ranges and provides a safe pass around during archery tournaments.

A universally accessible archery range has been proposed for the area southwest of the intersection of Maple Lane and Tower Hill Rd. It would have one central hardened path down the middle, and seven shooting lanes down each side. It would also replace the practice range which used to be on the west side of the Sugar Hill Recreation Area. This would not, however, provide the same experience for archers with disabilities as everyone else in the competition. Trail hardening and/or relocation of sections of one of the existing ranges will provide a more inclusive facility for all visitors. As of the writing of this plan, none of the ranges have been evaluated to the extent needed for a final decision, but

the northern half of the Pennsylvania Range will be the first to be looked at, followed by the southern half of the New York Range. Both are located near already existing parking lots. As the Fire Tower is located at the top of a steep hill, slope will be the most challenging part of locating an accessible range near the Sugar Hill Recreation Area.

The open field, or overflow field, located west of CR 21 and along Seneca trail will be the new practice range area. The entrance road and some of the trail will be graveled, as mentioned in the Access section; however, the remainder will remain in grass. A portion of that grassy field will be designated for use as a practice range during archery tournaments. Minimal earth movement may be required to provide a safe backstop for the arrows.

If NYFAB decides to no longer hold tournaments on Sugar Hill State Forest, and demonstrates this via letter or by not holding events for two or more consecutive years, the archery ranges will be removed and allowed to revert back to forest.

Lower Evergreen Parking Lot

The facilities at the Lower Evergreen Parking Lot are in generally good repair, the only exception is some of the picnic tables will soon need to be replaced. No potable water is available, instead a nearby stream provides a year round water source, although it should be treated before drinking. The pit privy is in good condition, but when it does need replaced it will be replaced with a larger more accessible one. One of the tables has a wider concrete pad around it, allowing for wheelchair access; however there is no mounting ramp for horseback riders. Due to limited space, no ramp will be constructed at this time, however a horse mounting platform with the steps meeting ADA transfer platform requirements will be designed and constructed.

Spencer Pond

The facilities at Spencer Pond are in generally good repair. The pit privy was recently replaced with an accessible one, although the path to it is not accessible. Widening and upgrading the path and the small bridge on the path through the woods to the picnic area would allow this area to be added to the list of accessible sites.

Hunting and Fishing

Hunting is allowed during open seasons, with the correct license and tags. Available game varies depending on the habitat available; see the Timber and Vegetation Management and Fish and Wildlife Habitat sections for information on plans for maintaining and modifying the currently available habitats.

Permanent tree stands are prohibited. However, a tree stand or blind is allowed, provided that it does not injure any trees, is properly marked or tagged with the owner's name and address or valid hunting or fishing license number, and is placed and used during big game season, migratory game bird season, or turkey season, but no more than thirty days in one location per calendar year, per 6 NYCRR §190.8.

The second gate on Guiren Rd on Goundry Hill State Forest and the Gas Well Rd gate on Cinnamon lake State Forest will continue to be opened for big game gun season. The new gate at the start of Guiren Trail will be constructed such that MAPPWD users will be able to get past it on an ATV, but it will remain locked year round. If excess damage to the resource or other serious issues arises, NYS DEC

reserves the right to close one or both of those gates for one or more seasons. Unless posted otherwise, walking past a NYS DEC gate is always allowed.

Fishing opportunities within the Unit range from extremely limited, to a few seasonally important fishing sites. Most of the streams located on the Unit are too small to be of any fishing significance, as most of the state forest properties are on top of the hills.

Fishing opportunities can also be found in Cinnamon Lake, located down a ¼ mile trail south off of Hornby Rd. Currently the path to the lake has a couple of wet and/or over grown sections and the launch site is in poor condition. The parking lot on Hornby Rd is in ok condition, but a gate needs to be added to the start of the trail, it would remain a hand carry and launch only site, with no vehicular access to the lake.

Spencer Pond is located at the north end of Tower Hill Road on Sugar Hill State Forest. It was rehabilitated in the mid-1980's and is approximately one acre in size. The pond has bass and panfish and offers enjoyable surroundings for picnicking.

Table 14: Table Management Objectives and Actions for Public Recreation and Use

Management Objectives		Mgt. Action #	Management Actions	Frequency of Action*
1	Identify additional recreation needs.	1.0	Receive public input.	On-Going
		1.1	Monitor use patterns	On-Going
		1.2	Solicit public input.	Every 10 years
		1.3	Assess user satisfaction from comments received.	On-Going
2	Coordinate with volunteer groups, and other agencies/municipalities through the use of Cooperative Agreements, Volunteer Stewardship Agreements or Adopt-a-Natural-Resource Agreements, to construct and/or maintain existing and/or future recreational facilities	2.0	Identify resources and/or volunteer groups to form additional partnerships.	On-Going
		2.1	Assist the Finger Lakes Trail Conference sponsors in maintenance and enhancement of the Finger Lakes Trail and Crystal Hills Trail.	On-Going
		2.2	Assist the Trail Tamers Snowmobile Club sponsors in maintenance and enhancement of the Six Nations Trail System	On-Going
		2.3	Encourage rehabilitation of trail sections that are unsuitable for existing use.	On-Going

Management Objectives		Mgt. Action #	Management Actions	Frequency of Action*
		2.4	Provide resources or utilize opportunities as needed to maintain and enhance existing trail(s)	On-Going
		2.5	Minimize conflicts between user groups	On-Going
		2.6	Discourage illegal use of motorized vehicles.	On-Going
3	Determine feasibility and/or compatibility of proposed additional recreational opportunities.	3.0	In house review of proposed projects	As Needed
		3.1	Add proposed projects to the Six Nations UMP by amendment. (This includes a 30 day public comment period.)	As Needed
		3.2	Negotiate and enter into AANR agreements with sponsoring volunteer groups.	As Needed
4	Provide additional recreational opportunities. Including maintaining and improving access for persons with disabilities.	4.0	Construct and maintain new facilities as supported by the UMP. (see also 9.0 – 9.10 & 10.0- 10.3 & 11.0 – 11.7)	By year 10
		4.1	Provide technical support for volunteer groups.	As Needed
		4.2	Construct barriers to discourage motorized use of skid trails and abandoned roads after logging operations.	As Needed
		4.3	Improve small hand-carry boat launch on Cinnamon Lake	Year 5
		4.4	Improve woods path at Spencer Pond.	Year 4
		4.5	Place ADA picnic table and fire ring at overlook at the end of the MAPPWD trail on Goundry Hill State Forest.	By year 10
		4.6	Assist the Finger Lakes Trail Conference sponsors in constructing and maintaining a lean-to on West Hill State Forest	One time.
5	Advocate wildlife-based recreation	5.0	Encourage bird watching, hunting, fishing, trapping etc. according to New York State regulations.	On-Going

Management Objectives		Mgt. Action #	Management Actions	Frequency of Action*
		5.1	See also Fish and Wildlife Habitat	On-Going
6	Maintain existing and future recreational facilities.	6.0	See also Maintenance and Facilities, and Access	On-Going
		6.1	Assess, maintain and improve Sugar Hill Recreation Area, Six Nations Trail System, Archery courses, etc (see also 9.0 – 9.10 & 10.0 – 10.4 & 11.0 – 11.7)	As funding is available.
7	Increase awareness of public recreation opportunities.	7.0	Provide brochures and maps for users at kiosks, NYS DEC offices, and NYS DEC web page.	Check at least monthly
		7.1	Place kiosks or signs at high use parking areas, such as on Hoppers Bridge on Meads Creek SF, CR 23 & Tower Hill Rd on Sugar Hill State Forest.	By year 10
		7.2	Update maps and brochures to reflect new facilities/trails/acquisitions	As Needed (At least every 5 yrs)
		7.3	Update kiosks	Annually
8	Enhance visual appeal	8.0	Establish a litter-free environment by promoting carry in/carry out policy.	On-Going
		8.1	Remove litter from state land.	At least Annually
9	Sugar Hill Recreation Area	9.0	Hire seasonal caretaker	Annually
		9.1	Post guidelines	Year 1
		9.2	Open gate from the 3 rd Monday in May through the 3 rd Monday of October. (When conditions specified above are met.)	Annually
		9.3	Maintain and keep open the restroom and water supply.	At least weekly, while gate is open.

Management Objectives		Mgt. Action #	Management Actions	Frequency of Action*
		9.4	Mow grass, remove garbage and manure, and fill brochure holder.	At least weekly, while gate is open.
		9.5	Continue to use the TRP system to allow use of the facilities by large groups. (Such as NYFAB, Boy or Girl Scouts, Reigns of Hope, etc.)	Annually
		9.6	Finish porch area of restroom, then remove current kiosk.	By Year 5
		9.7	Construct a 10 stall horse shelter.	By year 10
		9.8	Construct an improved parking spot for the manure spreader.	By year 10
		9.9	Finish accessible camping spot.	By year 5
		9.10	Construct hardened path to one of the accessible picnic tables.	By year 10
		9.11	After 9.7, above, evaluate usage patterns and if needed install one overhead 3 post picket line.	After 9.7
10	Archery Courses	10.0	Continue to remove deteriorating bale backstops from the ranges.	Annually, until gone.
		10.1	Close and remove the Mass. Archery course.	Year 2
		10.2	Evaluate ranges for conversion to universally accessible.	Year 4
		10.3	Develop chosen range to universally accessible.	Year 6
		10.4	<i>If NYFAB no longer uses the ranges, they will be removed and allowed to revert to forest.</i>	Only after no longer in use.
11	Six Nations Trail System	11.0	Systematic evaluation of the Six Nations Trail system	Year 1 and 8
		11.1	Add sections of A-Trail and Mohawk to MAPPWD list.	Year 1
		11.2	Move the Six Nations Trail System trails off of private land. (May not be possible in all locations.)	As funding is available.
		11.3	Prioritize the issues documented in the systematic evaluation of the Six Nations Trail System	Year 1 and 8

Management Objectives		Mgt. Action #	Management Actions	Frequency of Action*
		11.4	Repair or otherwise deal with the issues discovered in the evaluation, if funding is available.	Years 2-7 and 9-10+
		11.5	Open snowmobile spur trail along Switzer Hill Rd.	By year 10
		11.6	Construct horse shelters at the two parking lots on Tower Hill Rd located closest to Fire Tower Access Rd. Either a set of four or two sets of two stalls. Include a small display board/kiosk as part of the building.	By year 10

*Factors such as budget and staff constraints, wood product markets, and forest health problems may necessitate deviations from the scheduled management activities.

Unit Maintenance and Facilities Management

The goal is to maintain the facilities on the unit to ensure its integrity, character, and safety. This must be done with the limited money and staff resources that are available. See also the Access and Public Recreation and Use sections for additional facilities.

All trees eventually fall down, those located in the forest rarely harm any humans or human property, however trees located at areas of higher concentrated recreational use should be evaluated for the level of risk, and those with an Imminent or Probable risk level removed or trimmed. It is not possible to have trees with no risk of falling, however the odds of injury or death can be reduced by removing the trees with the highest level of risk to users.

Trees in areas of higher use will be evaluated a minimum of every five years, more frequently when possible. Initial evaluation will be a Level 1: Limited Visual Assessment, with a Level 2: Basic Assessment done on those that do not pass the Level 1. The areas to be inspected include the Sugar Hill Recreation Area, all the lean-to sites, Lower Evergreen Parking Lot, and Spencer Pond. The other parking lots, roads and trails will not be systematically inspected. All risk trees will be dealt with as needed after discovery by inspection, public notification or other method.

There may be the potential for generating electricity with windmills or the construction of towers for radio, cell, etc transmission, in the area of the Six Nations Unit. There are currently no windmills, or applications for windmills, for power generation on the Six Nations Unit. NYS DEC does not have the legal authority to authorize the construction of windmills, or commercial towers, on the lands covered by this Unit Management Plan. Therefore, legislation would need to be passed authorizing such use before any tower construction could take place. This plan does not cover any actions, or construction, on any adjacent privately owned lands. There are, however, two public communication towers located at the Sugar Hill Recreation Area.

Located on Sugar Hill State Forest, on the corner of Donovan Hill Rd and Evergreen Hill Rd, is the NYS DEC Sugar Hill Maintenance Shop and Dept. of Corrections, Monterey Shock Camp. This plan does not cover activities taking place within the grounds of the shop or Correctional Facility.

The Finger Lakes Trail / North Country Trail and Crystal Hills Branch Trail (a foot trail) crosses the unit. The trails are maintained by volunteers. It is the policy of the NYS DEC to encourage the use of volunteers, under an AANR or TRP, to maintain facilities such as these.

The Fire Tower was last painted in 1992, and needs a new coat of paint. The stair treads and railings are inspected annually and replaced as needed.

Table 15: Management Objectives and Actions for Unit Maintenance and Facilities Management

Management Objectives		Mgt. Action #	Management Actions	Frequency of Action*
1	Maintain constructed ponds/potholes (In consultation with the Division of Water, Dam Safety Unit)	1.0	Inspect for problems.	Annually
		1.1	Repair dikes, control boxes, etc	As Needed
2	Solicit volunteer groups to help maintain facilities (see also Public Recreation and Use)	2.0	Promote Adopt a Natural Resource Program or Volunteer Stewardship Agreements.	On-Going
		2.1	Enter into agreements with volunteer groups.	On-Going
3	Maintain existing and future facilities. (see also Public Recreation and Use)	3.0	Identify needed maintenance	On-Going
		3.1	Do the needed maintenance, as money allows.	On-Going
		3.2	Enhance law enforcement efforts.	On-Going
		3.3	Inspect higher concentrated recreational use areas	Minimum of every 5 years
		3.4	Remove Imminent or Probably trees or branches	Minimum of every 5 years, or as needed.
		3.5	Inspect and repair stairway on the Fire Tower.	Annually
		3.6	Re-paint the Fire Tower.	Year 2
4	Maintain existing and future roads. (see also Access)	4.0	Identify needed maintenance	On-Going
		4.1	Do the needed maintenance, as money allows.	On-Going
		4.2	Enhance law enforcement efforts.	On-Going

*Factors such as budget and staff constraints, wood product markets, and forest health problems may necessitate deviations from the scheduled management activities.

Land Acquisition

New York State has been a leader in recognizing the value of open, undeveloped land. The Six Nations Unit is one of the largest blocks of relatively undeveloped public land in the Finger Lakes Region and is an important wild land resource.

The acquisition of land by DEC in New York State is guided by the New York State Open Space Conservation Plan. The Open Space Conservation Plan serves as a blueprint that identifies the priority projects, policies and programs that will enhance land acquisition from willing sellers for the future. The plan, issued jointly with NYS DEC and the Office of Parks, Recreation and Historic Preservation, relies heavily upon the input of Regional Advisory Committees, local governments and the public. The Open Space Conservation Plan is updated every three years, as required by law. In 2009 NYS DEC and the NYS Office of Parks Recreation and Historical Preservation issued a plan, entitled, *New York State Open Space Conservation Plan*. (www.dec.ny.gov/lands/317.html) The plan brings together: 1) an objective analysis of the State's resources; 2) the knowledge and insight of professionals inside state agencies; and most importantly, 3) the informed and valuable ideas of the public, local government and the private sector. The plan defines what open space priorities and guidelines for public land acquisition that will be followed on the Six Nations Unit.

New York State may acquire land by donation; fee title purchase; easement, purchase of some of the rights such as development and recreation; or land swap by action of the New York State Legislature.

It is not NYS DEC's objective to significantly enlarge the size of the State Forest Land ownership. Certain parcels will be considered for purchase if they improve access; consolidate public ownership by eliminating in holdings; enhance recreational opportunity; protect significant ecological area, especially within Forest Matrix Blocks; are scenically important; contain threatened or endangered species; are of exceptional historical or cultural importance; improve watershed protection; or resolve other issues. It should be clearly understood that the NYS DEC intends to acquire these parcels from willing sellers as funding becomes available.

Table 16: Management Objectives and Actions for Land Acquisition

Management Objectives		Mgt. Action #	Management Actions	Frequency of Action*
1	Provide improved access to the Unit.	1.0	Identify land acquisition needs that improve access to state forest.	On-Going
		1.1	Acquire desired properties from willing sellers as funding permits.	On-Going
2	Consolidate public ownership by eliminating in holdings	2.0	Identify land acquisition needs, which simplify the NYS DEC's boundaries.	On-Going

Management Objectives		Mgt. Action #	Management Actions	Frequency of Action*
		2.1	Acquire desired properties from willing sellers as funding permits.	On-Going
3	Enhance recreational opportunity.	3.0	Identify land acquisition needs, that improve recreational opportunities	On-Going
		3.1	Acquire desired properties from willing sellers as funding permits.	On-Going
4	Protect significant ecological areas, especially within Forest Matrix Blocks.	4.0	Identify land acquisition with significant ecological areas, especially within Forest Matrix Blocks.	On-Going
		4.1	Acquire by fee simple or easement desired properties from willing sellers as funding permits.	On-Going
5	Are scenically important;	5.0	Identify land acquisitions that are scenically important.	On-Going
		5.1	Acquire desired properties from willing sellers as funding permits.	On-Going
6	Contain threatened or endangered species;	6.0	Identify land acquisition with threatened or endangered species.	On-Going
		6.1	Acquire by fee simple or easement desired properties from willing sellers as funding permits.	On-Going
7	Are of exceptional historical or cultural importance	7.0	Identify land acquisition with exceptional historical or cultural importance.	On-Going
		7.1	Acquire desired properties from willing sellers as funding permits.	On-Going
8	Improve watershed protection	8.0	Identify land acquisition which improves watershed protection.	On-Going
		8.1	Acquire by fee simple or easement desired properties from willing sellers as funding permits.	On-Going
9	Resolve other issues, such as split mineral estate.	9.0	Identify issues	On-Going
		9.1	Attempt to resolve such issues	On-Going

*Factors such as budget and staff constraints, wood product markets, and forest health problems may necessitate deviations from the scheduled management activities.

Mineral Resources

Any party desiring to procure minerals, rocks or oil & gas resources (or the use of the mineral estate in the case of gas or liquid storage in geological formations) from the mineral estate under state lands included in this unit management plan, must obtain contractual rights (such as a lease contract) to those minerals from the appropriate state entity administering those resources. The party must also obtain appropriate consent (temporary revocable permit) from the state to access the surface estate during operations. Prior to the commencement of operations the appropriate permits must be obtained. These procedures are further outlined below.

Gas well drilling, pipeline, and related road development must be in compliance with State Forest Tract Assessments, the *Strategic Plan for State Forest Management*, the *Generic Environmental Impact Statement*, the *Supplemental Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program*, and this Unit Management Plan. As of the writing of this plan, the Supplemental Generic Environmental Impact Statement (SGEIS) on the Oil, Gas and Solution Mining Regulatory Program and the proposed regulations for high-volume hydraulic fracturing (HVHF) are under review, but not yet finalized. When finalized, the new regulations will be followed on this and other State Forests.

Any activity involving the procurement of oil and gas resources and/or storage of gas and liquids in the subsurface on state lands in this unit management plan are administered by the NYS DEC Division of Mineral Resources. The procurement of minerals and rocks (inorganic substances), including the solution mining of minerals (such as salt) on these same state lands are administered by the Office of General Services. All activity associated with mining minerals and rocks, solution mining of minerals and oil & gas drilling, including production, are regulated by the NYS DEC Division of Mineral Resources (including the issuance of mining permits and drilling permits).

The surface estate of these state lands is managed through the NYS DEC Division of Lands and Forests. In the event the surface estate is to be used in the evaluation and/or extraction of mineral resources from state lands, a Temporary Revocable Permit (TRP) must be obtained from the NYS DEC Division of Lands and Forests prior to conducting any operations. It should be noted that if the mineral estate is under a lease agreement, only the lessee, or entities authorized by the Lessee, will be issued a TRP for these purposes.

Any proposal for mineral development other than oil and gas would require SEQR review.

Procedures for Oil & Gas Procurement

In the event a party has an interest in exploring and developing oil and gas reserves under lands administered by the NYS DEC, the NYS DEC will receive requests to nominate specific lands for leasing of the mineral rights. Prior to leasing lands where the mineral estate is owned by New York State, a thorough review of the lands nominated for leasing is conducted to determine:

- Which areas cannot be leased,
- Which areas can be leased with full rights granted (100% surface entry and no special conditions required),
- Which may require special environmental and safety conditions, and
- Which may be leased with no surface-disturbance/entry conditions (non-drilling clause).

This review is conducted by the area's land manager (Division of Lands and Forests or Division of Fish, Wildlife and Marine) in coordination with the Division of Mineral Resources. A tract assessment is then conducted that identifies sensitive resources of the unit. These resources include certain management strategies, wetland, riparian zones, steep slopes, recreational trails and areas, unique ecological communities, habitat of rare and endangered species, archeological and cultural sites and scenic vistas and view sheds.

See Appendix M: Maps for current gas lease exclusions from drilling, production and/or other surface occupancy. A preliminary tract assessment of recommended exclusion has been included for state land not under a current gas lease; the full tract assessment will be finalized prior to the proposed gas lease public meeting.

A public meeting on the proposed gas lease will be held to provide information about natural gas development specific to the state land and receive comments. A 30-day public comment period will follow. NYS DEC will consider all comments prior to making a decision. If NYS DEC decides to pursue leasing, the site specific conditions for limiting impacts on natural resources will be drafted by the Division of Mineral Resources in coordination with the Division of Lands & Forests and/or Division of Fish, Wildlife and Marine(Wildlife) and incorporated into contract documents. These conditions will include but not be limited to criteria for site selection, mitigation of impacts and land reclamation upon completion of drilling. A number of factors are considered. Riparian areas, steep slopes, significant recreation areas, presence of rare, threatened or endangered species or unique ecological communities, are all areas which may be excluded from surface disturbance. Certain land management strategies, such as reserves, where timber harvesting is precluded, which may be incompatible with oil and gas well development, may result in exclusion from surface disturbance. This determination is made as part of the tract assessment process on a case by case basis. Preliminary individual tract proposal reviews for each forest within this Unit have been completed, and determinations deciding which areas would be excluded from surface disturbance (should leasing be initiated) have been made. See Appendix M: Maps. Any parcel designated as a non-surface entry lease will no longer be subject to the process detailed above due to the prohibition of surface disturbance(s). Exceptions to these tract assessments are possible if additional analysis, protective measures, new technology, or other issues warrant a change in the compatibility status of an area.

If it is determined that oil and gas exploration and development can proceed on these State minerals, a lease sale is conducted. The DEC Division of Mineral Resources is the oil and gas leasing agent for these state lands. Lease sales are then conducted through a competitive bid process administered by the Division of Mineral Resources and in accordance with Article 23, Title 11 of the Environmental Conservation Law and State Finance Law.

Revenues from State Reforestation Areas and Multiple Use Areas (State Forests) are deposited into the General Fund while revenues from Wildlife Management Areas are deposited into the Conservation Fund.

In the event leases are granted and the drilling of a well is desired by the lessee on the leased property, an Application for Permit to Drill, Deepen, Plug Back or Convert a Well Subject to the Oil, Gas and Solution Mining Law (form 85-12-5) must be submitted to the Division of Mineral Resources. Site-specific impacts will then be identified by NYS DEC staff during review process and inspection of the proposed well site. The Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program (Draft, 1988) is used to guide the Department in determining whether the proposal will have a significant impact on the environment. Conditions are then attached to the drilling permit as well as the Temporary Revocable Permit (TRP) which covers the mitigation and/or control of surface disturbances.

Pipelines are allowed to be constructed on NYSDEC lands for the purpose of removing oil and/or gas and any of the constituents thereof from State land. These rights are granted in the respective lease agreement and are confirmed beyond the primary term of the lease by the continued payment of royalties to New York State. In the event underground pipelines are planned to transport gas and/or oil across state lands; the Division of Mineral Resources in conjunction with the Division of Lands and Forests, and Division of Fish and Wildlife will coordinate with the mineral estate lessee to determine the best route for the pipeline(s). When oil and/or gas are no longer being removed from NYSDEC land the pipelines must be remediated to the satisfaction of the department. It should be noted that any pipelines greater than 1,000 feet in length and/or containing pressures greater than 125 pounds per square inch are regulated by the New York State Public Service Commission. The NYSDEC has the authority to permit underground pipelines with the existence of an active mineral lease. As of the writing of this plan, NYSDEC has no authority to permit underground utilities in the absence of a mineral lease. In the absence of a valid mineral lease, special legislation by the state legislature is required.

Once the proposal is approved, a drilling permit with site specific conditions is issued by the Division of Mineral Resources along with a Temporary Revocable Permit issued by either the Division of Lands and Forests or Fish and Wildlife. These permits are administered by their respective programs and are designed to prevent and/or mitigate environmental impacts. Site inspections are conducted by the Division of Mineral Resources to ensure compliance with Article 23 of the Environmental Conservation Law and 6NYCRR Part 550 - 559. The Division of Lands and Forests or Fish and Wildlife will also inspect the site to ensure compliance with the TRP.

Procedures for Mineral and Rock Procurement

Under Article 7 of the New York Consolidated Laws / Public Lands, if a party wishes to explore and/or procure minerals and/or rock (including salt) from state lands they must be issued a permit, consent, or lease from the General Services Office. Prior to operations, a Mining Permit or Drilling Permit in the case of solution mining must be obtained from the Division of Mineral Resources and a Temporary Revocable Permit (for access and use of land) must be obtained from the Division of Lands and Forests or the Division of Fish, Wildlife and Marine. Mining operations are regulated by the Division of Mineral Resources.

There are no mining contracts, permits, or operations on any areas in this unit management plan. Under Article 7 of the New York State Consolidated Laws, any citizen of the United States may apply for permission to explore and/or extract any mineral on State lands. However, current department policy is to decline any commercial mining application(s) pertaining to any lands covered by this unit management plan.

Surface Use for Evaluation of Mineral Resources

In the event a party desires to use the surface estate to conduct geophysical (such as a seismic survey), geochemical and/or surface sampling procedures on Department lands prior to, or after leasing they must first obtain a Temporary Revocable Permit (TRP) for the access and use of state lands. If the area is subject to a lease agreement, only the lessee, or parties authorized by the lessee, can be issued a TRP for these purposes. A TRP can be applied for through the NYSDEC Division of Lands and Forests, 7291 Coon Road, Bath, New York 14810.

For further information contact the NYS DEC Mineral Resource staff, Region 8, 6274 East Avon-Lima Road, Avon, New York 14414-9591. Additional contacts include; New York State Department of Environmental Conservation-Division of Mineral Resources- Bureau of Oil and Gas Regulation, 3rd Floor, 625 Broadway, Albany, New York 12233.

For further discussion of Mineral Resources, see page 18 and Chapter 5 of the *Strategic Plan for State Forest Management*.

Table 17: Management Objectives and Actions for Mineral Resources

Management Objectives		Mgt. Action #	Management Actions	Frequency of Action*
1	Decide to approve or not approve extraction of mineral resources.	1.0	Nominated properties are reviewed by Division of Mineral Resources(DMN) and Division of Lands and Forests(L&F) and Division of Fish, Wildlife and Marine(Wildlife) per above process. Office of General Services(OGS) makes approvals for minerals	As Needed
		1.1	A public meeting is held with a 30 day comment period after.	As Needed
If extraction is permitted continue with Objectives 2-6.				
2	Execute consent contracts.	2.0	DMN conducts lease sale through competitive bid process and executes contracts for oil and gas. OGS executes contracts for minerals.	As Needed
3	Regulate operations; and access surface estate to extract mineral resources.	3.0	Division of Lands and Forests reviews proposed operations and if approved, issues a Temporary Revocable Permit	Every Time

Management Objectives		Mgt. Action #	Management Actions	Frequency of Action*
		3.1	DMN reviews proposed operation and issues Drilling Permit or Mining Permit.	Every Time
		3.2	DMN inspects & regulates operations, production and administers royalty payments to State.	Every Time
4	Monitor reclamation & well plugging	4.0	DMN enforces Rules and Regulations pertaining to plugging procedures.	Every Time
		4.1	DMN and L&F monitors and enforces surface reclamation	Every Time
5	Administer mineral estate	5.0	DMN monitors lease, production and royalty payments for oil and gas. OGS does same for minerals.	Every Time
6	Pipeline access and construction	6.0	Granted and directed by terms of lease agreement administered by DMN.	Every Time
		6.1	L&F and/or Wildlife reviews proposed operations and if approved, issues a Temporary Revocable Permit (TRP)	Every Time
		6.2	Division of Lands and Forests and/or Division of Fish, Wildlife and Marine enforce TRP provisions.	Every Time

*Factors such as budget and staff constraints, wood product markets, and forest health problems may necessitate deviations from the scheduled management activities.

Archaeological and Historic Resources

The archaeological sites located within this land unit as well as additional unrecorded sites that may exist on the property are protected by the provisions of the New York State Historic Preservation Act (SHPA - Article 14 PRHPL), Article 9 of Environmental Conservation Law and Section 233 of Education Law. Should any actions that would impact these resources be proposed they will be reviewed in accordance with SHPA. Unauthorized excavation and removal of materials from any of these sites is prohibited by Article 9 of Environmental Conservation Law and Section 233 of Education Law.

Preservation of these resources may require intensive management practices, for example maintaining the Fire Tower in a safe and operable condition. (See Unit Maintenance and Facilities

Management) In other situations, such as the numerous stone walls, merely recognizing their locations and avoiding disturbance of the site will be sufficient.

The archaeological sites located on this land unit as well as additional unrecorded sites that may exist on the property may be made available for appropriate research. All future archaeological research to be conducted on the property will be accomplished under the auspices of all appropriate permits. Research permits will be issued only after consultation with the New York State Museum and the Office of Parks, Recreation and Historic Preservation, and the Seneca Nation of Indians Tribal Historic Preservation Office at 716-945-9427.

Table 18: Management Objectives and Actions for Archaeological and Historic Resources

Management Objectives		Mgt. Action #	Management Actions	Frequency of Action*
1	Preservation of historical and archaeological resources	1.0	Avoid any activity which may disturb any historical and/or archaeological resources.	On-Going
		1.1	Comply with state historic preservation act.	On-Going
		1.2	Consultation with the Seneca Nation of Indians Historical Preservation Office.	On-Going

*Factors such as budget and staff constraints, wood product markets, and forest health problems may necessitate deviations from the scheduled management activities.

PUBLIC INVOLVEMENT

Initial Mailing

Six Nations Unit Management Plan's citizen participation activities commenced with an initial mailing on **December 15, 2008** and public meeting **January 22, 2009**, outlining management plan objectives.

The initial mailing's targeted audience consisted of previously identified:

- adjacent property owners;
- local town & county officials;
- local media;
- recreational groups;
- interested industry groups;
- first nations;
- wildlife groups, and;
- other general environmental groups;

Based on those returned and other public comments received, the mailing list was amended to add other interested parties and/or correct outdated names and addresses.

Public comments received from the initial mailing and meeting are listed in Appendix A: Public Comment, with a summary of the comments received located in the Summary of Identified Issues section starting on page 46. They include: access, vegetation management, water resources, wildlife and fish management, public recreation and use, oil and gas leasing, cooperative agreements, open space conservation, aesthetics and cultural resources and historic preservation.

Second Mailing

Upon completion of the draft Six Nations Unit Management Plan, a second fact sheet was sent to those on the updated mailing list, including the media, summarizing objectives of the draft plan, listing local document repositories and announcing a public meeting. Repositories will include local libraries, the Bath and Avon NYS DEC offices, and NYS DEC's web page. A notice was also posted in the Environmental Notices Bulletin (ENB) prior to the meeting.

Public Meetings

The first preliminary public meeting was held **January 22, 2009** at the Bath Sub-office. The second public meeting was held **August 7, 2012** at the Tyrone Firehall to present the draft plan and receive comments on it. Written comments were accepted until **September 7, 2012**. Following the end of a 30-day public comment period, any modifications based on public comment have been made and a responsiveness summary is located in the Appendix A: Public Comment section.

Final Notice

Commentators and those on the updated mailing list will receive a notice of availability of the final plan. Document repositories will again be identified and any significant modifications based on public comment will be noted.

MANAGEMENT ACTIONS SUMMARY TABLE

The following table is a summary of all the *Management Objectives and Actions for The Six Nations Unit* tables located in the preceding sections of the GOALS AND OBJECTIVES chapter. Each action has been given a priority code and an estimated cost for the 10 year plan period.

The figures for the 10-year costs are *estimates* for budgetary planning purposes. Actual costs are determined at the time the action takes place. As required by New York State Policy, lowest acceptable bid will be used for all state contracts. Budgeted amounts are not directly allocated to these individual action costs, and actual amount received is likely to be much less than the total amounts indicated in the table. See the Funding section on page 45 for further discussion on budgeting for this and other State lands under NYS DEC management.

Priority codes:

C=Critical, Necessary to ensure public health and safety; To stabilize structures so as to not lose the money and time invested in them; Mandated by legislation.

H=High, Necessary for public use, and/or to improve habitat or other natural resources. Often this will be for new projects.

L=Low, Important for the enhancement of public use, habitats or other natural resources.

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
Access: Identify need for additional access	1.0	Asses site(s)	As Needed	L	40 Work Days		
	1.1	Receive public comments	On-Going	C	40 Work Days		
	1.2	Solicit public comments	Every 10 yrs (as part of the UMP process)	C	14 Work Days		
Access: Maintain roads	2.0	Inspect culverts	Annually	L	10 Work Days \$25,000		

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
	2.1	Replace culverts on about a 25 year interval, or when failure occurs.	5 culverts per year	C	\$200,000		\$3-5,000 per culvert
	2.2	Public Forest Access Roads - grade and maintain surface.	Every 2 years.	H	\$25,000		About \$2,000 per mile
	2.3	Haul Roads - grade and maintain surface.	Every 5 yrs	H	\$34,000		About \$2,000 per mile
	2.4	Mow roads right of way	Annually	H	\$40,000, 10 Work Days		
Access: Construct and/or repair roads	3.0	Construct vented concrete ford on Coon Hollow Access Trail	Year 2	L	\$60,000		
	3.1	Repair about 0.4 mile of Moody Rd to Haul Road standards	Year 8	L	\$106,000		\$40-60 per linear foot.
	3.2	<i>If</i> the Town of Orange abandons Chambers Rd. – Stabilize erosion and relocate and/or repair to Haul Road standards	Only after Town of Orange abandons the road.	H	\$800,000		\$50 per linear foot.
Access: Construct additional parking lots	4.0	Locate and construct parking lots per the above list.	One per year	L	\$70,000		About \$7,000 per parking lot.
Access: Maintain parking areas	5.0	Litter removal	At least annually.	H	100 Work Days & \$190,000		Cost does not include inmate labor.
	5.1	Maintain all parking areas	Every 5 yrs	C	\$30,000		

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
	5.3	Maintain informational signs	Annually	C	\$40,000		
	5.4	Mow all parking areas	Annually	H			
Access: Control access	6.0	Locate and construct gates per the above list.	Years 2, 4, 6, 8, 10	C	80 Work Days & \$96,000		5 Work Days + \$6,000 per gate.
	6.1	Maintain gates and signs	Annually	H	50 Work Days & \$40,000		
	6.2	Enforce NYS DEC policies	On-Going	C			
Access: Identify state property boundary lines.	7.0	Paint and post boundaries about every 5 years.	Goundry Hill SF– Yrs 2&7 Sugar Hill SF –Yrs 3&8 Coon Hollow SF– Yrs 5&10 S. Bradford SF –Yrs 1&6 West Hill SF – Yrs 1 & 6 Meads Creek SF –Yrs1& 6 Beaver Dams SF–Yrs5&10	H	\$103,000 and 450 Work Days		170.1 miles of boundary line, 0.8 mile is shared by S. Bradford and Goundry Hill State Forests and by Cinnamon Lake and Coon Hollow State Forests. -- Frequency of action continued: Dry Run SF – Yrs 5&10 Erwin Hollow SF– Yrs5&10 Cinnamon Lake SF–Yrs 1&6
	7.1	Identify and resolve boundary encroachment issues. (No currently known issues.)	As Needed	C			Unable to predict costs.

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
	7.2	Survey and blaze boundaries. (No currently known issues)	As Needed	C			Contracted out - \$4,500 to \$5,500 per mile NYS DEC surveyors – 12 to 15 work days per mile
	7.3	Repair and replace area signs as they are vandalized or fade.	Year 5	L	\$12,000		
	7.4	Place new area signs on Sugar Hill, Coon Hollow, Meads Creek and Dry Run State Forests. Move sign on S. Bradford State Forest.	Year 1	L	\$5,000		
Timber and Vegetation Management: Maintain knowledge of forest stands.	1.0	Perform State Forest inventories	Every 10 yrs.	C	625 Work Days		
Timber and Vegetation Management: Maintain healthy vegetation	2.0	Practice Integrated Pest Management	On-Going	C			Unable to predict future pest problems. A new invasion could greatly increase the cost.
	2.1	Reduce Deer population, to reduce damage to the low growing vegetation (understory).	Annually	H			Accomplished by hunting license sales, producing brochures, etc.
	2.2	If widespread damage occurs, evaluate the damaged stands for salvage cut or other management action.	After damage occurs.	C			Unable to predict costs or income.

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
	2.3	Deal with invasive exotic plants or animals. Specific actions will be based on species and location, but include prescribed burn, pesticide and mechanical removal.	After invasive is found.	L			Unable to predict costs.
	2.4	Mechanical or herbicide removal of Giant Hogweed.	Annually	L	20-200 Work Days		
	2.5	Herbicide removal of Japanese Knotweed.	Annually	L	20-200 Work Days		
Timber and Vegetation Management: Protect water and soil quality	3.0	During Timber and Vegetation Management, follow “Special Management Zones, Retention on State Forests, and Rutting Guidelines” and other Best Management Practices (BMP’s) per NYS DEC’s “Timber Management Handbook”	On-Going	C	--		
	3.1	Designate stands into the Protection Forest category that have factors that require special considerations.	On-Going	C	See 1.0		
	3.2	See also “Watershed and Wetlands Protection” and/or “Fish and Wildlife Habitat”	On-Going	C	--		
Timber and Vegetation Management:	4.0	Create about 112 acres.	By year 10	L	\$190,400		Based on \$1,700 per acre.

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
Grassy/Brushy Openings (105 current acres, plus 112 additional acres)	4.1	Maintain grassy openings with a 3 year rotation of mowing (or annually). Or annual burn. (105 current acres)	At Least Every 3 yrs. (Or annually)	H	\$100 per acre to burn. \$200 per acre to mow.		
	4.2	Maintain brushy openings with a 5yr rotation of hydro-axing.	Every 5 yrs.	H	\$300 per acre		
Timber and Vegetation Management: All Age silviculture – about a 20 yr cutting rotation	4.3	Stand entry on 136 acres located on 8 stands	See schedule, Appendix F: Timber Management	H		\$34,000	Based on \$250 per acre.
Timber and Vegetation Management: Even Age silviculture, Natural hardwood at about a 100 yr rotation Plantation softwood at about a 75 yr rotation	4.4	Regenerate 1,850 acres located on 61 stands	See schedule, Appendix F: Timber Management	H		\$555,000	Based on \$300 per acre. (Natural hardwood at about a 100 yr rotation Plantation softwood at about a 75 yr rotation)
	4.5	Thin 4,240 acres located on 152 stands	See schedule, Appendix F: Timber Management	H		\$339,200	Based on \$80 per acre

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
Timber and Vegetation Management: No Access - For one or more reasons, some stands cannot be accessed with modern logging equipment, even though some of them could be treated.	5.0	If access improves through additional acres being purchased, or new types of logging equipment is developed, these stands will also be <u>evaluated</u> for silvicultural activities.	After access improves.	L			Unable to predict costs.
Timber and Vegetation Management: Pre-commercial thinning	6.0	If funding or staffing becomes available, the seedling/sapling and smaller pole size stands will be evaluated for pre-commercial thinning.	When funding and/or staffing are available.	L			Unable to predict costs.
	6.1	Implement “pre-commercial thinning” or silvicultural activities in “no access” stands, After evaluation per 5.0 and 6.0, add to schedule, Appendix F: Timber Management	After 5.0 or 6.0	L			Unable to predict costs.

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
Timber and Vegetation Management: Roads, ponds, wetlands etc.	7.0	Maintain per “Unit Maintenance and Facilities Management” and/or “Fish and Wildlife Habitat” and/or “Public Recreation and Use”	On-Going	H	--	--	
Watershed and Wetlands Protection: Protect water and wetland resources	1.0	Utilize Best Management Practices (BMPs) for water quality on timber sales, gas well site construction, recreation facilities, and any other construction.	On-Going	C	--	--	
	1.1	Control erosion through proper road and trail maintenance.	See Access and Unit Maintenance and Facilities Management	C	--	--	See Access.
	1.2	Comply with the Water Resources Law, Freshwater Wetlands Act, and Federal wetlands regulations	On-Going	C	--	--	
	1.3	Follow Objective 3 in Table 11: Management Objectives and Actions for Timber and Vegetation Management	On-Going	C	--	--	
	1.4	Identify areas with potential and need for additional water resources	On-Going	L	--	--	
	1.5	Construct new water features in upland areas	See Fish and Wildlife Habitat	L	--	--	See Fish and Wildlife Habitat Action 1.1

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
Fish and Wildlife Habitat: Manage habitats for endemic wildlife species and public use	1.0	Conduct all forms of woody vegetation management to achieve balance forest structure.	See Timber and Vegetation Management	H	--	--	
	1.1	Develop and maintain up to 300 small ponds and dugouts to act as amphibian activity centers.	At least 2 per year, and no more than 100 per year.	L	Up to \$10,000 per each, most for much less.		Occasionally will be part of a sale contract, the majority is likely to be constructed as part of a partnership with the Upper Susquehanna Coalition (USC).
	1.2	Manage conifers in natural forests	On-Going	L	--	--	See also Timber and Vegetation Management.
	1.3	Protect and enhance rare plant and animal communities	Annually	C	30 Work Days		May also include other costs.
	1.4	Convert plantations to natural communities	See Timber and Vegetation Management	H	--	--	See also Timber and Vegetation Management. This will happen both naturally and as part of stand treatments.
	1.5	Identify, protect, and improve habitat for threatened/ endangered species	On-Going	C	45 Work Days		May also include other costs.
	1.6	Develop larger (>1 acre) wetland	At least once as part of 1.1	L	--		See 1.1
	1.7	Survey for, identify, protect, and improve habitat for Species of Greatest Conservation Need (SGCN)	On-Going, or as funding is available	H			Unable to predict costs.

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
Fish and Wildlife Habitat: Manage habitats for endemic wildlife species and public use	1.8	Monitor invasive exotic plants or animals. Specific actions will be based on species and location, but include prescribed burn, pesticide and mechanical removal.	After invasive is found. (see Timber and Vegetation Management)	H			Unable to predict costs.
Fish and Wildlife Habitat Encourage public use to enjoy wildlife resources	2.0	Assist local groups in utilizing and protecting wildlife resources	Annually	L	45-100 Work Days		
	2.1	Under the Adopt-a-Natural-Resource Program or Volunteer Stewardship Agreement, work with local and governmental groups to enjoy wildlife habitat by building ponds, observation decks, nesting structure etc.	As opportunities arise – See also Public Recreation and Use	L	--	--	See also Timber and Vegetation Management, and Public Recreation and Use.
Fish and Wildlife Habitat: Manage and reduce nuisance wildlife populations.	3.0	See action 2.1 in the Timber and Vegetation Management section - Manage deer population to reduce damage to the low growing vegetation (understory).	Annually	H	--		
	3.1	Remove feral swine from the landscape.	When found	C	--		
Public Recreation	1.0	Receive public input.	On-Going	C	250 Work Days		

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
and Use: Identify additional recreation needs.	1.1	Monitor use patterns	On-Going	L	150 Work Days		
	1.2	Solicit public input.	Every 10 years	C	14 Work Days		Part of the UMP process.
	1.3	Assess user satisfaction from comments received.	On-Going	H	50 Work Days		
Public Recreation and Use: Coordinate with volunteer groups, and other agencies/ municipalities through the use of Cooperative Agreements, Volunteer Stewardship Agreements, or Adopt-a-Natural-Resource Agree-ments, to construct	2.0	Identify resources and/or volunteer groups to form additional partnerships.	On-Going	L	50 Work Days		
	2.1	Assist the Finger Lakes Trail Conference sponsors in maintenance and enhancement of the Finger Lakes Trail and Crystal Hills Trail.	On-Going	H	200 Work Days		
	2.2	Assist the Trail Tamers Snowmobile Club sponsors in maintenance and enhancement of the Six Nations Trail System	On-Going	H	200 Work Days		
	2.3	Encourage rehabilitation of trail sections that are unsuitable for existing use.	On-Going	H	100 Work Days		
	2.4	Provide resources or utilize opportunities as needed to maintain and enhance existing trail(s)	On-Going	C	--	--	Unable to predict costs.

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
and/or maintain existing and/or future recreational facilities	2.5	Minimize conflicts between user groups	On-Going	H	40 Work Days		
	2.6	Discourage illegal use of motorized vehicles.	On-Going	H	40 Work Days		
Public Recreation and Use: Determine feasibility and/or compatibility of proposed additional recreational opportunities.	3.0	In house review of proposed projects	As Needed	L	40 Work Days		
	3.1	Add proposed projects to the Six Nations UMP by amendment. (This includes a 30 day public comment period.)	As Needed	L	30-300 Work Days		
	3.2	Negotiate and enter into AANR agreements with sponsoring volunteer groups.	As Needed	H			About 5 Work Days per AANR.
Public Recreation and Use: Provide additional recreational	4.0	Construct and maintain new facilities as supported by the UMP. (see also 9.0 – 9.10 & 10.0- 10.3 & 11.0 – 11.7)	By year 10	H	--	--	
	4.1	Provide technical support for volunteer groups.	As Needed	L	--	--	Unable to predict costs.

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
opportunities. Including maintaining and improving access for persons with disabilities.	4.2	Construct barriers to discourage motorized use of skid trails and abandoned roads after logging operations.	As Needed	C	\$1- 4,000 per location		Usually will be part of a sale contract.
	4.3	Improve small hand-carry boat launch on Cinnamon Lake	Year 5	L	\$10,000		
	4.4	Improve woods path at Spencer Pond.	Year 4	L	5 Work Days and \$5,000		
	4.5	Place ADA picnic table and fire ring at overlook at the end of the MAPPWD trail on Goundry Hill State Forest.	By year 10	L	\$2,000		
	4.6	Assist the Finger Lakes Trail Conference sponsors in constructing and maintaining a lean-to on West Hill State Forest	One time.	L	3 Work Days		Most of the work and cost will be done by the Finger Lakes Trail Conference.
Public Recreation and Use: Advocate wildlife-based recreation	5.0	Encourage bird watching, hunting, fishing, trapping etc. according to New York State regulations.	On-Going	L	--	--	Unable to predict costs.
	5.1	See also Fish and Wildlife Habitat	On-Going	--	--	--	
Public Recreation and Use:	6.0	See also Maintenance and Facilities, and Access	On-Going	--	--	--	

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
Maintain existing and future recreational facilities.	6.1	Assess, maintain and improve Sugar Hill Recreation Area, Six Nations Trail System, Archery courses, etc (see also 9.0 – 9.10 & 10.0 – 10.4 & 11.0 – 11.7)	As funding is available.	H	--	--	
Public Recreation and Use: Increase awareness of public recreation opportunities.	7.0	Provide brochures and maps for users at kiosks, NYS DEC offices, and NYS DEC web page.	Check at least monthly	H	20 Work Days		
	7.1	Place kiosks or signs at high use parking areas, such as on Hoppers Bridge on Meads Creek SF, CR 23 & Tower Hill Rd on Sugar Hill State Forest.	By year 10	H	\$1,000 to \$5,000 per each		
	7.2	Update maps and brochures to reflect new facilities/trails/acquisitions	As Needed (At least every 5 yrs)	H	50 Work Days \$2,000		Printing costs about \$200 per 1000 brochures
	7.3	Update kiosks	Annually	H	20 Work Days		
Public Recreation and Use: Enhance visual appeal	8.0	Establish a litter-free environment by promoting carry in/carry out policy.	On-Going	H	--	--	Unable to predict costs.
	8.1	Remove litter from state land.	At least Annually	H	--	--	See Access 5.0
Public Recreation and Use: Sugar Hill	9.0	Hire seasonal caretaker	Annually	C	\$160,000		
	9.1	Post guidelines	Year 1	H	--	--	

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
Recreation Area	9.2	Open gate from the 3 rd Monday in May through the 3 rd Monday of October. (When conditions specified above are met.)	Annually	H	--	--	
	9.3	Maintain and keep open the restroom and water supply.	At least weekly, while gate is open.	C	\$12,000		
	9.4	Mow grass, remove garbage and manure, and fill brochure holder.	At least weekly, while gate is open.	H	\$6,000		Cost does not include inmate labor.
	9.5	Continue to use the TRP system to allow use of the facilities by large groups. (Such as NYFAB, Boy or Girl Scouts, Reigns of Hope, etc.)	Annually	L			2 – 20 Work Days per TRP
	9.6	Finish porch area of restroom, then remove current kiosk.	By Year 5	H	\$3,500		
	9.7	Construct a 10 stall horse shelter.	By year 10	L	\$15,000		
	9.8	Construct an improved parking spot for the manure spreader.	By year 10	L	\$10,000		
	9.9	Finish accessible camping spot.	By year 5	H	\$5,000		
	9.10	Construct hardened path to one of the accessible picnic tables.	By year 10	L	\$800		
	9.11	After 9.7, above, evaluate usage patterns and if needed install one overhead 3 post picket line.	After 9.7	L	\$500		
	Public Recreation and Use:	10.0	Continue to remove deteriorating bale backstops from the ranges.	Annually, until gone.	L	\$10,000	
10.1		Close and remove the Mass. Archery course.	Year 2	L	\$2,000		

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
Archery Courses	10.2	Evaluate ranges for conversion to universally accessible.	Year 4	L	3 Work Days		
	10.3	Develop chosen range to universally accessible.	Year 6	L	\$10,000		
	10.4	<i>If</i> NYFAB no longer uses the ranges, they will be removed and allowed to revert to forest.	Only after no longer in use.	L	\$16,000		
Public Recreation and Use: Six Nations Trail System	11.0	Systematic evaluation of the Six Nations Trail system	Year 1 and 8	H	15 Work Days		
	11.1	Add sections of A-Trail and Mohawk to MAPPWD list.	Year 1	H	1 Work Day		
	11.2	Move the Six Nations Trail System trails off of private land. (May not be possible in all locations.)	As funding is available.	L	\$50,000		
	11.3	Prioritize the issues documented in the systematic evaluation of the Six Nations Trail System	Year 1 and 8	H	4 Work Days		
	11.4	Repair or otherwise deal with the issues discovered in the evaluation, if funding is available.	Years 2-7 and 9-10+	H			Unable to predict costs.
	11.5	Open snowmobile spur trail along Switzer Hill Rd.	By year 10	L	5 Work Days \$20,000		

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
	11.6	Construct horse shelters at the two parking lots on Tower Hill Rd located closest to Fire Tower Access Rd. Either a set of four or two sets of two stalls. Include a small display board/kiosk as part of the building.	By year 10	L	\$15,000		
Unit Maintenance and Facilities Management: Maintain constructed ponds/ potholes	1.0	Inspect for problems.	Annually	C	30 Work Days		
	1.1	Repair dikes, control boxes, etc	As Needed	C			(In consultation with the Division of Water, Dam Safety Unit) Unable to predict costs.
Unit Maintenance and Facilities Management: Solicit volunteer groups to help maintain facilities	2.0	Promote Adopt a Natural Resource Program or Volunteer Stewardship Agreement.	On-Going	L	--	--	Unable to predict costs.
	2.1	Enter into agreements with volunteer groups.	On-Going	L	--	--	See Public Recreation and Use

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
Unit Maintenance and Facilities Management: Maintain existing and future facilities.	3.0	Identify needed maintenance	On-Going	C	200 Work Days		
	3.1	Do the needed maintenance, as money allows.	On-Going	C	\$1,000 to \$100,000		
	3.2	Enhance law enforcement efforts.	On-Going	C	--	--	Unable to predict costs.
	3.3	Inspect higher concentrated recreational use areas	Minimum of every 5 years	C			
	3.4	Remove Imminent or Probably trees or branches	Minimum of every 5 years, or as needed.	C			
	3.5	Inspect and repair stairway on the Fire Tower.	Annually	C	20 Work Days & \$5,000		
	3.6	Re-paint the Fire Tower.	Year 2	H	\$20,000		Last painted in 1992.
Unit Maintenance and Facilities Management: Maintain existing and future roads.	4.0	Identify needed maintenance	On-Going	C	--	--	
	4.1	Do the needed maintenance, as money allows.	On-Going	C	--	--	
	4.2	Enhance law enforcement efforts.	On-Going	C	--	--	Unable to predict costs. (see also Access)
Land Acquisition: Provide	1.0	Identify land acquisition needs that improve access to state forest.	On-Going	L	--	--	Unable to predict costs.

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
improved access to the Unit.	1.1	Acquire desired properties from willing sellers as funding permits.	On-Going	L	--	--	Unable to predict costs.
Land Acquisition: Consolidate public ownership by eliminating in holdings	2.0	Identify land acquisition needs, which simplify the NYS DEC's boundaries.	On-Going	L	--	--	Unable to predict costs.
	2.1	Acquire desired properties from willing sellers as funding permits.	On-Going	L	--	--	Unable to predict costs.
Land Acquisition: Enhance recreational opportunity.	3.0	Identify land acquisition needs, that improve recreational opportunities	On-Going	L	--	--	Unable to predict costs.
	3.1	Acquire desired properties from willing sellers as funding permits.	On-Going	L	--	--	Unable to predict costs.
Land Acquisition: Protect significant ecological areas, especially within Forest Matrix Blocks.	4.0	Identify land acquisition with significant ecological areas, especially within Forest Matrix Blocks.	On-Going	L	--	--	Unable to predict costs.
	4.1	Acquire by fee simple or easement desired properties from willing sellers as funding permits.	On-Going	L	--	--	Unable to predict costs.
Land Acquisition:	5.0	Identify land acquisitions that are scenically important.	On-Going	L	--	--	Unable to predict costs.

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
Are scenically important	5.1	Acquire desired properties from willing sellers as funding permits.	On-Going	L	--	--	Unable to predict costs.
Land Acquisition: Contain threatened or endangered species	6.0	Identify land acquisition with threatened or endangered species.	On-Going	L	--	--	Unable to predict costs.
	6.1	Acquire by fee simple or easement desired properties from willing sellers as funding permits.	On-Going	L	--	--	Unable to predict costs.
Land Acquisition: Are of exceptional historical or cultural importance	7.0	Identify land acquisition with exceptional historical or cultural importance.	On-Going	L	--	--	Unable to predict costs.
	7.1	Acquire desired properties from willing sellers as funding permits.	On-Going	L	--	--	Unable to predict costs.
Land Acquisition: Improve watershed protection	8.0	Identify land acquisition which improves watershed protection.	On-Going	L	--	--	Unable to predict costs.
	8.1	Acquire by fee simple or easement desired properties from willing sellers as funding permits.	On-Going	L	--	--	Unable to predict costs.
Land Acquisition:	9.0	Identify issues	On-Going	L	--	--	Unable to predict costs.

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
Resolve other issues, such as split mineral estate.	9.1	Attempt to resolve such issues	On-Going	L	--	--	Unable to predict costs.
Mineral Resources: Decide to approve or not approve extraction of mineral resources.	1.0	Nominated properties are reviewed by Division of Mineral Resources(DMN) and Division of Lands and Forests(L&F) and Division of Fish, Wildlife and Marine(Wildlife) per above process. Office of General Services(OGS) makes approvals for minerals	As Needed	C	--	--	Unable to predict costs, which will vary greatly depending on how many properties are nominated.
	1.1	A public meeting is held with a 30 day comment period after.	As Needed	C	--	--	Unable to predict costs.
Mineral Resources: If extraction is permitted... Execute consent contracts.	2.0	DMN conducts lease sale through competitive bid process and executes contracts for oil and gas. OGS executes contracts for minerals.	As Needed	C			
Mineral Resources: Regulate operations;	3.0	Division of Lands and Forests reviews proposed operations and if approved, issues a Temporary Revocable Permit	Every Time	C	--	--	Unable to predict costs.

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
and access surface estate to extract mineral resources.	3.1	DMN reviews proposed operation and issues Drilling Permit or Mining Permit.	Every Time	C	--	--	Drilling permits generate between \$290 - <\$3,800 per well permitted, dependent upon depth well is permitted to.
	3.2	DMN inspects & regulates operations, production and administers royalty payments to State.	Every Time	C	--	--	Unable to predict costs or income.
Mineral Resources: Monitor reclamation & well plugging	4.0	DMN enforces Rules and Regulations pertaining to plugging procedures.	Every Time	C	--	--	Unable to predict costs.
	4.1	DMN and L&F monitors and enforces surface reclamation	Every Time	C	--	--	Unable to predict costs.
Mineral Resources: Administer mineral estate	5.0	DMN monitors lease, production and royalty payments for oil and gas. OGS does same for minerals.	Every Time	C	--	--	Royalty payments in past leases have been based upon 1/8 th or 12.5% royalty interest to NYS. One bcfg produced from NYS minerals at a sales price of \$5/mcfg, would generate more than \$600,000.
Mineral Resources: Pipeline access and	6.0	Granted and directed by terms of lease agreement administered by DMN.	Every Time	C	--	--	Unable to predict costs.

Section	Mgt. Action #	Management Action Item	Frequency of Action	Priority Code (pg 109)	Estimated 10 yr Cost	Estimated 10 yr Income	Comments
construction	6.1	L&F and/or Wildlife reviews proposed operations and if approved, issues a Temporary Revocable Permit (TRP)	Every Time	C	--	--	Unable to predict costs.
	6.2	Division of Lands and Forests and/or Division of Fish, Wildlife and Marine enforce TRP provisions.	Every Time	C	--	--	Unable to predict costs.
Archaeological and Historic Resources: Preservation of historical and archaeological resources	1.0	Avoid any activity which may disturb any historical and/or archaeological resources.	On-Going	C	--	--	Unable to predict costs.
	1.1	Comply with state historic preservation act.	On-Going	C	--	--	Unable to predict costs.
	1.2	Consultation with the Seneca Nation of Indians Historical Preservation Office.	On-Going	C	--	--	Unable to predict costs.

APPENDICES

Appendix A: Public Comment

Initial Public Meeting and Mailing Responses

The following Six Nations Unit Management Plan public comments were received as a result of a scoping meeting held January 22, 2009 at the Bath NYS DEC office. A letter announcing the meeting, and asking for comments, was mailed on December 15, 2008 to a previously identified audience including adjacent property owners, local government officials, recreational groups, forest industry groups, wildlife groups and other general environmental groups and the local media. A total of 14 people attended the meeting, and 31 written comments were received.

The following comments were summarized in the Summary of Identified Issues section on page 46.

Written comments received:

For those that own land in these areas, the owners should be able to say yes or no to whatever your group wants to do on the owner's property. More needs to be known about what would be done with the funds collected from the sale of whatever it is that is sold.

~ Mrs. Elizabeth Cade

My name is Joseph Hauryski: I am a county legislator for district 8 which includes the towns of Bradford, Campbell and Wayne. I am very much interested in seeing this unit plan include access for hikers, horseback riding, and snowmobile riding. I was born and raised on the family farm at 6031 County Route 17 and my wife and I have returned to the farm to raise beef cattle. I have always enjoyed hiking and hunting on the surrounding state lands and find it hard to believe that more people would not be doing the same.

Take Moss Hill for example, the old abandoned road from South Bradford to the Dennis Road, has been allowed to grow up and erode to the point that you cannot even walk down it. I have had hunters tell me that they find it difficult to even get through near South Bradford. Why isn't the state at least keeping the old road passable for hiking and horseback riding and for use as a fire lane.

Instead of local snowmobiler's traveling to the Tug Hill area in the winter, why can't this unit be developed to provide for this recreational activity that would benefit the local economy?

Sometime ago I recall that the state had big plans for this unit as they held public meetings, etc. to gain input on potential uses for the land. I never heard anything more. With the state of the economy I realize that it may be difficult to accomplish some things, but I would like to see more being done to help the local economy with innovative use of this unit. You need to do a better job of promoting what uses can be made of this unit by the public.

~ Joseph J. Hauryski

I own about 110 acres on the south west corner of the end of County Line Road at the intersection with Cross Road, in the Town of Dix, Schuyler County. Can you provide me a larger scale map of this portion of the Six Nations UMP area? We have a piece of the upper Glen Creek on our property, as well as a short section of the Finger Lakes Trail. We were also crossed by the Empire Connector pipeline (resulting in the loss of 1400 trees).

~ Douglas Milliken

There is a lot of dead trees behind my property and a line of fallen trees from an ice storm between my place and Knowles' place.

~ Gary Landolf

Thanks very much for the opportunity to comment on the Six Nations Unit Management Plan. Given the fragmented configuration of these public lands, the Finger Lakes Land Trust strongly recommends that the NYSDEC commit to a long-term effort to permanently protect key in-holdings and parcels that link existing state lands through select acquisitions from willing sellers and the use of conservation easements. The Land Trust has already secured one parcel in this area (Sugar Hill - Trechter parcel) through a donated conservation easement, and we look forward to working in partnership with private landowners and the NYSDEC in the future to secure additional lands.

~ Andy Zepp, Finger Lakes Land Trust

Charge all hikers, bikers, walkers, campers, etc a fee for use of our state lands rather than raising license fees of hunters and trappers and fisherman. Also sell timber at full value to logging companies rather than low value. Reduce DMP permits and control coyote population.

~ Walter R. Andrews

It is disappointing that residents or campers continue to dump trash on our property at the turn around at the end of Town of Orange on east end of Templar Road. The years of disposal and numerous complaints have brought no favorable results.

~ Daniel J. Grey

I would first like to thank you for the opportunity to comment on the upcoming usages for the Six Nations Unit Management Plan. This Unit covers a significant amount of Schuyler County. The largest area of concern and the highest percentage of State Land is located in the Town of Orange in the Meads Creek Watershed. Meads Creek Watershed is one of the steepest, flashiest small watersheds in the State of New York. It has an extremely high frequency of flooding, and severe erosion. Meads Creek itself and its tributaries in the Town of Orange are highly unstable. The largest contributing land use to this watershed is the State Land unit itself. A considerable amount of logging over the last 5 years in this area has had a recorded impact in the watershed, to sediment load, erosion, and a very extreme decrease in time of concentration in an already flashy watershed. By no means is the Schuyler County Soil and Water Conservation District against logging of State Lands. We believe it can have a very positive impact on wildlife, however some of the practices, or lack thereof, that have continued to occur on the harvests in this area over the last 5 year period are sub-par to say the least. Roadways constructed on near vertical slopes, no Best Management Practices installed to standard during the logging events, limited to no shut down during extremely wet and sensitive events. We do not blame these issues on DEC we understand that there are only two individuals to do oversight in dozen or more county area. However, if there aren't enough foresters to ensure a quality harvest done with Best Management Practices installed to good Timber Management guidelines then the harvest shouldn't occur. This area is too sensitive and needs extreme oversight. I have attached a Topographic overlay of the Town of Orange with the State Land and Meads Creek Watershed highlighted. I have also attached several soils

slope maps showing how steep of land we are talking about. The Soil and Water District met with many members of DEC in the past to walk the areas of concern. We would be willing to do so again. Thank you for the opportunity to comment.

~ Jerry Verrigni, Schuyler Co. SWCD

We feel that the existing trails should be reconfigured, if necessary, to accommodate ATVs and snowmobiles as well as horseback riding and hiking. This would assure a more diversified use and afford many more people access and enjoyment of the state lands.

~ John & Hohanna Inscho

Plant lumber grade pine. Try some American Chestnut. Make loggers fill or grade their ruts – causes erosion.

~Thomas Plucknette

I'm concerned about the way in which any timber plans are implemented. I disagree with any plans that call for clear cutting, especially in the Cinnamon Lake State Forest. The contractors should also be required to leave the areas substantially as they found them, not with deep ruts along the skid trails that make even walking along them difficult.

~ Mr. Greg Malzewski

Very happy with all that has been done so far, except the project done at the end of my road, Fish Hill Road. Two ½ to ¾ acre mud holes – what a mess. I can't believe someone got paid from state money for the mess they made of a wonderful piece of wood. Go check it out. I think you will say the same.

~Douglas W. Lindstrom

Sugar Hill has always been a place where history is waiting to be discovered. Many of the horse trails are the original roads of the settlers. You can ride in spring and see lilacs and other flowers of the settlers at the home-sites, surviving all the years, just waiting to be seen by the horse rider or walker.

The roads had to be built exceeding well to last this long. The only thing that kept these roads from being the original trails was lack of maintenance. How much work and money would it take to ditch and crown the roads once every five years to so instead of waiting to have to bulldoze your way through them and then make a track for the water to erode and wash them out.

Most of the horse trails like Otter Creek are just that, horse trails; but at Sugar Hill the trails and roads are part of history. The settlers long gone would wonder what modern day man has done to their hard and back-breaking work. It seems a shame to put in roads, like highways, to replace history.

Please consider this suggestion. It would make our Sugar Hill the most unique place of all multi-use trails in NY State.

I have often .. (met?) .. first timers at Sugar Hill out on rides pointing out various points of interest and explained how Sugar Hill evolved into this wonderful I have been thanked many times over for the leisure ride and interesting points of interest and history. Wouldn't it be great to have a marker at these home sites with the names of the settlers?

It seems such a waste to have such a wonderful place and have it not live up to its full potential.

NO ATV on trails or roads except for maintenance and then only when the terrain is stable enough to support it.

~Sharon Eastley

It sounds like there is a very worthwhile project going on. I am very much in favor of giving residents a chance to spend time in the forest. I am 83 years now and had open heart surgery. Don't get to the woods as much as I would like.

~ Donald Vansile

What about dens for bears. We have a lot of rock outages with not much hollow underneath. Could you dig out under these stones? I would like to see fox squirrels introduced in this area.

~ Anthony Yorski

Is there some way to plan a set of trails for 4-wheelers at set times and for protection of wildlife, at To build and maintain trails and

~ Wilbur Vance

My name is Daniel Teed and my farm borders some of this land in Town of Dix, Schuyler County. This land has recently been badly logged; ruining the hardwoods that supplied food for deer, turkey, squirrels and other wildlife. The only possible good that I can see is the roads that were made by the log skidders.

My wife is the leader of the Cabalo Loco 4-H club. We would like to see these log roads become recreational trails for her 4-H members to ride their horses on. They would be willing to help keep up the trails and help with the creation of signage. They have ridden their horses on the trails at Sugar Hill, and would like to do the same thing close to home.

Thank you for the opportunity to respond.

~ Daniel Teed

I think it is about time that the DEC made consideration for the use of ATVs at some, if not all of the 22,000 acres of state land in Steuben and Schuyler County.

Many of the upstate counties, as you know, have made possible the use of ATVs on their state lands. I do not find it necessary to explain to you the money brought into these areas from the ATV users. That is the same money as the snowmobiles have done for many years.

Owners of ATVs pay a registration fee each year in this area and get nothing in return. It is about time that this condition is addressed.

We must remember that this is not "state land", it is PUBLIC LAND and the public should have equal use as long as the public acts responsible and those that do not be punished.

~ Jay Voorhees

Replenish native trout to upper Meads Creek. Float stock trout from beginning of Meads Creek down to Hopper's Bridge. More wetland management – Sugar Hill; repopulate otter; keep horse trails clear and add grass areas near overnite (sic) camping.

~ Julia & Dwayne Tempest

Allow, or make available, more public parking on state land.

Allow landowners access to firewood on state land, to include dead or blow-downs and trees across streams.

Allow more gas companies into New York.

~ Lawrence J. Baker

I am writing regarding your letter dated December 15, 2008 concerning the Six Nations Unit Master Plan. Thank you in advance for your consideration of the points listed below in regards to New York Field Archers & Bowhunters (NYFAB) use of the Sugar Hill Recreation area.

New York Field Archers & Bowhunters (NYFAB) has a long tradition at the Sugar Hill and Watkins Glen area.

The 58th NYFAB Outdoor Championship was held on Sugar Hill in August 2008.

Thirteen (13) out of sixty-three (63) National Field Archery Association (NFAA) Outdoor National Championship Tournaments have held in the Sugar Hill Area – more than any other state. The first Outdoor National Championship held in the Sugar Hill Area was in 1951 and the most recent was in 2004.

There have been two (2) International Field Archery Association (IFAA) World Championship Tournaments held on Sugar Hill (1980 & 2004).

New York Field Archers & Bowhunters (NYFAB) is family organization. Women and children have always been active participants in archery events on Sugar Hill.

New York State has always recognized Sugar Hill for bowhunting and archery.

The NYFAB Bowhunters FUNANZA started on Sugar Hill more than 35+ years ago.

Sugar Hill is for recreation and hunting use. What is more appropriate than having Sugar Hill used for archery events and the FUNANZA?

The FUNANZA is an event attended by many hunters which allows them to practice prior to hunting season.

The Bowhunters FUNANZA was a spin-off of the Bowhunter Education Program as adopted by the New York State Department of Environmental Conservation and the National Bowhunter Education Foundation (NBEF).

There have been as many as 1,200 archers competing during the FUNANZA weekend. Most recently there have been approximately 250 participants per day. Participants at NYFAB's events bring revenue into Schuyler County and the Village of Watkins Glen.

NYFAB is very organized and consider ourselves experts in setting up archery ranges that meet accepted safety requirements.

NYFAB has always tried to comply with the rules & regulations set forth by the DEC.

NYFAB has a long standing heritage in the Watkins Glen area as evidenced by the arrows shot into the "State Champions wall" at the Seneca Lodge.

Any incidents that occurred during the NYFAB FUNANZA have been within the past two years. The incidents were not caused by registered FUNANZA participants, but by individuals who were on the "Hill".

At the September 2008 NYFAB FUNANZA a petition was signed by 295 participants requesting that the NYSDEC allow NYFAB to continue to host the FUNANZA on Sugar Hill.

~ Dave Hryn, NFAA Director – New York

I do not think ATVs should be allowed. I think that oil and gas leases should be kept to a minimum. I hope the state preserves the natural beauty of this area. Thanks.

~ John Kinsman

Both Steuben County DPW and the Finger Lakes Trail Conference support the inclusion of foot trails, and specifically, the proposed GET (Great Eastern Trail) in the new Six Nations UMP.

~ Stephen Catherman,

Constructing barriers on West Hill Forest area where people pull off road to drive on state land and dump garbage and misc household items. Large bolders (sic) arranged (sic) in a way which would allow a car to turn around but would keep them from driving into woods.

~ Donald E. Burnside

I would like more access for handicapped people. I would also be (sic) happy with anything that help improve (sic) the habitat of the land.

~ David Oakes

Maintenance of the historical stone walls

Sugar Hill: move the trails away from the archery fields

Better maintenance and signage of the Finger Lakes Trail

Maybe the addition of a baseball diamond in the recreation area

The addition of a bathroom facility in the 8-acre Sugar Hill Forest clearing.

~ Emily Hubbel, Tourism and Information Coordinator, Schuyler Co. Chamber of Commerce

Tree removal: I think it would be a good idea if when the trees were harvested, that the branches should be put through a chipper or piled in one area, so that when walked on you don't break a leg. Right now, I would say there is a serious tripping hazard and a sure lawsuit to follow. I have fallen down twice and I know about them. Just a suggestion.

~ Gil LeRoux

Thanks for the opportunity to talk with you all week before last about the Six Nations UMP. Unless I'm missing something, it sounds as if we hiking trail advocates probably have nothing new or dramatic to worry about in the next plan, assuming the basic tenets of the last one continue and no new wonderful fuel source is discovered below ground!

I did talk to you that evening about utilizing the language of the region 7 recreation plan with respect to the sanctity of foot trails without other users. Since mountain bike usage was barely a blip back when you did the first Six Nations UMP it didn't figure in your usage provisions, but in some spots it has become a genuine conflict, so biking is addressed in the region 7 rec plan, where such usage is essentially relegated to trails OTHER than designated foot trails.

See the full plan at www.dec.ny.gov/docs/lands_forests_pdf/reg7rec.pdf

I will observe that it is listed on your website as a Recreation Plan, with no "Draft" in front of it. Has something good happened we didn't know about?? Whatever its current status, I have observed references to it as if it were now in effect in two draft UMPs in region 7 this very winter.

Of particular interest to hiking trail advocates are the pages 44 through 48, especially near the bottom of 48 where certain trail systems are named and dedicated as foot trails. Naturally, during public hearings about this plan that feature was hotly debated by large numbers of bicyclists, but the region 7 foresters stood firm, for which we are eternally grateful. So while enforcement may be another matter, it is of great benefit to have this principle expressed in each UMP. Therefore, we eagerly and heartily endorse that provision, and hope you will utilize that language in the Six Nations plan, especially since a multitude of types of recreation do take place around the Sugar Hill complex.

~ Irene Szabo

I apologize for emailing you while sitting on our rented deck overlooking Monterey Bay and watching harbor seals and sea otters frolic about....

Just wanted to second Irene's comments about the draft Six Nations UMP plan. Having spent so many hours getting the FLT off of horse/snowmobile trails and onto its own designated path in the Six

Nations area, assuring that the main FLT and its branch trails are, and forever remain, for foot travel only is my top concern.

As we drove west last month, we saw many places where trails were restricted to foot-travel only; in fact, I was (pleasantly) surprised at how common this was. Yes, we were “off the beaten path,” but we saw paths limited to just hiking everywhere. I also saw trails reserved just for bicycles; and other trails just for horses. Only occasionally, and only where the trail bed was wide and clearly hardened, did we see multiple-use trails. Clearly, the “solution” of choice for trail conflict and environmental protection was to separate incompatible trail uses and users. Perhaps I just didn't see it, but I saw no evidence of abuse, even in Palo Duro Canyon park. Clearly, too, then, the trail managers were able to make their various “constituencies” understand that multiple users are compatible in only limited circumstances, because I saw no evidence of abuse. Maybe this is because abusers are easier to see and catch in the west's wide open spaces? Or maybe this is because there were more bike and horseback riders willing to create their own trails? Whatever, I just wanted to let you know that we're not alone in wanting footpaths limited to foot travel only and in believing that it's most appropriate.

~ Lynda Rummel

I am impressed with Lynda's observations of western trail management and I would like to add some of my own.

I have had a lot of wilderness experience hiking in the west and we know that those wilderness areas are vast protection from cultivation, human habitation and the ever invasive wheel. But give me a DEC logging forest foot trail anytime. It is still wilderness to me if there is no trail riding. Sure logging can daylight the place but so does a hurricane in a wilderness area.

So what if there is some difference of natural forest. You show me a wilderness area foot trail in the Adirondacks and I will show you a DEC L&F foot trail that is just as nice or maybe even better. I have done much trail work in both places.

The DEC has the fantastic opportunity to use its long distant foot trails to spread the wilderness kind of experience far beyond the wilderness areas themselves, like the days before Columbus and before they brought in the wheels. Our DEC L&F foresters can rival the wildest space anytime.

~ Bill Coffin

I would like for the DEC to contact the townships to up-keep the roads a little better. They are horrible! (sic) If you don't have a 4 x 4 there is no way you could access some areas. The state land going back Harrison Road is one of those roads. I know this because my place is back there.

~ Charles Jones, Jr,

Other Written Comments Received

Thank you for contacting me regarding the Six Nations trail system. I am the president of a horse trail riding club based between northern Pennsylvania and southern tier New York State. To better show you our interests, I have included our 2009 newsletter.

I've also enclosed several pages with pictures and or drawings of possible horse tie areas. The pictures are of high lines. The top picture was taken in Tennessee, where they have placed high lines at scenic overlooks so riders can safely tether their horses while they picnic or take pictures. There are actually metal loops placed six feet apart to tie a line to and keep the horses separate. The lower picture is from a magazine and has an explanation. Usually heavy-duty posts (telephone poles) or trees are used as the upright portion, and either rope or cable is used overhead. Our club didn't feel that we could put these posts in ourselves, so we looked at other ideas.

We were considering the triangle rails used in Hocking State Park in Ohio. We have access to pipe and a friend of the club who would weld them off site. We could then deliver them to the park and

safely place them in an appropriate spot. We are hoping you would consider allowing us to place a few of these at Sugar Hill. The area next to the manure wagon seems to be out of the way of camping vehicles and shouldn't effect how others use the area.

You mentioned the AANR. About twenty of our members have already signed up for this and have spent some volunteer hours at Jenksville, Tioga County. We would be happy to work in Sugar Hill also. We enjoy the trails there, and find that the location is central for our club.

The name and address of our club secretary is: Jeanne Root, [Address removed for privacy]. We also have a web site, if you would care to learn more about our club.

<http://twintiertrailriders2009.tripod.com/>

I've also enclosed our 2009 mailer, which we send to all our club members.

Thank you for listening to us.

~ Linda Hendricks

Our local trail riding club, Twin Tier Trail Riders, has been sponsoring fund raisers, club dues and has commitments from NYS Horse Council to match moneys that we have set aside that we would like to use for improvements at the Sugar Hill Recreation Area to benefit the horse riders by building more stalls in the camping areas. We have approached Bill Meehan the forest ranger with this proposal and have been told that you can also be of help to us to sponsor this program.

Sugar Hill is a very popular area for horse trail riders to camp and ride. Because it is so popular, the stalls fill up very quickly and many people have to picket their horses or put up portable fences to confine the horses.

Please let us help with funding more stalls being built so that more people who come to Sugar Hill to camp and ride their horses will have a safe place to put their horses while they are camping.

~ Jeanne Root, Secretary/Twin Tier Trail Riders

Greetings - We are from Ohio and rode Sugar Hill and that area in Oct. of 2009 and enjoyed it very much. Hope we are able to come back and do it again in the future. Are excited to hear of the possible improvements of the horse camps. The hospitality of the rangers and staff was super. Definitely, will make it a point to get up there in the near future. Best Regards

~ John & Eleanor Clower

I am writing to encourage the addition of stalls at the Sugar Hill Trail System.

Have ridden and enjoyed Sugar Hill Trails and camping areas. It is the closest system to my home; however, because of the lack of stalls I do not visit the system as often as I'd like.

I think it is in the best interest of the facility and the horse campers that more stalls be made available. Stalls provide a safe and secure environment for both horse and camper.

Thank you in advance for your interest and support.

~ Nancy Avery

As an avid trail rider and New York State resident, I am asking that the proposed improvements to the Sugar Hill Trail System (tie stalls) be completed. It is a true safety measure for the horses and riders, and an asset to the area.

~ Pat Reynolds

Senator Winner:

I am writing to support the proposed improvements to the Six Nations, aka Sugar Hill NYS Horse Trail System. I have used this system for many years and have watched the decline over the past few seasons. I believe additional stalls could minimize and possibly and perhaps eliminate the possibility of

injury to humans as well as horses. This would be a viable solution to a potentially dangerous situation. Picketing horses is neither safe nor convenient for anyone.

Thank you for your consideration.
~ Beth Worden

Senator George Winner

We are writing to encourage the addition of stalls at the Sugar Hill Trail System. This has become a wonderfully busy camping area for horsemen. The lack of sufficient stalls creates a safety problem when campers are forced to picket their horses. We think it in the best interest of the facility and the horse campers that more stalls be made available and our club (NYSPWHC) is eager to help.

Thank you in advance for your interest and support.
~ Tom and Regina Pondolfino

Senator George Winner

I am writing to encourage the addition of stalls at the Sugar Hill Trail System. Have ridden and enjoyed Sugar Hill Trails and camping areas. It is the closest system to my home; however, because of the lack of stalls I do not visit the system as often as I'd like.

I think it is in the best interest of the facility and the horse campers that more stalls be made available. Stalls provide a safe and secure environment for both horse and camper.

Thank you in advance for your interest and support.
~ Nancy Avery

As an avid trail rider and visitor to area trail systems, I am asking that the proposed tie stalls at Sugar Hill be completed. It is a safety measure for horse and rider, and an asset to the trail system.

Thank you.
~Pat Reynolds

Hi I would like to add my support to the other horse back riders who have been working with you and encouraging some work projects at Sugar Hill. Thanks for all you do for not only the horse people, but all who use this great resource.

~ Janet O. Smith

Verbal comments received since the 1998 Six Nations Unit Management Plan:

(That is not covered in the above written comments.)

Add A-trail between Evergreen Hill Rd and old Webb Rd to the MAPPWD list. Starting at the Upper Evergreen Hill Parking Lot, and heading east.

Create a portion of snowmobile trail to by-pass the section of Maple Lane that is plowed in the winter.

Connect D-trail north along Switzer Hill Rd to snowmobile trail on private land.

Add the power line on Coon Hollow State Forest, starting at County Route 19, to the MAPPWD list.

Horse trails on Coon Hollow and Cinnamon Lake State Forests, within riding distance of the horse stables outside of Monterey.

Make an accessible archery range on the south west side of the intersection of Maple Lane and Tower Hill Rd. It would be constructed with one central hardened lane with 7 target lanes on either side, the road side one would have to have an earth mound or something to stop arrows. This could also be used for practice during tournaments, and be left up for use year round, like there used to be at the Sugar Hill Recreation Area.

Horses and dogs running free, tethering horses to trees and excessive space used to paddock horses.

Allow use of MAPPWD trails for spring turkey season.

Keep the Six Nations Trail System the way it is, with no major changes.

Draft Plan Public Meeting Responses

Written and verbal comments on the draft plan were received during the August 7, 2012 public meeting held at the Tyrone Firehall. Written comments were accepted until September 7, 2012.

A summary of the verbal comments and NYS DEC responses:

These comments have been summarized and consolidated for easier reading.

Comment: If the area around the radio tower is to be designated for grazing by using electric fence corrals, manure shouldn't be spread there as it could spread worms to other horses.

Reply: An alternate location for dumping manure will be found.

Comment: Having a manure pit instead of having people put their manure up into the manure spreader would be a lot easier. Other places actually have cinder block walls and cement floors and you just wheel it in with your wheelbarrow and dump it.

Reply: The proposal is to have a pit to back the manure spreader in to, this should reduce the effort needed to put manure in to the spreader.

Comment: I also think we need more stalls than what they have in the plan at this point. I have 93 signatures on a petition for 20 stalls. Ten stalls up on top, two stallion stalls, four stall units at the parking lots. There are complaints about people tying to trees. More stalls will get horses off the trees.

Reply: An additional 14 stalls are contemplated in the draft UMP, six at the recreation area and two, two stall units at the two parking areas on Tower Hill (2x2x2+6=14).

Comment: In the 98-07 budget plan there was \$250,000 allotted in the ten-year plan to re-hab and maintain the horse trails. Was this ever spent? That's \$25,000 a year. That is in the plan. Can you carry the money over?

Reply: The prior UMP included a figure of \$250,000 for trail maintenance. That amount was never an allocated amount. Considerably less was actually budgeted and received for trail maintenance on this unit.

Comment: Our club has \$700 for building the stalls and another club, the New York State Plantation Walking Horse Club has \$400. The Plantation Walking Horse Club has \$10,000 in budget right now and no place to spend it. I have plans all drawn up and designs and photos for horse stall. We

can put in a four-horse stall in for \$3,000 and a ten-horse stall for \$7,100 dropped in place pressure treated, steel roof, all done. All it takes is the state scratching out a spot and some gravel.

Reply: The DEC will work with Clubs, through a TRP, to allow Clubs to construct stalls to Department specifications.

Comment: We would like to get the opening day changed to the first weekend of May. It is foolish to open up on a busy weekend and in case you have failures like you did this year. It's much wiser to do a soft start and make sure everything is up and running instead of doing what happened this year. Open it up with a soft start for a couple of weeks. The same expenses are there except for paying labor for the caretaker.

Reply: Opening the restrooms and water system is not an easy task and even more difficult if people are camping at the Recreation Area. Remember the trails are open even if the restroom is not. The Department will consider a 'convention', with conditions, for opening the restrooms and road to the Recreation Area

Comment: Brookfield has 136 stalls. No, Brookfield has 92. There are 131 miles of trail at Brookfield. No, a longer trail system. There used to be a lot more.

Reply: Information on the Brookfield Horse Trail system can be found on the NYS DEC Region 7 website. (www.dec.ny.gov/outdoor/46365.html)

Comment: Why were those dead trees cut down on the Thursday before Memorial Day Weekend, and the 20-foot dead limb left hanging over the campground, I don't quite understand that.

Reply: Operations staff does have many tasks and responsibilities. State Land Management staff do survey heavily used areas for hazards and request assistance from Operations for mitigation of those hazards. Any observed hazards should be reported to NYS DEC staff, and will be dealt with as soon as possible. The above dead limb, plus some others, was removed within a couple weeks of the public meeting notification. A few years ago there was earth moving in the Recreation Area from recent improvements, the damage to the roots of nearby trees will undoubtedly impact the health of adjacent trees.

Comment: And then every time I read something about the horse people in the UMP plan, it says "accomplished by year ten". Ten years is a long way, I've already been working on it for eight years, so if you don't do anything until ten years, that is 18 years I've been waiting to try to do something.

Reply: The work schedule is influenced by many factors, including budget and staffing. There are some actions that occur more quickly than anticipated and others that do not. The Department welcomes assistance from organizations and individuals, through TRP and AANR to accomplish actions in the work schedule.

Comment: You should make stipulation that people have to use some safeguard around the trees to protect the trees, like a tree safety then the horses have to be tied so they are away from the trees.

Reply: Those systems are contemplated in the UMP

Comment: The other thing I question is in the old UMP plan, there was amphibian retreats. Was any of those ever built? But if you do the math on them for this year, in ten years at up to a hundred of them for \$3,000 each if that is necessary, that's \$300,000 to build a place for frogs to swim around. It's hard for people to comprehend that you want to spend \$300,000 for frogs to swim around but yet you know, when the public wants some more stalls, you sorta want to go against that. It's in your plan for close to \$300,000. If you spent \$3,000 per occurrence, in ten years, that's \$30,000 a year to build frog ponds. Over ten years, that's \$300,000.

Reply: Yes many were built. Some were built as a small trade off in a timber sale, others in the partnership with the Upper Susquehanna Coalition (USC). Larger ones cost more, smaller ones cost less. It is unlikely that DEC staff or budget allocation will be used for construction, more likely to be constructed by partners to DEC specifications at locations approved by DEC staff.

Comment: The settlers built most of those roads over a hundred years ago and they have held up well. But they are not maintained; they are not ditched out, water runs down them, and get washed away. If they get fixed each year they will stay there forever. I've heard a lot of comments from different people that trailriders are trailriders, not road riders. When a trail is put back in, it's not for a semi-truck; it's for the horses to go down through. They must be four foot wide and three feet high, not 24, 30 feet wide. For example, logging trail, where they logged out, just down over from the campground going to County Rte 21.

Reply: At one time all of those old roads were wider, but over time they have brushed and eroded in from the sides. The same will happen to newly constructed or maintained trail. As multi-use trails the Six Nations Trail system trails should be about 12 foot wide (14 foot wide on sharp corners). On the new section Seneca trail referenced above, which was constructed as a trade off of a timber sale, the trail tread meets those requirements, but the lack of adjacent shrub undergrowth makes it feel wider.

Comment: Will there be any oil and gas leases on the state lands going forward? [The Revised Draft Supplemental Generic Environmental Impact Statement (SGEIS) on the Oil, Gas and Solution Mining Regulatory Program] is supposedly coming out somewhere down the road. Does DEC have to go through all 60 thousand comments? What's the status? There are some places it can't be drilled? They have to come up with a standard regulation for the hydrofracking. Hydrofracking's been around since the 40's. And it can be done safely. If it's covered it can be done safely.

Reply: The Supplemental "Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program" as it relates to horizontal drilling and high-volume hydraulic fracturing is not yet finalized, and the SEQRA process associated with this activity will address the issues raised in this comment.

Natural gas is a natural resource, and the leasing of State Forests for its extraction is authorized under the Environmental Conservation Law (ECL). ECL, Article 23, Title 11, section 23-1101 states the Department may make a lease on behalf of the state for the exploration, development and production of gas and oil in state-owned lands, except state park lands and the lands under the waters of Lake Ontario or along its shoreline. Leasing for the purpose of aiding in discovering and removing any oil and gas in state reforestation areas is also specifically authorized ECL Article 9, Title 5, section 9-0507.

The policies and procedures with respect to oil and gas leasing have been reviewed in accordance with SEQRA in the development of the "Strategic Management Plan for State Forest Management". This statewide plan has been developed to lead future management of DEC administered State Forests. It establishes statewide management guidelines for DEC staff through a process of public involvement and review.

Comment: Where in the UMP book is the map that you showed on the earlier slide of the management of the timber.

Reply: It is on page 259 additional information on timber management can be found on pages 23 and 63.

Comment: I would like to thank the bureau chief for coming because you and I have had several conversations and e-mails and I'm glad you're taking the concern to come down and to recognize Sharon Moore from the Senator O'Mara office representing him. I did tour the senator at Sugar Hill and

he told me that he endorsed what we were trying to do up there and thought it was a good idea. We spent almost two hours riding around in the hill. So he was very pleased. He never knew that site really existed and that's not far from his own back yard. I think with a group effort, we can get a lot of this accomplished, but everybody tells me I get a little upset, I'm just maybe too passionate about the place and I just put a lot of time I up there and when you work on a project for eight years, and then see it stalled on your desk in Albany for two years, it gets very, very frustrating. I'm trying to work with everybody; put I do have to push buttons to make things go and we got the governor's office involved and the commissioner's. I don't care who I write to, I'm just looking for results and I don't want to go another eight years to get something done, especially when we have money setting there where we can go forward.

Reply: We thank the 24 people that attended this public meeting on the Draft Six Nations Unit Management Plan and the 15 written comments we received.

Comment: I see spending \$96,000 on gates, \$70,000 on parking lots. In March I asked for gravel to go down to Evergreen and I would spread it if it just got there. But it hasn't made it there yet and the pile is just up the road. That's frustrating to me. Two years ago when we had the heavy rains, the stalls were flooded. I'm willing to do the work and help out, but I gotta have help on the other end, too. If anyone wants to review my cartoons of the horse stalls, I've got the works and would be glad to share those with anybody.

Reply: Once the trails have been reviewed and assessed we will prioritize work and coordinate activities between Operations staff and volunteers. DEC will work with volunteers/adopters and help to make it clear who at DEC adopters/volunteers should be contacting with questions/concerns.

Comment: I'm all for seeing you go into the state woods and cut down the cash crop trees, thin them out, do your clear cutting if you want. What I am not in favor of is the mess that was made over in Coon Hollow State Forest ten years ago where after all the oak that was going to be cut out, was cut out, they went back in and the logger cut down hundreds and hundreds of trees and left them wherever they felled. Unless you've got a million dollar insurance policy, they are going to lay there and rot because nobody's coming in to get them. When we was in school in conservation, that is 100% against everything we was taught. I know now that there are people out there with chippers that would haul this stuff out with a skidder and throw it in a chipper and it's another cash crop. I'd rather see that done than just cut 'em down and make an absolute gigantic mess out of these pieces of woods. If that's the kind of logging you're talking about doing, I'm not in favor of that. But if you're going to selectively cut and then clean the mess up, fine, I don't have a problem with that. When it's hip deep and you literally have to crawl over every log to get through the other hundred acres of this stuff to go someplace else and hunt. And I've never seen a deer in this piece of woods where this was done, even in the middle of winter when there's snow, you'll see the deer tracks on the outside, what few deer tracks you do find that you never see, in the middle of this mess because simply its more work to get through it than it is worth.

Reply: Timber sales on State Forest Lands are marked and supervised by the professional foresters on the State Lands Management Staff. Designated trees are sold through a competitive bidding process, then harvested by certified loggers who meet SFI & FSC green certification standards. Any tree limbs etc that are left on the ground will rot back into the soil to nourish the next generation of trees and other vegetation, and in the mean time provide habitat for insects and smaller animals. The tangled pile of tops will also proved shelter for the small seedlings by preventing the deer eating them.

Comment: You said you might be putting up gates on Maple Lane. That's a town road. I'm on the planning board. Why barricade Maple Lane? That's a town road. The whole thing's a town road. That's all public land. I understand that you're talking about maintaining public roads. We have the same

problem. Every town does, every year. It's not something that's like your individual property. It's everybody's problem, everywhere, so I don't understand how you can just come in here and say you're going to put a gate up and then you're restricting access to a lot of state land to a lot of people.

That's in our town. That's a town road that we've always used. Hunters around here have used that road. I've used it since I've been 8 years old. Emergency vehicles need to get through. So you're just saying that no matter what anybody says, you're going to do whatever you want. Another thing you don't understand, 51% of our town is state land, so you can pretty much close any road you wanted to. You want to just throw your weight around. It's not proper to just throw your weight around. If you close the road like that, if anything happens, the years it's been open. If someone gets hurt on that road, it's the town responsibility. It's a town law to oversee that road that it should not be closed. Have they talked to you about it? No one's talked to us about it. I'm on the planning board; he's on the board. The problem is we pretty much have to come together and pretty much block you from it is what you're saying. If you wanted to help us out, it's not a problem like a timber thing. If they're timbering, you can help us out and do it.

Reply: In the 1930's the CCC, at the request of the Conservation Department, moved the location of the northern most section of Maple Lane. This is the portion of Maple Lane that will have gates constructed at both ends, gates that can be locked open most of the year to allow free passage of the public on motor vehicles. The town has not maintained that section of road for many years but NYS DEC has maintained that section. Gates will prohibit vehicle traffic during times mud and snow season and reduce the frequency/cost of maintenance.

Comment: When 51% of your town is state land, you really have to raise the taxes on the people that are there, just to cover the roads that are on it. The state don't pay taxes. It goes to the county, not the town. A lot of people drive out through there, even in the winter. I'd like to open 'em all, but I don't want any gates on any of 'em.

Reply: New York State pay's land taxes on State Forests for all purposes except county tax. See page 14 for further explanation and Appendix C: Taxes for taxes paid in 2005.

Comment: There is a lot more vandalism up at Sugar Hill, there are a lot more people using it. At least twice a month there is a party at Sugar Hill. Instead of collecting wood, they burned the picnic table. The point is most people that aren't destroying something, don't close the road down. If you've trouble makers, take care of the troublemakers, don't close a road down because of it.

Reply: Closing a portion of Maple Lane will not stop people from accessing the Sugar Hill Recreation Area. Sugar Hill Recreation Area is accessed from Tower Hill Rd.

Comment: You say that now, but in two years, you've got a new guy in here and he says we're permanently closing it. We got nothing to say about it. Two years from now, the plan changes. Our plan changes every two years.

Reply: The point behind the ten year Unit Management Plan is to reduce the changes in plan that can occur as staff changes. Shifts will be needed as a plan hits the real world, and events happen that were not anticipated at the time of the writing of the plan, but this and all UMP's should reduce that tendency.

Comment: For instance, decades ago Seneca trail wasn't taken care of. Then, they had the state come in and opened the trail up with a bulldozer because nobody took care of it. That is like throwing money away. This is an example of what can happen when a trail is not maintained.

Reply: You are correct that lack of annual maintenance, by either NYS DEC staff or volunteers results in more work later. State staff continues to shrink, and as a result partnering with willing and

able volunteers, as well as using the staff and budgets to the most efficient way possible will continue to be vitally important for the continued use of the Six Nations Trail System.

Written comments received during and after the draft plan public meeting:

Comment: I had some typo's in my paperwork that was sent to your office.
Also after talking with other people that use Sugar Hill.

John, you made the comment about the increase usage of the 41 miles of trails, so as I was talking with other people, we came up with the idea of adding by the year 10, 20 more miles of trails. This would be done with a partnership of the AANR people and the horse riding clubs.

By doing this it would help take any extra load off of the existing trails.

So please Formally add this request to the UMP process

Also the 2, two stalls added to the parking lot areas, should be amended to read 1, 4 stall at each. It takes less material to make one four stall, then two, 2 stalls.

~Keith Reynolds

Reply: Our first priority will be to ensure the existing trails are in good condition. Proposals to add more trails will be discussed after existing trails are in good condition. We will compare costs and size of possible locations for the stalls.

Comment: The UMP calls for a total of 10 stalls, correct? Then why do I have a letter from Paul D'Amato, Regional Director, who was instructed by the Governor, to write me, and in this letter he stated that "our staff has responded by proposing 14 new stalls. Which is right?

I have signed petitions from 93 people requesting 20 stalls, and possibly more.

Item 7.3 Update kiosks annually , this is seldom done

Item 9.2 Opening date, change to the 1st weekend in May, don't wait until the first big Holiday arrives. The costs are the same, except for the care taker, maybe we can give someone a job for a couple of extra weeks. Very poor management to open on a holiday weekend, you should do a soft opening and check for any problems. You told me in March that Operations would start on May 15th and then be open the 18th, What happened to this promise? Then you tried to keep it closed until Friday, until Albany told you to open it up Thursday.

You had some campers waiting since Monday, and by Thursday there were close to 20 people and horse (with no watering facilities) waiting to get in.

If the trees that you had to be cut down on Thursday morning, those are the same tree that have been standing there since the first of May, why did you wait until Wednesday at noon to come over and mark them?

Then you still left a dead limb 20' long and appx. 6" in diameter hanging over the campground. Isn't this unsafe too? It was very clear to the horse campers you where trying to do everything you could to keep them out. This was totally uncalled for.

9.7 6 horse stall and tie line by year ten? Why

9.8 manure pit by year ten? Why

11.6 2 two horse stalls bye year ten? Why?

11.5 construct spur trail for snowmobiles by year one.

Nothing against snowmobiles give them what they want, but the area is used by horses more than snowmobiles. Yet you do that in the 1st year.

The horse people are coming up with a lot of monies to build the stalls, and may not even need state monies, other that some back hoe work and some gravel.

It seems like anything to do with the horse people you want to delay, and I have already been working on this for 8 years. 8 years ago two horse clubs set aside monies for stalls on Sugar Hill, but

have yet to be able to do anything. One horse club has put over \$30,000 dollars in to 3 DEC site, and the other Regions welcome us, and all we do at Sugar hill is run in to road blocks, WHY?

Management actions summary table

2.0 Inspect culverts annually 10 days work 25,000 that's is 2500 a day in expenses. Can I have this job?

4.0 Locate and construct 10 parking lots, for 70,000 dollars, you don't take care of the parking lots you have, I asked for gravel and Monterey in March, and I would spread it, all you had to do is dump a truck load there, and it still hasn't been done. Why do you wish to take on more maintance and up keep when you can't take care of what you have already?

6.0 Gates for \$96,000, again you don't take care of what you have already. I painted all 5 gates and replaced stop signs this spring, I doubt that these gates have been worked on in the last 5-8 years, there again, you are creating more maintance and up keep, and you're not taking care of what you already have.

Develop and maintain up to 300 small ponds and and dugouts to act as amphibian activity center. You have budgeted up to \$3,000 per each, so that totals to \$300,000 dollars in 10 years yet, you can take care of the trails and maintain them and mow them on a 3 year rotation. Does the grass not grow for 3 years? This is a total waste of the Taxpayers dollars, In the last five years on the Sugar Hill area, where have you done this? This was in the last UMP, and I haven't seen any dig outs in the entire trail riding that I do on Sugar Hill.

3.2 About 5 days per AANR. Are these 8 hour days?
40 hours per person?

9.6 Finish porch area of restroom and remove Kiosk. By year 5, you have already been sitting on this project for at least four years, again, you want to run out and build parking lots and install gates and you have something that has been sitting ready to finish for 4 years and yet you want another 5 years to finish it. I volunteered to do it the spring and haven't heard back yet.

9.7 Construct 6 horse stall for \$15,000 dollars, where do you come up with these figure?

I can set a 10 stall unit, built with 6x6 treated materials with a steel roof, for \$7,100 delivered. All that is need is some backhoe work and some gravel or crusher run.

9.8 Manure pit, here again something for horse people, by year 10

10.0 , 10.1, 10.4 Removal of Archery back stops,

For \$28,000 dollars, these were all taken out this year, and the people must be paid by now, so are we cooking the books? No need for this to be in the budget put the money into the trail system

11.4 Construct the two 2 horse stalls, for \$15,000, again where do you come up with these figures? I have a quote for a 4 horse stall made with 6x6 's and treated materials for \$2,960 for a total of \$5,920 , \$9,080 less that you planned.

Also the two horse stalls you proposed at the two parking areas need to go to 4 stall units, John you said you wanted to disperse that campers, by doing 4 stall units you would be able to move about 4 camping rigs off of the hill, figuring 2 people, 2 horses, two cars/trucks and trailers, with a two horse stall you only move two rigs, normally.

So by saving all of this money, there is NO REASON, the horse stalls can't start going in NEXT SPRING and be ready for the Memorial Day Weekend.

Again, Private monies are in the mix, and a plan can be worked out, to see them done this next year.

I would like to start on the 10 stall unit at the main campground , due to the fact this would be the most used.

Page 36. You state Portions of the trail system are in POOR REPAIR, with issues of excess mud, or erosion. Yet you want to go build gates and parking lots and you are not taking care of what you already have in place. Also you had \$250,000 in the old UMP for 41 miles of trail maintance, where did all this money go?

Page 41. DEC has limited budget to manage the DEC lands, so here again, you want to build more parking lots and gates, why?

Page 46 You state that the 16 stalls fill up quickly on a busy weekend, then what is the problem with adding ten more plus 2 stallion stalls.

Sugar Hill is appx. 12,000 acres with at total of 20 stalls in two area.

Brookfield DEC is appx 13,000 acres with a total of 92 covered stalls in one area.

What is wrong with the math at Sugar Hill?

~Keith Reynolds

Reply: The draft UMP proposed 14 stalls. (2x2x2+6=14)

We have modified the opening of the gate to the Sugar Hill Recreation Area, with conditions that must be met before the gate can be opened.

Updateing the information in the kiosks is given a lower priority of staff time behind many other projects; the ideal is still yearly, although many things do not change from year to year.

We plan on designating and removing risk (hazard) trees in heavily used areas.

Work projects are placed in the schedule through consultation with Division of Operations; projects can be completed earlier if staff and funding are available. A TRP will be required for construction projects done by individuals or groups; this would include construction of stalls, parking areas and also includes the use of heavy equipment.

The USC has constructed vernal pools under TRP from the Department in this Unit.

The porch area of the restrooms was finished by Operations staff; remember these types of activities can only be done by others under TRP.

Costs for various actions are estimates derived from various sources, and in the case of target removals must include transportation and tipping fees. Funding is seldom available at levels requested.

Comment: Also if you can a concern of the usage of the 41 miles of trails, then please put in the UMP, that we add 20 miles of trails by year 10. Also this would be done by a partnership between the DEC and the AANR people and the Horse clubs.

~Keith Reynolds

Reply: Our first priority will be to ensure the existing trails are in good condition. Proposals to add more trails will be discussed after existing trails are in good condition.

Comment: As a user of Sugar Hill horse barns/trails for the past 30 years, I have heard about a meeting to be held in August about Sugar Hill and other reforestation areas.

Improvements that should be considered is a walking path to the pavilion for handicapped people in wheel chairs and walkers.

A few more stalls would be nice, then people wouldn't have to tie to their trailers or trees.

Memorial Day is the weekend where Sugar Hill gets the most use. And making sure it is open a day or two before the weekend would help considerably as people want to enjoy the whole weekend and not just the day.

Sugar Hill is a jewel in the middle of the finger lakes. It gives people a chance to enjoy nature, their horses and friendship.

If you would forward this email to John Gibbs for his consideration, I would appreciate it.

~Mae Church

Reply: The opening date for the gate and restrooms has been moved forward, provided that certain conditions can be met. The path you propose and the additional stalls are proposed in the UMP.

Comment: I am president of Twin Tier Trail Riders, members located Southern Tier NY and Northern Tier PA. We consider Sugar Hill the most geographically suitable for us – central to most members – and have sort of unofficially support SH. We have funds \$700 to contribute to tie stall

construction. Another club, NYSPWHC has set aside \$400 for the same purpose. That club also supports and works with DEC at Brookfield and Tuller Hill. I would like a better working relationship with DEC concerning Sugar Hill.

~Linda Hendricks

Reply: The Department works with various groups under TRP and AANR to accomplish various tasks.

Comment: You play lip service.

When Pete Grannis first was appointed commissioner, he asked for public opinion on how to make NY outdoors more available to sportmen with disabilities. I attended a panel and offered a plan very similar to other plans on other panels across the state; we do talk to each other. We asked for lower license rates because our access was limited and the days we felt like getting out were fewer. We asked for fishing access sites that just were not at the end of a parking lot somewhere. We asked for an earlier season because cold weather affects our health badly. And, we asked for more. The end result was NY lowered the hunting age to attract more dollars, raised the senior license age requirement from 65 to 70, and raised license fees. Many of my friends hung up their guns and fishing rods because it became just too costly. Then the crossbow issue came up and the state approved use during gun season only. What hold has NY BOWHUNTERS have over you? I have since relocated to Florida. Here a person with a permanent disability or over the age of 65 is eligible for a free, yes I said free, hunting and fishing license. You keep telling yourself you are fooling NY residents that you really care what they think. Then continue to scratch your head why you are losing dollars. I do not expect that any good will come out of this email or even a reply. You just don't care.

~Robert Moss, President Physically Challenged Sportsmen of America, Inc.

Reply: I'm sorry you are so frustrated; unfortunately this comment session has only to do with the Six Nations Unit Management Plan area, and unfortunately no influence on the cost and timing of hunting and fishing seasons.

But what it can and does include is changes to the recreation portion of the state forests it covers. Included in the proposed actions of this UMP is to add additional trails that are currently part of the Six Nations Trail System to the MAPPWD list, continue to improve the accessible facilities available at the Sugar Hill Rec Area, and the Spencer Pond area. See Public Recreation and Use section.

Comment: Dear Mr. Gibbs,

We appreciate the use of the park. Thank you for this opportunity to share our thoughts as equestrians and residents of Schuyler County.

Here are our opinions of the following:

- a tie line is not necessary as most people have their own equipment and understand that care needs to be taken when using the trees. (Over flow areas could use them.)

-Opening the park as of May 1st would be very much appreciated, even if the water is not on- that's what the pond is for.

-a manure pit may be handy for some but not necessary, the spreader is sufficient and everyone seems to cooperate to keep the area clean around it.

-Additional stalls would be wonderful and certainly be an asset, possibly reducing the amount of portable fencing being used by some. A stallion stall would be nice also. It is always nice to have one available, if for no other reason than for use if there were an emergency.

-If nothing else changes that is fine too, but we would like to see more parking for horse rigs, it is really needed for holiday weekends. Even if there were a few more over flow areas down by the main road. People just need to know they cannot consume the over flow areas with portable fencing. Maybe that is where your tie lines would be appreciated.

-One thing we do need though- is to raise awareness of certain folks that dogs need to be on a leash or tied close to rigs when in the common area. This needs to be done for horsepeople as well as campers as a common courtesy.

~Jerry and Becky Knibbs

Reply: The opening date for the gate and restrooms has been moved forward, provided that certain conditions can be met. In addition guidelines will be posted for public use.

Comment: Dear Mr. Gibbs: Please open Sugar Hill gate by May 1st or no later than the 15th. It sure would make a lot of horseback riders very happy. With water by the 15th. Thank you!

Sugar Hill gate - Bill and I looked at the gate to see what should be done. The only thing we could see was to move it back away from the road. Dig up the posts that are there and reset them. Move the big stones back. There are too many big, long rigs that come in- and for me- this old lady might not make it and hit the right front and the left trailer fender.

Sidewalks - We need a sidewalk from the bathroom along the pine trees by the parking lot to the pavilion. The old folks with their walkers and wheelchairs can't make it there because of all the tree roots. Some have suggested that you dig out the driveway near the pavilion. Dig the bank back and put the dirt on the other side so there would be parking on both sides. Then on the right end of the new parking lot you could dig a ramp up to the pavilion on a slant with hand rails.

Stalls- We don't need 10 stalls at the tower. If we had 5 to 6 more (wider and taller) they can be put on the other side of the manure spreader to the west. That has been all graded off for them a few years ago. We don't need a PIT! The spreader is fine. The only thing I have heard from riders is to make the spreader so they can dump manure in with a ramp. The new stalls location would also be close to the spreader.

NO STALLION STALLS!! WE DON'T NEED THEM OR HAVE THE ROOM!!

3 Pole Line- NO!! There were people I talked to said they would not use it because they wouldn't want other horses tied there. All the people that I've seen tie their horses have protecters for the trees and their own lines for their own horses.

Portable Fencing- There should be a limited footage per horse fence. If more space is needed for more campers the portable fences should come down.

Parking- What we do need is more parking area for the 2 big weekends each year when we get more people in with bigger rigs.

~Irene Hutchinson and Wm Tolhurst, Debra Ayers

Reply: The opening date for the gate and restrooms has been moved forward, provided that certain conditions can be met. The accessible route to the pavilion and better access to the manure spreader are also included.

Comment: 8/5/12 Sugar Hill UMP

I have looked over the plans - on page 84 - 9.2 - open gate to hilltop Friday of Memorial Day weekend

As weather usually becomes suitable for camping by early to mid May this seems a bit late - I feel that the gate should be open by at least the Monday before memorial day

9.7 - As I understand at least two horse clubs have money for horse stalls so why is this up to 10 years ?

I feel that the parking-camp site at the south end of Evergreen Rd. should be high priority for more stalls.

Hopefully time and money to upgrade wet areas on the horse trails can be found - most trails are mostly good but have small areas that are bad.

The idea of dispersed camping is fine but with the facilities at the tower site most people I know much prefer to be there so that that area should be high priority for stalls and maintenance .

~Elwin Buckler

Reply: The opening date for the gate and restrooms has been moved forward, provided that certain conditions can be met. Actions can be accomplished earlier if time and funding is available.

Comment: We the People, would like the DEC Region 8, to amend the UMP for Sugar Hill. To add the following items to their plan:

- 1) To add a total of 18 stalls to the Sugar Hill riding area, 10 to the main camping area, and 2 four stall units to the lower parking lots.
- 2) Add to 3 pole high line to the Main tail (sic) head area and on 3 pole high line to the Monterey camping area.
- 3) Add two stallion stalls to the main camping area.
- 4) Add a manure pit to the main area, similar to Brookfield and Otter Creek.

We also understand that these stalls will be built with little or no expense to the DEC Region 8.

We also believe that the addition of these stalls will make a safer environment for the horses and the people in the camping areas.

~Keith Reynolds, Also included 81 hand written signatures and 13 computer “signatures”

Reply: We have received many differing requests for stalls, tie lines and manure pit and will try to propose actions that reflect concerns.

Comment: RE: Six Nations Unit Management Plan

The New York State Chapter of the National Wild Turkey Federation (Chapter) would like to offer the following comments for development of the Six Nations Unit Management Plan (UMP).

First, our chapter would like to commend the NY State Department of Environmental Conservation (DEC) Bureau of State Land Management staff in Region 8 for managing of over 21,724 acres of forest resources in the Six Nations Unit. Our Chapter members in the area have enjoyed excellent turkey hunting opportunities over the years on DEC managed lands within the unit and many hunters travel from other parts of NY to take advantage of what the region’s public lands have to offer. Local economies have benefitted from those trips to the region.

The Chapter supports active management of our forest resources on public and private lands. We encourage the DEC staff to continue actively managing the lands within the Six Nations Unit using a variety of silvicultural techniques used to achieve the long term goals of the Department. The Chapter encourages the use of even-aged forest management with an emphasis on regeneration of aspen stands using short rotations to address the habitat needs of ruffed grouse, American woodcock and numerous other species that utilize this forest cover type that is in very limited supply across the northeastern states. We do not believe that limiting the size of cutting units as a blanket restriction is beneficial. We encourage DEC Bureau of State Land Management staff to collaborate with DEC Bureau of Wildlife staff to develop cutting unit sizes for even-aged managed stands that will provide the greatest benefits to the wildlife resources.

The Chapter also recommends that DEC staff be able to efficiently manage the lands under their jurisdiction within this unit. We do not support including items in the UMP that would add layers of public input process prior to administering a timber harvest or other activities outlined in the UMP. DEC Foresters are highly trained professionals and should not have to delay responsible management of our forests through multiple layers of public input processes prior to managing a timber stand. The efforts of DEC staff have resulted in all of New York’s State Forests being independently certified by the Forest Stewardship Council (FSC) and the sustainable Forestry Initiative (SFI). There is no reason to add additional layers of public process before DEC staff are able to administer timber harvesting operations.

The Chapter does not support the designation of any area of the forests within the Unit as a Forest Preserve or similar designation that would prevent active forest management through a Forever Wild

type of clause. Such a designation could have long term negative impacts on forest health, local economies, recreation, and wildlife habitat and should not be considered as an option. There are thousands of acres of forests classified as Forever Wild in NY State that provide mature, late seral stage habitats. Land cover trends over the last several decades have resulted in forest succession across the northeast favoring predominantly mature forests. Our Chapter supports efforts to increase the acres and percent of land managed for early/young seral stage cover types which have become a very limited habitat type throughout the northeast.

We encourage DEC staff to not overlook the need to have pre-green up quality nest site habitat available for wild turkey hens given the timing of their egg laying in early-mid April for first nest attempts. As forest stands mature, early nest site quality diminishes and we believe recruitment of wild turkeys has been impacted across the northeast by forest succession. Bowhunter sighting log data from 2002-2011 indicate the western 1/3 of NY State has the lowest observation rate of wild turkeys in the state. Forest succession is likely impacting recruitment and an increase in quality nesting cover and brood habitat would benefit wild turkeys and a host of other species.

Our Chapter encourages DEC staff to use logging operations as a means to improve wild turkey brood habitat on logging decks and skidder trails after harvest operations have concluded. Providing quality grass and legume cover in these areas will enhance insect abundance and attract turkey broods during late spring and early summer. During this time, young turkey poults feed almost exclusively on insects. Enhancing logging decks and skidder trails adjacent to areas that will provide thick understory cover and logging slash that will be used as nesting cover by hens will increase turkey brood survival by providing those two cover types in close proximity. This will also enhance forage and cover areas for numerous other species.

Our Chapter encourages DEC staff to inventory stands of apple trees when and where possible and enhance these areas via pruning and releasing. These areas provide excellent food sources for wild turkeys, ruffed grouse, and American woodcock. The Chapter supports the use of State Forest lands within the unit for hunting and fishing. We will not support any proposal that will decrease the number or percent of acres where fall or spring hunting opportunities on state lands would be reduced.

Our Chapter encourages DEC staff to use as many management tools as possible to responsibly manage the forest resources under their jurisdiction. These tools can include, but are not limited to use of herbicides, prescribed fire, even and uneven aged timber harvest, and forest thinning/ timber stand improvements. Having these options available will allow the Division to respond quickly to issues such as invasive species, fuel load accumulation, wildlife habitat enhancements, forest disease and insect pests.

Our Chapter encourages DEC staff to establish an easier way to find and navigate Recreation section of the NYS DEC website. This revised website section should simply include downloadable .PDF file type maps of each State Forest, MUA, Wildlife Management Area and other DEC managed lands available for public hunting, fishing and other recreation. Currently, downloadable maps are difficult to find or in many cases do not exist.

This makes it difficult for many people to find maps and public areas. In a way, we believe this is indirectly limiting access to DEC managed lands across the state. Many state natural resource agencies have website sections that provide much easier access to their lands and we believe a revision to the NYS DEC website to promote these areas and provide updated, easy to read maps showing boundaries, roads, and regulation summaries is long overdue.

Our Chapter encourages DEC staff to allow enhanced/additional access to mobility impaired hunters and fishermen when taking part in a sanctioned NWTF Wheelin' Sportsmen event on DEC managed lands within the Unit. Wheelin' Sportsmen NWTF helps people with disabilities enjoy outdoor activities such as hunting, fishing and shooting through participating in Wheelin' Sportsmen events and by learning how to continue taking part in these activities independently. These events are managed by NWTF Chapter volunteers and one of the more difficult aspects of event planning is

securing permission to easily accessible areas on private or public lands. Offering a permit application process where Chapters that are planning an event could apply for enhanced access to areas that might not typically be legal to access by ATV or other off-road vehicle could make these events larger and provide more people with limited mobility opportunities through our Wheelin' Sportsmen program.

~Bill Wilbur, President, New York State Chapter, James C. McGlynn, President, Cohocton Valley Chapter, Doug Little, CWB® Senior Regional Wildlife Biologist National Wild Turkey Federation

Reply: Thank you for your comment. Most of the vegetation management, including grassland and other non-forested management, are covered in the Timber and Vegetation Management sections of this Unit Management Plan. NYS DEC's web page is outside the scope of this plan, but the web page is a continuous work in progress, with improvements regularly occurring.

Comment: To Mr. D'Amato,

My name is Linda Hendricks. I am the president of a group called Twin Tier Trail Riders, composed of about 150 members. We are primarily located Southern Tier NY and Northern Tier PA by Elmira.

We have a primary riding site, Sugar Hill – Six Nations, as it is the most centrally located for our members. We meet there to ride and enjoy each others company.

We have dedicated – set aside – funds to assist in the building of stalls for this area. We are very interested in the UMP and some of us will be at the meeting in August in Tyrone, NY. Other horse clubs and other regions have been able to work well together and I hope we can do the same (NYS Plantation Walking Horse Club and Brookfield is a prime example).

~Linda Hendricks

Reply: The Department works with various groups under TRP and AANR to accomplish various tasks.

Comment: As Vice President of Trail Maintenance for the Finger Lakes Trail Conference, I would like to thank you for the opportunity to comment on this Draft Unit Management Plan as it relates to the Finger Lakes Trail in Goundry Hill, Sugar Hill, South Bradford, West Hill, Meads Creek and Erwin Hollow State Forests. We appreciate the on-going partnership through the Adopt-a-Natural-Resource program that our organizations have enjoyed over the years and understand the difficult job that the NYSDEC has in trying to manage its forests while balancing the competing interests for public use of these lands.

As you are aware, the Finger Lakes Trail is a single use foot trail of statewide and national significance that extends for over 560 miles across New York State. Including 6 branch trails and numerous spur and loop trails, our total mileage of trail approaches 950. Nearly 425 miles of the main trail also run concurrently with the North Country National Scenic Trail which will stretch 4600 miles, when complete, from North Dakota to Vermont. The FLT is maintained by over a dozen organizational sponsors and 65 individual or family sponsors, all of whom are volunteers. Our trail has been designed, constructed, and maintained as a wilderness footpath to be environmentally friendly and lay lightly on the land, and we commend the recognition and designation of the FLT as such in DEC's Statewide Strategic Plan for State Forest Management as well as in this Draft Unit Management Plan.

Upon reading through this Draft UMP, I'm offering the following comments on behalf of the Finger Lakes Trail Conference:

- We concur with the prohibition of unauthorized All Terrain Vehicles and Off-Road Vehicles on the trails in this unit and support the decision not to develop new trails for this use.
- We appreciate the acknowledgement in this Draft UMP, as well in our current AANR agreement, that no snowmobiles, horses, bikes, or motorized vehicles are permitted on the Finger Lakes Trail.

- We encourage the construction of new and improved parking areas at access locations to the FLT, such as in West Hill SF along West Hill Rd and in Meads Creek SF along CR 26, and support the inclusion of new kiosks, signs and maps at these trailheads.
- Finally, we continue to be deeply concerned about the potential impacts of oil and gas drilling on our State Forests and the Finger Lakes Trail, and would hope that our wilderness hiking experience will not be sacrificed when the NYSDEC is considering future surface occupancy by these operations.

We have enjoyed partnering with your office over the years and look forward to working with you on upcoming projects to enhance our trail system. We appreciate the fact that you place a High priority on assisting us in accomplishing this goal. It is indeed a privilege and a pleasure to work with your organization to further our commitment to maintain a premier hiking trail across New York State. I hope we can continue this cooperative relationship far into the future.

~Stephen C. Catherman, VP of Trail Maintenance

Reply: We have included parking areas where needed and appropriate. Oil & Gas activities will be guided by the EIS for such activities.

Comment: As a follow up to my previous email, you may want to consider referring to the Great Eastern Trail in NYS as the FLTC's Crystal Hills Trail and adding FLT mileage in Erwin Hollow SF as it becomes approved.

~Steve Catherman, VP Trail Maintenance

Reply: Noted.

Comment: The Adirondack Mountain Club (ADK) thanks the Department of Environmental Conservation (DEC) for the opportunity to submit written comments on the draft Six Nations Unit Management Plan. The Adirondack Mountain Club is dedicated to conservation, education, outdoor recreation and protection of New York's Forest Preserve, parks, wild lands and waters. ADK represents over 30,000 hikers, paddlers, skiers and backpackers.

While there are many aspects of this plan that demonstrate a commitment to the future health of our state forest system, such as the agencies proposal to prohibit ATVs, we will detail our assertion that the DEC is incorrect in concluding that high volume hydraulic fracturing or hydrofracking for natural gas drilling is a consistent use for any state forest. Such uses would not only put the forests health at risk, but could also compromise water supplies for communities located within the Six Nation unit.

While ADK reveres the Adirondack and Catskill Mountain ranges for their grandness, there are many valuable State Forests in Central and Western New York that are extremely important to our members, especially in our Western New York chapters. ADK will present our concerns for the potential environmental and recreational impacts that increased natural gas drilling in the Marcellus Shale may have on our State Forest system.

These valuable public lands are currently managed for watershed protection, public recreation, wildlife habitat and open space conservation. The renowned North Country National Scenic Trail, authorized by Congress, traverses several states and many of New York's State Forests.

ADK is deeply concerned about the potential for hydro-fracking on DEC managed state forests. ADK will oppose by all legal means available any effort by the state to grant new or expanded leases to private entities for natural gas exploration and exploitation in and beneath our state forests. DEC managed public forests deserve the same level of legal protection as our state parks managed by the Office of Parks, Recreation and Historic Preservation (OPRHP). The intensive industrial footprint and activity required for hydro-fracking is wholly inconsistent with the conservation of these state lands for public recreation, watershed protection, habitat preservation and open space protection.

While ADK applauds the progress DEC has made in protecting the surface of state forests from the impacts of drilling, forests will still be threatened if mineral rights are leased beneath state forest. Adjoining landowners have done their part to enhance forest connectivity and preserve their lands adding greatly to the overall size of connected forest. If the DEC were to lease its mineral rights it could force these stewards, even unwillingly, into natural gas leases as well. The surface destruction done just outside of state forests will not only have a negative impact on air and water quality, tourism will decline, and the value of that ecosystem will be greatly diminished.

Even without hydro-fracking, gas production is an industrial activity with a number of potential environmental consequences. It requires cutting trees, clearing land, building roads and moving heavy equipment. It is noisy, dirty, and it creates numerous opportunities for spillage of waste and pollutants and the contamination of surface and groundwater. Even with no environmental mishaps, each gas-well site will leave a sizable scar on the landscape that will take years to heal.

Visual impacts of natural gas drilling are neither minor nor short term. Many small towns and businesses rely on seasonal tourists who visit state forests and support local economies. Disruption of these areas is extremely undesirable in lands that are revered for their natural character and outdoor recreation opportunities. This is especially damaging for large contiguous tracks of old growth forest that would take more than a century to be restored.

ADK agrees with the DEC's assessment that ATV use is incompatible with the other recreational activities, and causes too much environmental degradation to be permitted in state forests, and we were delighted to see that the DEC included this statement in their plan:

"Existing management actions, poor soils, conflicts with other uses, impacts on neighboring residents, safety concerns, maintenance costs and challenges, and existing issues with illegal ATV and ORV use were some of the factors which have prevented the NYS DEC from developing ORV or ATV trails in the past."

We urge the DEC to continue to enforce this policy, and not allow for our state forests to become unusable for all other recreationists who have enjoyed them for years.

ADK believes that the DEC should consider that the roads created and used in the drilling process will attract many "thrillcraft" riders such as all terrain vehicle (ATV) and dirt bike enthusiasts who are seeking challenging and muddy terrain. We fear that increased truck trails will lead to ATV trespass on state forests and scenic hiking trail systems. We are impressed by the DEC's thorough study on the environmental impacts of ATVs on state forests, and allege that the agency is correct in their assessment that ATV use is incompatible within state forests. ATVs present overwhelming enforcement problems that will only be exacerbated by creating a network of truck trails for drilling.

ADK endorses the DEC's assessment that despite years of trying to accommodate ATV use, this activity is not fiscally or environmentally sustainable on state forest land. The cost of maintaining these trails is too financially burdensome on the state, and would be more suitable for a private owner with a fee structure in place.

We agree that environmental degradation that occurs from ATV and ORV use includes, but is not limited to soil erosion, displacement and compaction. There are direct negative impacts to streams and wetlands from ATV crossings, including increased siltation and turbidity, noise, disturbance to wildlife and their habitats, damage to vegetation, and air pollution. These disturbances are impossible to justify on state forests. In addition these impacts not only disturb the forest, but they also deter the public from using the area for any other recreational purpose.

The DEC acknowledges that illegal use of ATVs and ORVs on state forest roads and trails officially closed to ATV and ORV use is frequent, difficult to prevent, and presents significant enforcement issues. Natural gas drilling will require hundreds of acres of new roads creating an influx of opportunities for illegal riding to occur.

The State Forest Plan states "Despite a variety of signs, gates, boulders, and other barriers designed to notify ATV and ORV users that particular roads and trails are closed to their use, a large amount of

illegal riding continues to occur on these prohibited areas.” The plan then continues to acknowledge that “[i]llegal use of ATVs presents significant enforcement problems because illegal riding often occurs in remote areas, where apprehension of violators is difficult and impoundment of unregistered ATVs is impractical.”

We applaud the DEC for their position regarding ATV use in our state forests, and hope that the agency will do everything in its power to curtail illegal riding in the future. Especially important to our membership is the continued preservation of the Finger Lakes Trail. We were happy to see this plan reiterate the sentiment expressed by the DEC in the Statewide Management Plan for State Forests that the Finger Lakes Trail is a single use hiking trail that should continue to be maintained as such. This policy decision will be a meaningful victory to our membership, many of whom have invested their time volunteering to create and restore trails across the state.

Thank you for the opportunity to comment, and we will be looking forward to seeing a final unit management plan addressing the concerns broached by the public.

~Neil F. Woodworth, Executive Director and Counsel, Joelle Foskett, Public Lands Advocate
Adirondack Mountain Club

Reply: The Six Nations UMP is not intended to serve as the environmental review for oil and gas well drilling operations associated with high-volume hydraulic fracturing. The Supplemental “Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program” as it relates to horizontal drilling and high-volume hydraulic fracturing is not yet finalized and the SEQRA process associated with this activity will address the issues detailed in this comment.

Natural gas is a natural resource, and the leasing of State Forests for its extraction is authorized under the Environmental Conservation Law (ECL). ECL, Article 23, Title 11, section 23-1101 states the Department may make a lease on behalf of the state for the exploration, development and production of gas and oil in state-owned lands, except state park lands and the lands under the waters of Lake Ontario or along its shoreline. Leasing for the purpose of aiding in discovering and removing any oil and gas in state reforestation areas is also authorized by ECL Article 9, Title 5, section 9-0507.

The policies and procedures with respect to oil and gas leasing have been reviewed in accordance with SEQRA in the development of the “Strategic Management Plan for State Forest Management”. This statewide plan has been developed to lead future management of DEC administered State Forests. It establishes statewide management guidelines for DEC staff through a process of public involvement and review.

Appendix B: Animals of the Six Nations Unit Management Plan Area

These are not intended to be all-inclusive lists, some animals will be missed, and some may no longer be found on these areas.

Species of Greatest Conservation Need (SGCN)

The State Wildlife Grants program provides funds for conservation efforts aimed at preventing fish and wildlife populations from declining, reducing the potential for these species to be listed as endangered. In order to access these grant funds, New York State was required to develop a Comprehensive Wildlife Conservation Strategy (CWCS) that focuses on the “species of greatest conservation need.” This includes those species that are deemed rare, imperiled and those for which status has not been established. NYS DEC staff produced a list of 537 species of greatest conservation need. The list of species is certainly not exhaustive, but includes those species for which systematic assessments had been made by staff of the NYSDEC Division of Fish, Wildlife and Marine Resources and the New York Natural Heritage Program. For further information on how the list was compiled, visit the web site www.dec.ny.gov/animals/9406.html which also has the entire list of species.

Birds

Based on information included in the 2000-2005 NYS Breeding Bird Atlas, approximately 16 Atlas blocks overlap with Six Nations state land unit (3167B; 3168B, D; 3267A, C; 3269B, C, D; 3368A, C; 3369A, C; 3268 A, B, C, D). These blocks contain confirmed breeding populations of 88 species, probable breeding populations of 21 species, and 16 possible breeding populations. Of these, one species, the northern harrier (*Circus cyaneus*), is protected as a NYS threatened species and seven species are protected as NYS special concern species (Table 1C).

Fourteen additional species are listed as NYS Species of Greatest Conservation Need (SGCN) (Table 2C). It should be noted that because the Atlas blocks do not follow exactly the outline of Six Nations state land unit, some of the birds identified during this effort may have been found adjacent to, but not within, the state land.

The Six Nations state land unit is not listed by Audubon, NY (2005) as an Important Bird Area of New York.

Table 1B: Birds

This is from the 2000-2005 NYS Breeding Bird Atlas blocks that overlap the State Forests of the Six Nations Unit.

Common Name	Scientific Name	Breeding Status	NY Legal Status
Alder Flycatcher	<i>Empidonax alnorum</i>	Possible	Protected
American Black Duck	<i>Anas rubripes</i>	Confirmed	Game Species
American Crow	<i>Corvus brachyrhynchos</i>	Confirmed	Game Species
American Goldfinch	<i>Carduelis tristis</i>	Possible	Protected
American Kestrel	<i>Falco sparverius</i>	Possible	Protected
American Redstart	<i>Setophaga ruticilla</i>	Probable	Protected
American Robin	<i>Turdus migratorius</i>	Confirmed	Protected
American Woodcock	<i>Scolopax minor</i>	Confirmed	Game Species

Common Name	Scientific Name	Breeding Status	NY Legal Status
Baltimore Oriole	<i>Icterus galbula</i>	Possible	Protected
Bank Swallow	<i>Riparia riparia</i>	Possible	Protected
Barn Swallow	<i>Hirundo rustica</i>	Confirmed	Protected
Barred Owl	<i>Strix varia</i>	Confirmed	Protected
Belted Kingfisher	<i>Megaceryle alcyon</i>	Probable	Protected
Black-and-white Warbler	<i>Mniotilta varia</i>	Probable	Protected
Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	Possible	Protected
Blackburnian Warbler	<i>Dendroica fusca</i>	Possible	Protected
Black-capped Chickadee	<i>Poecile atricapillus</i>	Confirmed	Protected
Black-throated Blue Warbler	<i>Dendroica caerulescens</i>	Possible	Protected
Black-throated Green Warbler	<i>Dendroica virens</i>	Confirmed	Protected
Blue Jay	<i>Cyanocitta cristata</i>	Possible	Protected
Blue-gray Gnatcatcher	<i>Poliophtila caerulea</i>	Probable	Protected
Blue-headed Vireo	<i>Vireo solitaries</i>	Confirmed	Protected
Blue-winged Warbler	<i>Vermovora pinus</i>	Confirmed	Protected
Bobolink	<i>Dolichonyx oryzivorus</i>	Probable	Protected
Brewster's Warbler	<i>Vermivora pinus x V. chrysoptera</i>	Confirmed	Protected
Broad-winged Hawk	<i>Buteo platypterus</i>	Possible	Protected
Brown Creeper	<i>Certhia Americana</i>	Confirmed	Protected
Brown Thrasher	<i>Toxostoma rufum</i>	Probable	Protected
Brown-headed Cowbird	<i>Molothrus ater</i>	Confirmed	Protected
Canada Goose	<i>Branta Canadensis</i>	Confirmed	Game Species
Canada Warbler	<i>Wilsonia Canadensis</i>	Possible	Protected
Carolina Wren	<i>Thryothorus ludovicianus</i>	Probable	Protected
Cedar Waxwing	<i>Bombycilla cedrorum</i>	Possible	Protected
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>	Confirmed	Protected
Chimney Swift	<i>Chaetura pelagic</i>	Possible	Protected
Chipping Sparrow	<i>Spizella passerine</i>	Confirmed	Protected
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>	Confirmed	Protected
Common Grackle	<i>Quiscalus quiscula</i>	Confirmed	Protected
Common Merganser	<i>Mergus merganser</i>	Confirmed	Game Species
Common Raven	<i>Corvus corax</i>	Confirmed	Protected
Common Yellowthroat	<i>Geothlypis trichas</i>	Confirmed	Protected
Cooper's Hawk	<i>Accipiter cooperii</i>	Probable	Protected Special Concern
Dark-eyed Junco	<i>Junco hyemalis</i>	Confirmed	Protected
Downy Woodpecker	<i>Picoides pubescens</i>	Possible	Protected
Eastern Bluebird	<i>Sialia sialis</i>	Possible	Protected
Eastern Kingbird	<i>Tyrannus tyrannus</i>	Possible	Protected
Eastern Meadowlark	<i>Sturnella magna</i>	Possible	Protected
Eastern Phoebe	<i>Sayornis phoebe</i>	Possible	Protected
Eastern Screech Owl	<i>Magascops asio</i>	Probable	Protected
Eastern Towhee	<i>Pipilo erythrophthalmus</i>	Possible	Protected

Common Name	Scientific Name	Breeding Status	NY Legal Status
Eastern Wood-Pewee	<i>Contopus virens</i>	Possible	Protected
European Starling	<i>Sturnus vulgaris</i>	Confirmed	Unprotected
Field Sparrow	<i>Spizella pusilla</i>	Possible	Protected
Golden-crowned Kinglet	<i>Regulus satrapa</i>	Confirmed	Protected
Grasshopper Sparrow	<i>Ammodramus savannarum</i>	Probable	Protected-Special Concern
Gray Catbird	<i>Dumetella carolinensis</i>	Confirmed	Protected
Great Blue Heron	<i>Ardea Herodias</i>	Possible	Protected
Great Crested Flycatcher	<i>Myiarchus crinitus</i>	Possible	Protected
Great Horned Owl	<i>Bubo virginianus</i>	Probable	Protected
Hairy Woodpecker	<i>Picoides villosus</i>	Possible	Protected
Hermit Thrush	<i>Catharus guttatus</i>	Possible	Protected
Hooded Warbler	<i>Wilsonia citrine</i>	Probable	Protected
Horned Lark	<i>Eremophila alpestris</i>	Confirmed	Protected Special Concern
House Finch	<i>Carpodacus mexicanus</i>	Possible	Protected
House Sparrow	<i>Passer domesticus</i>	Possible	Unprotected
House Wren	<i>Troglodytes aedon</i>	Possible	Protected
Indigo Bunting	<i>Passerina cyanea</i>	Confirmed	Protected
Killdeer	<i>Charadrius vociferous</i>	Confirmed	Protected
Least Flycatcher	<i>Empidonax minimus</i>	Probable	Protected
Louisiana Waterthrush	<i>Seiurus motacilla</i>	Possible	Protected
Magnolia Warbler	<i>Dendroica magnolia</i>	Probable	Protected
Mallard	<i>Anas platyrhynchos</i>	Confirmed	Game Species
Mourning Dove	<i>Zenaida macroura</i>	Probable	Protected
Mourning Warbler	<i>Oporornis Philadelphia</i>	Possible	Protected
Nashville Warbler	<i>Vermivora ruficapilla</i>	Possible	Protected
Northern Cardinal	<i>Cardinalis cardinalis</i>	Confirmed	Protected
Northern Flicker	<i>Colaptes auratus</i>	Possible	Protected
Northern Goshawk	<i>Accipiter gentillis</i>	Confirmed	Protected Special Concern
Northern Harrier	<i>Circus cyaneus</i>	Possible	Threatened
Northern Mockingbird	<i>Mimus polyglottos</i>	Probable	Protected
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	Possible	Protected
Ovenbird	<i>Seiurus aurocapilla</i>	Possible	Protected
Pileated Woodpecker	<i>Dryocopus pileatus</i>	Possible	Protected
Pine Warbler	<i>Dendroica pinus</i>	Possible	Protected
Prairie Warbler	<i>Dendroica discolor</i>	Possible	Protected
Purple Finch	<i>Carpodacus purpureus</i>	Possible	Protected
Purple Martin	<i>Progne subis</i>	Confirmed	Protected
Red Crossbill	<i>Loxia curvirostra</i>	Confirmed	Protected
Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	Confirmed	Protected
Red-breasted Nuthatch	<i>Sitta Canadensis</i>	Possible	Protected
Red-eyed Vireo	<i>Vireo olivaceus</i>	Possible	Protected

Common Name	Scientific Name	Breeding Status	NY Legal Status
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	Possible	Protected Special Concern
Red-shouldered Hawk	<i>Buteo lineatus</i>	Possible	Protected- Special Concern
Red-tailed Hawk	<i>Buteo jamaicensis</i>	Confirmed	Protected
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	Confirmed	Protected
Ring-necked Pheasant	<i>Phasianus colchicus</i>	Probable	Game Species
Rock Pigeon	<i>Columba livia</i>	Possible	Unprotected
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	Possible	Protected
Ruby-throated Hummingbird	<i>Archilochus colubris</i>	Possible	Protected
Ruffed Grouse	<i>Bonasa umbellus</i>	Probable	Game Species
Savannah Sparrow	<i>Passerculus sandwichensis</i>	Possible	Protected
Scarlet Tanager	<i>Piranga olivacea</i>	Possible	Protected
Sharp-shinned Hawk	<i>Accipiter striatus</i>	Possible	Protected Special Concern
Song Sparrow	<i>Melospiza melodia</i>	Confirmed	Protected
Spotted Sandpiper	<i>Actitis macularius</i>	Possible	Protected
Swamp Sparrow	<i>Melospiza Georgiana</i>	Possible	Protected
Tree Swallow	<i>Tachycineta bicolor</i>	Confirmed	Protected
Tufted Titmouse	<i>Baeolophus bicolor</i>	Confirmed	Protected
Turkey Vulture	<i>Cathartes aura</i>	Possible	Protected
Veery	<i>Catharus fuscescens</i>	Possible	Protected
Vesper Sparrow	<i>Pooecetes gramineus</i>	Possible	Protected Special Concern
Warbling Viero	<i>Vireo gilvus</i>	Probable	Protected
White-breasted Nuthatch	<i>Sitta carolineensis</i>	Possible	Protected
White-throated Sparrow	<i>Zonotrichia albicollis</i>	Possible	Protected
Wild Turkey	<i>Meleagris gallopavo</i>	Possible	Game Species
Willow Flycatcher	<i>Empidonax traillii</i>	Probable	Protected
Winter Wren	<i>Troglodytes troglodytes</i>	Confirmed	Protected
Wood Duck	<i>Aix sponsa</i>	Confirmed	Game Species
Wood Thrush	<i>Hylocichla mustelina</i>	Possible	Protected
Worm-eating Warbler	<i>Helmitheros vermivorum</i>	Possible	Protected
Yellow Warbler	<i>Dendroica petechia</i>	Possible	Protected
Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>	Confirmed	Protected
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	Probable	Protected
Yellow-rumped Warbler	<i>Dendroica coronate</i>	Possible	Protected
Yellow-throated Vireo	<i>Vireo flavifrons</i>	Possible	Protected

Table 2B: Bird Species of Greatest Conservation Need (SGCN)

Birds that were identified during the 2000-2005 Breeding Bird Atlas, on blocks that overlap with the State Forests of the Six Nations unit.

Common Name	Scientific Name	Breeding Status	NYS Status
American Black Duck	<i>Anas rubripes</i>	Confirmed	SGCN
Black-throated Blue Warbler	<i>Dendroica caerulescens</i>	Confirmed	SGCN
Bobolink	<i>Dolichonyx oryzivorus</i>	Confirmed	SGCN
Canada Warbler	<i>Wilsonia canadensis</i>	Confirmed	SGCN
Eastern Meadowlark	<i>Sturnella magna</i>	Confirmed	SGCN
Ruffed Grouse	<i>Bonasa umbellus</i>	Confirmed	SGCN
Scarlet Tanager	<i>Piranga olivacea</i>	Confirmed	SGCN
Wood Thrush	<i>Hylocichla mustelina</i>	Confirmed	SGCN
American Woodcock	<i>Scolopax minor</i>	Probable	SGCN
Blue-winged Warbler	<i>Vermivora pinus</i>	Probable	SGCN
Prairie Warbler	<i>Dendroica discolor</i>	Probable	SGCN
Louisiana Waterthrush	<i>Seiurus motacilla</i>	Possible	SGCN
Northern Bobwhite	<i>Colinus virginianus</i>	Possible	SGCN
Worm-eating Warbler	<i>Helmitheros vermivorum</i>	Possible	SGCN

Reptiles and Amphibians

Based on information presented in the 1990-2007 NYS Amphibian and Reptile Atlas Project (Herp Atlas), eight species of snake, three turtle species, one toad species, seven frog species, and nine species of salamander were found in or near the Six Nations Unit (Table 3C). Of these reptile and amphibian species, two are Species of Greatest Conservation Need (Table 4C).

It should be noted that because the Herp Atlas blocks do not follow the exact outline of Six Nations state land unit, some of the reptiles and amphibians identified during this effort may have been found adjacent to, but not within, the state land.

This list is summarized from on the NYS Amphibian and Reptile Atlas, 1990-1999.

Table 3B: Reptiles and Amphibians by common name and scientific name:

Common Name	Species	NYS Status
Allegheny Dusky Salamander	<i>Desmognathus ochrophaeus</i>	
American Toad	<i>Bufo americanus</i>	
Brown Snake	<i>Storeria dekayi</i>	
Bullfrog	<i>Rana catesbeiana</i>	
Common Garter Snake	<i>Thamnophis sirtalis</i>	
Common Snapping Turtle	<i>Chelydra s. serpentina</i>	SGCN
Eastern Racer	<i>Coluber constrictor</i>	SGCN
Four-toed salamander	<i>Hemidactylium scutatum</i>	
Gray Treefrog	<i>Hyla versicolor</i>	
Green Frog	<i>Rana clamitans</i>	
Jefferson Salamander	<i>Ambystoma jeffersonianum</i>	

Common Name	Species	NYS Status
Milk Snake	<i>Lampropeltis triangulum</i>	
Northern Dusky Salamander	<i>Desmognathus fuscus</i>	
Northern Leopard Frog	<i>Rana pipiens</i>	
Northern Redback Salamander	<i>Plethodon cinereus</i>	
Northern Slimy Salamander	<i>Plethodon glutinosus</i>	
Northern Two-lined Salamander	<i>Desmognathus fuscus</i>	
Northern Water Snake	<i>Nerodia sipedon</i>	
Painted Turtle	<i>Chrysemys picta</i>	
Pickerel Frog	<i>Rana palustris</i>	
Redbelly Snake	<i>Storeria occipitomaculata</i>	
Red –spotted Newt	<i>Notophthalmus viridescens</i>	
Ringneck Snake	<i>Diadophis punctatus</i>	
Spotted Salamander	<i>Ambystoma maculatum</i>	
Spring Peeper	<i>Pseudacris crucifer</i>	
Spring Salamander	<i>Gyrinophilus porphyriticus</i>	
Timber Rattlesnake	<i>Crotalus horridus</i>	Threatened
Wood Frog	<i>Rana sylvatica</i>	
Wood Turtle	<i>Glyptemys insculpta</i>	

Table 4B: Reptile and Amphibian Species of Greatest Conservation Need

Reptiles and Amphibians identified within the 1990-2007 Herp Atlas on blocks that overlap with the State Forests of the Six Nations Unit.

Common Name	Scientific Name	NYS Status
Common Snapping Turtle	<i>Chelydra s. serpentina</i>	SGCN
Eastern Racer	<i>Coluber constrictor</i>	SGCN

Fish Species

Recent surveys have been limited, as most streams within the Unit have not been surveyed recently. The following is a list of species that are probable in streams within this unit management plan area. It should be noted that this list may exclude some species that are present and omit species that are rare.

Table 5B: Fish Species by common name and scientific name:

Common Name	Scientific Name
Brown Trout	<i>Salmo trutta</i>
Brook Trout	<i>Salvelinus fontinalis</i>
Chain pickerel	<i>Esox niger</i>
Central Stoneroller	<i>Campostoma anomalum</i>
Common Carp	<i>Cyprinus carpio</i>
Cutlips Minnow	<i>Exoglossum maxillingua</i>
Common Shiner	<i>Notropis cornutus</i>
Spottail Shiner	<i>Notropis hudsonius</i>

Common Name	Scientific Name
Bluntnose Minnow	<i>Pimephales notatus</i>
Longnose Dace	<i>Rhinichthys cataractae</i>
Eastern Blacknose Dace	<i>Rhinichthys atratulus</i>
Creek Chub	<i>Semotilus atromaculatus</i>
White Sucker	<i>Catostomus commersoni</i>
Northern Hogsucker	<i>Hypentelium nigricans</i>
Stonecat	<i>Noturus flavus</i>
Margined madtom	<i>Noturus insignis</i>
Pumpkinseed	<i>Lepomis gibbosus</i>
Bluegill	<i>Lepomis macrochirus</i>
Rock Bass	<i>Ambloplites rupestris</i>
Smallmouth Bass	<i>Micropterus dolomieu</i>
Largemouth Bass	<i>Micropterus salmoides</i>
Tessellated Darter	<i>Etheostoma olmstedii</i>
Green Sunfish	<i>Lepomis cyanellus</i>
Fallfish	<i>Semotilus corporalis</i>
Banded Killifish	<i>Fundulus diaphanus</i>
Banded Darter	<i>Etheostoma zonale</i>
Shield Darter	<i>Percina peltata</i>
Mimic Shiner	<i>Notropis volucellus</i>
Slimy Sculpin	<i>Cottus cognatus</i>
Mottled Sculpin	<i>Cottus bairdii</i>
Brown Bullhead	<i>Ameiurus nebulosus</i>
Yellow Perch	<i>Perca flavescens</i>
Black Crappie	<i>Pomoxis nigromaculatus</i>

Freshwater Mussels

Strayer and Jirka (1997) report that eastern floater (*Pyganodon catarata*) and possibly eastern elliptio (*Elliptio complanata*) were found in or near the area of Six Nations Unit either prior to 1970 or as spent shells. Neither of these species is listed as a NYS SGCN. In October 2009, NYS DEC biologists visited six stream crossings within the Six Nations Unit area looking for evidence of native mussel populations. In the fall, mussels bury into the sediment making detection difficult; for this reason sites were examined only for shells and shell fragments as indicators of possible mussel populations. No evidence of mussels was found, although this cursory examination does not preclude the presence of mussels at these or at other sites within the Six Nations Unit area.

References:

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New York State Breeding Bird Atlas 2000 [Internet]. 2000 - 2005. Release 1.0. Albany (New York): New York State Department of Environmental Conservation. [updated 2007 Jun 11; cited 2009 Dec 09]. Available from: www.dec.ny.gov/animals/7312.html.

New York State Amphibian and Reptile Atlas Project Interim Report [Internet]. 1990 - 2007. Albany (New York): New York State Department of Environmental Conservation. [cited 2009 Dec 09]. Available from: www.dec.ny.gov/animals/7140.html.

Strayer, D. L. and K. J. Jirka. 1997. The pearly mussels of New York State. New York State Museum Memoir 26, Albany, NY. 113 pp.

Appendix C: Taxes

Taxes paid on NYS DEC Lands

School and Town general taxes, the following is an estimate of the real property taxes that were paid by New York State based on the Assessment Roll on these State Forests from New York State Office of Real Property Services Taxable State Land Unit 2005 Assessment Roll Report. Portions were acquired using monies from the Bond Act of 1960 and are not subject to real property taxes.

Table 1C: Cinnamon Lake State Forest, Dry Run State Forest, West Hill State Forest, Beaver Dams State Forest

					Projected Taxes to be Paid (\$)				
County	Town	Number of Parcels	Acreage	Law Section *	County **	Town/ Village	School	Special District	Total
Steuben	Hornby	25	2,728.84	RPTL 534	\$0.00	\$16,727	\$46,362	\$1,560	\$64,649

Table 2C: Erwin Hollow State Forest

					Projected Taxes to be Paid (\$)				
County	Town	Number of Parcels	Acreage	Law Section*	County**	Town/ Village	School	Special District	Total
Steuben	Erwin	1	530.12	RPTL 534	\$0.00	\$1,926	\$8,748	\$591	\$11,265

Table 3C: Meads Creek State Forest

					Projected Taxes to be Paid (\$)				
County	Town	Number of Parcels	Acreage	Law Section*	County **	Town/ Village	School	Special District	Total
Steuben	Campbell	12	1,418.29	RPTL 534	\$0.00	\$5,471	\$26,729	\$1,485	\$33,685

Table 4C: Sugar Hill State Forest, Goundry Hill State Forest, Coon Hollow State Forest, Cinnamon Lake State Forest, South Bradford State Forest, Dry Run State Forest

					Projected Taxes to be Paid (\$)				
County	Town	Number of Parcels	Acreage	Law Section *	County **	Town/ Village	School	Special District	Total
Schuyler	Orange	156	12,767.36	RPTL 534	\$0.00	\$67,497	\$206,044	\$16,396	\$289,937
Schuyler	Orange	0	1>	RPTL 545	\$0.00	\$40	\$123	\$10	\$173

Table 5C: Sugar Hill State Forest

					Projected Taxes to be Paid (\$)				
County	Town	Number of Parcels	Acreage	Law Section*	County**	Town/Village	School	Special District	Total
Schuyler	Tyrone	5	449.24	RPTL 534	\$0.00	\$1,436	\$6,922	\$587	\$8,945
Schuyler	Reading	11	971.76	RPTL 534	\$0.00	\$1,341	\$7,221	\$368	\$8,930

Table 6C: Sugar Hill State Forest, Coon Hollow State Forest

					Projected Taxes to be Paid (\$)				
County	Town	Number of Parcels	Acreage	Law Section*	County**	Town/Village	School	Special District	Total
Schuyler	Dix	7	651.38	RPTL 534	\$0.00	\$2,935	\$9,983	\$1,346	\$14,264
Schuyler	Dix	0	1>	RPTL 545	\$0.00	\$6	\$20	\$3	\$29

Table 7C: South Bradford State Forest****

					Projected Taxes to be Paid (\$)				
County	Town	Number of Parcels	Acreage	Law Section*	County**	Town/Village	School	Special District	Total
Steuben	Bradford	22	3,850.71	RPTL 534	\$0.00	\$24,072	\$63,936	\$4,265	\$92,273

*RPTL- Real Property Tax Law

** State Forest lands acquired for reforestation purposes pursuant to section 9-0501 of the environmental conservation law are subject to taxation for all purposes except county tax.

Portions were acquired using monies from the Bond Act of 1960 and are not subject to real property taxes

**** All figures under this entry also include portions of Birdseye Hollow State Forest which is not included in this management plan.

RPTL 545 establishes a transitional assessment, which refers to the parcels taxed under RPTL 534 so there are no separate parcels to record in the Number of Parcels Column. For additional information refer to www.state.ny.us, click on 'state laws' in the bottom right corner of the webpage, scroll down and click on Real Property Tax and navigate to Article 5, Title 2 for more information on RPTL 545

This unit does not contain any Wildlife Management Areas, but if it did they are not subject to real property taxes except where special arrangements have been made at the time of acquisition.

Tax codes used to determine adjoining land use patterns

All real property appearing on the tax rolls in New York is assigned a property use code by the local assessor. The classes of these codes are as follows:

- 100 - Agricultural - Property used for the production of crops or livestock.
- 200 - Residential - Property used for human habitation. Living accommodations such as hotels, motels, and apartments are in the Commercial category - 400.

- 300 - Vacant Land - Property that is not in use, is in temporary use, or lacks permanent improvement.
- 400 - Commercial - Property used for the sale of goods and/or services.
- 500 - Recreation & Entertainment - Property used by groups for recreation, amusement, or entertainment.
- 600 - Community Services - Property used for the well being of the community.
- 700 - Industrial - Property used for the production and fabrication of durable and nondurable man-made goods.
- 800 - Public Services - Property used to provide services to the general public.
- 900 - Wild, Forested, Conservation Lands & Public Parks - Reforested lands, preserves, and private hunting and fishing clubs

Within each class are a number of individual codes. As an example, below, we show individual codes for the Agricultural class:

105 - Agricultural Vacant Land (Productive)

Land used as part of an operating farm. It does not have living accommodations and cannot be specifically related to any of the other divisions in the agricultural category. Usually found when an operating farm is made up of a number of contiguous parcels.

110 - Livestock and Products

111 - Poultry and Poultry Products: eggs, chickens, turkeys, ducks and geese

112 - Dairy Products: milk, butter and cheese

113 - Cattle, Calves, Hogs

114 - Sheep and Wool

115 - Honey and Beeswax

116 - Other Livestock: donkeys, goats

117 - Horse Farms

120 - Field Crops - Potatoes, wheat, hay, dry beans, corn, oats, and other field crops.

129 - Acquired Development Rights

Land for which development rights have been acquired by a governmental agency (e.g., certain agricultural lands in Suffolk County).

130 - Truck Crops - Mucklands

140 - Truck Crops - Not Mucklands

150 - Orchard Crops

151 - Apples, Pears, Peaches, Cherries, etc.

152 - Vineyards

160 - Other Fruits-Strawberries, raspberries, dewberries, currants, etc.

170 - Nursery and Greenhouse

180 - Specialty Farms

181 - Fur Products: mink, chinchilla, etc.

182 - Pheasant, etc.

183 - Aquatic: oysterlands, fish and aquatic plants

184 - Livestock: deer, moose, llamas, buffalo, etc.

190 - Fish, Game and Wildlife Preserves

Appendix D: Facilities

Table 1D: Facilities on Sugar Hill, Goundry Hill, Coon Hollow, South Bradford and Cinnamon Lake State Forests

	Sugar Hill State Forest	Goundry Hill State Forest	Coon Hollow State Forest	South Bradford State Forest	Cinnamon Lake State Forest
Public Forest Access Rd (Est. Miles)	0.5 – Firetower Access Rd 2.1– Maple Lane 0.1 – Mohawk 2.7 – total miles	1.0 - Guerin Rd	0	1.7 – CCC Rd	0
Haul Road (Est. Miles)	1.3 – Locust Lane 0.4 – Mohawk 0.4 – Tuscarora 2.1- total miles	0.6 – Guerin Rd 0.2 – Wellhead Access Rd 0.8 – total	0	0.7 – Cotton Hanlon Access Rd 1.2 – Wellhead access Rds 1.9 - total	1.8 – Duran Rd 0.5 – Gas Well Rd 0.7 – Hornby Rd Haul Rd. 3.0 - total
Access Trails (Est. Miles)	1.0 – Seneca 0.9 – Old Love Rd 2.8 – A-Trail 4.7 – total miles	0	0.6 - Coon Hollow Access Trail 1.3 – Meads Creek Rd Access Trail 0.8 – Old Anthony Rd 0.4 – CCC Bridge Rd 3.1 – total	1.2 – Old Dennis Rd Trail	0.3 – Shea Rd Trail 0.3 – Wild Trail 0.6 - total
Non-Maintained Town Roads, or with unknown status.	Portions of: Love Rd Maple Lane Fish Hill Rd	The road between Corbett Hollow and Yawger Hill Rd.	Portions of: Anthony Rd	Portions of: Moss Hill Rd Dennis Rd	Portions of: Shea Rd Velie Rd Duvall Rd Wildcat Hollow

	Sugar Hill State Forest	Goundry Hill State Forest	Coon Hollow State Forest	South Bradford State Forest	Cinnamon Lake State Forest
Officially Abandoned Town Roads (Est. Miles) See also Summary of Identified Issues and Appendix L: Known Official Road Abandonments	2 Pine Knob Rd. 0.36 Sickler Rd 0.53 Parks Hollow 2.14 Webb Rd 0.63 Yorski Rd 5.6 total miles	2-Corbett Hollow Rd	2 - Baker Hill Rd	Dennis Rd (in Schuyler Co.)	0.82 Duran Rd .48 Gas Well Rd 1.3 total miles
Right-of-Way (Est. Miles)	0.2 – Cotton Hanlon’s 0.1 – Pine Knob Rd. 0.1 - Trail to Hayes Memorial Cemetery 0.4 total miles	2 – Corbett Hollow Rd	0	0	0
Gates	9	3	0	2	3
Unpaved Parking lots	12	2	2	6	2

	Sugar Hill State Forest	Goundry Hill State Forest	Coon Hollow State Forest	South Bradford State Forest	Cinnamon Lake State Forest
Facility ID Signs	1-CR23 and Tower Hill Rd. 1-CR23 and CR21 1-CR21 1-CR23 parking lot 1-Sugar Hill Rd and Maple Lane 1-Sugar Hill Rec. Area 1-CR22 1-CR16 8 total	1-Goundry Hill Rd and Switzer Hill Rd.	1-Coon Hollow Rd 1-County Rte 19?	1-CR17 and Dennis Rd 1 – CCC Rd (south end) 2 total	1 -Coon Hollow Rd and Hornby Rd 1 –Forks Rd 2 total
Kiosks	3 – Sugar Hill Rec. Area, Lower Evergreen Hill Rd Parking Lot, and Upper Evergreen Hill Rd Parking Lot	0	0	0	0
Hiking Trails (miles)	9.8 - FLT	5 - FLT	0	4 - FLT 1.5 - GET	0.20 Cinnamon Lake Trail
Multiple Use Trails (Mostly Horse and Snowmobile Use)	32.6 miles of the Six Nations Trail System	4.7 miles of the Six Nations Trail System	0	0	0.8 miles
Gas Wells (p&a = plugged and abandoned)	1-(SRA 2 -#1)	1-(Grand Prix #2) 1-(Grand Prix #1)-p&a 1-(Schuyler SRA #1)-temp p&a 2 – active on adjoining private land	0	2-(SRA 3 – 1 and the SRA 3 – 2) 2-active on adjoining private land	0-on state forest 1-active on adjoining private land

	Sugar Hill State Forest	Goundry Hill State Forest	Coon Hollow State Forest	South Bradford State Forest	Cinnamon Lake State Forest
Pipeline	3.2 miles, 3 segments	2.5 miles, 3 segments	0.85 miles, 2 segments	1.9 miles, 4 segments	0
MAPPWD Routes	4.9 miles (open seasonally)	2.3miles	0	1.2 miles	¾ miles
Boundary Line	58.5 miles About 24.7 miles of roadside	19.2 miles About 4.6 miles of roadside	22.8 miles About 3.9 miles of roadside	11.0 miles About 3.6 miles of roadside	19.2 miles About 6.6 miles of roadside
Fire Tower	1	0	0	0	0
Lean-tos	5	0	0	1	0
Pit Privies	1-Lower Evergreen Hill Rd Parking Lot 1 - Spencer Pond 4- at lean-to's 1- Firetower Access Rd & Tower Hill Rd. 7 total	0	0	1 at lean-to 1 total	0
Water body, Fire Pond and/or Fishing Pond	1 – Spencer Pond 1 – pond/wetland complex, Fish Hill Rd. Many small dug-outs and CCC waterholes less than ¼ acre in size	Many small dug-outs and CCC waterholes less than ¼ acre in size	Many small dug-outs and CCC waterholes less than ¼ acre in size	Many small dug-outs and CCC waterholes less than ¼ acre in size	1-Cinnamon Lake Many small dug-outs and CCC waterholes less than ¼ acre in size
Horse Stalls	2-2 stall at Lower Evergreen Hill Rd Parking Lot 1 - 16 Stall at Sugar Hill Rec. Area 20 stalls total 3 buildings	0	0	0	0

Table 2D: Facilities on Beaver Dams, Meads Creek, Dry Run, West Hill and Erwin Hollow State Forests

	Beaver Dams State Forest	Meads Creek State Forest	Dry Run State Forest	West Hill State Forest	Erwin Hollow State Forest
Public Forest Access Rd (Est. Miles)	0	0	0.6 – Wildcat Hollow	0	0
Haul Road (Est. Miles)	0	0	0	0.2 – W. Hill Rd Haul Rd. 0.3 – Rogers Rd. Haul Rd. 0.5 – total	0
Access Trails (Est. Miles)	1.4 – Moody Rd 0.2 - Stephens Rd 1.6 - Total	0	0.2 – Wildcat Hollow Rd	0	0.8 – Erwin Hollow Access Trail 0.5 – Stone Silo Access Trail 1.3 - Total
Non- Maintained Town Roads, or with unknown status	Portions of: Buck Hollow Rd Stephens Rd		Wildcat Hollow		

	Beaver Dams State Forest	Meads Creek State Forest	Dry Run State Forest	West Hill State Forest	Erwin Hollow State Forest
Officially Abandoned Town Roads (Est. Miles) See also Summary of Identified Issues and Appendix L: Known Official Road Abandonments	0.46 - Moody Rd (taken by condemnation by NYS DEC)				
Right-of- Way	0	0	0	0	0
Gates	0	0	0	0	0
Unpaved Parking lots	0	3	2	0	0
Facility ID Signs	1-Hornby Rd	1 – McNutt Run Rd 1 – Meads Creek Rd 1 –Stony Ridge Rd and Wixon Rd 3 total	1-Duvall Rd.	1 West Hill Rd and Rogers Rd	1 – Erwin Hollow Rd
Kiosks	0	0	0	0	0
Hiking Trails	0	1.8 – GET 0.8 Hoppers Bridge Spur trail	0	3 GET, under construction	0

	Beaver Dams State Forest	Meads Creek State Forest	Dry Run State Forest	West Hill State Forest	Erwin Hollow State Forest
Multiple Use Trails (Mostly Horse and Snowmobile Use)	0	0	0	0	0
Gas Wells	0 wells	0-on state forest land 3-active on adjoining private land	0 wells	0-on state forest land 2-active on adjoining private land	0-on state forest land 1-active on adjoining private land
Pipeline	0 miles	1.7 miles, 3 segments	0 miles	0.8 miles, 2 segments	1.4 miles, 1 segment
MAPPWD Routes	1.5 miles-Moody and Stephens Rds	0	0	0	0
Boundary Line	4.8 miles About 0 miles of roadside	13.5 miles About 3.9 miles of roadside	10.9 miles About 2.7 miles of roadside	6.7 miles About 4.7 miles of roadside	4.1 miles About 0.9 miles of roadside
Fire Tower	0	0	0	0	0
Lean-tos	0	0	0	0	0
Pit Privies	0	0	0	0	0
Water body, Fire Pond and/or Fishing Pond	Many small dug-outs and CCC waterholes less than ¼ acre in size	Many small dug-outs and CCC waterholes less than ¼ acre in size	Many small dug-outs and CCC waterholes less than ¼ acre in size	Many small dug-outs and CCC waterholes less than ¼ acre in size	Many small dug-outs and CCC waterholes less than ¼ acre in size
Horse Stalls	0	0	0	0	0

Table 3D: Summary of All Facilities on the Six Nations Unit Management Plan Area

	Public Forest Access Rd (Miles)	Haul Road (Miles)	Access Trails (Miles)	Non-Maintained Town Roads, or with unknown status	Officially Abandoned Town Roads (Est. Miles)	Right-of-Way (Est. Miles)	Gates
Totals	6.0	8.3	12.7		11.36	2.4	17

	Unpaved Parking lots	Facility ID Signs	Kiosks	Hiking Trails	Multiple Use Trails (Mostly Horse and Snowmobile Use)	Gas Wells	Pipeline (Miles)
Total	29	22	3	26.1 miles	38.1 miles	4 active 1 temp. p&a 1 p&a	12.35

	MAPPWD Routes	Boundary Line	Fire Tower	Lean-tos	Pit Privies	Water body, Fire Pond and/or Fishing Pond	Horse Stalls
Total	10.65	170.1miles About 55.6 miles of roadside	1	6	8	3 ponds And many small dug-outs and CCC waterholes less than ¼ acre in size	20 stalls total (3 buildings)

Appendix E: Water Resources

WIN - Watershed Index Number: Numbering system used by NYSDEC to identify individual streams/ponds/lakes. (PA- water flows to Pennsylvania, Ont – water flows to Lake Ontario)

Water Classifications:

Class C - Fishing and any other usages except for bathing or as a source of water supply for drinking, culinary, or food processing purposes.

Class C(T) - Same as Class C plus it is designated as trout waters

Class C(TS) - Same as Class C plus waters are suitable for trout spawning

Table 1E: Streams

Name	WIN	Perennial/ Intermittent	Class	Fisheries Resource
McNutt Run	PA-3-58-8-1	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-8-1-2	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-5	Intermittent	C	Suckers, minnows
Meads Creek	PA-3-58-3	Perennial	C(T)	Brown Trout
Unnamed trib	PA-3-58-3-6	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-7	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-7-1	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-7-2	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-8	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-8-1	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-8-2	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-8-3	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-8-3A	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-8-4	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-9-1	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-9-2	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-10	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-10-1	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-10-1A	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-10-2	Perennial	C	Suckers, minnows
Pine Creek	PA-3-58-3-9	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-9-3	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-9-3A	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-9-3-1	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-10	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-10-1	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-10-1A	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-10-2	Perennial	C	Suckers, minnows
Pine Creek	PA-3-58-3-11	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-11-2	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-11-2-1	Perennial	C	Suckers, minnows

Name	WIN	Perennial/ Intermittent	Class	Fisheries Resource
Unnamed trib	PA-3-58-3-12	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-12A	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-12-A	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-12-2	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-13	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-13-1	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-13-1-A	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-13-2	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-14	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-15	Perennial	C	Suckers, minnows
Dry Run	PA-3-58-3-3	Perennial	C(TS)	Brook Trout
Stanton Creek	PA-3-58-3-3	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-3-2	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-3-2-2	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-3-2-C	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-3-3	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-3-3A	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-3-2-B	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-3-7	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-3-3-8	Perennial	C	Suckers, minnows
Erwin Hollow Brook	PA-3-58-1	Perennial	C(TS)	Brook Trout
Borden Creek	PA-3-55-2	Perennial	C(TS)	Brook Trout
Unnamed trib	PA-3-52-9	Perennial	C	Suckers, minnows
Unnamed trib	PA-3-58-15-P47-6-1-2	Perennial	C	Suckers, minnows
Unnamed trib	ONT-66-12-P369-60-1-2-5	Perennial	C	Suckers, minnows
Unnamed trib	ONT-66-12-P369-60	Perennial	B	Suckers, minnows
Unnamed trib	ONT-66-12-P369-60-7-7-1	Perennial	C	Suckers, minnows
Unnamed trib	ONT-66-12-P369-60-21	Perennial	C	Suckers, minnows
Unnamed trib	ONT-66-12-P369-60-20	Perennial	C	Suckers, minnows
Unnamed trib	ONT-66-12-P369-60-19	Perennial	C	Suckers, minnows
Unnamed trib	ONT-66-12-P369-60-19-A	Perennial	C	Suckers, minnows
Unnamed trib	ONT-66-12-P369-60-16	Perennial	C	Suckers, minnows
Unnamed trib	ONT-66-12-P369-60-16-2	Perennial	C	Suckers, minnows
Unnamed trib	ONT-66-12-P369-60-16-3	Perennial	C	Suckers, minnows
Unnamed trib	ONT-66-12-P369-60-15	Perennial	C	Suckers, minnows
Unnamed trib	ONT-66-12-P369-60-14	Perennial	C	Suckers, minnows
Unnamed trib	ONT-66-12-P369-60-13	Perennial	C	Suckers, minnows
Unnamed trib	ONT-66-12-P369-60-11-2	Perennial	C	Suckers, minnows
Glen Creek	ONT-66-12-P369-60-11	Perennial	C	Suckers, minnows

Table 2E: Ponds

Name	WIN	Fisheries Resource
Cinnamon Lake	PA-3-58-3-3-P38	brown bullheads, yellow perch, chain pickerel, largemouth bass, black crappie, pumpkinseeds

Appendix F: Timber Management

See also maps on Appendix M: Maps, page 231 and Timber and Vegetation Management starting on pages 23 and 63.

The following tables list the anticipated bid year for the start of the treatment of these stands. Many factors can influence the actual start date for these events, including, but not limited to; staff time and other resources, invasive bug or plant issues, weather, local/regional/worldwide markets, and deer or other animal populations. Most of these will be sold in sales of more than one stand, and most will take more than one year to plan, sell, and cut.

These lists only include commercial sales of timber; they do not include any pre-commercial treatments for any stands. Pre-commercial is a stand treatment when the trees or stand is too small to sell for profit, requiring the payment of someone to do the work. In addition, properly trained volunteers, or prison work crews, can also do the work. When prison work crews are available, or money to contract for work is available, the stands not slated for commercial sales will be evaluated, starting with the ones in the seedling-sapling and pole timber sizes.

Key	
Abbreviation	Definition
SS	Seedling/sapling size - A stand with an average D.B.H. of 0 to 5 inches.
PT	Poletimber size - A stand with an average D.B.H. of 6 to 11 inches.
ST	Sawtimber size - A stand with an average D.B.H. of 12 inches or larger.
AA	All-aged cut - To continue, or encourage, a forest stand to contain trees of two or more age classes. Both regenerating and thinning at the same time.
Regen	Regeneration -To reestablish a forest stand with tree seedlings. Cut styles that do this include; clearcut or overstory removal cut (one cut removes all the overstory trees); or a Shelterwood or Seed tree Cut (one or more cuts to get sunlight on the ground before the final cut). This indicates the first entry; later cuts will be timed based on the growth response of the vegetation. Depending on type of cut, and the size of the area treated, additional SEQR may be required.
Thin	Thinning - An intermediate cut to encourage faster growth.
Protection	An area which requires special management considerations. (Special cutting regimen, no treatment, short rotation, or long rotation.) See Protection Forest page 70.
No Access	Inadequate access to treat, if access improves treatment may (or may not) be scheduled.
Legacy Plantation	The CCC, and later work crews, established a legacy of sound stewardship on state forest land through the planting of millions of trees. Where possible, NYS DEC will designate some plantations to help carry on this legacy. Although no living creature lives forever, these plantations would be grown beyond economic maturity and maintained for as long as possible. Every effort will be made to not deliberately regenerate these stands, although thinning to improve the health of the trees will occasionally occur.

Table 1F: Goundry Hill State Forest Timber Management
(Schuyler Reforestation Area #1)

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Goundry Hill State Forest)	
					Years 1-5	Years 6-10
A	1	11	Hardwood	PT		
A	2	19	Con Nat.	ST		
A	3	21	Hardwood	ST	Thin	
A	4	2	Hardwood	SS		
A	5	3	Hardwood	PT		
A	6	2	Hardwood	SS		
A	7	17	Hardwood	ST	Thin	
A	8	33	Plantation	PT		Thin
A	9	40	Hardwood	PT	Thin	
A	10	4	Plantation	PT		
A	11	11	Con Nat.	PT		AA
A	12	5	Hardwood	SS		
A	13	6	Hardwood	PT		
A	14	36	Hardwood	PT		
A	15	8	Hardwood	ST		Regen
A	16	45	Hardwood	ST		Thin
A	17	11	Hardwood	PT		
A	18	27	Hardwood	ST		Thin
A	19	7	Hardwood	ST		
A	20	20	Hardwood	PT		
A	21	11	Plantation	PT		Thin
A	22	3	Hardwood	SS		
A	23	2	Hardwood	SS		
A	24	5	Hardwood	SS		
A	711	5	Road		Other (Roads, Cemeteries, etc.)	
A	712	1	Parking		Other (Roads, Cemeteries, etc.)	
A	722	8	Elec.		Other (Roads, Cemeteries, etc.)	
A	723	4	Gas		Other (Roads, Cemeteries, etc.)	
A	940	4	Open		Open; mow at least every 3 rd year.	
A	950	4	Open		Open; mow at least every 3 rd year.	
B	1	4	Hardwood	PT		
B	2	6	Con Nat.	PT		
B	3	15	Con Nat.	PT		
B	4	12	Hardwood	SS		
B	5	29	Hardwood	PT		
B	6	15	Hardwood	PT		
B	7	11	Plantation	PT		
B	8	12	Con Nat.	PT		
B	9	32	Hardwood	SS		

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Goundry Hill State Forest)	
					Years 1-5	Years 6-10
B	10	104	Hardwood	ST		Thin
B	11	56	Hardwood	ST		Thin
B	12	24	Plantation	ST		
B	13	12	Con Nat.	PT		
B	14	7	Plantation	PT		
B	15	38	Plantation	ST	Thin	Regen
B	16	14	Plantation	PT		
B	17	7	Plantation	PT		
B	18	7	Plantation	ST		Regen
B	19	15	Plantation	ST		Regen
B	711	3	Road		Other (Roads, Cemeteries, etc.)	
B	712	1	Road		Other (Roads, Cemeteries, etc.)	
B	810	4	Gas Well		Other (Roads, Cemeteries, etc.)	
B	920	4	Wetland		Wetland or Pond	
C	1	8	Con Nat.	PT		
C	2	30	Hardwood	ST	Thin	
C	3	13	Hardwood	SS		
C	4	45	Hardwood	PT		Thin
C	5	10	Plantation	PT		
C	6	20	Plantation	PT		
C	8	29	Hardwood	ST	Thin	
C	9	8	Plantation	PT		
C	10	7	Plantation	ST		Regen
C	11	14	Con Nat.	PT		
C	12	14	Hardwood	SS		
C	950	3	Open		Open; mow at least every 3 rd year.	
D	1	13	Con Nat.	ST		AA
D	2	44	Hardwood	ST	Thin	
D	3	16	Hardwood	PT		
D	5	66	Hardwood	PT	Thin	
D	7	34	Hardwood	SS		
D	8	39	Hardwood	PT		
D	10	15	Hardwood	PT		
D	11	47	Hardwood	PT		
D	12	28	Hardwood	ST		Thin
D	13	139	Hardwood	PT		
D	14	49	Hardwood	ST		
D	15	14	Hardwood	PT		
D	711	4	Road		Other (Roads, Cemeteries, etc.)	
D	723	4	Gas		Other (Roads, Cemeteries, etc.)	
D	810	2	Gas Well		Other (Roads, Cemeteries, etc.)	
E	1	6	Con Nat.	ST		
E	2	15	Con Nat.	PT		

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Goundry Hill State Forest)	
					Years 1-5	Years 6-10
E	3	8	Plantation	PT		
E	4	25	Con Nat.	PT		
E	5	10	Con Nat.	ST		
E	6	15	Plantation	PT		
E	7	31	Hardwood	PT		
E	8	15	Plantation	PT		
E	9	33	Hardwood	ST		
E	10	42	Hardwood	PT		
E	11	50	Plantation	PT		Regen
E	12	7	Con Nat.	PT		
E	13	25	Plantation	PT	Regen	
E	14	73	Plantation	ST	Regen	
E	15	17	Plantation	PT		
E	16	15	Plantation	PT		
E	17	32	Hardwood	ST	Thin	
E	18	6	Plantation	PT		
E	19	18	Hardwood	PT		
E	20	16	Con Nat.	PT		
E	21	5	Plantation	PT		
E	22	29	Con Nat.	PT		
E	23	37	Plantation	PT	Legacy Plantation	
E	24	37	Con Nat.	PT		
E	25	4	Hardwood	SS		
E	711	10	Road		Other (Roads, Cemeteries, etc.)	
E	722	4	Elec.		Other (Roads, Cemeteries, etc.)	
E	723	3	Gas		Other (Roads, Cemeteries, etc.)	
E	810	2	Gas Well		Other (Roads, Cemeteries, etc.)	

Table 2F: Sugar Hill State Forest Timber Management
(Schuyler Reforestation Area #2)

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Sugar Hill State Forest)	
					Years 1-5	Years 6 - 10
A	1	6	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
A	2	4	Con Nat.	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
A	3	11	Con Nat.	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
A	4	22	Plantation	PT		
A	5	65	Plantation	PT	Regen	

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Sugar Hill State Forest)	
					Years 1-5	Years 6 - 10
A	6	11	Hardwood	SS		
A	7	3	Plantation	PT		
A	8	11	Hardwood	PT		
A	9	15	Hardwood	PT		
A	10	25	Plantation	PT		Regen
A	11	86	Hardwood	ST		Thin
A	12	18	Plantation	PT		Regen
A	13	57	Plantation	PT		Regen
A	14	28	Hardwood	PT		
A	15	27	Hardwood	SS		
A	16	9	Hardwood	ST		Thin
A	17	13	Plantation	ST		
A	18	6	Plantation	PT		
A	19	15	Plantation	PT		
A	20	10	Hardwood	PT		
A	711	5	Road		Other (Roads, Cemeteries, etc.)	
A	712	0.3	Parking		Other (Roads, Cemeteries, etc.)	
A	713	0.1	Parking		Other (Roads, Cemeteries, etc.)	
A	722	1	Electric ROW		Other (Roads, Cemeteries, etc.)	
A	910	2	Pond		Wetland or Pond	
A	940	2	Open / Brush		Open; mow at least every 3rd year.	
B	1	29	Plantation	PT		
B	2	40	Plantation	PT		
B	3	66	Hardwood	ST		
B	4	11	Hardwood	PT		
B	5	23	Hardwood	PT	Thin	
B	6	12	Con Nat.	PT		
B	7	18	Hardwood	ST		
B	8	27	Hardwood	PT		
B	9	7	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
B	10	6	Con Nat.	PT	Thin	
B	11	5	Hardwood	PT	Thin	
B	12	36	Con Nat.	PT	Thin	
B	13	4	Hardwood	SS		
B	14	13	Hardwood	PT		Thin
B	15	9	Plantation	PT		Thin
B	16	34	Con Nat.	PT		
B	17	2	Hardwood	PT		
B	18	8	Hardwood	PT		
B	19	38	Plantation	PT	Inadequate access to treat, if access improves treatment may be scheduled.	

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Sugar Hill State Forest)	
					Years 1-5	Years 6 - 10
B	20	6	Con Nat.	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
B	21	28	Plantation	PT		
B	22	2	Plantation	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
B	711	4	Road		Other (Roads, Cemeteries, etc.)	
B	712	0.3	Parking		Other (Roads, Cemeteries, etc.)	
B	713	0.2	Parking		Other (Roads, Cemeteries, etc.)	
B	910	1	Pond		Wetland or Pond	
B	930	19	Wetland		Wetland or Pond	
B	931	6	Wetland		Wetland or Pond	
B	932	14	Wetland		Wetland or Pond	
B	950	29	Open / Brush		Open; mow at least every 3rd year.	
C	1	3	Hardwood	ST		
C	2	18	Hardwood	ST	Thin	
C	3	44	Con Nat.	ST	AA	
C	4	16	Plantation	ST		Thin
C	5	12	Hardwood	PT		
C	6	6	Plantation	PT		AA
C	7	13	Plantation	PT		
C	8	10	Con Nat.	ST		
C	9	34	Hardwood	ST		
C	10	10	Hardwood	PT	Thin	
C	11	9	Hardwood	ST		
C	12	10	Hardwood	PT		
C	13	16	Con Nat.	PT	AA	
C	14	6	Hardwood	SS		
C	15	18	Plantation	PT		
C	16	4	Hardwood	PT		
C	17	10	Hardwood	ST		
C	18	15	Con Nat.	ST	Thin	
C	19	16	Hardwood	ST		
C	20	13	Hardwood	ST		
C	21	18	Hardwood	SS		
C	22	7	Hardwood	ST	Thin	
C	23	4	Hardwood	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
C	24	7	Hardwood	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
C	25	3	Con Nat.	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
C	26	2	Plantation	ST	Inadequate access to treat, if access improves treatment may be scheduled.	

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Sugar Hill State Forest)	
					Years 1-5	Years 6 - 10
C	27	8	Hardwood	PT		
C	28	27	Hardwood	PT		
C	29	8	Hardwood	PT		
C	30	20	Hardwood	ST		Thin
C	31	32	Plantation	ST	Regen	
C	32	21	Hardwood	ST		Thin
C	33	8	Hardwood	PT		
C	34	37	Plantation	PT		
C	35	3	Hardwood	PT		
C	36	15	Hardwood	ST		
C	37	7	Hardwood	ST		Thin
C	38	46	Con Nat.	PT		
C	39	2	Con Nat.	PT		
C	40	8	Hardwood	ST		
C	41	8	Hardwood	ST		Thin
C	42	22	Hardwood	ST		Thin
C	43	9	Hardwood	PT		
C	44	38	Con Nat.	PT		
C	45	14	Con Nat.	ST		
C	46	20	Hardwood	ST		Thin
C	47	25	Plantation	PT		Regen
C	48	18	Con Nat.	PT		
C	49	7	Hardwood	ST		
C	50	6	Hardwood	PT		
C	51	4	Hardwood	ST		
C	52	34	Plantation	PT		Regen
C	53	7	Plantation	PT		
C	54	10	Con Nat.	PT		
C	55	4	Hardwood	SS		
C	56	6	Plantation	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
C	57	28	Hardwood	ST		
C	58	26	Con Nat.	ST		
C	59	3	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
C	60	6	Con Nat.	PT		
C	711	17	Road		Other (Roads, Cemeteries, etc.)	
C	930	13	Wetland		Wetland or Pond	
C	931	15	Wetland		Wetland or Pond	
C	932	9	Wetland		Wetland or Pond	
D	1	16	Plantation	PT		
D	2	14	Hardwood	ST		
D	3	30	Hardwood	ST	Thin	

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Sugar Hill State Forest)	
					Years 1-5	Years 6 - 10
D	4	31	Hardwood	ST		
D	5	2	Plantation	ST		
D	6	63	Plantation	ST		Thin
D	7	7	Plantation	ST		
D	8	3	Con Nat.	ST		
D	9	20	Hardwood	ST		
D	10	8	Hardwood	PT		
D	11	17	Con Nat.	PT		
D	12	27	Plantation	ST		
D	13	14	Plantation	ST		
D	14	46	Hardwood	PT		
D	15	7	Hardwood	ST		
D	16	19	Hardwood	ST		
D	17	14	Hardwood	ST		
D	18	12	Hardwood	PT		
D	19	6	Hardwood	PT		
D	20	16	Hardwood	ST		
D	21	23	Plantation	PT		
D	22	16	Hardwood	ST		
D	23	19	Con Nat.	ST		
D	24	15	Hardwood	ST		
D	25	13	Plantation	ST		
D	26	6	Hardwood	ST		
D	27	22	Con Nat.	ST		
D	28	31	Hardwood	ST		
D	29	71	Con Nat.	ST		
D	30	30	Hardwood	SS		
D	31	17	Hardwood	ST		
D	32	25	Con Nat.	ST		
D	33	16	Hardwood	ST		
D	34	8	Con Nat.	ST		
D	35	4	Plantation	ST		
D	36	11	Hardwood	ST		Regen
D	37	24	Hardwood	SS		
D	38	28	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
D	39	9	Hardwood	ST		
D	40	13	Hardwood	ST	Regen	
D	711	17	Road		Other (Roads, Cemeteries, etc.)	
D	712	0.4	Parking		Other (Roads, Cemeteries, etc.)	
D	722	1	Electric ROW		Other (Roads, Cemeteries, etc.)	
D	760	9	Recreation		Other (Roads, Cemeteries, etc.)	
D	761	11	Recreation		Other (Roads, Cemeteries, etc.)	

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Sugar Hill State Forest)	
					Years 1-5	Years 6 - 10
D	910	0.4	Pond		Wetland or Pond	
D	911	0.2	Pond		Wetland or Pond	
E	1	41	Hardwood	PT		
E	2	5	Hardwood	PT	Maple Taps	Thin
E	3	10	Hardwood	PT		
E	4	7	Plantation	PT		Thin
E	5	15	Hardwood	PT		
E	6	21	Con Nat.	ST		
E	7	4	Hardwood	SS		
E	8	19	Hardwood	ST		
E	9	24	Con Nat.	PT		
E	10	6	Hardwood	PT		
E	11	14	Hardwood	PT		
E	12	8	Con Nat.	PT		
E	13	18	Hardwood	PT		
E	14	37	Plantation	PT		
E	15	62	Hardwood	SS		
E	16	8	Plantation	SS		
E	17	9	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
E	18	4	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
E	19	40	Plantation	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
E	20	8	Plantation	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
E	21	46	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
E	22	10	Con Nat.	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
E	23	20	Plantation	PT		
E	24	25	Plantation	PT		
E	25	25	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
E	26	4	Plantation	PT		
E	27	29	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
E	28	21	Hardwood	PT		
E	29	71	Hardwood	PT		
E	711	4	Road		Other (Roads, Cemeteries, etc.)	
E	911	0.4	Pond		Wetland or Pond	
E	912	2	Pond		Wetland or Pond	
E	920	35	Wetland		Wetland or Pond	

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Sugar Hill State Forest)	
					Years 1-5	Years 6 - 10
E	921	3	Wetland		Wetland or Pond	
E	922	2	Wetland		Wetland or Pond	
E	950	6	Open / Brush		Open; mow at least every 3rd year.	
F	1	47	Hardwood	PT		
F	2	108	Plantation	PT		Regen
F	3	19	Hardwood	PT		
F	4	4	Hardwood	PT		
F	5	59	Hardwood	SS		
F	6	21	Hardwood	PT		
F	7	38	Hardwood	PT		
F	711	1	Road		Other (Roads, Cemeteries, etc.)	
G	1	70	Plantation	PT		Regen
G	2	6	Hardwood	PT		
G	3	2	Hardwood	ST		
G	5	8	Hardwood	ST		
G	6	14	Plantation	PT		
G	7	7	Con Nat.	PT		
G	8	9	Hardwood	ST		
G	9	61	Hardwood	SS		
G	10	12	Plantation	SS		
G	11	7	Hardwood	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
G	12	18	Hardwood	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
G	13	67	Hardwood	ST		
G	14	10	Con Nat.	ST		
G	15	17	Hardwood	PT		
G	711	6	Road		Other (Roads, Cemeteries, etc.)	
G	712	0.1	Parking		Other (Roads, Cemeteries, etc.)	
G	920	1	Wetland		Wetland or Pond	
G	921	34	Wetland		Wetland or Pond	
G	950	11	Open / Brush		Open; mow at least every 3rd year.	
G	951	4	Open / Brush		Open; mow at least every 3rd year.	
H	1	2	Open / Brush		Open; mow at least every 3rd year.	
H	2	36	Plantation	PT		Regen
H	3	2	Hardwood	PT		
H	4	17	Hardwood	ST	Thin	
H	5	9	Hardwood	PT		Thin
H	6	15	Plantation	PT		
H	7	26	Hardwood	PT		
H	8	25	Hardwood	ST		
H	9	10	Plantation	PT		
H	10	7	Plantation	ST		

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Sugar Hill State Forest)	
					Years 1-5	Years 6 - 10
H	11	15	Hardwood	PT		
H	12	51	Hardwood	PT		
H	13	50	Plantation	PT		
H	14	4	Hardwood	SS		
H	15	11	Hardwood	SS		
H	16	3	Hardwood	PT		
H	17	15	Plantation	PT		Thin
H	18	5	Hardwood	SS		
H	19	4	Hardwood	PT		
H	20	9	Hardwood	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
H	711	1	Road		Other (Roads, Cemeteries, etc.)	
H	712	0.2	Parking		Other (Roads, Cemeteries, etc.)	
I	1	22	Hardwood	ST		Thin
I	2	28	Con Nat.	ST		
I	3	26	Hardwood	ST		Thin
I	4	11	Hardwood	ST		
I	5	9	Plantation	PT		
I	6	7	Plantation	PT		
I	7	20	Plantation	ST		Thin
I	8	11	Hardwood	ST		Regen
I	9	7	Plantation	PT		
I	10	18	Hardwood	ST		Thin
I	11	12	Plantation	PT		
I	12	26	Hardwood	PT		
I	711	1	Road		Other (Roads, Cemeteries, etc.)	
J	2	5	Hardwood	ST		
J	3	26	Plantation	PT	Thin	
J	4	7	Plantation	PT		
J	5	9	Hardwood	PT		
J	6	20	Hardwood	ST	Thin	
J	7	25	Hardwood	ST		
J	8	4	Con Nat.	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
J	9	5	Con Nat.	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
J	10	16	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
J	11	115	Con Nat.	ST		
J	12	19	Hardwood	ST		
J	13	24	Plantation	ST		Regen
J	14	1	Plantation	PT		
J	15	15	Con Nat.	ST		

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Sugar Hill State Forest)	
					Years 1-5	Years 6 - 10
J	16	9	Hardwood	ST		
J	17	9	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
J	711	4	Road		Other (Roads, Cemeteries, etc.)	
J	711	0.7	Road		Other (Roads, Cemeteries, etc.)	
J	930	1	Wetland		Wetland or Pond	
K	1	13	Hardwood	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
K	2	13	Plantation	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
K	3	13	Plantation	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
K	4	27	Hardwood	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
K	5	5	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
K	6	9	Con Nat.	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
K	7	27	Con Nat.	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
K	8	26	Plantation	PT		
K	9	5	Con Nat.	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
K	10	10	Con Nat.	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
K	12	5	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
K	13	25	Hardwood	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
K	14	51	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
K	15	31	Con Nat.	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
K	16	12	Plantation	PT		
K	17	2	Plantation	PT		
K	18	6	Con Nat.	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
K	19	9	Plantation	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
K	20	5	Plantation	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
K	21	25	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Sugar Hill State Forest)	
					Years 1-5	Years 6 - 10
K	711	7	Road		Other (Roads, Cemeteries, etc.)	
K	930	40	Wetland		Wetland or Pond	
K	931	14	Wetland		Wetland or Pond	
L	1	8	Plantation	PT		
L	2	5	Plantation	PT		
L	3	5	Con Nat.	SS		
L	4	4	Plantation	PT		
L	5	12	Plantation	PT		
L	6	3	Con Nat.	PT		
L	7	5	Plantation	PT		
L	8	10	Plantation	PT		
L	9	8	Hardwood	PT		Thin
L	10	6	Plantation	PT	Thin	
L	11	49	Plantation	PT	Thin	
L	12	35	Plantation	PT	Legacy Plantation	
L	13	5	Con Nat.	PT		
L	14	14	Plantation	PT	Legacy Plantation	
L	15	3	Plantation	ST		Thin
L	16	15	Hardwood	PT		Thin
L	17	27	Hardwood	PT		
L	18	3	Hardwood	SS		
L	19	16	Hardwood	PT		
L	20	13	Hardwood	PT		Thin
L	21	29	Hardwood	PT		
L	22	9	Hardwood	PT		
L	23	9	Hardwood	PT		
L	24	22	Plantation	PT		Thin
L	25	11	Plantation	PT		Thin
L	26	8	Hardwood	PT		
L	27	5	Con Nat.	SS		
L	28	10	Hardwood	PT	Thin	
L	29	3	Hardwood	PT		
L	30	7	Hardwood	PT		
L	31	29	Plantation	PT		Regen
L	32	19	Hardwood	ST	Thin	
L	33	49	Plantation	PT	Legacy Plantation	
L	34	77	Hardwood	PT		
L	35	14	Hardwood	PT		
L	36	14	Hardwood	ST	Thin	
L	37	25	Hardwood	PT		
L	38	16	Hardwood	PT		
L	39	109	Plantation	PT		

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Sugar Hill State Forest)	
					Years 1-5	Years 6 - 10
L	40	31	Plantation	PT	Legacy Plantation	
L	41	8	Hardwood	ST	Regen	
L	42	7	Hardwood	PT		
L	43	9	Hardwood	PT		
L	711	18	Road		Other (Roads, Cemeteries, etc.)	
L	722	7	Electric ROW		Other (Roads, Cemeteries, etc.)	
L	810	2	Wellhead		Other (Roads, Cemeteries, etc.)	
L	920	4	Wetland		Wetland or Pond	
L	930	3	Wetland		Wetland or Pond	
L	950	1	Open / Brush		Open; mow at least every 3rd year.	
M	1	18	Hardwood	PT		
M	2	43	Hardwood	PT		
M	3	8	Hardwood	PT		
M	4	10	Con Nat.	PT		
M	8	63	Plantation	PT	Thin	
M	9	5	Hardwood	SS		
M	10	44	Plantation	PT		
M	11	38	Plantation	PT		
M	13	27	Con Nat.	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
M	14	13	Plantation	PT	Legacy Plantation	
M	15	5	Hardwood	PT		
M	16	30	Plantation	PT	Thin	
M	17	8	Hardwood	PT		
M	18	31	Plantation	PT		Thin
M	19	15	Plantation	PT		
M	20	36	Con Nat.	PT		
M	21	41	Hardwood	PT		
M	22	16	Plantation	ST		
M	23	69	Hardwood	PT		
M	24	64	Plantation	PT		
M	25	16	Hardwood	SS		
M	26	24	Hardwood	ST		
M	27	7	Hardwood	PT		
M	28	23	Plantation	PT		
M	29	17	Plantation	PT		
M	30	28	Plantation	PT		
M	31	16	Hardwood	PT		
M	32	65	Hardwood	PT	Thin	
M	33	4	Hardwood	SS		
M	35	16	Hardwood	PT	Thin	
M	36	41	Hardwood	PT		
M	38	18	Con Nat.	PT		

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Sugar Hill State Forest)	
					Years 1-5	Years 6 - 10
M	57	13	Con Nat.	PT		
M	58	65	Hardwood	PT		
M	711	21	Road		Other (Roads, Cemeteries, etc.)	
M	712	1	Parking		Other (Roads, Cemeteries, etc.)	
M	760	8	Recreation		Other (Roads, Cemeteries, etc.)	
M	810	12	Wellhead		Other (Roads, Cemeteries, etc.)	
M	920	97	Wetland		Wetland or Pond	
M	940	12	Open / Brush		Open; mow at least every 3rd year.	
M	950	10	Open / Brush		Open; mow at least every 3rd year.	
N	1	32	Plantation	ST		Thin
N	2	84	Plantation	PT		Thin
N	4	50	Plantation	ST		Thin
N	5	15	Plantation	PT		Thin
N	6	24	Plantation	PT		Thin
N	7	22	Plantation	PT		
N	8	23	Plantation	PT		Regen
N	9	34	Plantation	PT		
N	10	30	Plantation	PT		Regen
N	11	64	Hardwood	PT		
N	12	10	Hardwood	PT		
N	13	47	Hardwood	PT		
N	14	28	Hardwood	PT		
N	15	39	Hardwood	ST		
N	16	28	Hardwood	ST		
N	17	22	Hardwood	PT		
N	18	53	Plantation	PT		
N	19	6	Hardwood	ST		
N	20	16	Plantation	PT	Thin	
N	21	6	Plantation	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
N	22	15	Plantation	ST	Thin	
N	23	50	Hardwood	PT		
N	24	34	Con Nat.	PT		
N	25	31	Hardwood	PT		
N	26	16	Hardwood	PT		
N	27	26	Hardwood	PT		
N	28	43	Hardwood	ST		
N	29	4	Con Nat.	ST		
N	30	11	Con Nat.	PT		
N	31	7	Hardwood	PT		
N	32	6	Plantation	PT		
N	711	8	Road		Other (Roads, Cemeteries, etc.)	
N	910	1	Pond		Wetland or Pond	

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Sugar Hill State Forest)	
					Years 1-5	Years 6 - 10
N	911	1	Pond		Wetland or Pond	
N	920	1	Wetland		Wetland or Pond	
N	921	3	Wetland		Wetland or Pond	
N	950	4	Open / Brush		Open; mow at least every 3rd year.	
O	1	41	Plantation	ST		
O	2	61	Plantation	PT	Regen	
O	3	5	Hardwood	PT		Thin
O	4	12	Hardwood	PT		
O	5	12	Open / Brush		Open; mow at least every 3rd year.	
O	6	49	Plantation	PT	Thin	
O	7	10	Plantation	PT		
O	8	4	Plantation	PT		
O	9	32	Hardwood	PT		
O	10	20	Hardwood	ST		
O	11	13	Plantation	PT		
O	12	50	Hardwood	PT		
O	13	28	Hardwood	PT		
O	14	30	Hardwood	PT		
O	15	29	Hardwood	PT		
O	16	15	Hardwood	PT		
O	17	23	Hardwood	PT	Thin	
O	19	78	Hardwood	PT		
O	20	8	Hardwood	PT		
O	21	51	Hardwood	PT		Thin
O	22	78	Hardwood	ST		
O	711	8	Road		Other (Roads, Cemeteries, etc.)	
O	712	0.1	Parking		Other (Roads, Cemeteries, etc.)	
O	722	8	Electric ROW		Other (Roads, Cemeteries, etc.)	
O	760	16	Recreation		Other (Roads, Cemeteries, etc.)	
P	1	2	Hardwood	PT		Thin
P	2	15	Plantation	PT	Regen	
P	3	4	Hardwood	ST		Thin
P	4	8	Hardwood	PT	Thin	
P	5	24	Hardwood	ST		All-Aged
P	6	54	Hardwood	SS		
P	7	11	Con Nat.	PT		
P	8	17	Hardwood	ST		
P	9	11	Plantation	PT		
P	10	35	Hardwood	ST		
P	11	7	Hardwood	PT		
P	12	18	Hardwood	ST		Thin
P	13	27	Hardwood	ST	Thin	

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Sugar Hill State Forest)	
					Years 1-5	Years 6 - 10
P	14	16	Con Nat.	PT		
P	15	13	Hardwood	PT		
P	16	15	Hardwood	PT		
P	17	13	Hardwood	PT		
P	18	17	Hardwood	ST		Thin
P	19	12	Hardwood	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
P	20	47	Hardwood	ST		
P	21	6	Hardwood	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
P	22	9	Hardwood	PT		
P	711	0.6	Road		Other (Roads, Cemeteries, etc.)	
P	722	18	Electric ROW		Other (Roads, Cemeteries, etc.)	

Table 3F: Coon Hollow State Forest Timber Management
(Schuyler Reforestation Area #4)

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Coon Hollow State Forest)	
					Years 1- 5	Years 6 - 10
A	1	11	Hardwood	ST	Thin	
A	2	6	Hardwood	ST	Thin	
A	3	25	Plantation	PT		
A	4	37	Hardwood	ST	Thin	
A	5	7	Plantation	PT		
A	6	7	Hardwood	ST		
A	7	18	Hardwood	PT	Thin	
A	8	51	Plantation	PT		Regen
A	9	24	Hardwood	PT		
A	10	65	Hardwood	ST		
A	11	33	Hardwood	ST	Regen	
A	12	47	Hardwood	PT		
A	13	24	Hardwood	PT		
A	14	23	Plantation	PT		Regen
A	15	14	Hardwood	ST		
A	16	48	Plantation	PT		Regen
A	17	86	Plantation	PT		Regen
A	18	12	Hardwood	ST		
A	19	43	Hardwood	PT		
A	20	28	Hardwood	PT		
A	21	9	Hardwood	ST		

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Coon Hollow State Forest)	
					Years 1- 5	Years 6 - 10
A	711	2	Road		Other (Roads, Cemeteries, etc.)	
A	920	2	Wetland		Wetland or Pond	
A	921	3	Wetland		Wetland or Pond	
A	922	5	Wetland		Wetland or Pond	
B	1	12	Hardwood	PT	Thin	
B	2	29	Hardwood	ST	Thin	
B	3	84	Hardwood	PT		
B	4	30	Con. Nat.	ST		
B	5	5	Plantation	ST		
B	6	11	Hardwood	PT		
B	7	5	Hardwood	PT	Thin	
B	8	25	Hardwood	ST	Thin	
B	9	30	Plantation	PT		Regen
B	10	8	Hardwood	PT		Regen
B	11	7	Hardwood	SS		
B	12	23	Hardwood	PT		
B	13	100	Plantation	PT	Thin	
B	14	4	Hardwood	PT		
B	15	19	Hardwood	PT		
B	16	25	Hardwood	PT	Thin	
B	17	4	Hardwood	PT		
B	18	13	Hardwood	PT		
B	19	49	Hardwood	PT		
B	20	61	Hardwood	PT		
B	21	44	Hardwood	ST		
B	22	52	Plantation	PT		Thin
B	23	16	Hardwood	PT		
B	24	6	Plantation	PT		
B	25	10	Hardwood	ST		
B	26	15	Plantation	PT	Thin	
B	27	7	Open		Open; mow at least every 3 rd year.	
B	28	28	Hardwood	ST		
B	29	9	Hardwood	PT		
B	711	11	Road		Other (Roads, Cemeteries, etc.)	
B	923	6	Wetland		Wetland or Pond	
B	940	21	Open		Open; mow at least every 3 rd year.	
B	941	3	Open		Open; mow at least every 3 rd year.	
C	1	13	Plantation	ST	Regen	
C	2	11	Hardwood	ST	Thin	
C	3	33	Hardwood	PT	Maple Taps	
C	4	107	Hardwood	PT	Thin	
C	5	84	Hardwood	ST		Thin
C	6	18	Hardwood	PT		Thin

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Coon Hollow State Forest)	
					Years 1- 5	Years 6 - 10
C	7	23	Hardwood	PT		
C	8	5	Hardwood	PT		
C	9	25	Hardwood	PT		
C	10	34	Plantation	PT		Regen
C	11	30	Hardwood	PT	Regen	
C	12	28	Plantation	PT	Regen	
C	13	8	Hardwood	ST		Thin
C	14	6	Hardwood	ST	Thin	
C	15	5	Con. Nat.	PT	Thin	
C	16	34	Hardwood	ST	Thin	
C	17	10	Hardwood	PT		
C	18	12	Hardwood	ST		
C	19	10	Plantation	PT		Regen
C	20	24	Hardwood	PT		
C	21	35	Hardwood	PT		
C	22	31	Con. Nat.	PT		
C	23	12	Hardwood	ST		
C	711	5	Road		Other (Roads, Cemeteries, etc.)	
D	1	15	Hardwood	ST	Thin	
D	2	31	Hardwood	SS	Thin	
D	3	19	Plantation	PT	Legacy Plantation	
D	4	6	Plantation	PT	Legacy Plantation	
D	5	5	Hardwood	PT		
D	6	8	Hardwood	PT		
D	7	41	Hardwood	PT	Maple Taps	
D	8	39	Hardwood	PT		
D	9	17	Hardwood	SS		
D	10	45	Hardwood	PT	Maple Taps	
D	11	6	Hardwood	ST		
D	12	30	Hardwood	PT		
D	13	84	Hardwood	ST		
D	14	5	Hardwood	PT		
D	15	5	Hardwood	SS		
D	16	26	Plantation	PT		Regen
D	17	18	Hardwood	PT		
D	18	16	Hardwood	ST		
D	19	11	Hardwood	PT		
D	20	4	Hardwood	ST		
D	21	10	Hardwood	PT	Thin	
D	711	3	Road		Other (Roads, Cemeteries, etc.)	
D	722	4	Powerline		Other (Roads, Cemeteries, etc.)	
D	723	3	Pipeline		Other (Roads, Cemeteries, etc.)	

Table 4F: South Bradford State Forest Timber Management
(Steuben Reforestation Area #3)

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (South Bradford State Forest)	
					Years 1 - 5	Years 6 - 10
A	1	16	Plantation	PT		
A	2	31	Plantation	PT		
A	3	19	Hardwood	ST	Thin	
A	4	21	Plantation	ST		
A	5	47	Hardwood	ST	Thin	
A	6	17	Hardwood	ST		
A	7	16	Con Nat	ST		
A	8	6	Con Nat	PT		
A	9	22	Hardwood	SS		
A	10	7	Hardwood	SS		
A	11	34	Plantation	ST	Regen	
A	12	22	Plantation	PT		Thin
A	13	21	Hardwood	PT		
A	14	57	Hardwood	ST		Thin
A	15	17	Plantation	PT		
A	16	12	Plantation	ST	Regen	
A	17	12	Hardwood	PT		
A	18	6	Con Nat	ST		
A	19	10	Hardwood	PT		
A	20	29	Hardwood	ST		
A	21	7	Hardwood	PT		
A	711	6	Road		Other (Roads, Cemeteries, etc.)	
A	723	2	pipeline		Other (Roads, Cemeteries, etc.)	
B	1	6	Hardwood	SS		
B	2	8	Con Nat	PT		
B	3	32	Con Nat	PT		
B	4	31	Plantation	ST		
B	5	38	Hardwood	ST		Thin
B	6	26	Hardwood	ST		Thin
B	7	17	Hardwood	PT		
B	8	29	Plantation	PT		
B	9	32	Hardwood	ST	Thin	
B	10	18	Hardwood	ST		
B	11	20	Plantation	PT		
B	12	8	Plantation	PT		
B	13	120	Hardwood	ST		Thin
B	14	41	Hardwood	PT		
B	711	13	Road		Other (Roads, Cemeteries, etc.)	
B	723	5	pipeline		Other (Roads, Cemeteries, etc.)	

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (South Bradford State Forest)	
					Years 1 - 5	Years 6 - 10
B	810	9	well pad		Other (Roads, Cemeteries, etc.)	
C	1	38	Hardwood	SS		
C	2	10	Plantation	PT		Regen
C	3	37	Plantation	PT		Regen
C	4	23	Plantation	PT		Regen
C	5	5	Hardwood	PT		
C	6	21	Hardwood	SS		
C	7	18	Plantation	PT		
C	8	6	Plantation	PT		
C	9	36	Hardwood	ST		
C	10	35	Hardwood	ST	Thin	
C	11	30	Hardwood	ST		
C	12	25	Plantation	PT		
C	13	15	Hardwood	SS		
C	14	21	Hardwood	ST	Thin	
C	15	20	Con Nat	ST		
C	16	8	Plantation	ST		
C	17	26	Hardwood	ST	Thin	
C	18	12	Con Nat	ST		
C	19	12	Hardwood	SS		
C	20	7	Hardwood	SS		
C	711	4	Rd		Other (Roads, Cemeteries, etc.)	
D	1	23	Con Nat	PT		
D	2	10	Hardwood	PT		
D	3	17	Hardwood	PT		
D	4	22	Hardwood	ST		Thin
D	5	15	Con Nat	ST	AA	
D	6	15	Plantation	PT		
D	7	25	Hardwood	ST	Thin	
D	8	7	Con Nat	ST	AA	
D	9	82	Hardwood	ST	Thin	
D	10	11	Con Nat	ST		
D	11	4	Hardwood	ST		
D	12	23	Con Nat	ST		
D	711	3	Rd		Other (Roads, Cemeteries, etc.)	
E	1	29	Con Nat	ST		
E	2	17	Plantation	PT		Regen
E	3	41	Hardwood	ST		Thin
E	4	59	Hardwood	PT		
E	5	10	Hardwood	PT		
E	6	43	Plantation	PT		Regen
E	7	6	Hardwood	SS		
E	8	24	Hardwood	SS		

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (South Bradford State Forest)	
					Years 1 - 5	Years 6 - 10
E	9	23	Plantation	PT	Legacy Plantation	
E	10	7	Hardwood	ST		
E	711	4	Rd		Other (Roads, Cemeteries, etc.)	

Table 5F: West Hill State Forest Timber Management
(Steuben Reforestation Area #5)

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (West Hill State Forest)	
					Year 1 - 5	Year 6 - 10
A	1	60	Hardwood	ST		THIN
A	2	39	Hardwood	PT		
A	3	12	Hardwood	PT		
A	4	54	Hardwood	PT		
A	5	25	Hardwood	PT	Thin	
A	6	5	Plantation	S-S		
A	920	6	Wetland		Wetland	
A	930	4	Wetland		Wetland	
B	1	30	Hardwood	PT	Thin	
B	2	17	Hardwood	PT		
B	3	31	Hardwood	ST	Thin	
B	4	29	Hardwood	PT		
B	5	30	Hardwood	PT		
B	6	28	Plantation	PT		
B	7	14	Hardwood	PT		
B	8	4	Hardwood	S-S		
B	910	4	Pond		Pond	
C	1	53	Hardwood	PT		
C	2	49	Hardwood	PT		
C	3	15	Plantation	PT		
C	4	3	Hardwood	S-S		
C	930	6	Wetland		Wetland	
D	1	72	Hardwood	PT		Thin
D	2	27	Hardwood	PT		
D	3	71	Hardwood	ST		
D	4	13	Hardwood	PT		
D	5	38	Hardwood	PT		
D	6	6	Plantation	S-S		
D	7	55	Plantation	PT		Regen
D	8	12	Hardwood	PT		
D	9	54	Plantation	PT		

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (West Hill State Forest)	
					Year 1 - 5	Year 6 - 10
D	10	14	Hardwood	PT		
D	723	2	Pipeline		Other (Roads, Cemeteries, etc.)	
D	740	1	Foundation		Other (Roads, Cemeteries, etc.)	
Z	711	4	Road		Other (Roads, Cemeteries, etc.)	

Table 6F: Meads Creek State Forest Timber Management
(Steuben Reforestation Area #7)

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Meads Creek State Forest)	
					Years 1 - 5	Years 6 - 10
A	1	22	Hardwood	PT	Thin	
A	2	27	Hardwood	PT	Thin	
A	3	9	Hardwood	ST	Thin	
A	4	7	Hardwood	PT		
A	5	7	Hardwood	SS		
A	6	16	Hardwood	PT		
A	7	28	Hardwood	PT		
A	8	44	Hardwood	SS		
A	9	23	Hardwood	PT		
A	10	14	Hardwood	PT	Thin	
A	11	44	Hardwood	PT		
A	12	19	Hardwood	SS		
A	13	15	Con Nat.	PT		
A	14	19	Hardwood	PT		
A	711	7	Road		Other (Roads, Cemeteries, etc.)	
A	723	3	PIPELINE		Other (Roads, Cemeteries, etc.)	
B	1	3	Hardwood	SS		
B	2	6	Hardwood	SS		
B	3	30	Hardwood	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
B	4	31	Hardwood	PT		
B	5	71	Hardwood	ST		
B	6	7	Hardwood	PT		
B	7	44	Hardwood	ST		Thin
B	8	9	Con Nat.	PT		
B	9	20	Hardwood	PT		Thin
B	10	20	Hardwood	PT		Thin
B	11	14	Plantation	PT		
B	12	6	Hardwood	PT		
B	13	11	Hardwood	ST		

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Meads Creek State Forest)	
					Years 1 - 5	Years 6 - 10
B	14	14	Hardwood	PT		
B	711	1	Road		Other (Roads, Cemeteries, etc.)	
B	723	3	Pipeline		Other (Roads, Cemeteries, etc.)	
C	1	19	Hardwood	PT	Thin	
C	2	13	Hardwood	ST	Thin	
C	3	7	Hardwood	ST	Thin	
C	4	16	Hardwood	PT		
C	5	9	Hardwood	ST	Thin	
C	6	11	Hardwood	PT		
C	7	6	Con Nat.	PT		
C	8	62	Hardwood	PT		
C	9	25	Hardwood	ST	Thin	
C	10	7	Hardwood	PT		
C	11	12	Hardwood	PT		
C	12	31	Hardwood	ST	Thin	
C	13	22	Hardwood	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
C	14	52	Hardwood	PT		
C	15	23	Con Nat.	ST		
C	16	13	Hardwood	PT		
C	17	6	Con Nat.	ST		
C	18	12	Hardwood	PT		
C	19	11	Hardwood	SS		
D	1	94	Con Nat.	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
D	2	80	Hardwood	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
D	3	25	Hardwood	PT		
D	4	17	Con Nat.	ST		
D	5	30	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
D	6	19	Con Nat.	PT		
D	7	63	Hardwood	ST		
D	8	9	Con Nat.	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
D	9	20	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
D	10	20	Hardwood	ST		
D	11	13	Con Nat.	ST		
D	12	28	Hardwood	PT		
D	13	8	Con Nat.	PT		
D	14	24	Con Nat.	PT		
D	15	17	Hardwood	PT		

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Meads Creek State Forest)	
					Years 1 - 5	Years 6 - 10
D	16	29	Con Nat.	PT		
D	711	5	Road		Other (Roads, Cemeteries, etc.)	

Table 7F: Beaver Dams State Forest Timber Management
(Steuben Reforestation Area #9)

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Beaver Dams State Forest)	
					Year 1 - 5	Year 6 - 10
A	1	12	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
A	2	11	Plantation	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
A	3	52	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
A	4	31	Hardwood	S-S	Inadequate access to treat, if access improves treatment may be scheduled.	
A	5	6	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
A	6	8	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
A	7	5	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
A	8	5	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
A	9	6	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
A	10	25	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
A	11	6	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
A	12	27	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
A	13	31	Hardwood	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
A	14	25	Hardwood	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
A	15	21	Hardwood	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
A	16	16	Con Nat	PT	Inadequate access to treat, if access improves treatment may be scheduled.	

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Beaver Dams State Forest)	
					Year 1 - 5	Year 6 - 10
A	17	31	Plantation	S-S	Inadequate access to treat, if access improves treatment may be scheduled.	
A	19	9	Hardwood	S-S	Inadequate access to treat, if access improves treatment may be scheduled.	
A	20	23	Plantation	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
A	21	15	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
A	22	31	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
A	23	33	Plantation	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
A	24	19	Plantation	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
A	25	47	Plantation	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
A	26	15	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
A	27	5	Hardwood	S-S	Inadequate access to treat, if access improves treatment may be scheduled.	
A	28	5	Hardwood	S-S	Inadequate access to treat, if access improves treatment may be scheduled.	
A	711	9	Road		Other (Roads, Cemeteries, etc.)	
A	930	5	Wetland		Wetland or Pond	

Table 8F: Dry Run State Forest Timber Management
(Steuben Reforestation Area #13)

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Dry Run State Forest)	
					Years 1- 5	Years 6 - 10
A	1	7	Con Nat	PT		
A	2	55	Hardwood	PT		
A	3	20	Hardwood	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
A	4	54	Hardwood	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
A	5	19	Hardwood	ST		
A	6	14	Plantation	PT		Regen
A	7	17	Hardwood	PT		
A	8	19	Con Nat	ST		
A	9	18	Hardwood	ST		

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Dry Run State Forest)	
					Years 1- 5	Years 6 - 10
A	10	13	Hardwood	PT		
B	1	13	Hardwood	PT	Thin	
B	2	9	Hardwood	PT	Thin	
B	3	5	Hardwood	PT		
B	4	21	Plantation	PT		Regen
B	5	40	Plantation	PT		Regen
B	6	3	Hardwood	PT		
B	7	8	Hardwood	PT		
B	8	29	Hardwood	ST		
B	9	4	Hardwood	PT		
B	10	13	Hardwood	PT		
B	11	77	Hardwood	ST	Thin	
B	12	27	Hardwood	PT		
B	13	8	Hardwood	PT		
B	14	16	Hardwood	PT		
B	15	8	Con Nat	PT		
B	16	15	Hardwood	PT		
B	711	3	Road		Other (Roads, Cemeteries, etc.)	
B	920	3	Wetland		Wetland or Pond	
C	1	8	Con Nat	ST		
C	2	18	Con Nat	PT		
C	3	15	Hardwood	PT		
C	4	28	Hardwood	ST		Thin
C	5	58	Hardwood	PT		
C	6	12	Plantation	PT		
C	7	6	Plantation	PT		
C	711	10	Road		Other (Roads, Cemeteries, etc.)	
D	1	74	Hardwood	PT		
D	2	3	Hardwood	PT		
D	3	2	Con Nat	ST		
D	4	14	Hardwood	PT		
D	5	57	Hardwood	PT		
D	6	9	Hardwood	PT		
D	9	16	Con Nat	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
D	10	35	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
D	11	13	Plantation	SS	Inadequate access to treat, if access improves treatment may be scheduled.	
D	950	5	Open		Open; mow at least every 3 rd year.	
E	1	15	Con Nat	PT	Inadequate access to treat, if access improves treatment may be scheduled.	

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Dry Run State Forest)	
					Years 1- 5	Years 6 - 10
E	2	14	Con Nat	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
E	3	22	Hardwood	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
E	4	45	Plantation	PT	Inadequate access to treat, if access improves treatment may be scheduled and Legacy Plantation	
E	5	10	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
E	6	18	Con Nat	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
E	7	17	Con Nat	ST	Inadequate access to treat, if access improves treatment may be scheduled.	

Table 9F: Erwin Hollow State Forest Timber Management
(Steuben Reforestation Area #14)

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Erwin Hollow State Forest)	
					Years 1 - 5	Years 6 - 10
A	1	34	Hardwood	PT	Thin	
A	2	49	Hardwood	PT	Regen	
A	3	4	Hardwood	ST		Regen
A	4	24	Hardwood	PT		Regen
A	5	34	Hardwood	PT		Thin
A	6	19	Hardwood	PT		
A	7	13	Con Nat	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
A	8	61	Hardwood	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
A	9	91	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
A	10	4	Hardwood	S-S	Inadequate access to treat, if access improves treatment may be scheduled.	
A	11	19	Con Nat	ST	Inadequate access to treat, if access improves treatment may be scheduled.	
A	12	127	Hardwood	S-S	Inadequate access to treat, if access improves treatment may be scheduled.	
A	13	25	Hardwood	S-S	Inadequate access to treat, if access improves treatment may be scheduled.	
A	14	7	Hardwood	ST	Inadequate access to treat, if access improves treatment may be scheduled.	

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Erwin Hollow State Forest)	
					Years 1 - 5	Years 6 - 10
A	15	11	Hardwood	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
A	711	4	Other		Other (Roads, Cemeteries, etc.)	
A	723	4	Pipeline		Other (Roads, Cemeteries, etc.)	
A	740	1	Other		This is a cultural resource site ("The Stone Silo"). Trees and brush have been cleared from the site. Clearing will continue to be needed	

Table 10F: Cinnamon Lake State Forest Timber Management
(Steuben-Schuyler Reforestation Area #1)

Com-part-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Cinnamon Lake State Forest)	
					Years 1 - 5	Years 6 - 10
A	1	13	Plantation	SS		
A	2	19	Plantation	PT		
A	3	7	Hardwood	PT		
A	4	41	Hardwood	PT		
A	5	6	Hardwood	PT		
A	6	36	Plantation	PT		Regen
A	7	21	Plantation	ST		Regen
A	8	10	Hardwood	PT		
A	9	14	Plantation	SS	Legacy Plantation	
A	10	12	Plantation	PT	Legacy Plantation	
A	11	15	Hardwood	ST		
A	711	13	Road		Other (Roads, Cemeteries, etc.)	
B	1	24	Hardwood	ST		
B	2	10	Hardwood	SS		
B	3	15	Plantation	ST		
B	4	8	Plantation	PT		
C	1	23	Plantation	PT		
C	2	4	Hardwood	SS		
C	3	8	Plantation	SS		
C	4	17	Hardwood	PT		
C	5	26	Hardwood	SS		
C	6	13	Hardwood	PT		
C	7	31	Hardwood	PT		
C	8	12	Plantation	PT	Regen	
C	9	10	Plantation	SS		
D	1	8	Hardwood	SS		

Compart-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Cinnamon Lake State Forest)	
					Years 1 - 5	Years 6 - 10
D	2	42	Plantation	PT	Regen	
D	3	9	Hardwood	PT		
D	6	22	Hardwood	ST	Thin	
D	7	41	Hardwood	PT		
D	721	2	Phone		Other (Roads, Cemeteries, etc.)	
D	920	10	Wetland		Wetland	
E	1	7	Hardwood	PT		
E	2	21	Hardwood	PT		
E	3	4	Hardwood	PT		
E	4	24	Hardwood	ST		
E	5	4	Plantation	ST		
E	6	17	Hardwood	PT		
E	7	14	Hardwood	ST		
E	8	11	Plantation	PT		
E	9	10	Con. Nat.	ST		
E	10	33	Hardwood	PT		
E	11	20	Hardwood	ST		
E	12	7	Hardwood	SS		
E	13	8	Hardwood	SS		
E	711	2	Road		Other (Roads, Cemeteries, etc.)	
E	910	1	Pond		Pond	
F	1	14	Plantation	PT		
F	2	29	Plantation	PT		
F	3	6	Hardwood	SS		
F	4	15	Hardwood	ST		
F	5	28	Hardwood	PT	Thin	
F	6	13	Hardwood	PT	Thin	
F	7	10	Hardwood	SS		
F	8	7	Hardwood	ST		
F	9	25	Hardwood	ST		
F	10	5	Hardwood	SS		
F	11	52	Plantation	ST		
F	12	19	Plantation	ST		
F	13	30	Con. Nat.	ST		
F	14	20	Hardwood	ST		
F	15	12	Hardwood	ST		
F	16	34	Plantation	ST		
F	17	69	Plantation	SS		
F	18	4	Hardwood	SS		
F	910	1	Pond		Pond	
G	1	12	Hardwood	ST		
G	2	25	Hardwood	PT		

Compart-ment	Stand No.	Acres	Stand type	Stand Size	Year of Management Action (Cinnamon Lake State Forest)	
					Years 1 - 5	Years 6 - 10
G	3	11	Plantation	PT		
G	4	10	Plantation	PT		
G	5	7	Hardwood	SS		
G	6	9	Plantation	PT		
G	7	10	Plantation	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
G	8	36	Con. Nat.	PT	Inadequate access to treat, if access improves treatment may be scheduled.	
G	9	10	Hardwood	ST		
G	10	4	Hardwood	ST		
G	11	8	Plantation	ST		
G	12	3	Hardwood	ST		
G	13	8	Hardwood	SS		
G	14	19	Plantation	ST		
G	15	49	Hardwood	SS		
G	16	13	Con. Nat.	ST		
G	17	7	Hardwood	SS		
G	711	5	Road		Other (Roads, Cemeteries, etc.)	
H	1	16	Plantation	ST		Thin
H	2	24	Hardwood	SS		
H	3	15	Plantation	ST		Regen
H	4	7	Hardwood	SS		
H	5	12	Hardwood	SS		
H	711	4	Road		Other (Roads, Cemeteries, etc.)	
I	1	17	Plantation	ST		Thin
I	2	17	Plantation	ST		
I	3	7	Hardwood	ST	Thin	
I	4	69	Hardwood	PT		Thin
I	5	15	Hardwood	PT		
I	6	13	Hardwood	PT		
I	7	17	Plantation	SS		
I	8	7	Hardwood	PT		
I	9	3	Hardwood	SS		
I	711	5	ROAD		Other (Roads, Cemeteries, etc.)	
J	1	21	Hardwood	SS		
J	2	21	Plantation	ST	Regen	
J	3	75	Hardwood	ST		
J	4	16	Hardwood	PT		Regen
J	5	21	Hardwood	PT		
J	6	20	Hardwood	PT		

Appendix G: Glossary

Access Trails - May be permanent, unpaved and do not provide all-weather access within the Unit. These trails are originally designed for removal of forest products and may be used to meet other management objectives such as recreational trails. These trails are constructed according to Best Management Practices.

All-Aged - A forest containing trees of two or more age classes.

Allegheny Hardwoods - Composed of primarily of black cherry, white ash, and tulip poplar. May contain lesser amounts of sugar maple, beech, red maple, red oak and basswood.

Allowable cut - The amount of wood fiber that may be harvested annually or periodically for a specified area over a stated period in accordance with the objectives of management.

Alluvium - Clay, silt, sand, gravel or similar material deposited by running water.

Anticlinal - Rock layers that are folded so that the layers are inclined away from each other (like the legs of a capital A).

Basal Area - The cross sectional area of a tree at breast height, measured in square feet. (Forestry Handbook, 2nd Edition, 1984, p.287) For a stand: the total basal area per unit of area, usually expressed as square feet per acre. (Silvicultural Systems For The Major Forest Types of The United States, USDA Ag. Hndbk. #445, 1973, p.103)

Bedrock - Hard lithified or consolidated rock units that underlie the unconsolidated or partially-consolidated surface (geology) sediments and soils deposited during recent sedimentation and glacial sedimentation.

Best Management Practices (BMPs) - Practices and techniques that control erosion of soil or other contaminants from the site.

Board Foot - A piece of lumber 1 inch thick, 12 inches wide and 1 foot long, or its equivalent.

Buffer Strips - A strip of vegetation used to protect sensitive areas from soil erosion and siltation.

Canadian Shield - the stable portion or nucleus of the North American continent, primarily igneous and metamorphic rocks, located primarily in northeastern Canada, Michigan, Wisconsin and Minnesota.

Clast - A fragment of rock

Classified Water Bodies - A system whereby water bodies are protected under Environmental Conservation Law.

Clearcut - The removal of a forest overstory. This practice is done in preparation of the reestablishment of a new forest through regeneration. This is one form of even aged management.

Conifer - Needle bearing trees.

Conifer/Conifer Hardwood Stand - A forest stand containing 33%, or more, of conifer species.

D.B.H. - (diameter at breast height) - The diameter of a tree at roughly breast height or 4. feet from the ground.

Defoliated - Complete, or almost complete removal of leaves from a living tree.

Dip - The angle that strata (rock layers) or planar features deviate from horizontal.

Dug-Out - A 500 square foot by 3 feet deep pot hole constructed of earth and containing water.

Early Successional Forest - Trees and brush that grow after disturbance such as plowing, fire or clearcut. Common species include grass, raspberries/black berries, white pine, aspen, red maple, black cherry, birch etc.

Early Successional Wildlife Species - Animal species which require early vegetative stages such as grass, brush, aspen.

Ecological Diversity - The number of species living in an ecosystem.

Ecological Subzone - A geographic area containing fauna and flora which are adapted to that particular area.

Ecoregion – (Ecological Region) - NYS DEC is using the The Nature Conservancy definition of an area of ecological homogeneity, which are defined by similarities in soil, physiography, climate, hydrology, geology and vegetation.

Ecosystem - A complex of living organisms and their environment.

Endangered - Native plants (and animals) in danger of extinction throughout all or a significant portion of their ranges within the state and requiring remedial action to prevent such extinction (NYCRR Title 9 Part 193.3)

Erosion - To wear away by the action: water, wind, or ice.

Even Aged - A forest in which all of the trees are essentially the same age.

Faulting - a fracture or crack that has had movement parallel to the fracture's surface

Fluvial - pertaining to sediments deposited by stream or river actions

Fragipan - An impervious subsurface soil layer (sometimes known as “hardpan”) which restricts rooting and internal soil drainage.

Glacier / Glacial - a large mass of ice and snow that is moving on the land's surface

Hardwood Forest - A forest stand in which each of the two predominant species by percent is a hardwood.

Hardwoods – Broad leafed trees.

Haul roads - Are permanent, unpaved roads but are not designed for all-weather travel. They are constructed primarily for the removal of forest products and provide only limited access within the Unit. Public motor vehicle use is not allowed, but pedestrian travel is encouraged. All administrative roads are gated and warning signs are posted. The standards for these roads are those of Class C roads as provided for in the Forest Road Handbook.

Herbaceous Opening - A non-forest vegetative type consisting of grasses and forbs.

Homocline - geologic structure that is dipping or inclined in one direction and at the same angle of inclination

Kame - a short ridge, hill, or mound of stratified glacial deposits

Lacustrine - sediments deposited in association with the processes within a lake

Large Coarse Woody Debris - The accumulation of dead woody material, both standing and fallen, which occurs in a forest stand.

Lean-To - A small, open fronted, log shelter used for overnight camping.

Linements - linear trends of weakness or fractures in the earth's crust

Log Landing - An area to which logs are skidded and then loaded for removal.

MCFGPD - thousand cubic feet of gas per day

Moraine - sediment that is accumulated due to the actions of a glacier

Multiple Use - A management philosophy by which many uses are derived for a specific land area.

Natural Regeneration - The regrowth of a forest stand by natural means.

Natural Forest - A forest established by natural regeneration.

No Entry / No Surface Occupancy Lease - A lease to explore and develop underground mineral resources without any surface disturbance. Above ground facilities and equipment to remove mineral resources must be located off the subject property.

Northern Hardwoods - Largely composed of sugar maple, American beech, yellow birch, and hemlock. These species are generally long-lived and may adapt to all-aged management.

Oak Opening - a globally rare plant community, also known as an oak savannah. The community is composed of native prairie grasses and associated plants usually surrounded by oak/hickory forests. Oak Openings are maintained by periodic burning. Historically, fires were set by Native Americans or

caused by lightning strikes. Oak Openings can be variable in size, from just an acre to several thousand acre complexes.

Off - Site - The species are growing (or at least have been planted) where these species would not ordinarily be found, due to unfavorable site conditions.

Old-Growth Forest - The definition of “Old-Growth Forest” involves a convergence of many different, yet interrelated criteria. Each of these criteria can occur individually in an area that is not old growth, however, it is the presence of all of these factors that combine to differentiate “Old-Growth Forest” from other forested ecosystems. These factors include: An abundance of late successional tree species, at least 180 - 200 years of age-in a contiguous forested landscape that has evolved and reproduced itself naturally, with the capacity for self perpetuation, arranged in a stratified forest structure consisting of multiple growth layers throughout the canopy and forest floor, featuring (1) canopy gaps formed by natural disturbances creating an uneven canopy, and (2) a conspicuous absence of multiple stemmed trees and coppices. Old growth forest sites typically (1) are characterized by an irregular forest floor containing an abundance of coarse woody materials which are often covered by mosses and lichens; (2) show limited signs of human disturbance since European settlement; and (3) have distinct soil horizons that include definite organic, mineral, illuvial accumulation, and unconsolidated layers. The understory displays well developed and diverse surface herbaceous layers.

Overstory - The upper portion of a community of plants, the canopy of the trees in a forest.

Pioneer Hardwood - Early Successional trees that are hardwood, such as black cherry, white birch, red maple and aspen.

Plantation - A forest established by planting.

Pole Sized - A young tree with a D.B.H. of 6 to 11 inches.

Pre-Commercial - To do a stand treatment when the trees are too small to sell for profit, requiring the payment of someone to do the work.

Prescribed Fire - The intentional setting of forest or grass land on fire under carefully controlled conditions to achieve a vegetative or wildlife management goal adhering to a written and approved prescribed fire burn plan.

Protection Management - An area which requires special management considerations. (Special cutting regimen, short rotation, long rotation, or no treatment.)

Public access roads - Are constructed and maintained to accommodate motor vehicle traffic, they are permanent, unpaved roads. They may be designed for all-weather use depending on their location and surfacing. These roads provide primary access within a Unit. The standards for these roads are those of the Class A and Class B access roads as provided for in the Forest Road Handbook.

Rare - Native plants that have from 20 to 35 extant sites or 3,000 to 5,000 individuals statewide. (NYCRR Title 9 Part 193.3)

Regeneration - To reestablish a forest stand with tree seedlings.

Rotation - The length of time between the establishment and the harvest of a forest stand.

Sawtimber Sized - A tree with a D.B.H. of 12 inches or greater.

Seedling/Sapling Sized - A young tree with a D.B.H. of less than 6 inches.

Selective Harvesting - Removal of the mature timber, usually the oldest or largest trees.

Shade Intolerant - Tree species that require full sunlight to survive past the seedling stage.

Shade Tolerant - Tree species that can survive in the shade cast by older trees.

Sidetrack Well - An inclined well that is drilled from a predetermined depth within an existing well

Site - Site is defined as a group of features (such as slope, aspect, soil type, etc.) which characterize a given area of land.

Silviculture - The establishment, development, care, and reproduction of forest stands.

Softwoods - Needle bearing trees, conifers

Species Diversity - The occurrence of a variety of plants and animals.

Stand - A group of plants with similar characteristics that are treated as a single unit in a management plan.

Stand Analysis - A systematic method of evaluating stands to determine the need for treatment.

Stand Treatment - Work done in a stand which is directed towards the management of the stand.

State Forest - Lands owned by the state of New York and administered by the Department of Environmental Conservation which are managed for the establishment and maintenance of forests for watershed protection, the production of timber, and for recreation and kindred purposes.

Stratigraphic - The layering and sequence of mapable rock units.

Succession - The gradual supplanting of one community of plants and animals by another.

Surficial - Of, or relating to, the surface

Sustained Yield - The maintenance of a continuous flow of a particular product.

Synclinal - Rock layers that are folded so that the layers are inclined towards each other (like the letter V)

Till - Unstratified glacial deposits consisting of clay, sand, gravel, and boulders

Temporary Revocable Permit (TRP) - Authority for the issuance of temporary use permits is provided by §3-0301 of the ECL. Permits may be granted for the temporary use of State Land by the public within stated guidelines and legal constraints so as to protect the State lands and their resources.

Top Lopping - The cutting of limbs from the tops of felled trees to reduce fire danger and improve visibility. On state forests top lopping of conifers is required by law.

Trail Head - The intersection of a trail with a road.

Understory - The layer of plants that grow in the shade of the forest.

Uneven Aged - A forest containing trees of two or more age classes.

Unique Area - A parcel of land owned by the state acquired due to its special natural beauty, wilderness character, geological, ecological or historical significance for the state nature and historic preserve, and may include lands within a forest preserve county outside the Adirondack and Catskill Parks.

Vegetative Stage - A description of a plant community based on the age of the component plants.

Vegetative Type - A description of a plant community based on species composition.

Vernal Pool - A small body of water that is present in the spring, but dries up by mid-summer.

Vertical Well - a well that is straight into the ground or is 90 degrees from horizontal.

Water Hole - A laid up stone cistern often built by C.C.C. crew members, and originally used for water for fire protection purposes.

Watershed - The land area from which a stream receives its water.

Wetland - Land or area saturated and sometimes partially or intermittently covered with water.

Class I, II, III or IV - The designation placed upon a mapped wetland by NYS DEC as required by 6NYCRR. The four classes rank wetlands according to their ability to perform wetland functions and provide wetland benefits. Class I is the most critical.

Yield - The production of a commodity such as; forest products, water, or wildlife.

Appendix H: Wildlife Harvest

Table 1H: Calculated Legal Deer Take in Wildlife Management Unit (WMU) 8W.

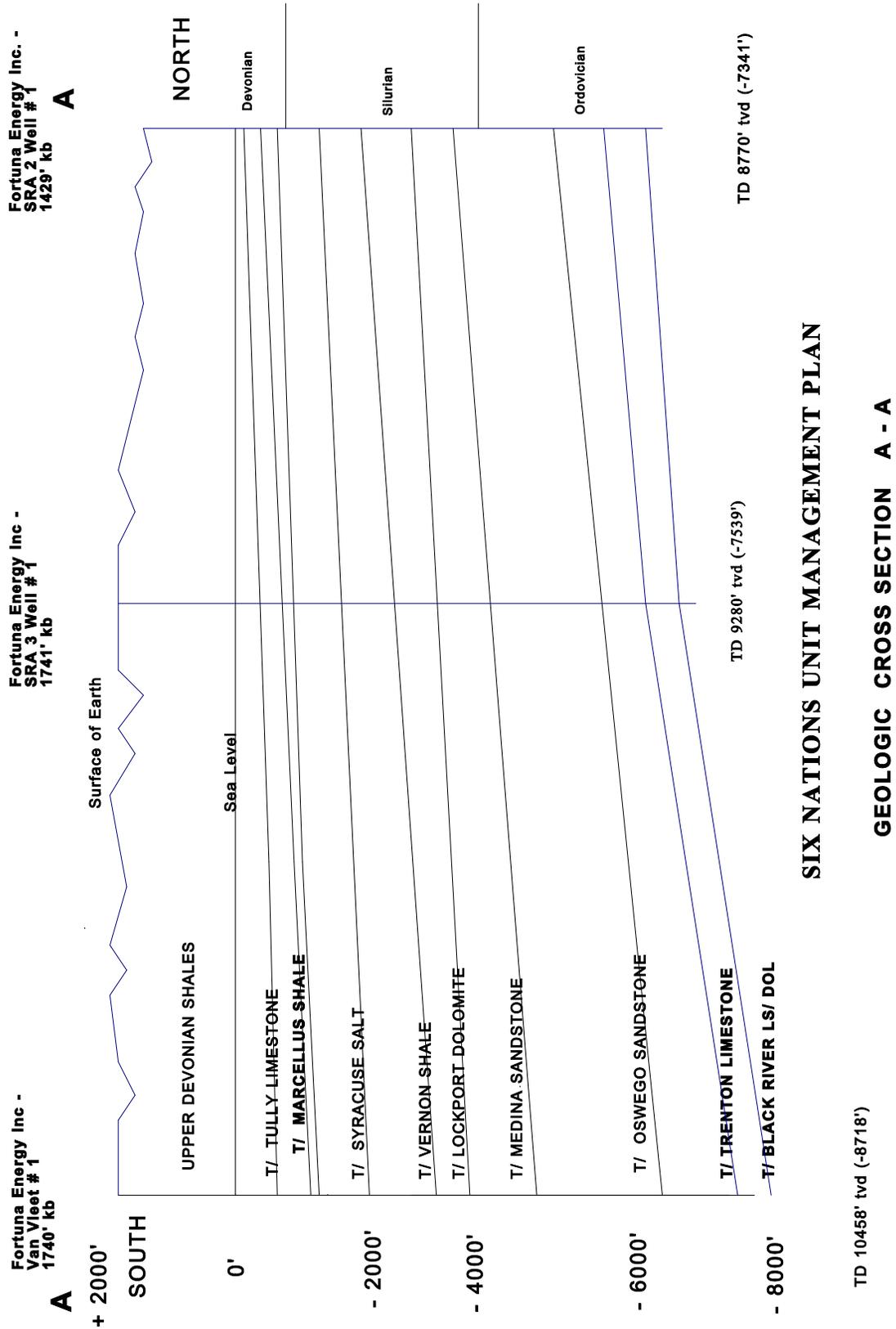
	2003	2004	2005	2006	2007	2008
Bucks	1,551	1,016	1,067	1,166	1,419	1,312
Total Deer	3,535	2,308	1,804	2,101	2,885	3,207

Table 2H: Furbearer Harvest of Pelt Sealed Species

Reported Beaver Harvest WMU 8W									
Year	*00-*01	*01-*02	*02-*03	*03-*04	*04-*05	*05-*06	*06-*07	'07-'08	'08-'09
Number	86	84	200	73	60	40	164	89	101

Appendix I: Bedrock Cross Section

See also the Bedrock Geology and Appendix M: Maps sections.



Appendix J: State Environmental Quality Review (SEQR)

12-12-79 (3/99)-9c

SEQR

State Environmental Quality Review NEGATIVE DECLARATION Notice of Determination of Non-Significance

Identifying# 2013-SLM-8-322

Date September 17, 2013

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 NYS Department of Environmental Conservation as lead agency has determined that the proposed action described below will not have a significant environmental impact and a Draft Environmental Impact Statement will not be prepared.

Name of Action: Adoption of the Six Nations Unit Management Plan

SEQR Status: Type 1 X

Unlisted

Conditioned Negative Declaration: Yes No

Description of Action: The Six Nations Unit Management Plan sets forth the proposed goals, objectives, management actions and associated costs for the management of approximately 21,724 acres on ten parcels of State land in Schuyler and Steuben Counties. It includes Goundry Hill, Sugar Hill, and Coon Hollow State Forests in Schuyler County and South Bradford, West Hill, Meads Creek, Beaver Dams, Dry Run, and Erwin Hollow State Forests in Steuben County and Cinnamon Lake State Forest in both counties. The plan details management activities for a ten year period, from 2013 - 2023. A review and update will take place at the end of the tenth year.

Six Nations Unit Management Plan's citizen participation activities commenced with an initial mailing on December 15, 2008 and public scoping meeting held January 22, 2009. A second public meeting was held August 7, 2012 at the Tyrone, New York Fire Hall to present the draft plan and receive comments. Written comments were accepted until September 7, 2012. Full consideration for public input has been sought prior to completion of the final plan. Management activities planned for this unit include: the general maintenance and improvement of the facilities, public access to State land, and managing vegetation and wildlife.

Vegetative management includes the creation of 112 acres of open grass and brush, 136 acres of all-aged forest, regeneration of 1,850 acres, thinning of 4,240 acres and maintaining 105 acres of existing grass and brush. There is inadequate access to provide silvicultural management techniques to 2,217 acres. The Legacy Plantations category

is comprised of 282 acres. Some level of insect, disease and natural disaster are recognized as being a beneficial factor in shaping vegetation, however, invasive exotic insects, fungi, animals, or plants can cause serious problems. Emerald Ash Borer will be managed by following the "Emerald Ash Borer Management Response Plan" a.k.a. the SLAM Document (Slow Ash Mortality). Mechanical or herbicide methods will be utilized to remove Giant hogweed as well as herbicide treatment for the removal of Japanese knotweed. Hunting white tail deer and removing feral swine when found will be encouraged.

Other activities include: locate and construct or re-work approximately seven parking areas. Place 15 new gates, (six of which will be locked open most of the time and six will be double with a gap between), replace one existing gate, improve three rock barricades, and two additional gates, if the Town of Orange abandons part of Chambers Road. Existing area signs will be repaired and three new ones will be appropriately placed. Some portions of the Town roads are seasonal and are not maintained for winter travel. Other roads have been officially abandoned; others have not been maintained in years. This lack of maintenance means portions of several State forests are not accessible, except by foot. Some have continued to have vehicle traffic, others have not. Approximately 0.4 mile of Moody Road will be repaired to haul road standards. If the Town of Orange abandons Chambers Road, then the road will be stabilized by controlling erosion and will be relocated and/or repaired to haul road standards. A vented concrete ford will be constructed on Coon Hollow Access Trail. State forest boundaries will be painted and posted approximately every five years.

Maintain, and when possible, upgrade the existing Six Nations Trail System, a multiple use trail system on Sugar Hill and Goundry Hill State Forests. The Finger Lakes Trail, a hiking trail, will continue to remain in place across the unit and will be maintained under an Adopt-a-Natural-Resource Agreement or Volunteer Stewardship Agreement by the Finger Lakes Trail Conference. The following trails will be added to the MAPPWD list: A-trail from Evergreen Hill Road Campsite #2, east and south to Donovan Hill Road, and Mohawk Trail from Sugar Hill Road north to the Parks Hollow Lean-to. At that time the season for MAPPWD use on Sugar Hill State Forest will be increased from September 15th to December 31st and from May 1 to 15th. Other proposed projects include: opening the snowmobile spur trail along Switzer Hill Road, constructing four stalls worth of horse shelters at each of the two parking areas on Tower Hill Rd, located closest to the Fire Tower Access Road, and including a small display board/kiosk as part of the building. In addition, the Parks Hollow lean-to, which is poorly located, will be removed and replaced farther away from the stream and haul road. The Parks Hollow pit privy which is in need of repair, will be removed and replaced to a new location near the re-located lean-to.

The following are proposed for the Sugar Hill Recreation Area: hire a seasonal caretaker, post guidelines, maintain and keep the restroom and water supply open, mow grass, remove garbage and manure, fill brochure holder, finish porch area of restroom, then remove current kiosk, construct a 10 stall horse shelter, construct a manure pit, finish accessible camping spot, construct hardened path to one of the accessible picnic tables, re-paint the fire tower and annually inspect and repair the stairway. The gate will be opened the third Monday of

May through the third Monday of October, provided the following conditions can be met: the water system is up and running to DOH standards, seasonal maintenance personnel have been approved for and hired, debris from any winter storms has been dealt with, the Firetower Access Road is dry and stable enough to support vehicle traffic, the field has been mowed, and the picnic tables and trash receptacles are out.

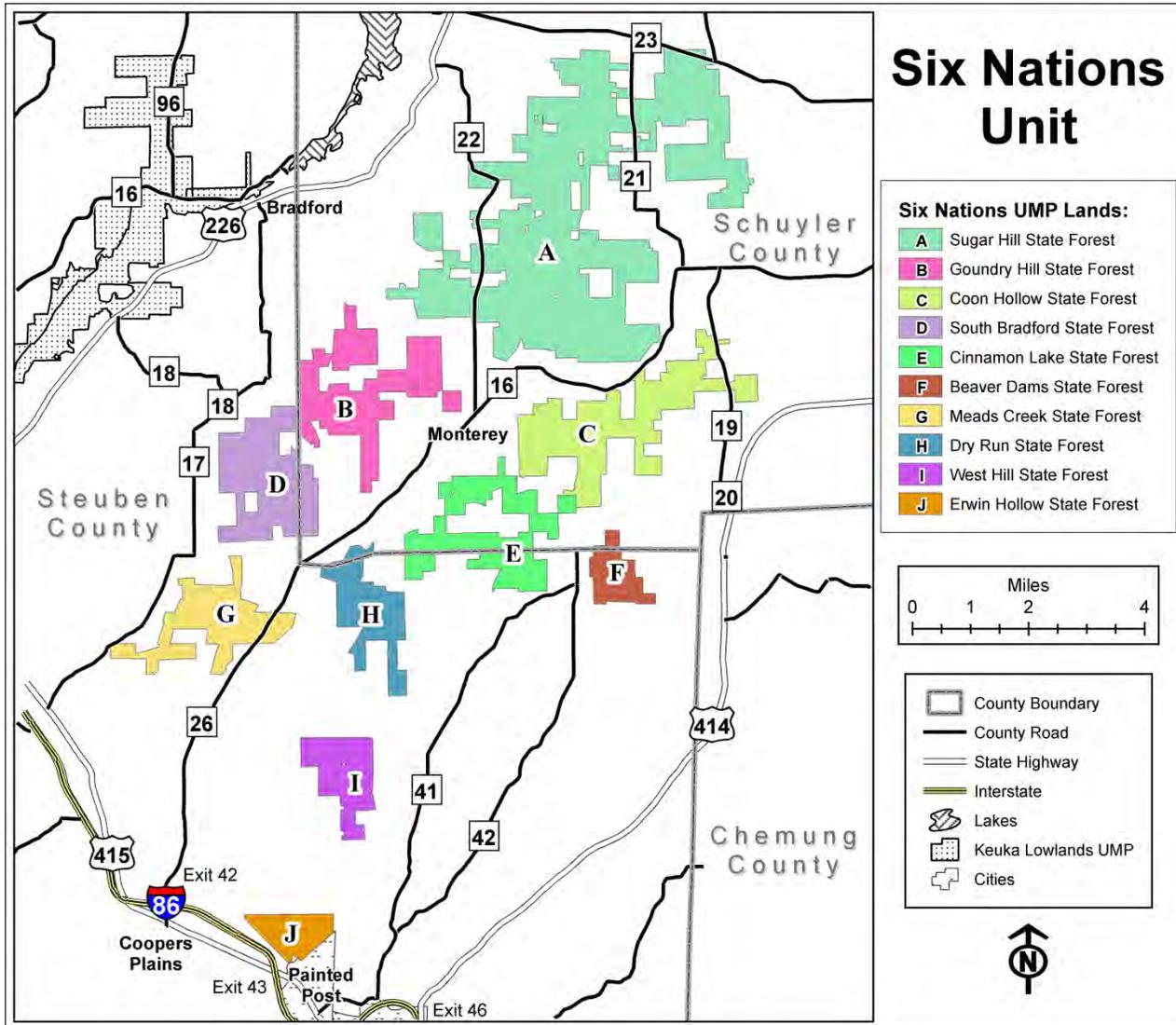
On the Sugar Hill Recreation Area continue to remove deteriorating bale backstops from the archery course ranges. Close and remove the Massachusetts Archery course. Evaluate ranges for conversion to universally accessible, and convert chosen range to universally accessible. If the New York Field Archers and Bowhunters no longer use the ranges, they will be removed and allowed to revert to forest.

Best management practices for the control of erosion, and integrated pest management for the control of insects, will be followed. In addition, up to 300 small, and a larger water hole amphibian activity center will be created and maintained. Acquisition of adjoining land from willing sellers will be sought, when possible. All silvicultural, gas or other mineral activity will be monitored, and best management practices followed. Endangered and threatened species will be protected as well as historical and archaeological resources.

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

The Six Nations Unit includes the following:

- Sugar Hill State Forest - Towns of Orange, Dix, Tyrone, Reading, in Schuyler County,
- Goundry Hill State Forest - Town of Orange, in Schuyler County,
- Coon Hollow State Forest - Towns of Orange, Dix in Schuyler County,
- South Bradford State Forest - Town of Bradford in Steuben County, Town of Orange, Schuyler County,
- Cinnamon Lake State Forest - Town of Hornby in Steuben County, Town of Orange, Schuyler County,
- Beaver Dams State Forest - Town of Hornby in Steuben County, Town of Orange Schuyler County,
- Meads Creek State Forest – Town of Campbell in Steuben County,
- Dry Run State Forest – Town of Hornby in Steuben County, Town of Orange, Schuyler County,
- West Hill State Forest - Town of Hornby in Steuben County and
- Erwin Hollow State Forest – Town of Erwin in Steuben County.



Reasons Supporting This Determination: (See 617.7(a)-(c) for requirements of this determination; see 617.7(d) for Conditioned Negative Declaration) Activities planned for the unit will be covered by the following Programmatic/Generic Environmental Impact Statements and other Department documents :

- Strategic Plan for State Forest Management
- State Forest Commercial Products Sales Program
- Special Management Zones
- Forest Retention Guidelines
- Rutting Guidelines
- Habitat Management Activities
- Temporary Revocable Permits
- Motorized Access Program for People With Disabilities (MAPPWD) (CP-3)
- Wildlife Habitat Management on State Forest Land
- Red Pine Plantation Clearcut Program
- New York State Open Space Plan
- The State Forest Recreation Management Program

- Generic Environmental Impact Statement On the Oil, Gas and Solution Mining Regulatory Program (Final,1992)
- When finalized – The Supplemental Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program (Draft, 2009 & 2011)

Activities which would require a site specific environmental review under the State Environmental Quality Review Act (SEQRA) include: prescribed fire of 10 acres or more, herbicide application, and clearcuts larger than 40 acres. In addition, if after the public review process, activities are added to the plan to provide better management of the unit and are not covered by this Negative Declaration or cited Programmatic/Generic Environmental Impact Statements or other cited documents, DEC will undertake a site specific environmental review for such activities. Activities relating to oil and gas exploration would also require a site specific environmental review and permit if activities are not covered by the Generic Environmental Impact Statement On the Oil, Gas and Solution Mining Regulatory Program (Final, 1992) or The Supplemental Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program (Draft, 2009 and 2011) if and when it is finalized.

Activities in the plan will be performed in accordance with the standards and policies and procedures set forth in the following DEC documents: Continuous Forest Inventory Handbook, State Forest Multiple Use Management Plan, Unpaved Forest Road Handbook, Special Management Zones on State Forests, and the Timber Management Handbook.

In addition, activities in the plan will be guided by the Environmental Conservation Law, best management practices, the expertise of foresters and biologists, and the views expressed by the participating public.

The aesthetic resources will be protected by law enforcement activities, screening of logging activities, and by limiting disturbance in sensitive areas. Scenic views will be preserved by the removal of screening vegetation. There will be a favorable impact on energy resources, since timber management will produce fuel wood and gas well drilling may provide natural gas. The noise impact of construction and logging will occur so briefly as to be inconsequential.

Small water hole amphibian activity centers are constructed by scooping out soil in a suitable location, such as near a spring or on soil that will hold water. They are from one to six feet in depth, and vary in size and shape from 10 feet up to 40 feet. They are left to fill naturally with water, providing habitat for animals, such as salamanders and frogs. Construction will take place during periods of dry weather. Best management practices will be followed to minimize any potential erosion or sedimentation problems to surrounding water bodies.

All parking areas and other structures will be placed to minimize short and long term impacts by constructing these facilities on flat, stable, well-drained sites in areas that will require a minimum amount of tree cutting. These projects will entail: clearing of brush and some trees, grading and applying gravel and the installation of culverts and ditches used to control drainage and erosion, as necessary. Construction will be limited to periods of low or normal rainfall. The size of the parking areas will be the minimum necessary for the intended use. This will improve public access and safety.

Archaeological and historical impacts will be minimized by disturbing the ground as little as possible. Any construction, forestry or mineral activities will incorporate the use of best management practices, including but not limited to such considerations as: locating improvements to minimize necessary cut and fill; locating improvements away from streams, wetlands, and unstable slopes; use of proper drainage devices such as water bars and broad-based dips; locating trails to minimize grade; laying out trails on existing old roads or cleared or partially cleared areas; using stream crossings with low, stable banks, firm stream bottom and gentle approach slopes; constructing stream crossings at right angles to the stream; limiting stream crossing construction to periods of low or normal flow; avoiding areas where habitats of threatened and endangered species are known to exist; and using natural materials to blend the structure into the natural surroundings.

When possible, gas pipelines and well pads will be constructed along existing roads or other corridors. All well pads, pipelines, and well pad access roads will require site approval by a DEC land manager, and other permits such as a Temporary Revocable Permit (TRP) and a Permit to Drill, Deepen, Plug Back or Convert a Well Subject to the Oil, Gas and Solution Mining Law (form 85-12-5) (Drilling Permit). All of the actions discussed in this Negative Declaration will not have significant adverse environmental impacts.

If Conditioned Negative Declaration, provide on attachment the specific mitigation measures imposed, and identify comment period (not less than 30 days from date of publication in the ENB)

For Further Information:

Contact Person: Gretchen Cicora or John Gibbs

Address: NYS DEC Office
7291 Coon Rd.
Bath, NY 14810

Telephone Number: (607) 776-2165 ext. 29 or 36

For Type 1 Actions and conditioned Negative Declarations, a Copy of this Notice is sent to:

Appropriate Regional Office of the Department of Environmental Conservation

Chief Executive Officer, Town/City/Village of

Other involved agencies (if any)

Environmental Notice Bulletin – NYS DEC – 625 Broadway – Albany, NY 12233-1750

(Type One Actions Only)

Appendix K: Undated Newspaper Article - Watkins Express, Watkins Glen, NY

Pine Creek CCC Camp - Sugar Hill State Forest

CCC Camp, on the Pine Creek Road, Town of Orange, Guest writer is John Lawlor of Corning, N.Y. Mr. Lawlor came to the CCC Camp near Monterey from New Jersey as a young man. Company 3201, Camp S-123 of the Civilian Conservation Corps

This company was formed at Camp Dix (now Fort Dix) on August 13, 1935, and was originally assigned to this area to help clean up the Watkins Glen area after the flood of that summer, but orders were changed as the Glen already had a camp established at White Hollow.

Camp S-123 was located approximately 18 miles from the City of Corning and two miles north of the hamlet of Monterey, under the supervision of the New York State Department of Forestry. The work consisted of tree thinning, clearing, and a little building and repairing roads.

The camp was built on a slight rise from the road and consisted of 12 buildings in the form of a U. On the right, looking up from the road, was the Headquarters office and Supply Room, followed by the Latrine and washroom, and then five barracks-type buildings housing 25 men per building; the recreation and PX building looked down toward the road from the top of the rise; next building, coming downhill from the Rec Hall, was the Dispensary (hospital) followed by the kitchen. The next two buildings were the office and sleeping quarters of the State Forestry personnel.

The men were trucked into Corning for relaxation and shopping and getting to know the people. After the camp was firmly established and accepted by the people of both Monterey and Corning, the camp was open to all visitors on Sundays, when they enjoyed dinner, ball games, and once in a while, a dance held in the kitchen. Many of the men made good contacts in Corning and obtained jobs in the area, I being one of them, going to work for Corning Glass Works, retiring ten years ago after 39 years of service.

The Civilian Conservation Corps camps were under the jurisdiction of the United States Army and staffed by officers of the Army Reserve. Our company was supervised by Captain Frank Marcus, Lieutenant Walter Land, and Lieutenant Milton Daus, who was the company doctor. The Forestry was headed by a Mr. Breckenbridge and his staff consisted of the following: Mr. Giffard, Theodore Wolfe, George Mayo, Mr. Couch and Mr. Sullivan.

On my last visit to the campsite, about 25 years ago, all that was left of the camp was the huge fireplace and chimney of the Recreation Hall.

The company, with many new replacements, was shipped out to another camp in Oregon and the buildings were torn down then sold for scrap lumber.

Appendix L: Known Official Road Abandonments

The following are scanned copies of official road abandonments that impact the State Forests of the Six Nations Unit Management Plan. These were pulled from the files of the Bath office of NYS DEC.

From 1935:

2

I, the undersigned, Town Superintendent of Highways of the Town of Orange, in the County of Schuyler, hereby certify that that portion of highway in the Town of Orange known as the Corbett's Hollow Road beginning at a point at or near the north property line on the William Morris farm and leading in a northerly direction to the south line of the Charles Jacoby farm. A distance of about 2½ miles all in the Town of Orange, has been abandoned by the public, and is no longer used as a public highway; and pursuant to section 234 of the Highway Law, the same is discontinued.

Dated this 20th. day of March 1935.



Town Supt. of Highways

Town of Orange

Unsigned carbon copy from 1962:

5 East Steuben Street
Bath, New York
September 17, 1962

TO: C. E. Boone
FROM: C. B. Kresge
SUBJECT: Truck Trail - Schuyler Reforestation Area #2.

Recently I met with the Schuyler County Highway officials and the road superintendent of the Town of Orange to discuss abandoned roads.

They informed me that our truck trail on Schuyler No. 2 which extends from proposal JJ to proposal K, a distance of over three miles, has never been officially abandoned. This truck trail was constructed by the C.O.G. and has been maintained by us since that time. The Town of Orange would like to have it remain as a town road and maintain it. They also mentioned the possibility of converting it to an Erwin Road. They would like to know if the State will approve.

Enclosed is a list of the officially abandoned roads in the Town of Orange.

Incidentally, I can see no objection to the town assuming responsibility for the maintenance of this truck trail. However, I would like an official opinion on this.

District Director

CBK:dh
Enc.

List attached to above letter - 1962:

TOWN OF CRANE - ABANDONED ROADS

✓ (1930) #1 Steager Hill Road-Jesse Whitehead farm to Merwin's four
Qualified-Corners - 3/4 mi.

✓ (1935) #2 Corbetta's Hollow Road - Wm. Morris farm to Jacoby farm ✓
- 2 1/2 mi.

(1935) #3 Brush Corners Road from Brush farmhouse north one mile.
- 1 mi.

INCLUDES PART OF ROAD TO C. N.E.F.

1928) #4 Baker Hill Road - Rusco farm on Monterey-Townsend Road to
Rant Everts farm - 2 mi. ✓

✓ (1926) #5 Intersection of Corbett Hollow Road near Crane farm, leading ✓
in a westerly direction to Steuben County line - 1 mi.

✓ (1929) #6 Pine Knob road-Sardus Raplee farm to Albert Ayers Corner. ✓
Qualified- - 2 mi.

✓ (1927) #7 Andrew Hughey's buildings on Sugar Hill-Pine Grove road to
Wm. Buck Farm. - 1 mi. ✓

✓ (1925) #8 Horton-Milsbaugh Road-beginning at a point of the Monterey-
Beaver Dams road near the old Overhiser School lot and leading
north about one mile thence east to the Town line of the Towns
of Orange and Dix at or near the Personius farm - 3 mi.

From 1980:

TOWN OF ORANGE
COUNTY OF SCHUYLER

September 23, 1980

New York State Department
of Transportation
30 West Main Street
Hornell, New York 14843

Attn: Robert Andrews, Local Assistance Engineer

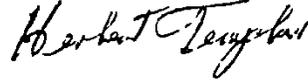
Dear Mr. Andrews,

Enclosed are four (4) copies of the Annual Report of Town or County Mileage for the Town of Orange for the year 1980. Also enclosed is a copy of a certificate of abandonment for 6.84 miles of road in the Town of Orange.

If it is possible to reflect this change on the current Annual Report of Town or County Mileage, please make the alterations and we will sign them. However, if this is not possible, please notify us as to the proper procedure to reduce the mileage for our Town as it stands now. Thank you.

Very truly yours,

Herbert A. Templar
Town of Orange Supt.



HAT/as
Enc.

REC'D. REG. #6
SEP 24 '80

REGIONAL DIRECTOR	
ASSISTANT TO R.D.	
DESIGN	
CONSTRUCTION	
MAINT.	
PLANNING	
REAL ESTATE	
ROADWAY MAINT.	
EQUIPMENT MAINT.	
ADMINISTRATION	
PERSONNEL	

CERTIFICATE OF ABANDONMENT

The undersigned Herbert Templer, Town Superintendent of Highways of the Town of Orange, County of Schuyler, New York hereby certifies:

That the following highways in the said Town of Orange, or of the portions thereof as hereafter described have not been traveled or used as highways for six (6) and more years prior to the date of this certificate and the said highways are hereby declared abandoned pursuant to Section 205 of the Highway Law as highways and public rights-of-way:

NAME	DEPT. OF TRANSPORTATION LOCAL HIGHWAY SYSTEM ROAD NUMBER	LENGTH
1. Duran	0105	.82 miles
2. Gas Well	0140	.48 miles
3. Gravel Pit	0180	.34 miles
4. Guiren	0200	1.08 miles
5. Moody	0270	.46 miles
6. Parks Hollow	0300	.53 miles
7. Sickler	0390	.36 miles
8. Webb	0480	2.14 miles
9. Yorski	0560	

That portion lying southerly of Sugar Hill Road commencing at the intersection thereof and proceeding southerly for approx. .63 miles

In Witness Whereof the undersigned Town Superintendent of Highways, Herbert Templar, has executed and the undersigned members of said Town, constituting at least a majority of said Board, have consented to this certificate and the filing and recording thereof.

Herbert Templar
Town Superintendent of
Highways of the Town of
Orange, County of Schuyler
New York

Linda Norcross

Charles McIlwain

Robert Hester

Leonard D. Ellison

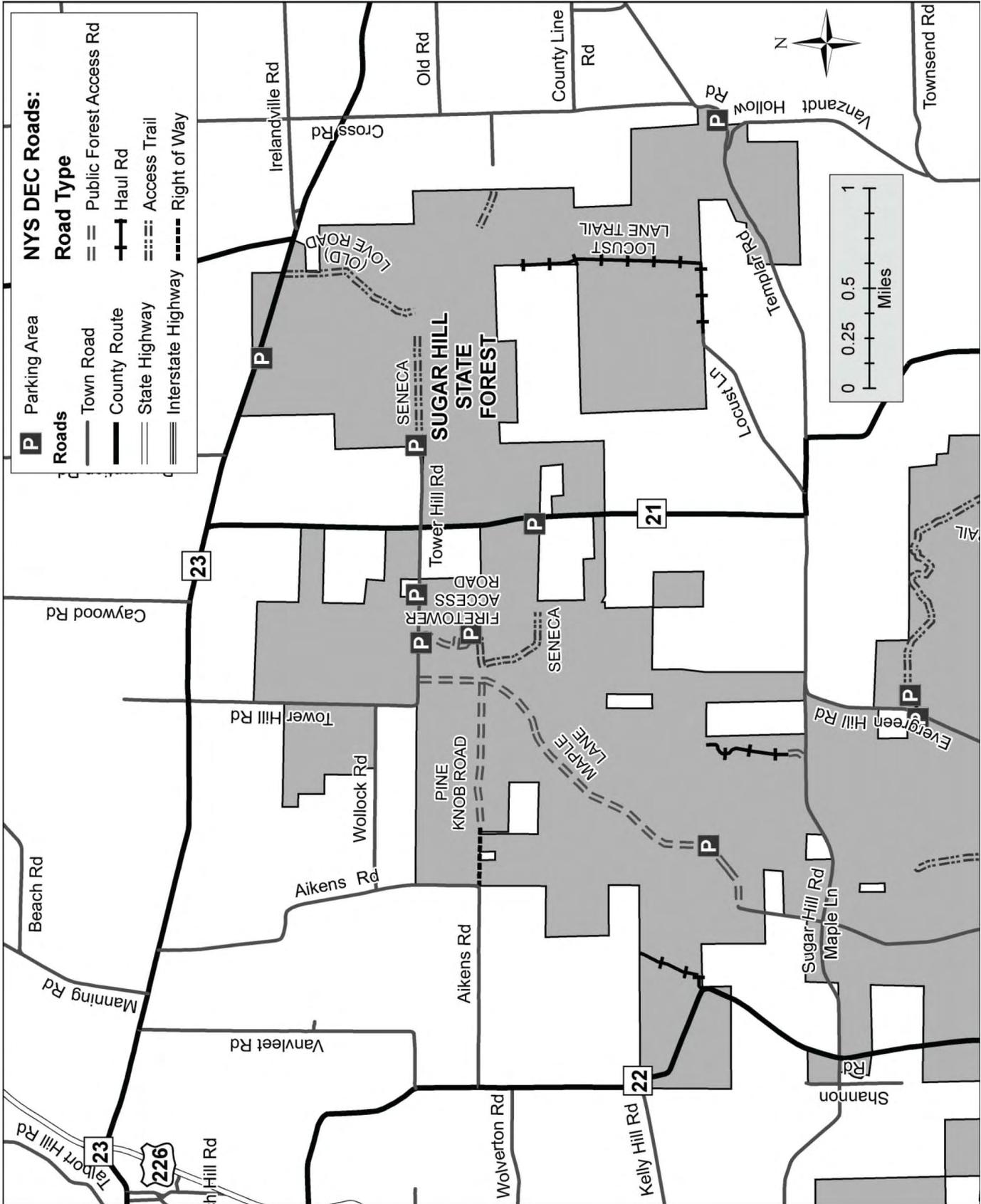
Members of the Town Board
of the Town of Orange,
County of Schuyler, New
York

Filed and Recorded in
the Town Clerk's Office
of the Town of Orange,
County of Schuyler,
New York.

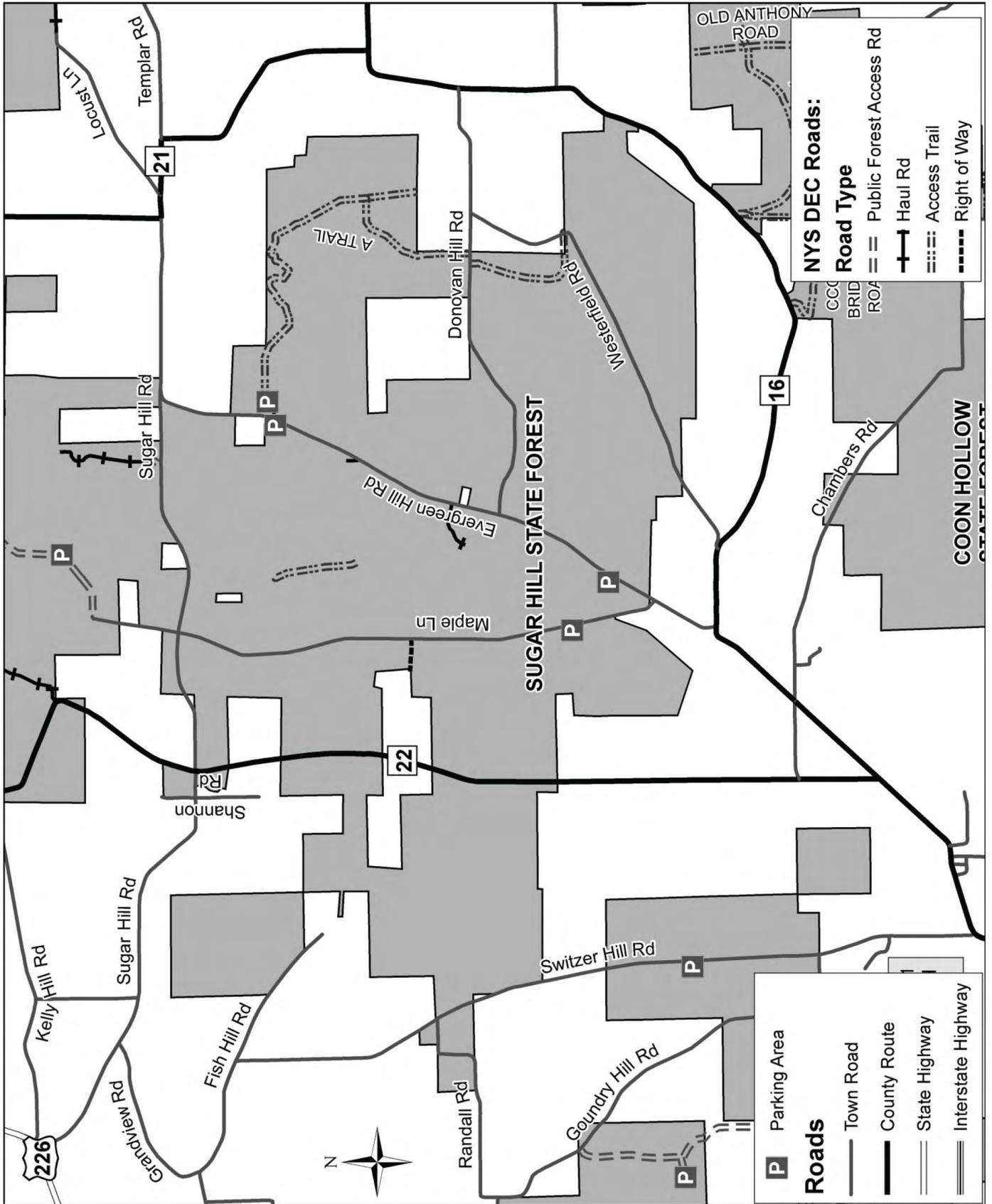
Francois Aldrich
Town Clerk

September 22, 1980

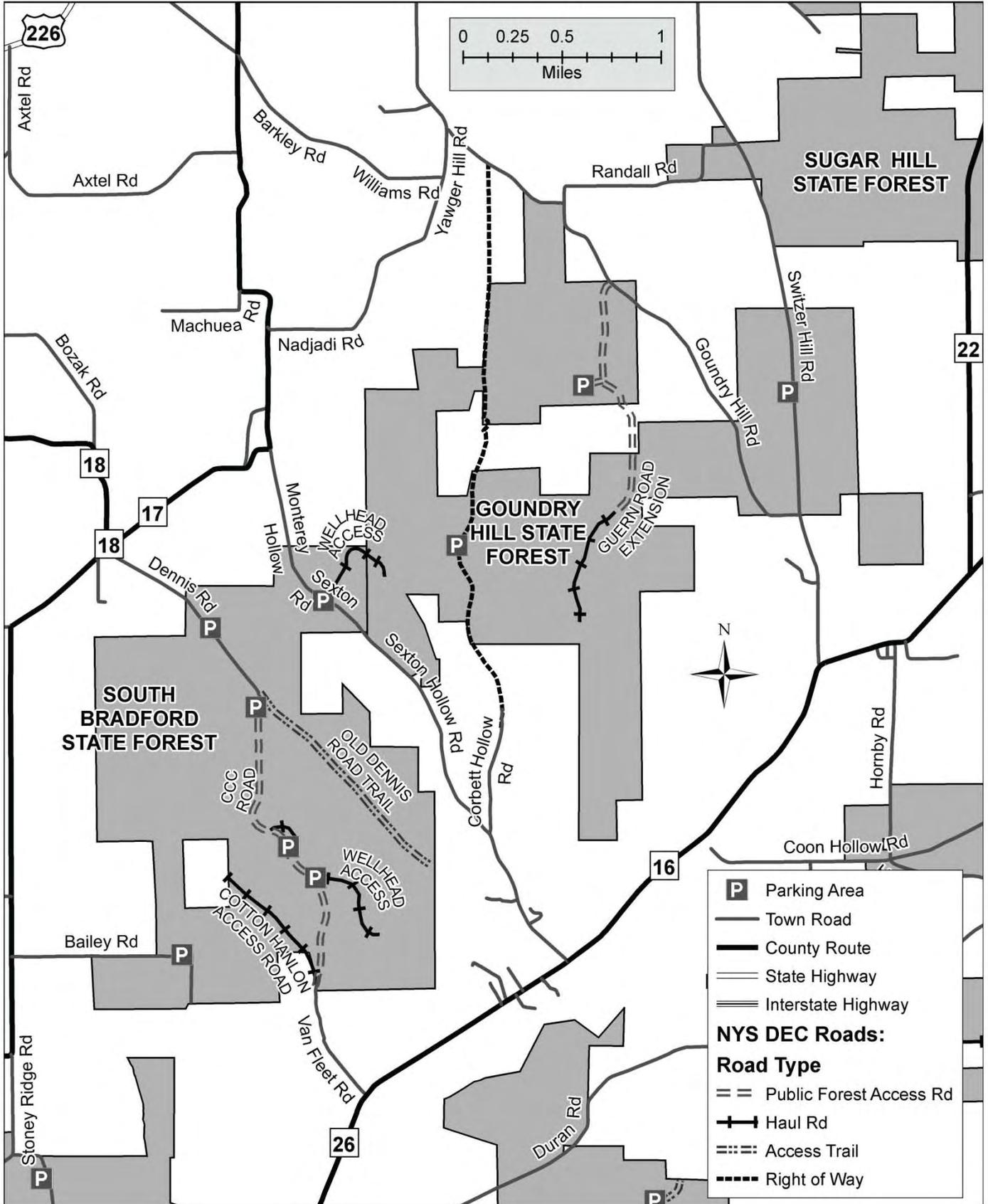
Sugar Hill State Forest - North End Roads and Parking Lots



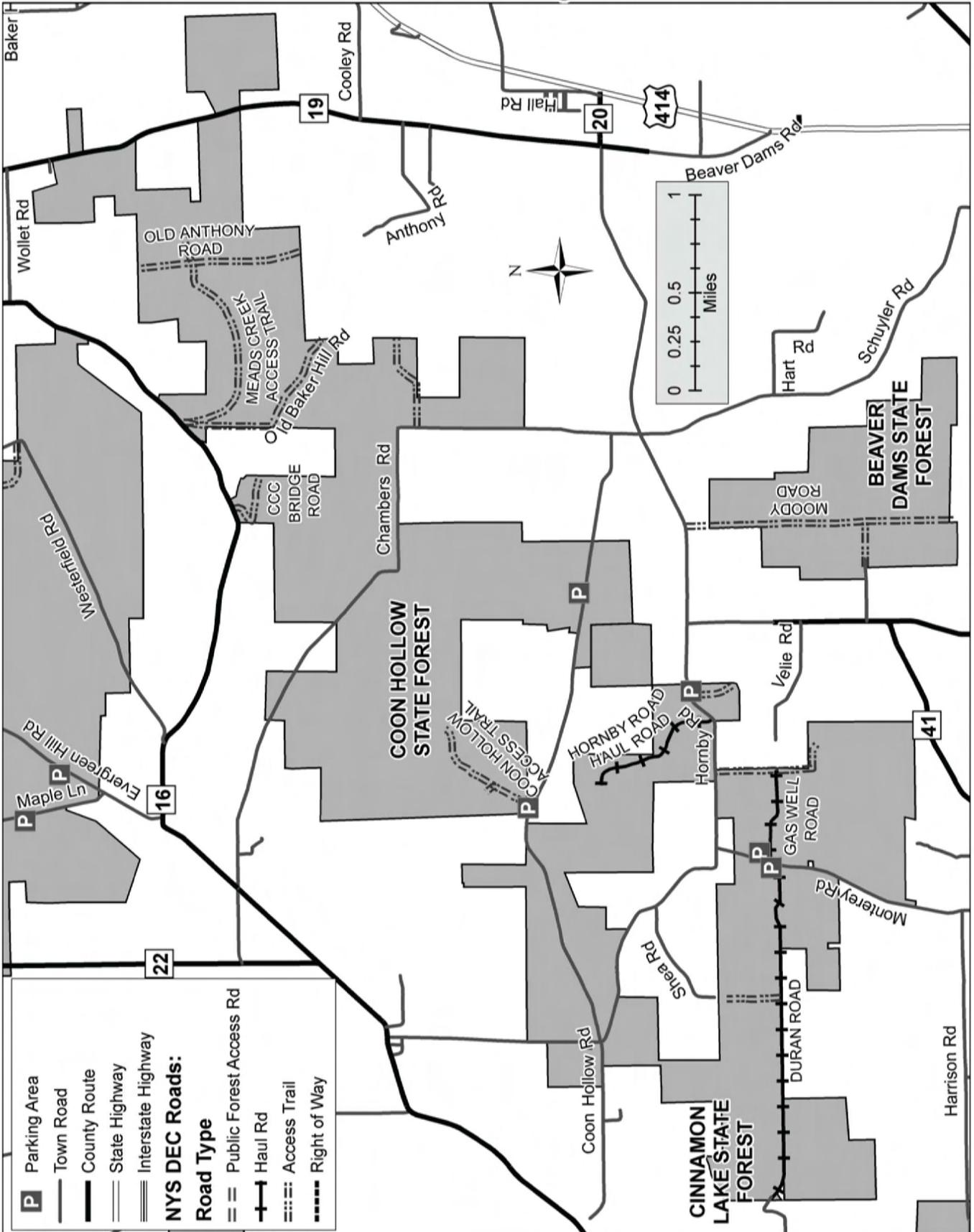
Sugar Hill State Forest - South End Roads and Parking Lots



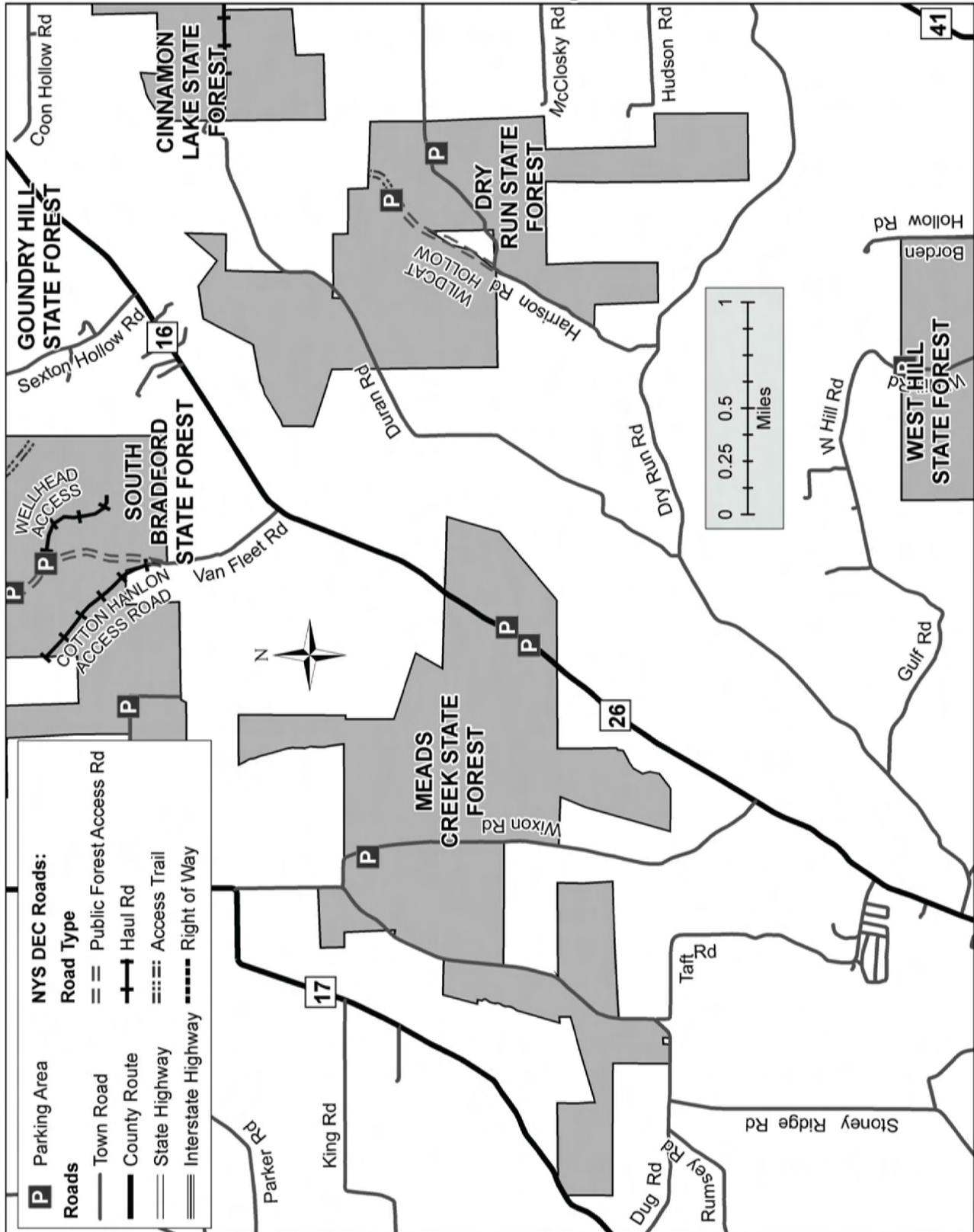
Goundry Hill State Forest and South Bradford State Forest Roads and Parking Lots



Coon Hollow, Cinnamon Lake and Beaver Dams State Forests Roads and Parking Lots



Dry Run State Forest and Meads Creek State Forest Roads and Parking Lots



Recreation and Other Facilities

Legend for ALL of the "Recreation and Other Facilities" Maps

Trails

- Foot Trail
- Foot Trail on Private Land
- Multiple Use Trail
- Approx. Location of future trail
- Closing Multiple Use Trail
- Snowmobile Trail
- Archery Trails

Facilities

- Archery Target Locations
- Area Sign
- Bridge or Culvert
- Campsite
- CCC Waterhole
- Cemetery
- Dry Hydrant
- Earth Dam
- Gate
- Gate (Proposed)
- Gate/Barrier (Private)
- Historic Foundation
- Historic Ruin
- Horse Shelter
- Kiosk
- Kiosk and Trailhead Register
- Lean-to
- Log Landing
- Natural Gas Wall
- NYS DEC Rd Turn Around
- Picnic Site
- Pit Privy
- Primitive Campsite
- Rock Barrier
- Sign (Misc.)
- Unpaved Parking Lot

Road Type

- Public Forest Access Rd
- Haul Rd
- Access Trail
- Right of Way
- Town Road
- County Route 97
- State Highway
- Interstate Highway

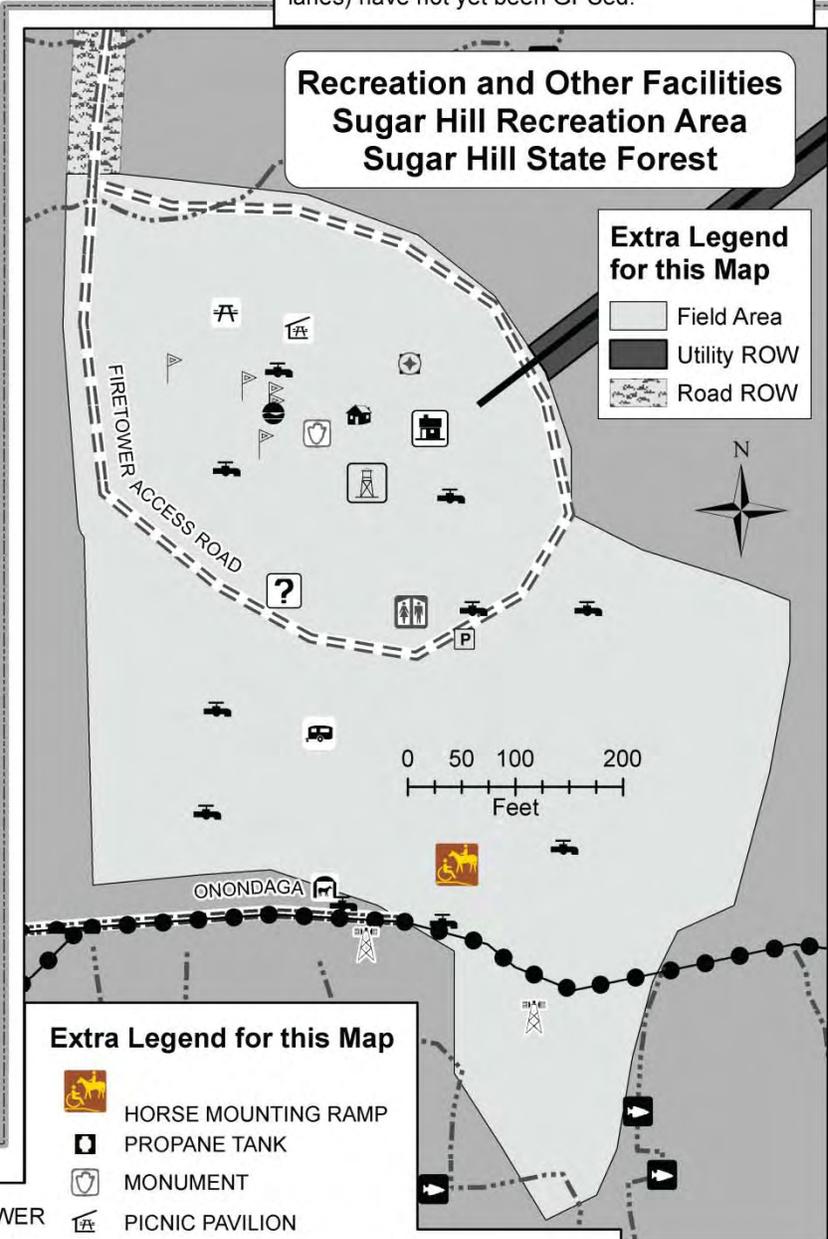
Utility Corridors

- Electric, phone and/or gas pipelines

For additional information see:

Roads page 32, Access page 57, Public Recreation and Use page 83, Unit Maintenance and Facilities Management page

Some facilities will be missing from these maps. For example, many foundations, culverts, and some log landings and access trails (old farm lanes) have not yet been GPSed.



Recreation and Other Facilities Sugar Hill Recreation Area Sugar Hill State Forest

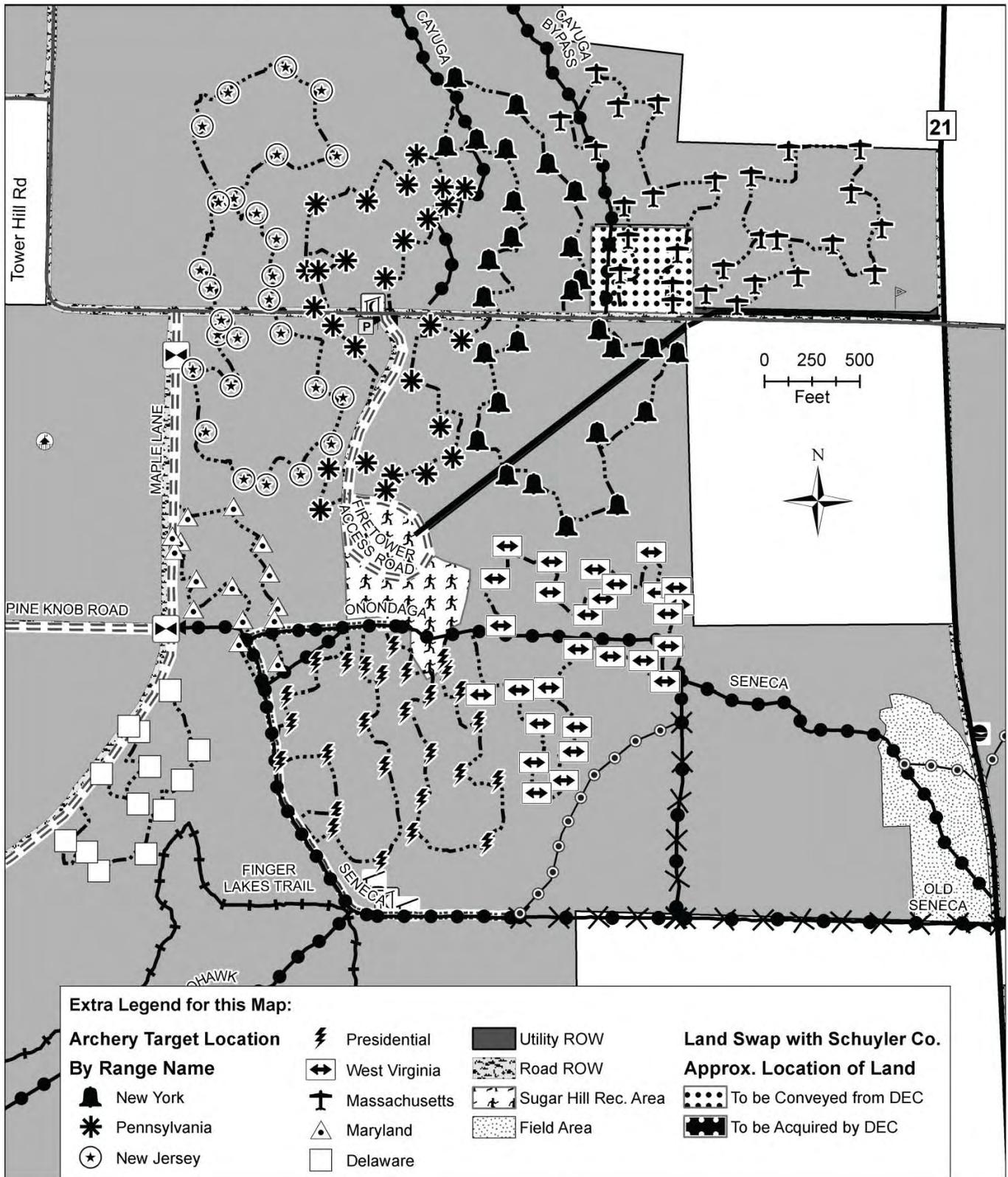
- ### Extra Legend for this Map
- Field Area
 - Utility ROW
 - Road ROW

- ### Extra Legend for this Map
- HORSE MOUNTING RAMP
 - PROPANE TANK
 - MONUMENT
 - PICNIC PAVILION
 - RANGER CABIN
 - Rec. BUILDING
 - COMMUNICATION TOWER
 - DRILLED WATER WELL
 - FIRE TOWER
 - RESTROOM
 - WATER SPIGOT

Recreation and Other Facilities

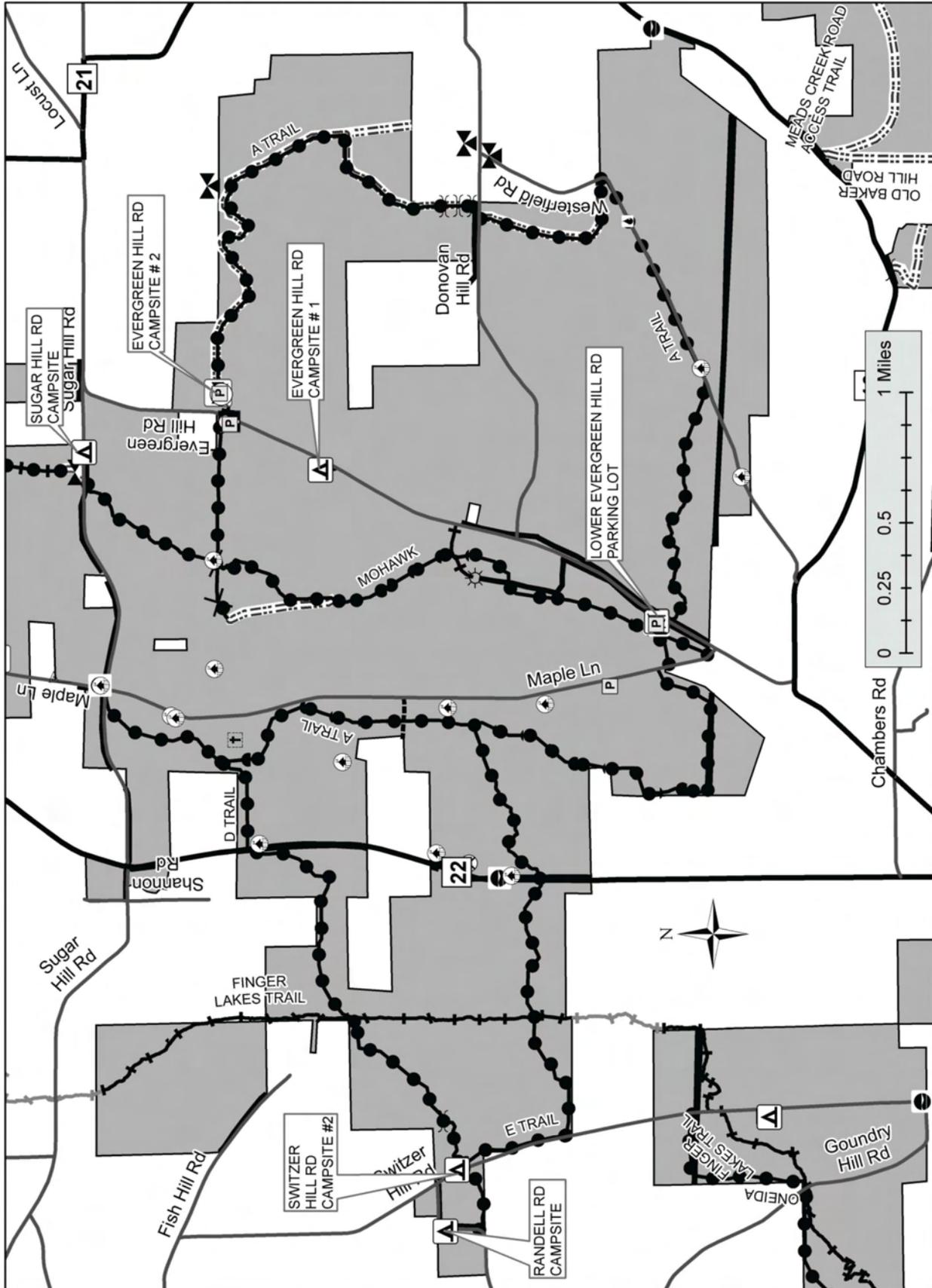
Archery Ranges in the Sugar Hill Recreation Area

Sugar Hill State Forest



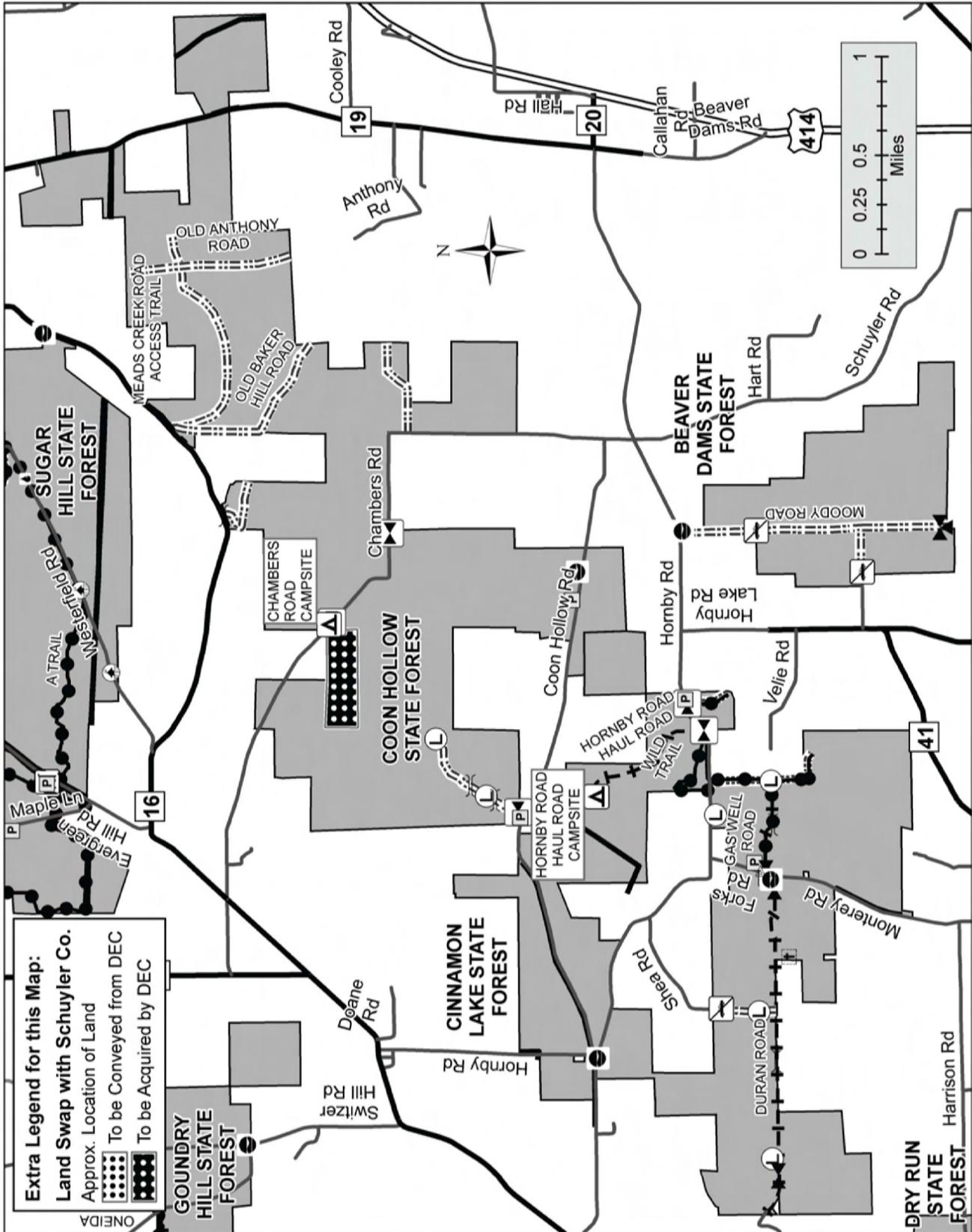
Recreation and Other Facilities Sugar Hill State Forest - South End

See Legend for all Recreation and Other Facilities maps on page 237.



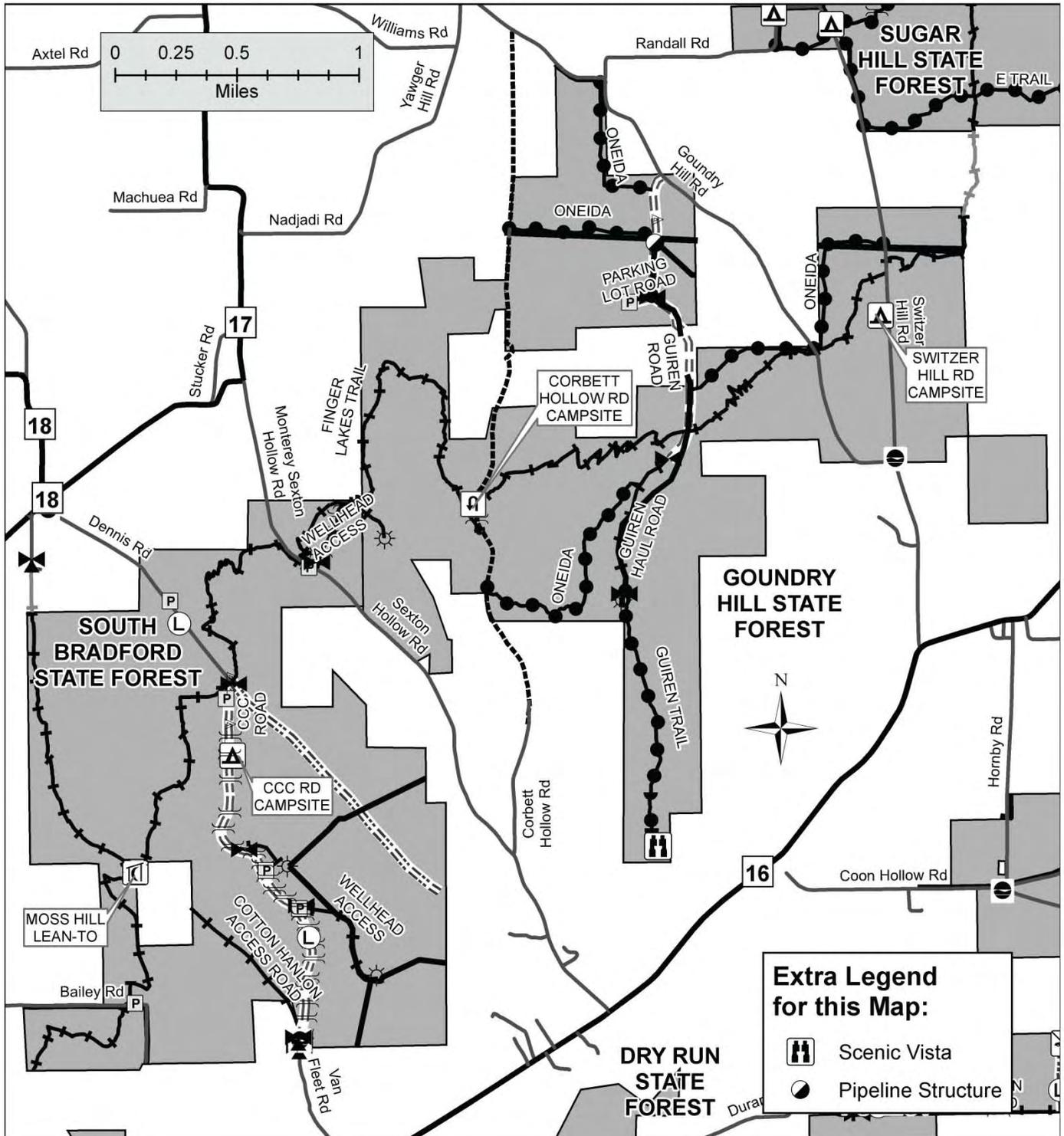
Recreation and Other Facilities Coon Hollow, Cinnamon Lake and Beaver Dams State Forests

See Legend for all Recreation and Other Facilities maps page 237.

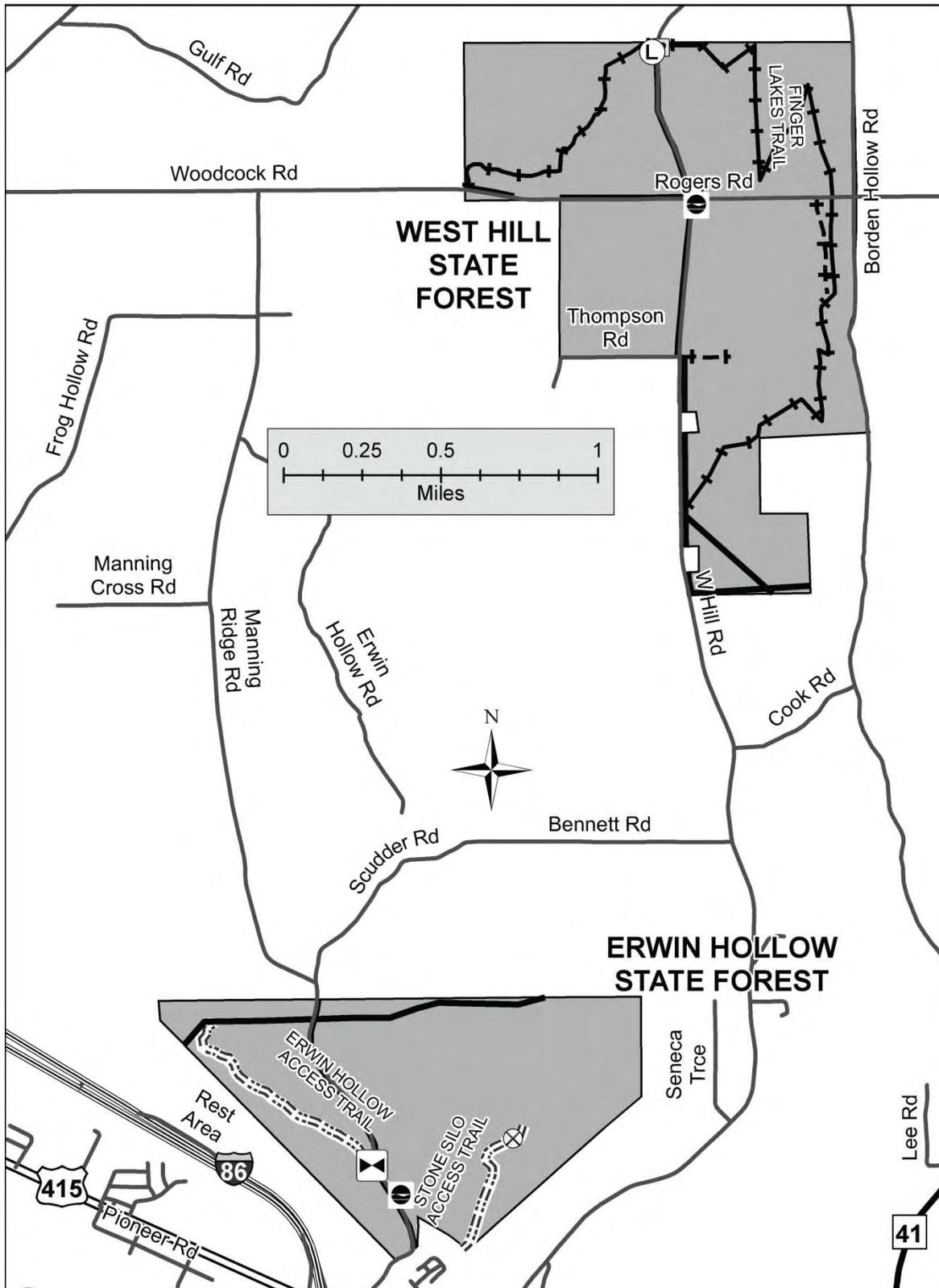


See Legend for all Recreation and Other Facilities maps page 237.

Recreation and Other Facilities Goundry Hill State Forest and South Bradford State Forest

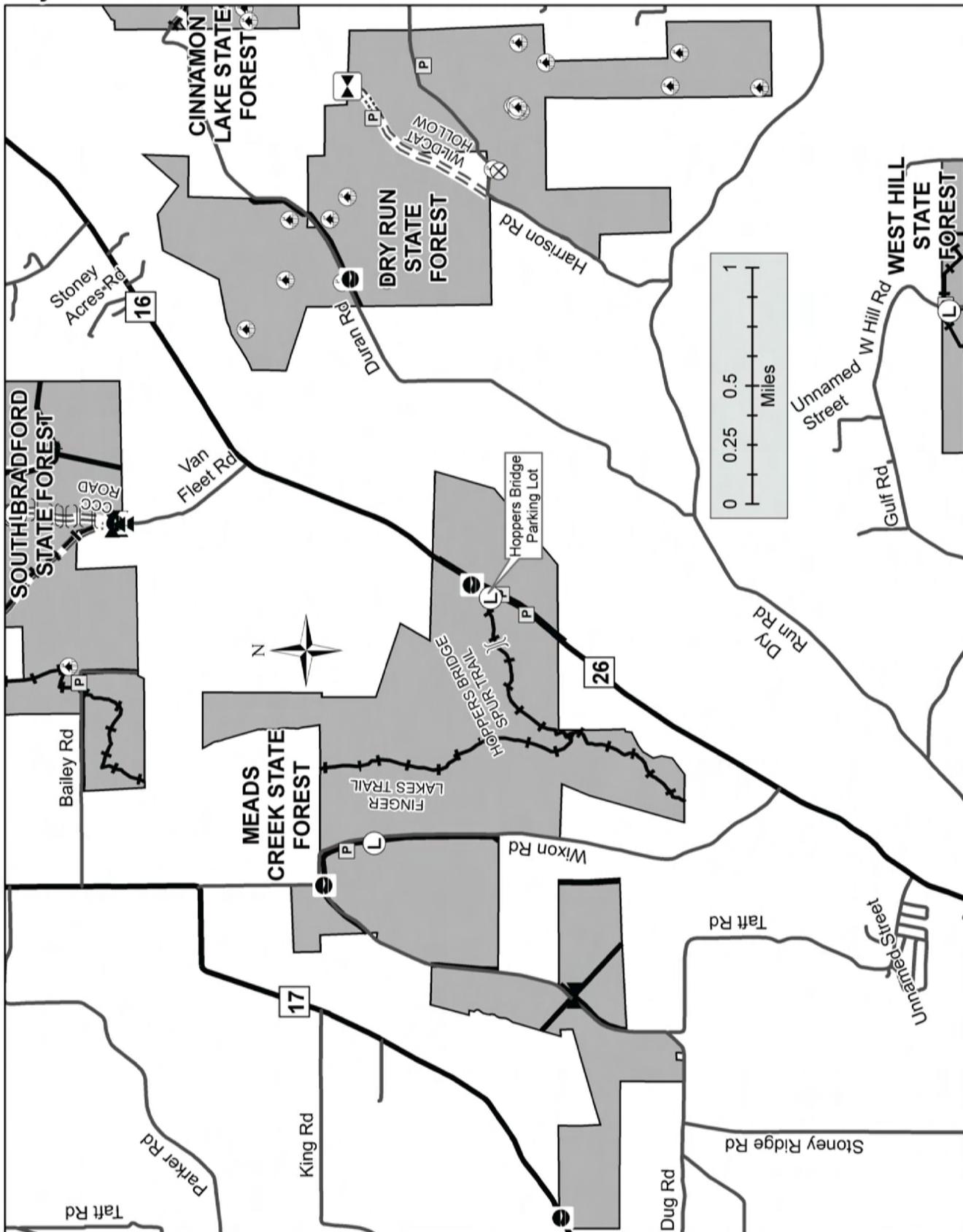


Recreation and Other Facilities West Hill State Forest and Erwin Hollow State Forests



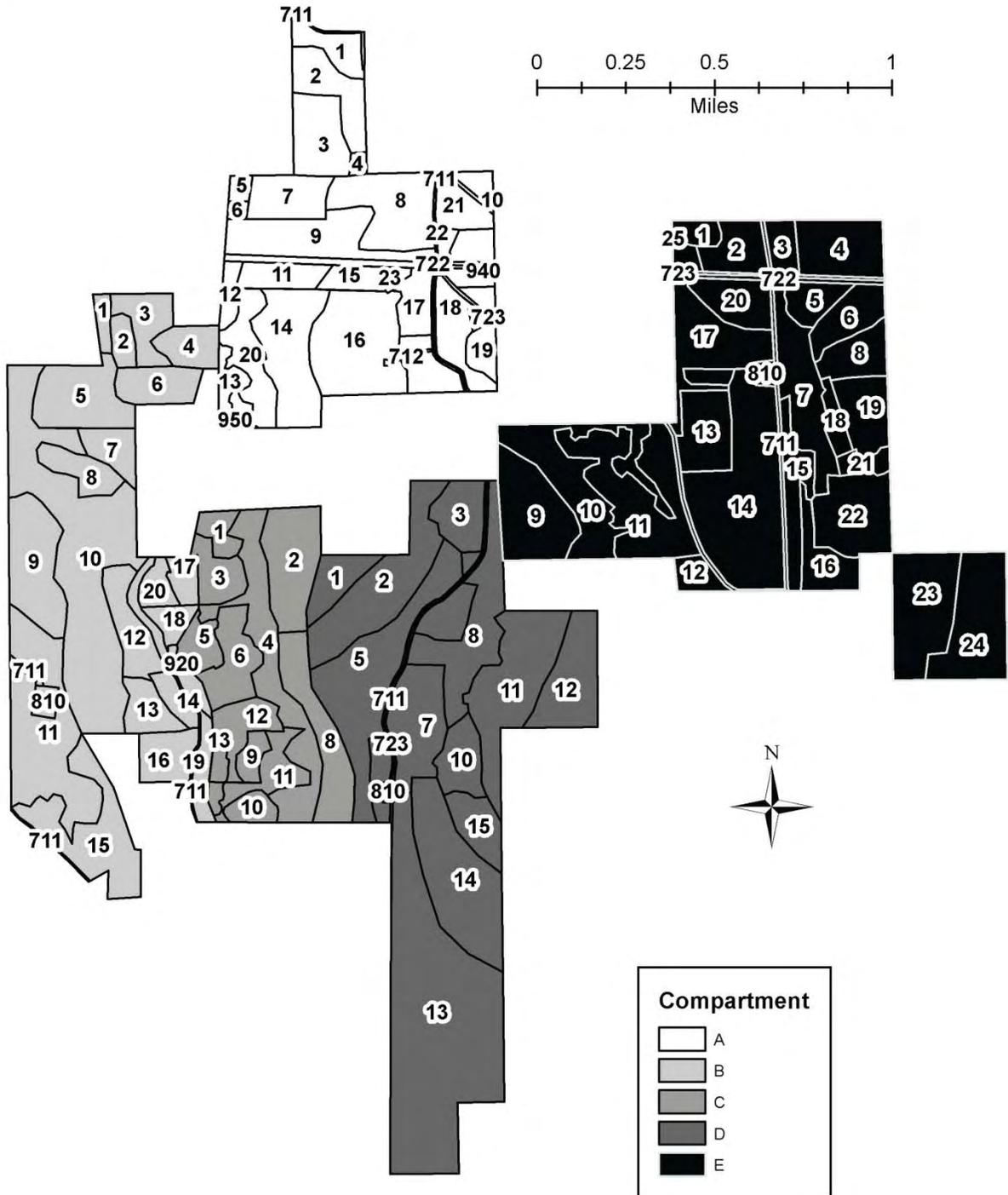
Recreation and Other Facilities Dry Run and Meads Creek State Forests

See Legend for all Recreation and Other Facilities maps page 237.

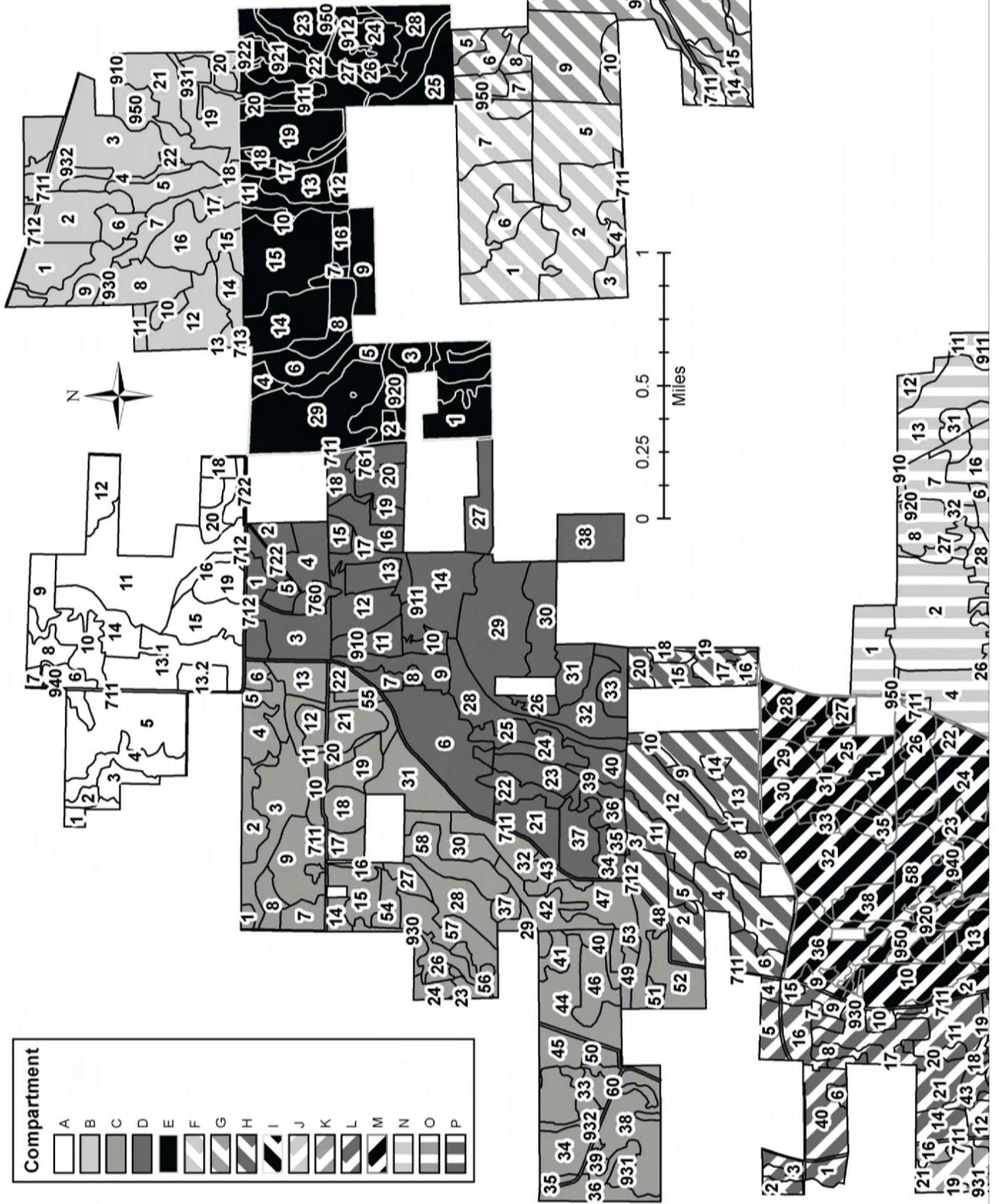


Compartment and Stand Numbers

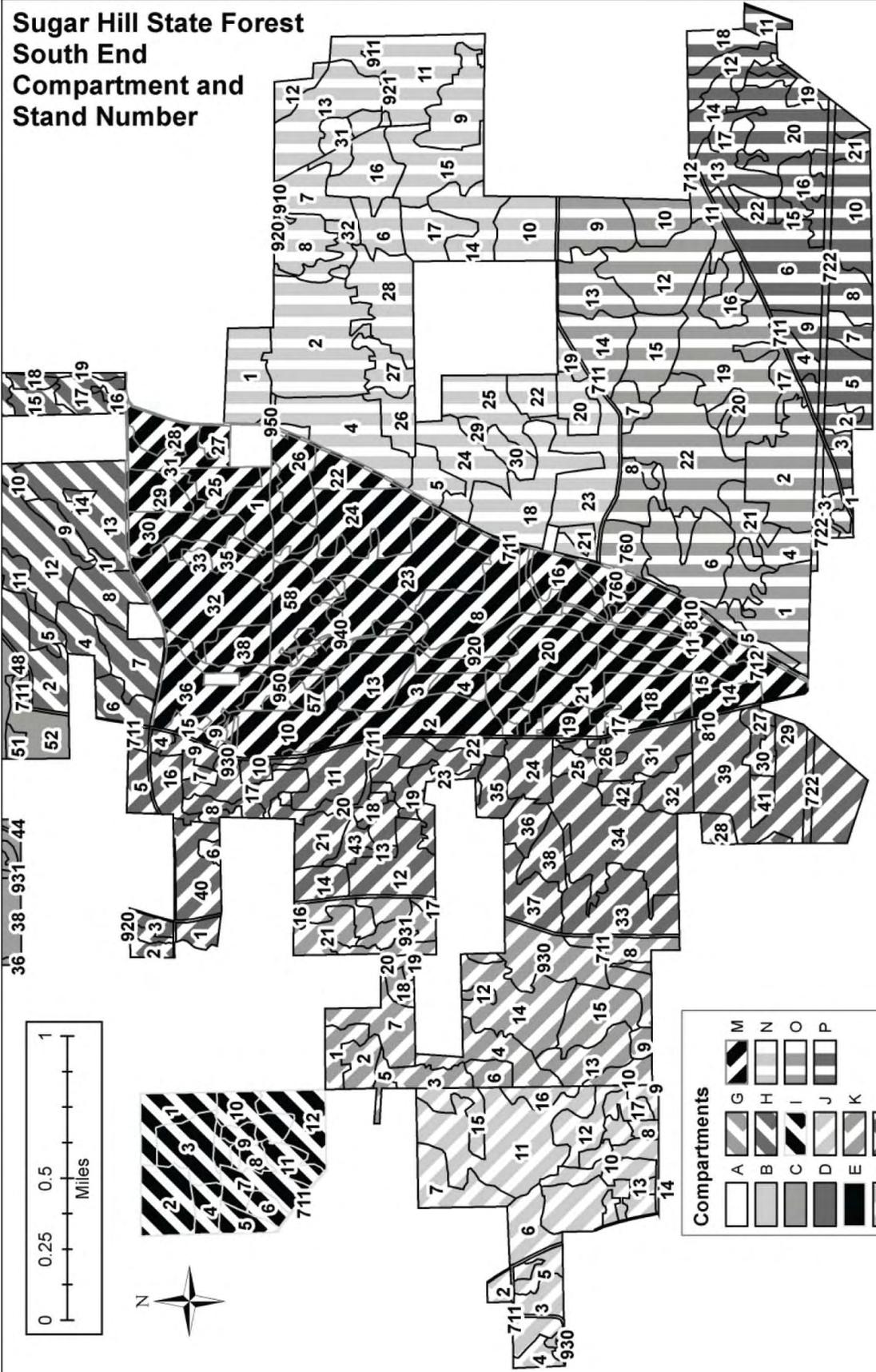
**Goundry Hill State Forest
Compartment and Stand Numbers**



Sugar Hill State Forest North End Compartment and Stand Number

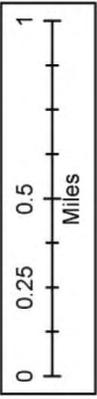


**Sugar Hill State Forest
South End
Compartment and
Stand Number**

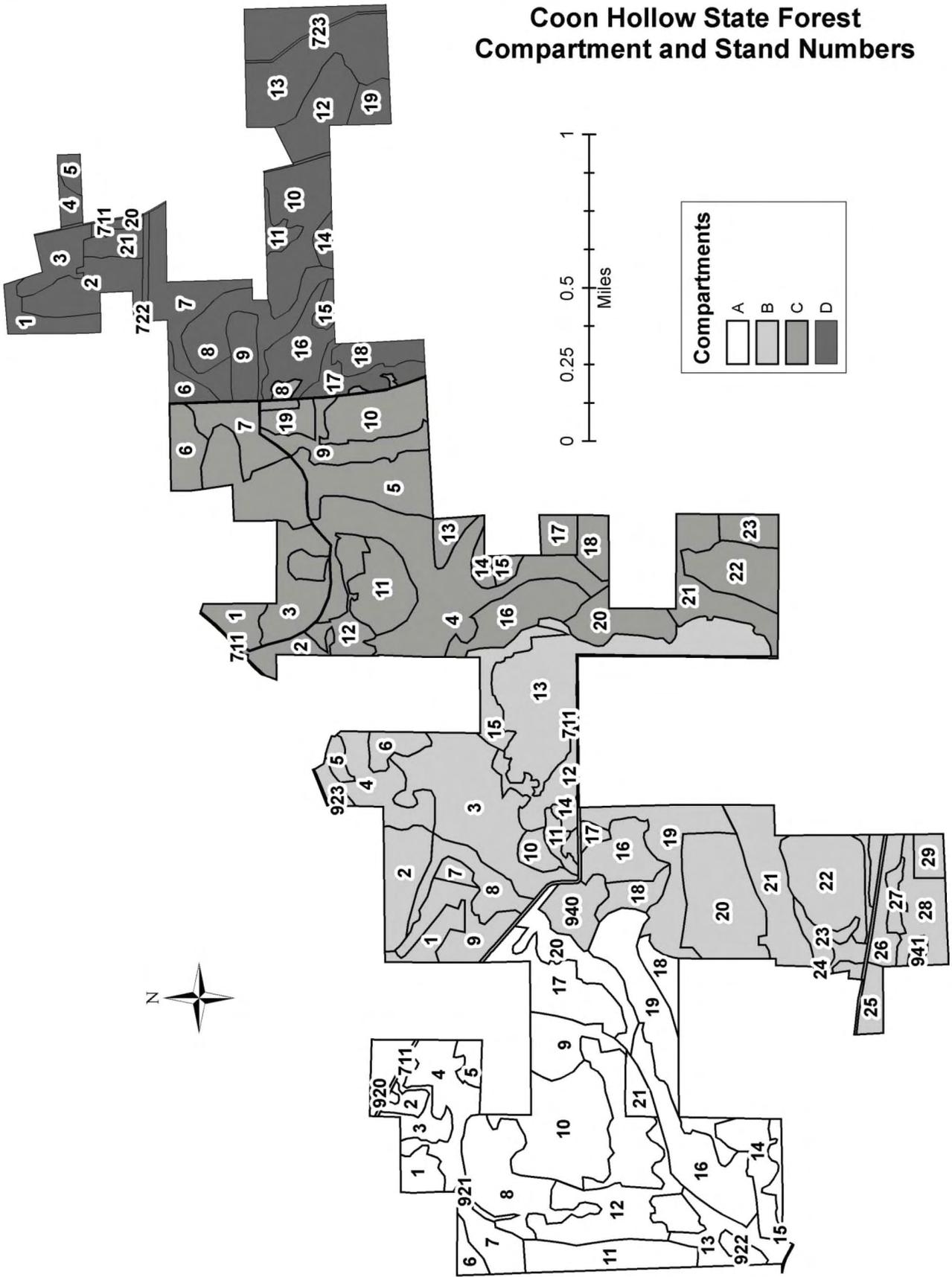


Compartments

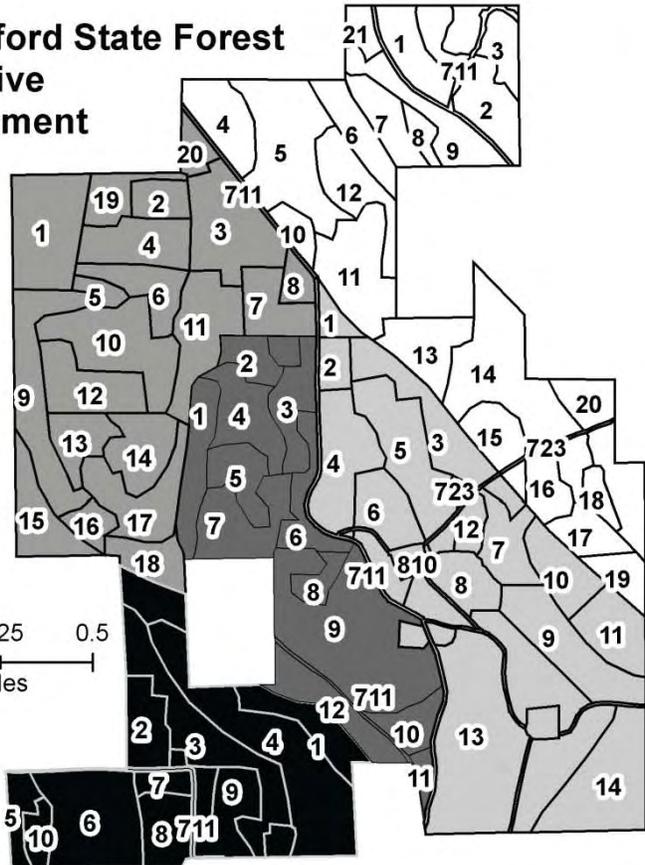
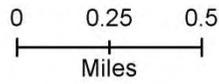
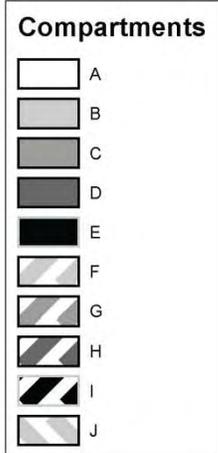
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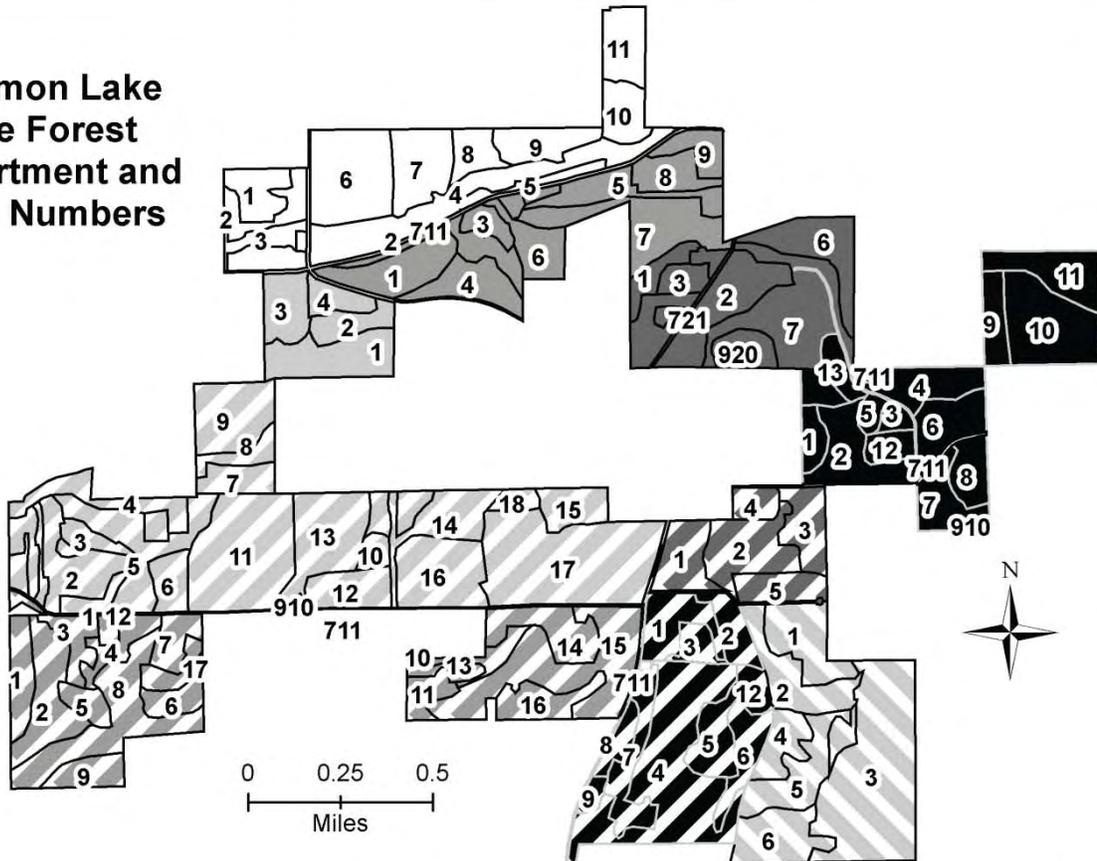
Coon Hollow State Forest Compartment and Stand Numbers

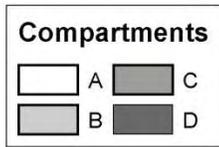


S. Bradford State Forest Vegetative Management

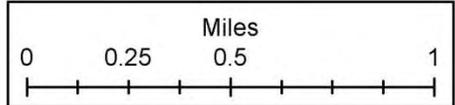
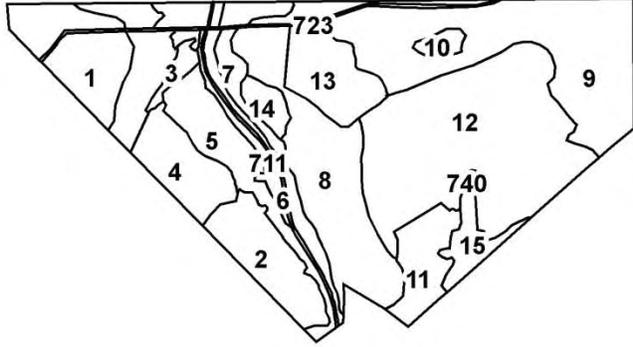


Cinnamon Lake State Forest Compartment and Stand Numbers

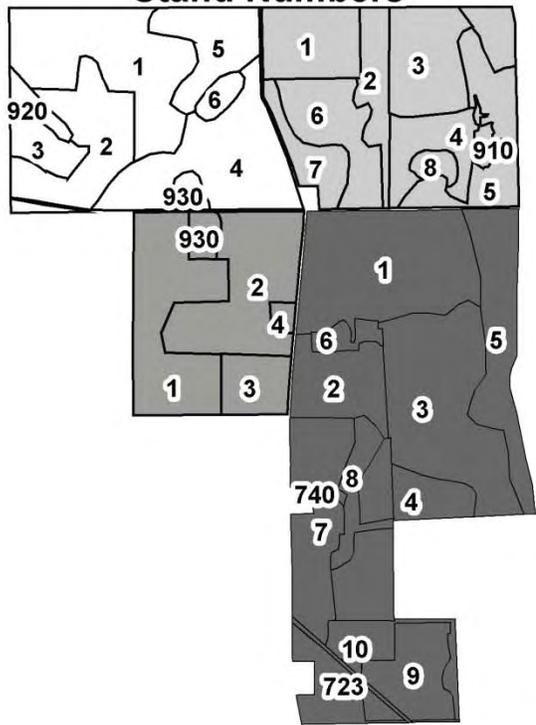




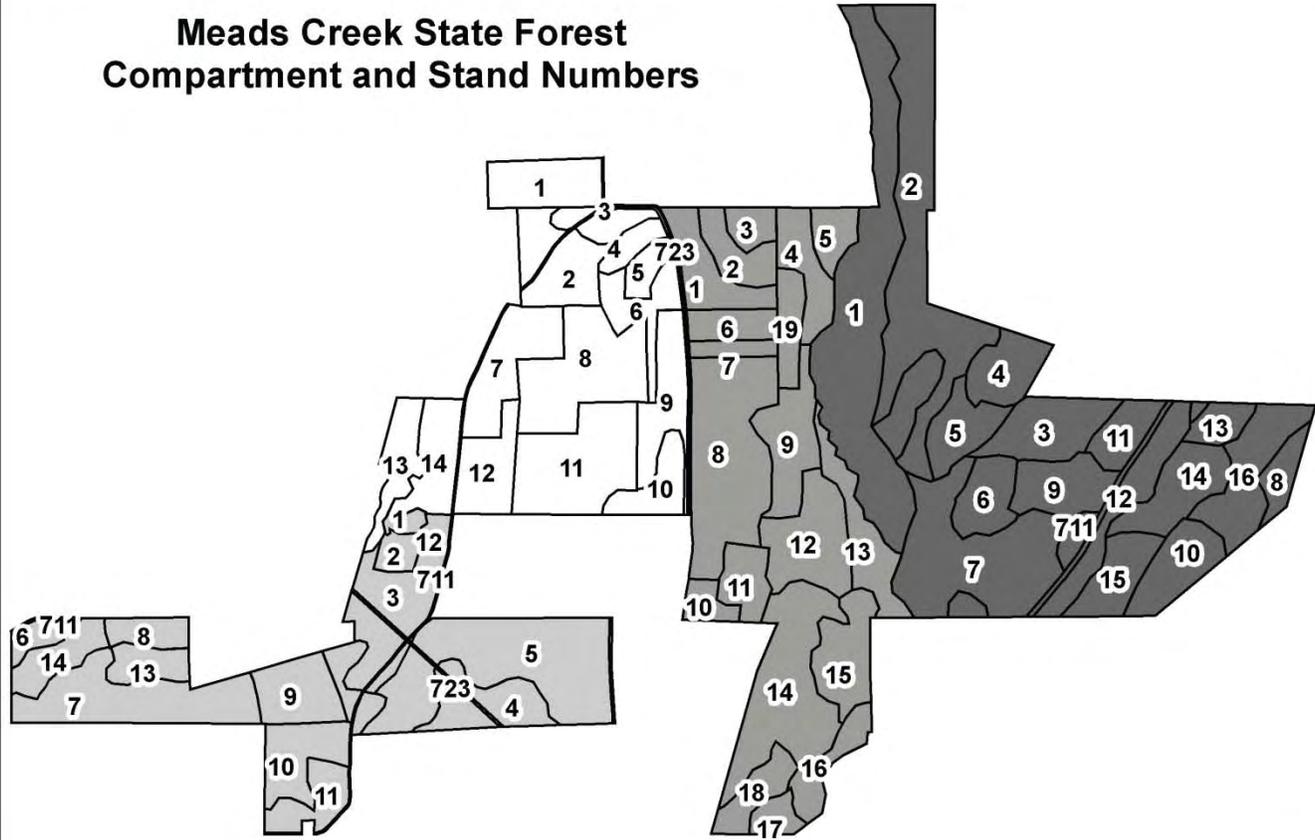
**Erwin Hollow State Forest
Compartment and Stand Numbers**



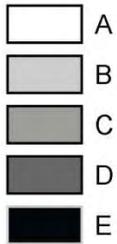
**West Hill State Forest
Compartments and
Stand Numbers**



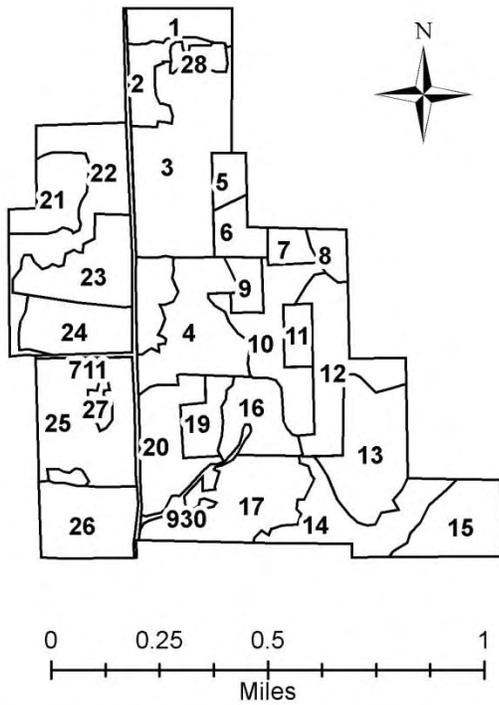
**Meads Creek State Forest
Compartment and Stand Numbers**



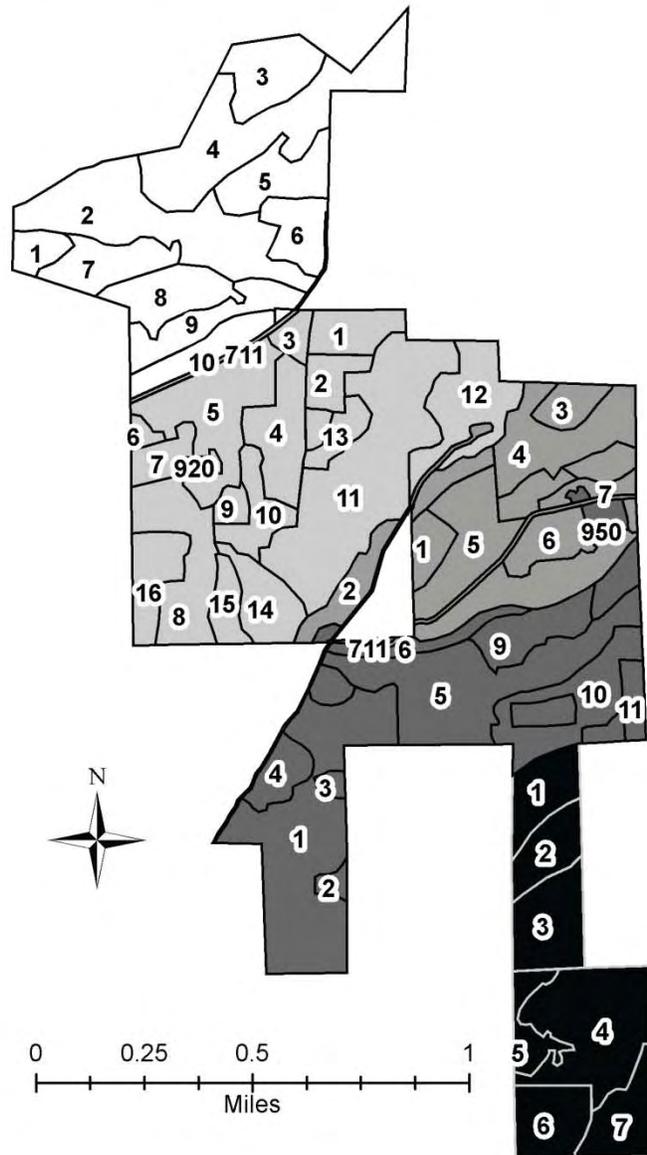
Compartments



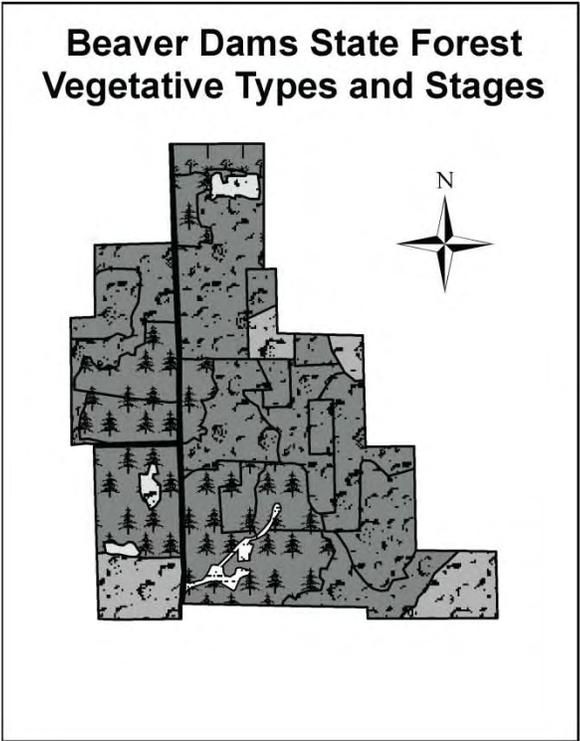
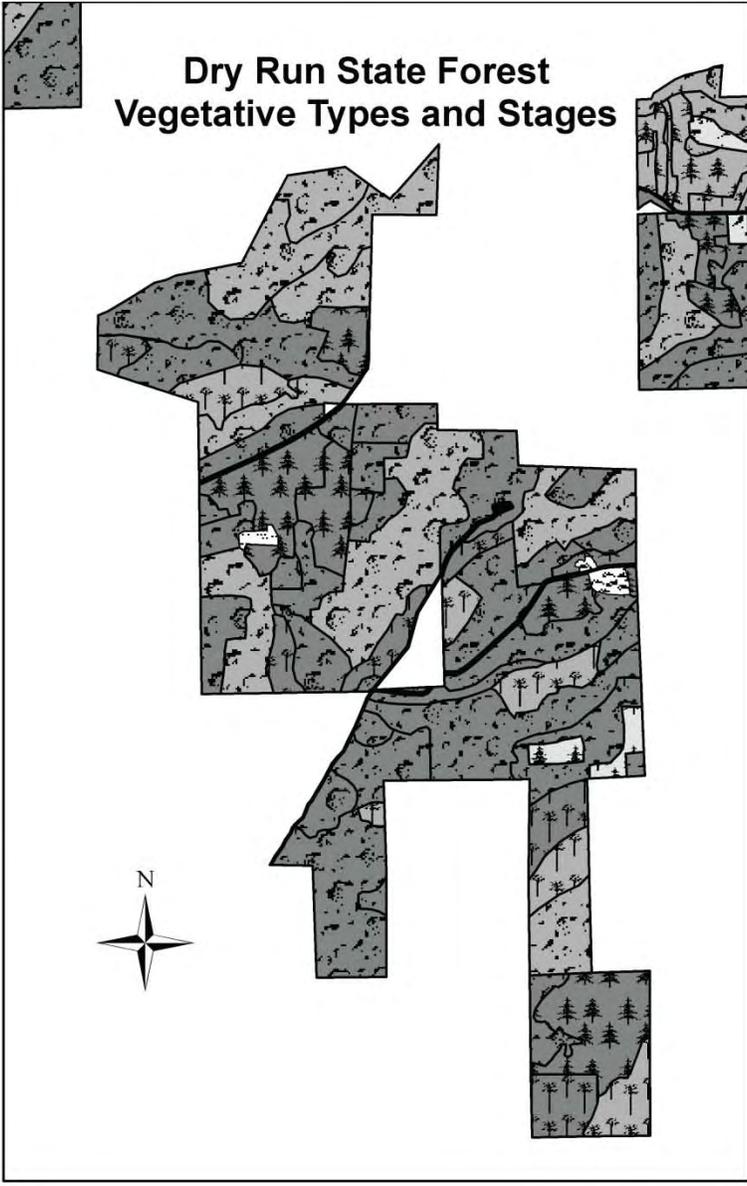
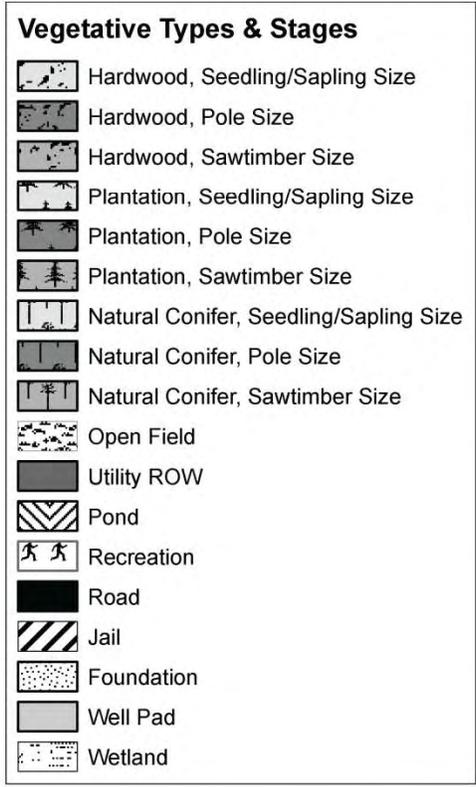
**Beaver Dams State Forest
Compartments and
Stand Numbers**



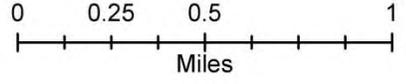
**Dry Run State Forest
Compartments and Stand Numbers**



Vegetative Types and Stages



See also Timber and Vegetation page 23 and Timber and Vegetation Management and 63.



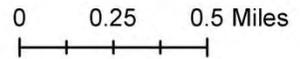
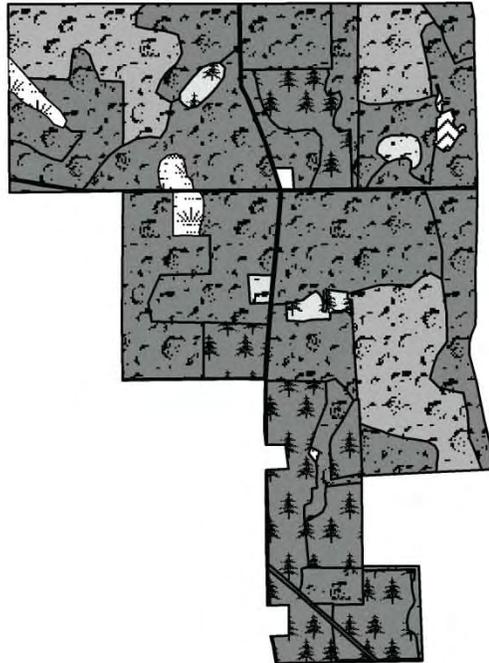
Vegetative Types and Stages

	Hardwood, Seedling/Sapling Size		Open Field
	Hardwood, Pole Size		Utility ROW
	Hardwood, Sawtimber Size		Pond
	Plantation, Seedling/Sapling Size		Recreation
	Plantation, Pole Size		Road
	Plantation, Sawtimber Size		Jail
	Natural Conifer, Seedling/Sapling Size		Foundation
	Natural Conifer, Pole Size		Well Pad
	Natural Conifer, Sawtimber Size		Wetland

**Erwin Hollow State Forest
Vegetative Types and Stages**

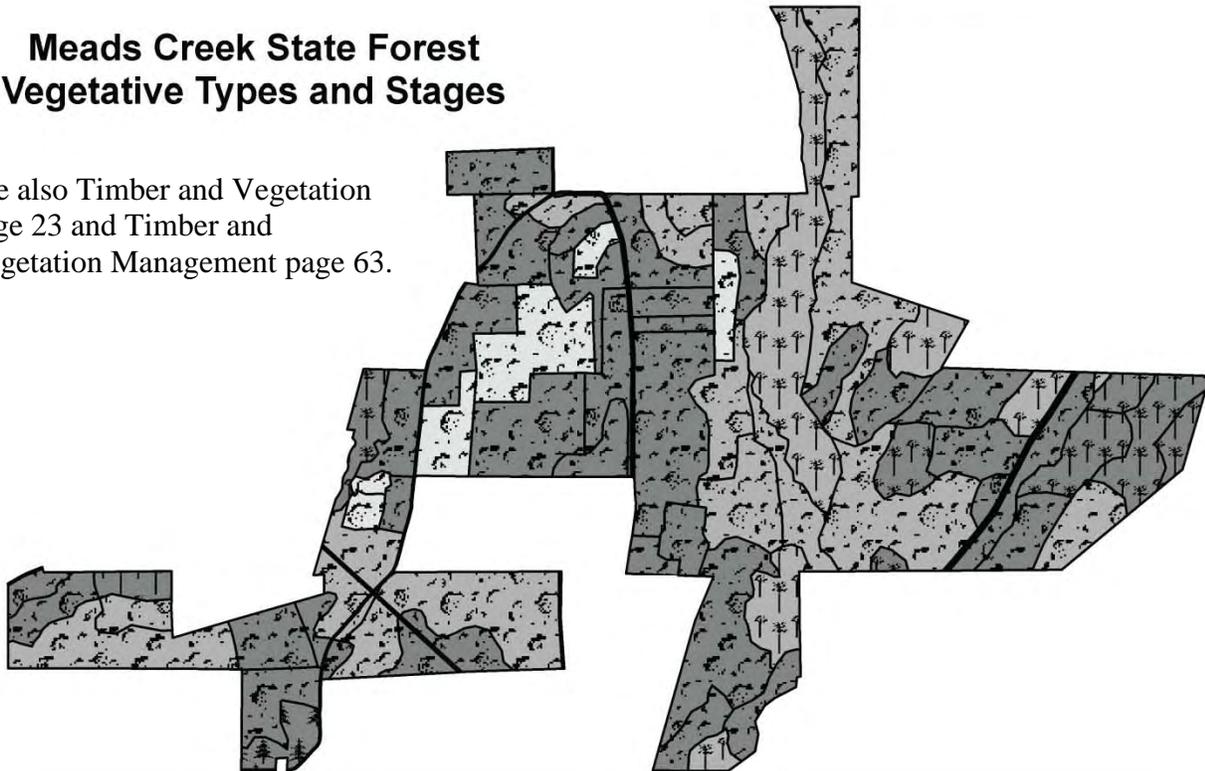


**West Hill State Forest
Vegetative Types and Stages**



**Meads Creek State Forest
Vegetative Types and Stages**

See also Timber and Vegetation
page 23 and Timber and
Vegetation Management page 63.

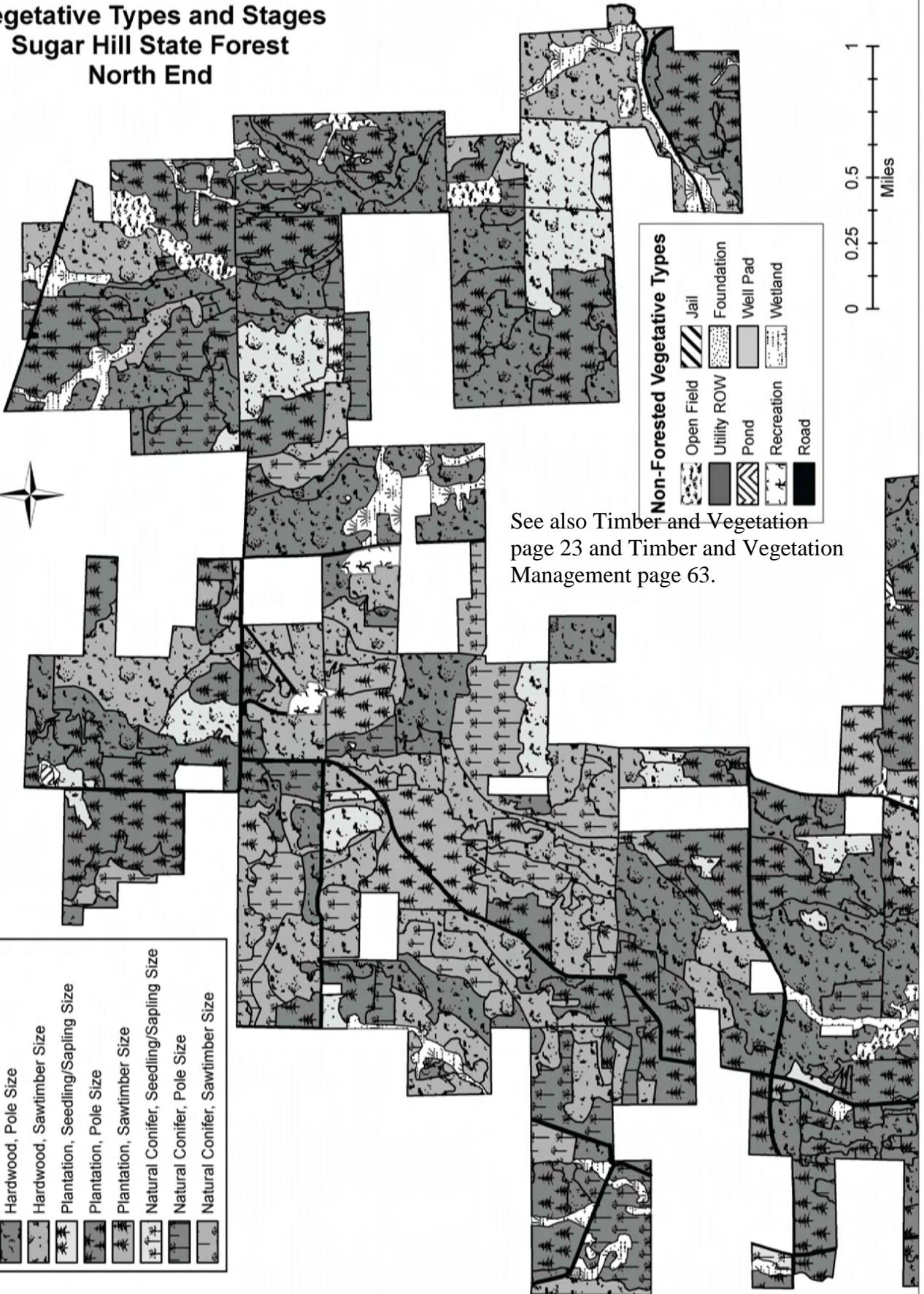


Vegetative Types and Stages Sugar Hill State Forest North End



Vegetative Types and Stages

	Hardwood, Seedling/Sapling Size
	Hardwood, Pole Size
	Hardwood, Sawtimber Size
	Plantation, Seedling/Sapling Size
	Plantation, Pole Size
	Plantation, Sawtimber Size
	Natural Conifer, Seedling/Sapling Size
	Natural Conifer, Pole Size
	Natural Conifer, Sawtimber Size



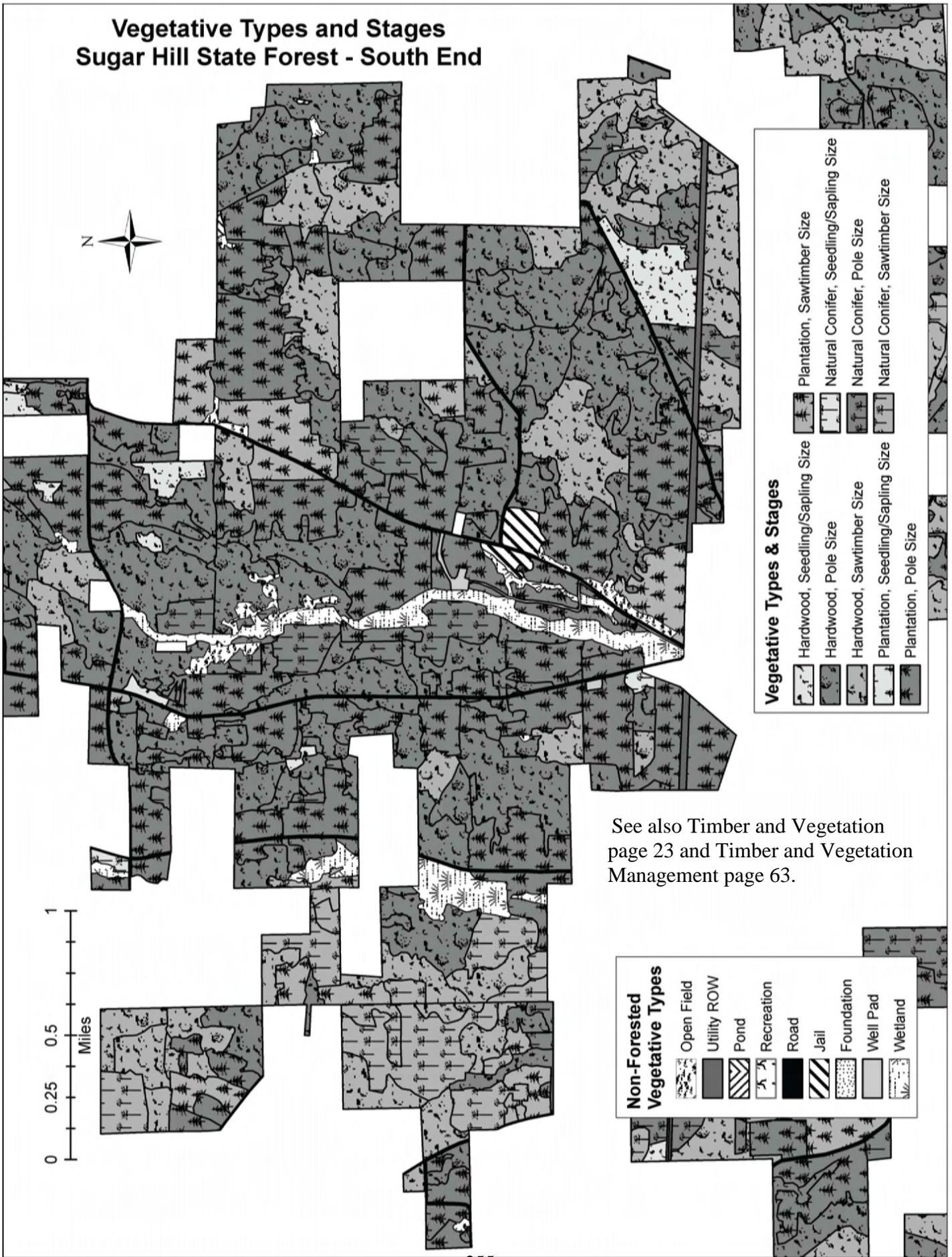
Non-Forested Vegetative Types

	Open Field		Jail
	Utility ROW		Foundation
	Pond		Well Pad
	Recreation		Wetland
	Road		

See also Timber and Vegetation
page 23 and Timber and Vegetation
Management page 63.



Vegetative Types and Stages Sugar Hill State Forest - South End



Vegetative Types & Stages

Plantation, Sawtimber Size	Plantation, Sawtimber Size
Hardwood, Seeding/Sapling Size	Natural Conifer, Seeding/Sapling Size
Hardwood, Pole Size	Natural Conifer, Pole Size
Hardwood, Sawtimber Size	Natural Conifer, Sawtimber Size
Plantation, Seeding/Sapling Size	Natural Conifer, Seeding/Sapling Size
Plantation, Pole Size	Plantation, Pole Size

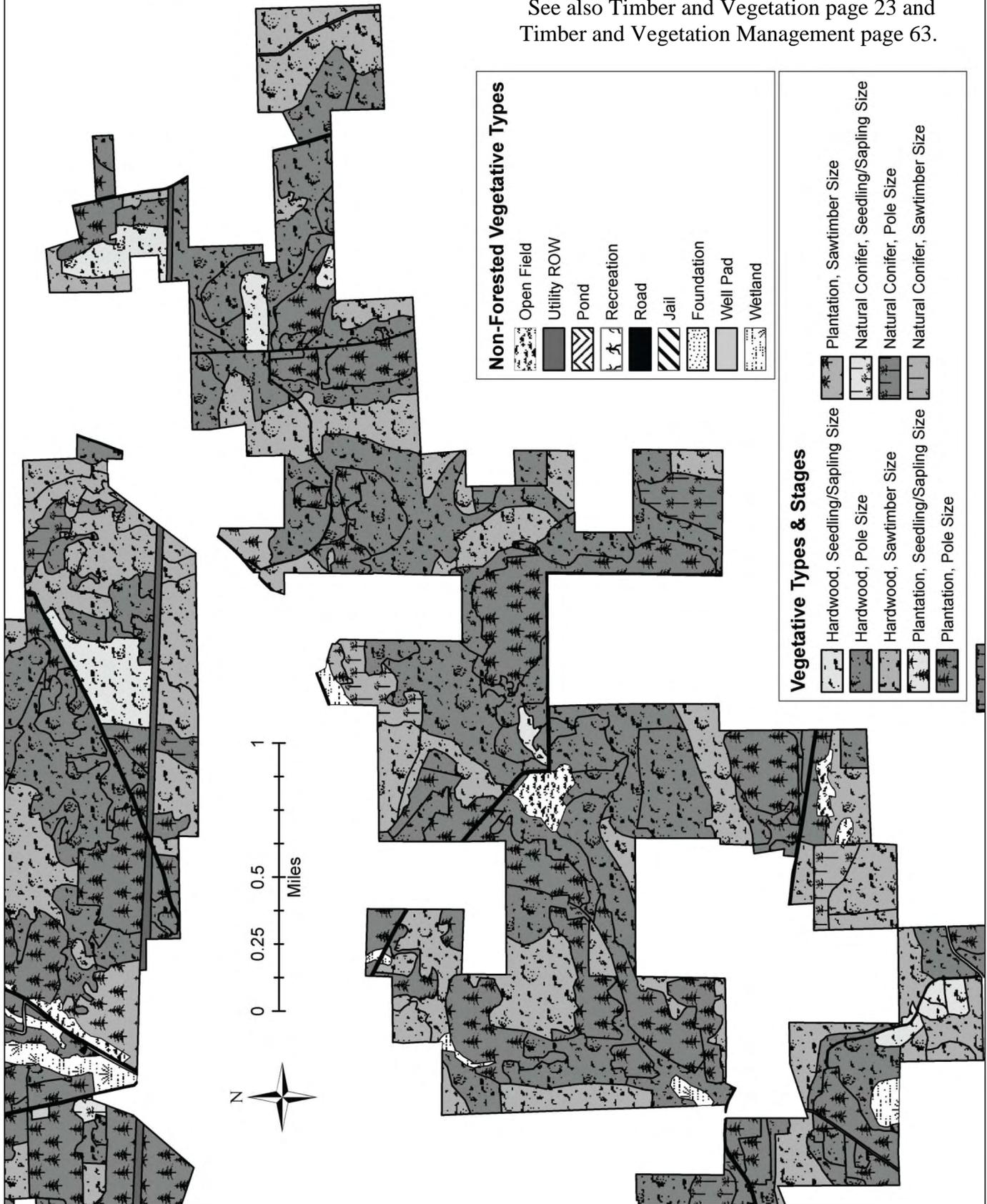
Non-Forested Vegetative Types

Open Field	Open Field
Utility ROW	Utility ROW
Pond	Pond
Recreation	Recreation
Road	Road
Jail	Jail
Foundation	Foundation
Well Pad	Well Pad
Wetland	Wetland

See also Timber and Vegetation page 23 and Timber and Vegetation Management page 63.

Coon Hollow State Forest Vegetative Types and Stages

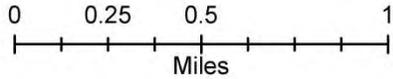
See also Timber and Vegetation page 23 and
Timber and Vegetation Management page 63.



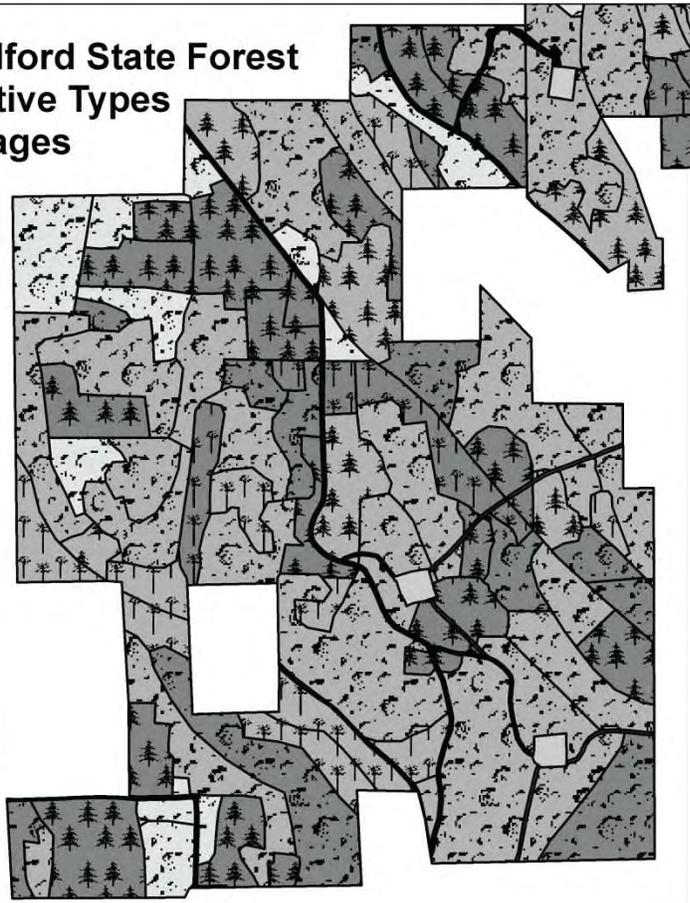
Vegetative Types & Stages

-  Hardwood, Seedling/Sapling Size
-  Hardwood, Pole Size
-  Hardwood, Sawtimber Size
-  Plantation, Seedling/Sapling Size
-  Plantation, Pole Size
-  Plantation, Sawtimber Size
-  Natural Conifer, Seedling/Sapling Size
-  Natural Conifer, Pole Size
-  Natural Conifer, Sawtimber Size
-  Open Field
-  Utility ROW
-  Pond
-  Recreation
-  Road
-  Jail
-  Foundation
-  Well Pad
-  Wetland

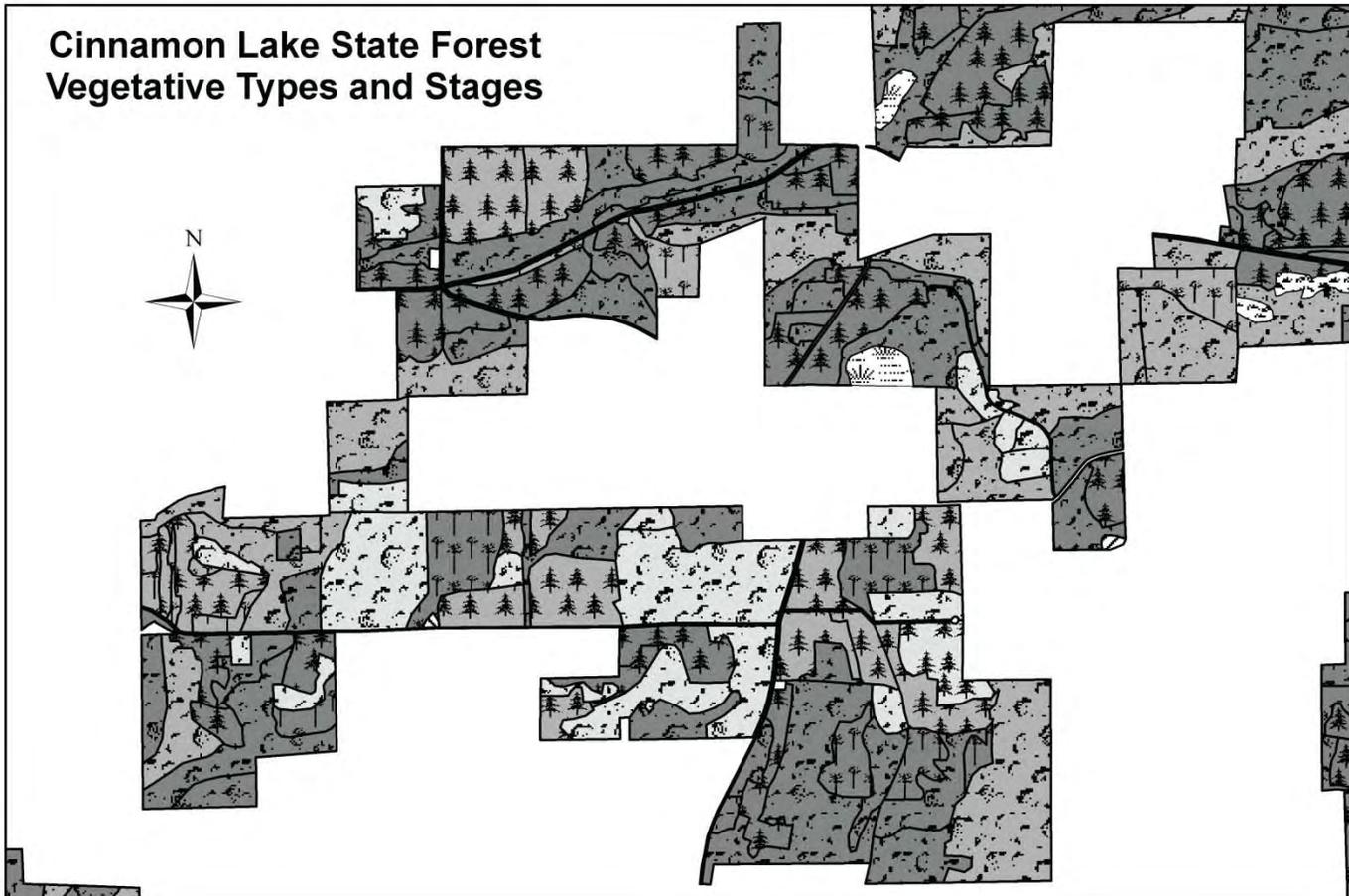
See also Timber and Vegetation page 23 and Timber and Vegetation Management page 63.



**S. Bradford State Forest
Vegetative Types and Stages**

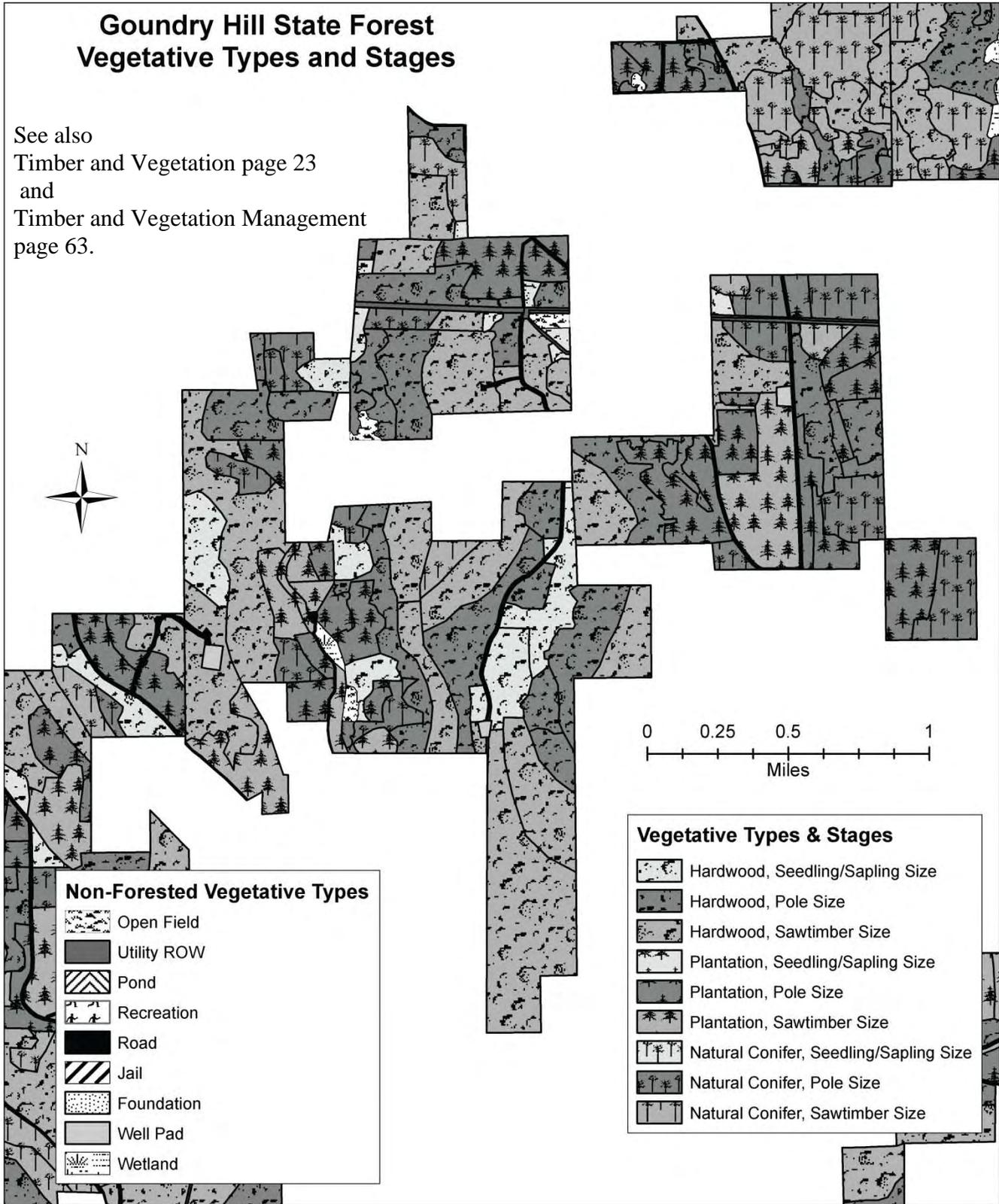


**Cinnamon Lake State Forest
Vegetative Types and Stages**



Goundry Hill State Forest Vegetative Types and Stages

See also
Timber and Vegetation page 23
and
Timber and Vegetation Management
page 63.



Vegetative Management

For additional information and explanation see:
 Timber and Vegetation - page 23,
 Timber and Vegetation Management - page 63,
 and Appendix F: Timber Management page 179.

Vegetative Management

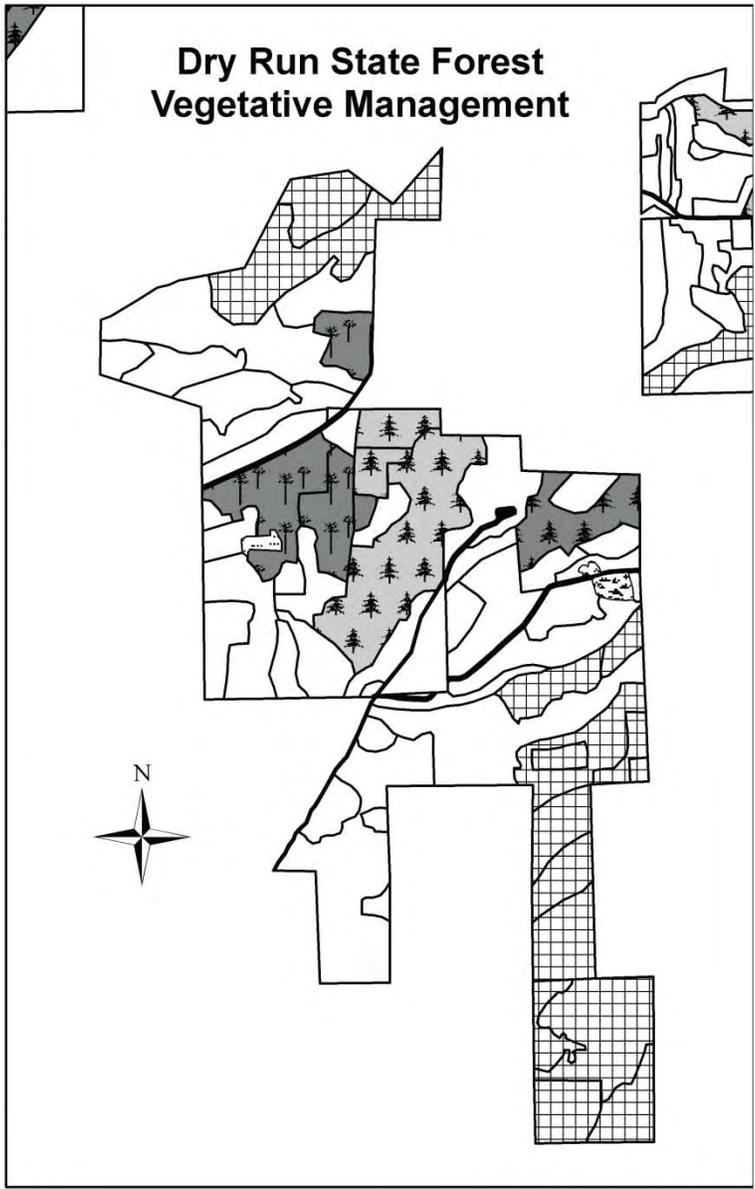
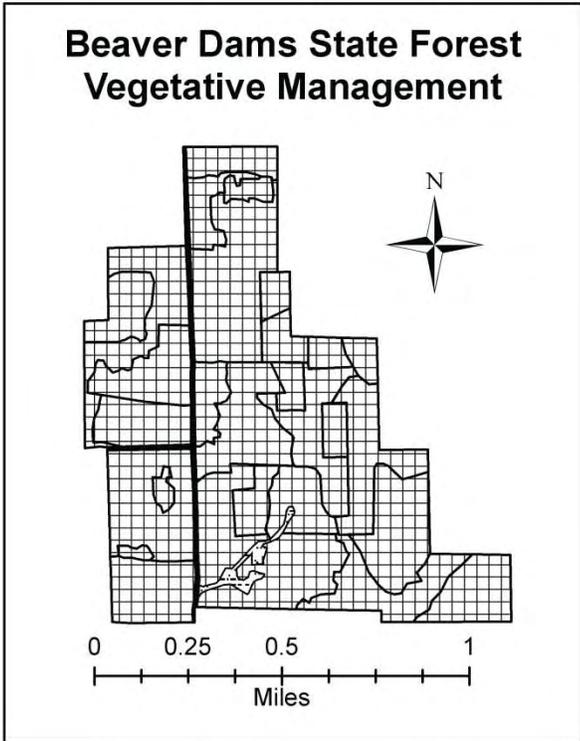
Years, Treatment

- Other Stands
- 1-10, Legacy
- 1-10, No Access*
- 1-5, AllAge
- 6-10, AllAge
- 1-5, Thin
- 6-10, Thin
- 1-5, Regenerate
- 6-10, Regenerate
- 1-5 & 6-10, Thin then Regen

* Several stands cannot be accessed with modern logging equipment. If access improves through additional acres being purchased, or new types of logging equipment being developed, these stands will also be evaluated for silvicultural activities.

Non-Forested Vegetative Types

- Open Field
- Recreation
- Foundation
- Utility ROW
- Road
- Well Pad
- Pond
- Jail
- Wetland

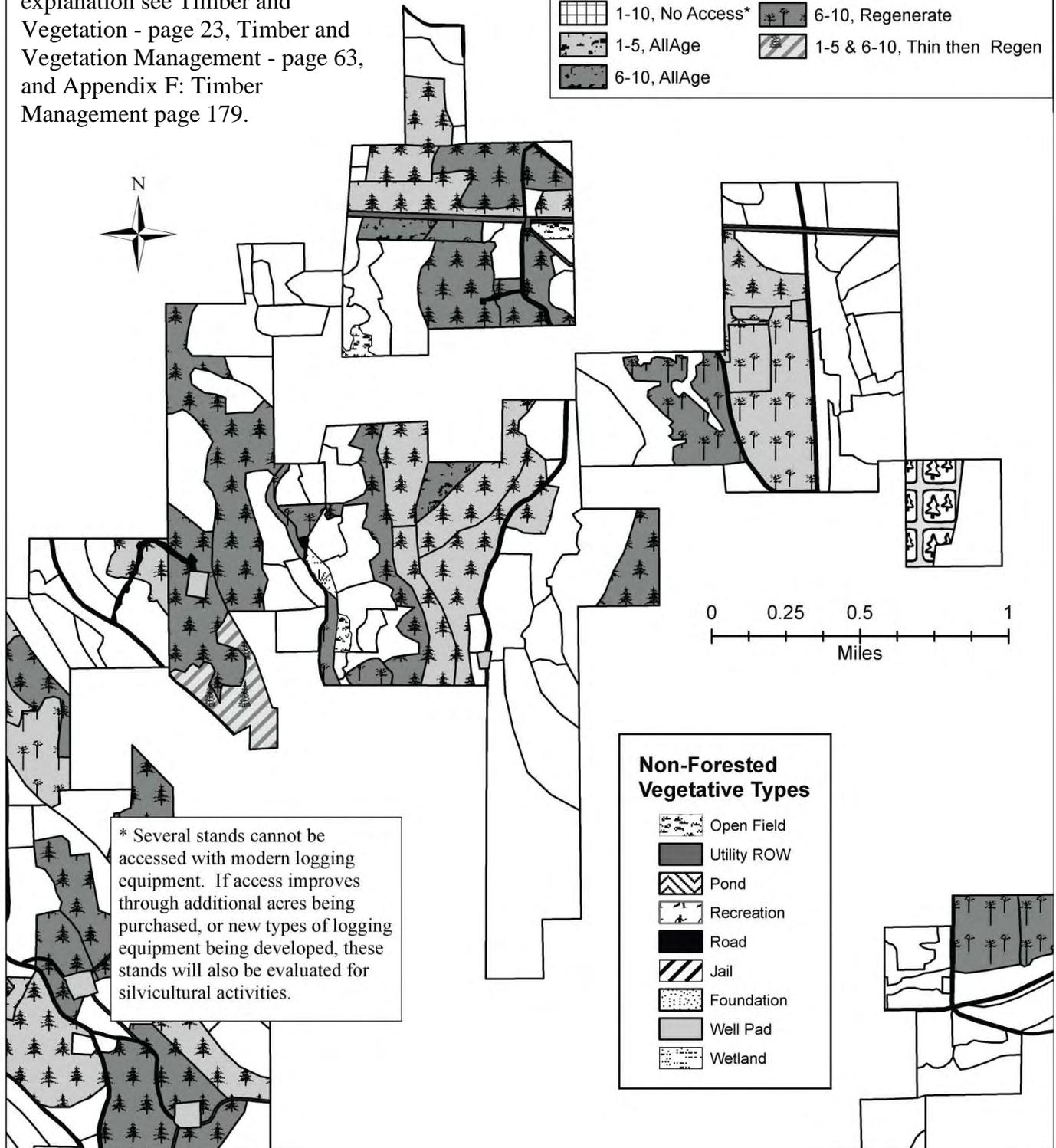


Goundry Hill State Forest Vegetative Management

For additional information and explanation see Timber and Vegetation - page 23, Timber and Vegetation Management - page 63, and Appendix F: Timber Management page 179.

Vegetative Management

Years, Treatment	
	Other Stands
	1-10, Legacy
	1-10, No Access*
	1-5, AllAge
	6-10, AllAge
	1-5, Thin
	6-10, Thin
	1-5, Regenerate
	6-10, Regenerate
	1-5 & 6-10, Thin then Regen



* Several stands cannot be accessed with modern logging equipment. If access improves through additional acres being purchased, or new types of logging equipment being developed, these stands will also be evaluated for silvicultural activities.

Non-Forested Vegetative Types

	Open Field
	Utility ROW
	Pond
	Recreation
	Road
	Jail
	Foundation
	Well Pad
	Wetland

Coon Hollow State Forest Vegetative Management



For additional information and explanation see Timber and Vegetation - page 23, Timber and Vegetation Management - page 63, and Appendix F: Timber Management - page 179.

Non-Forested Vegetative Types

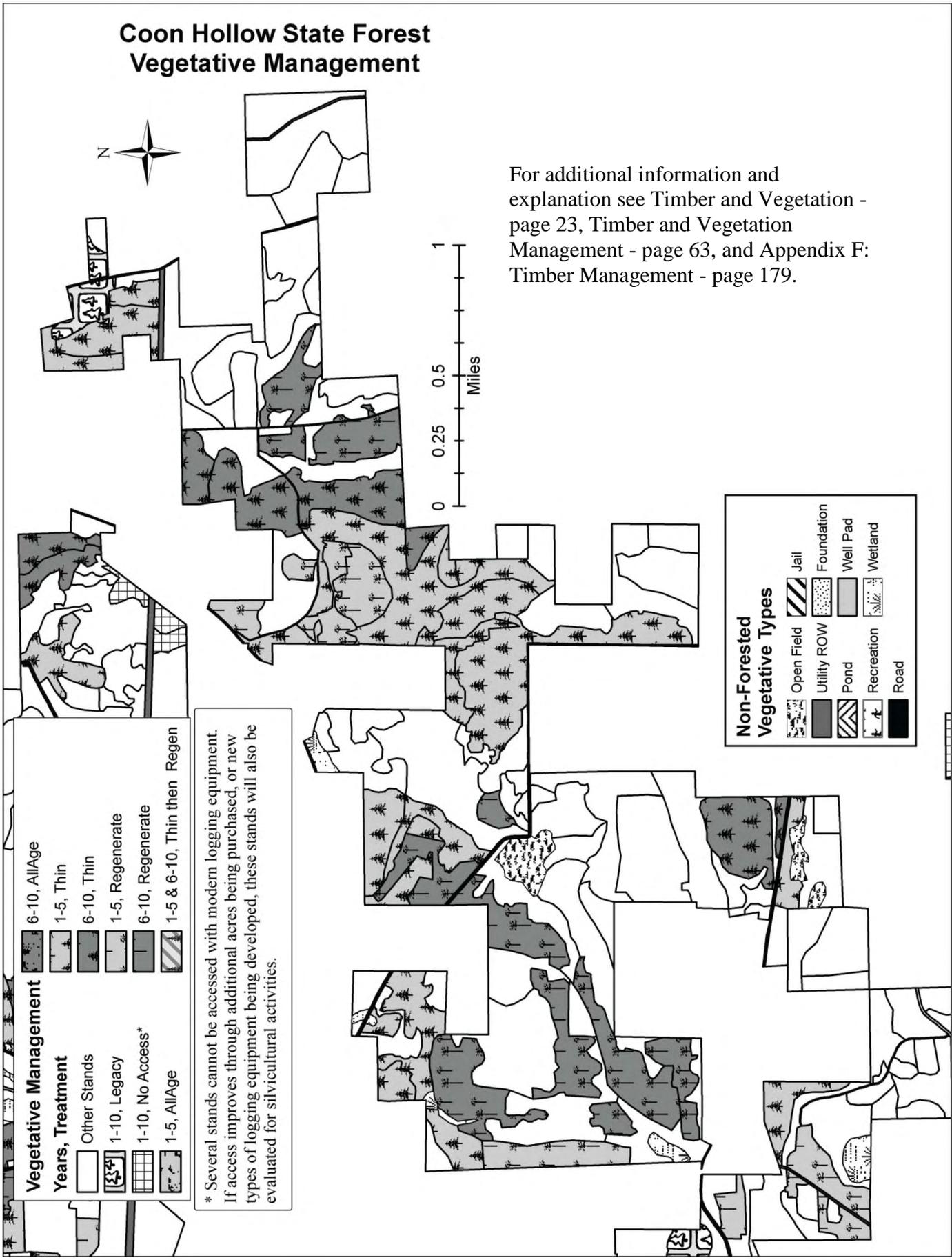
Vegetative Management

	6-10, AllAge
	1-5, Thin
	6-10, Thin
	1-5, Regenerate
	6-10, Regenerate
	1-5 & 6-10, Thin then Regen

Years, Treatment

	Other Stands
	1-10, Legacy
	1-10, No Access*
	1-5, AllAge

* Several stands cannot be accessed with modern logging equipment. If access improves through additional acres being purchased, or new types of logging equipment being developed, these stands will also be evaluated for silvicultural activities.



Vegetative Management

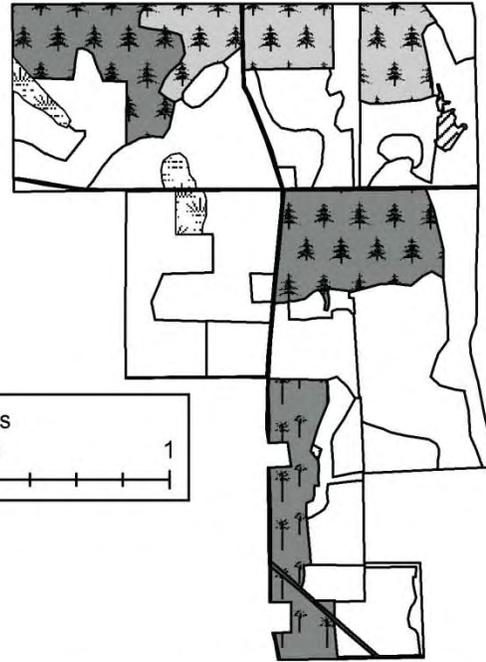
Years, Treatment

-  Other Stands
-  1-10, Legacy
-  1-10, No Access*
-  1-5, AllAge
-  6-10, AllAge
-  1-5, Thin
-  6-10, Thin
-  1-5, Regenerate
-  6-10, Regenerate
-  1-5 & 6-10, Thin then Regen

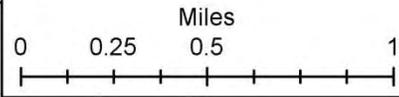
* Several stands cannot be accessed with modern logging equipment. If access improves through additional acres being purchased, or new types of logging equipment being developed, these stands will also be evaluated for silvicultural activities.



West Hill State Forest Vegetative Management



Erwin Hollow State Forest Vegetative Management

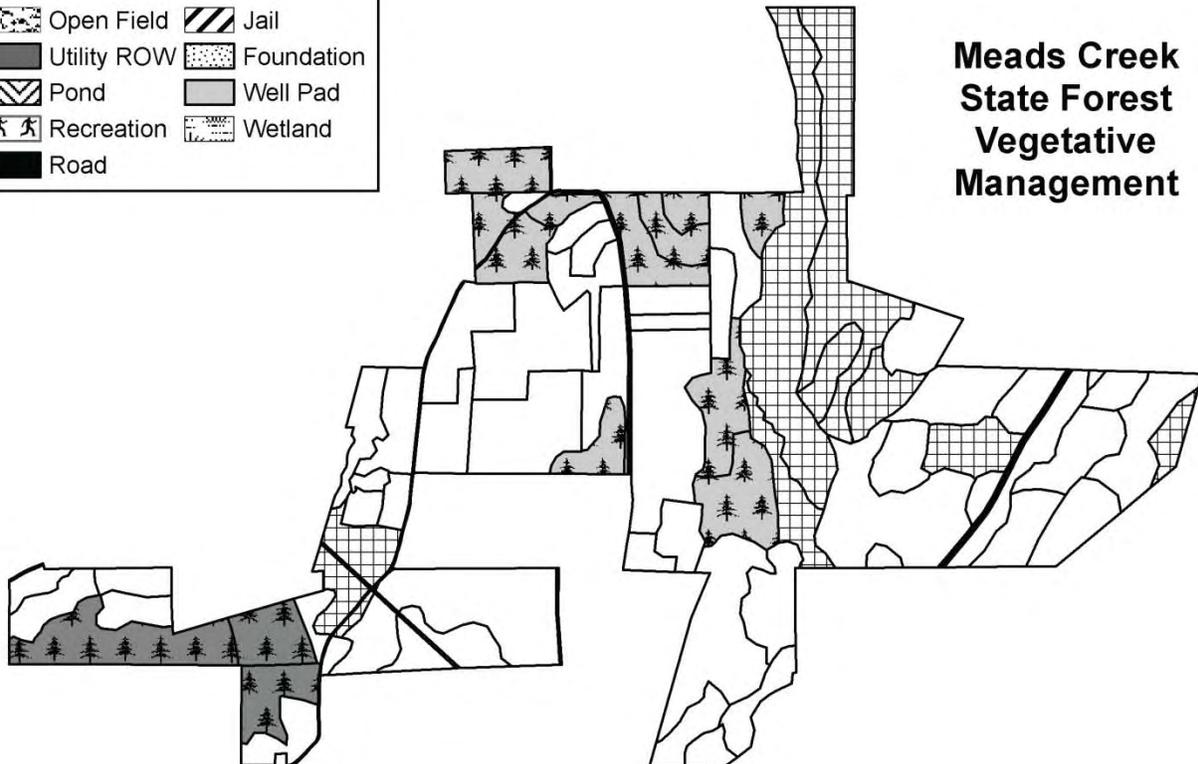


For additional information and explanation see: Timber and Vegetation - page 23, Timber and Vegetation Management - page 63, and Appendix F: Timber Management - page 179.

Non-Forested Vegetative Types

-  Open Field
-  Jail
-  Utility ROW
-  Foundation
-  Pond
-  Well Pad
-  Recreation
-  Wetland
-  Road

Meads Creek State Forest Vegetative Management



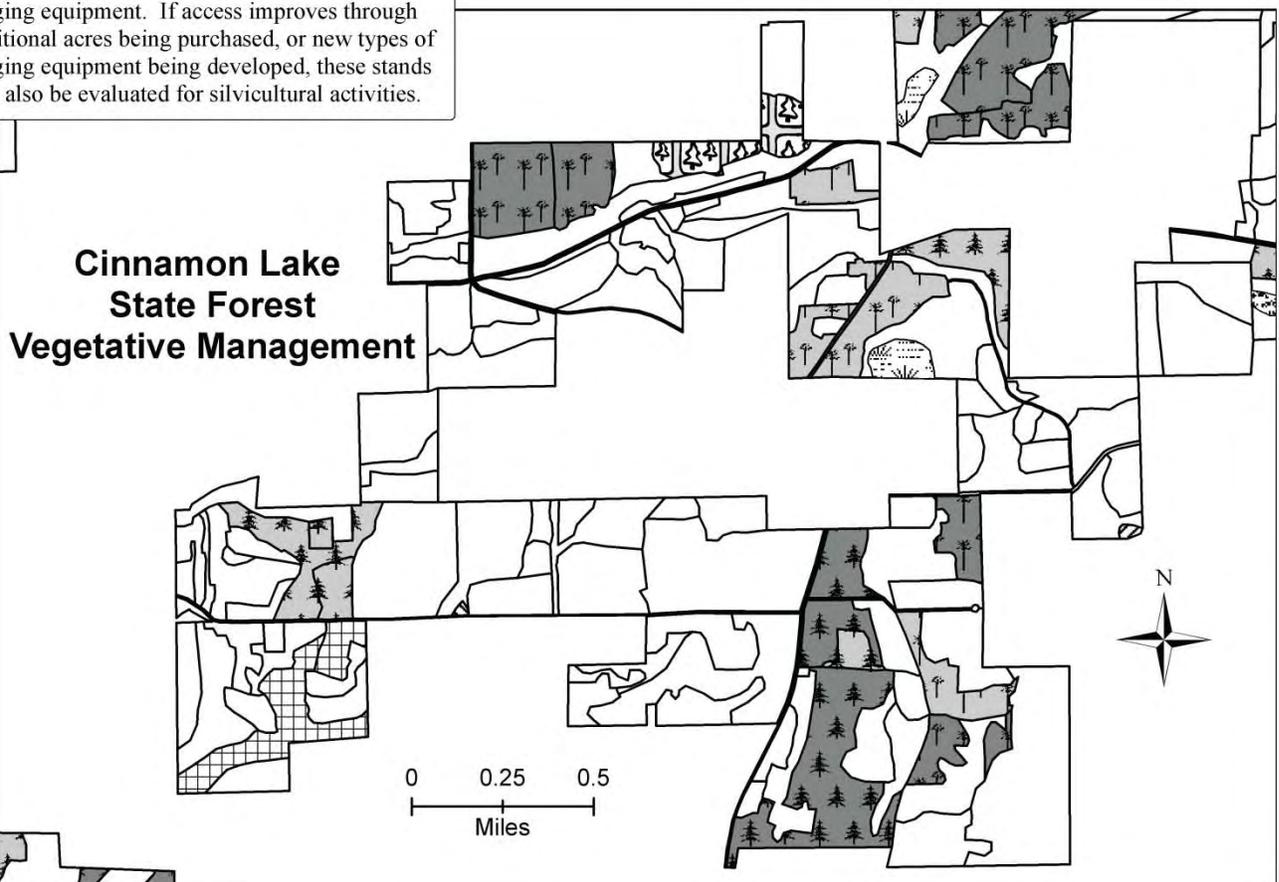
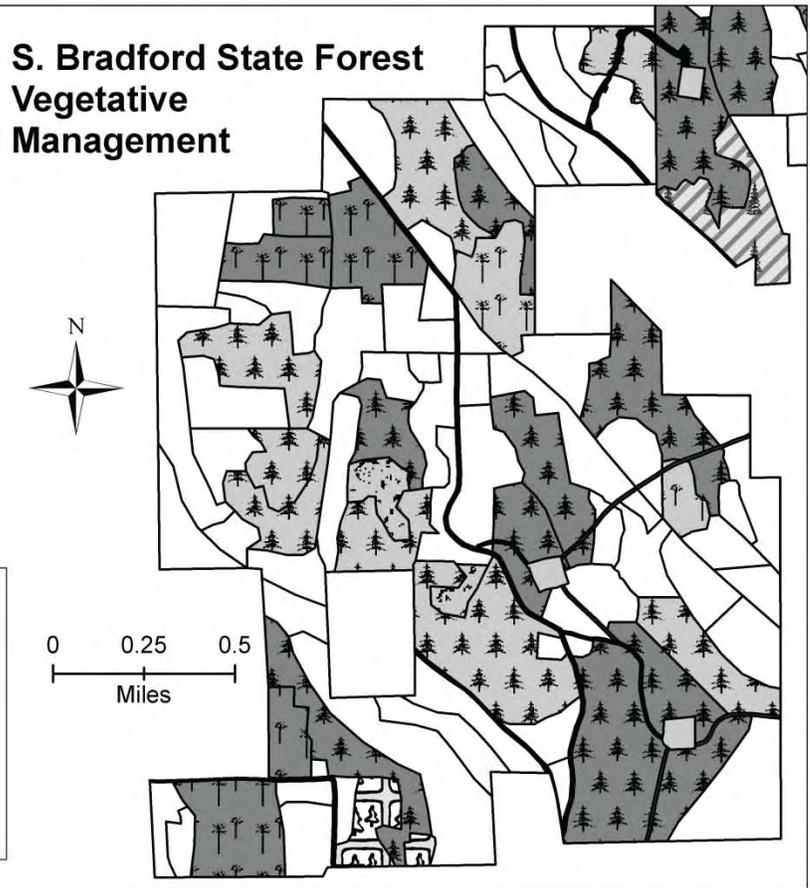
For additional information and explanation see Timber and Vegetation - page 23, Timber and Vegetation Management - page 63, and Appendix F: Timber Management page 179.

Non-Forested Vegetative Types			
	Open Field		Jail
	Utility ROW		Foundation
	Pond		Well Pad
	Recreation		Wetland
	Road		

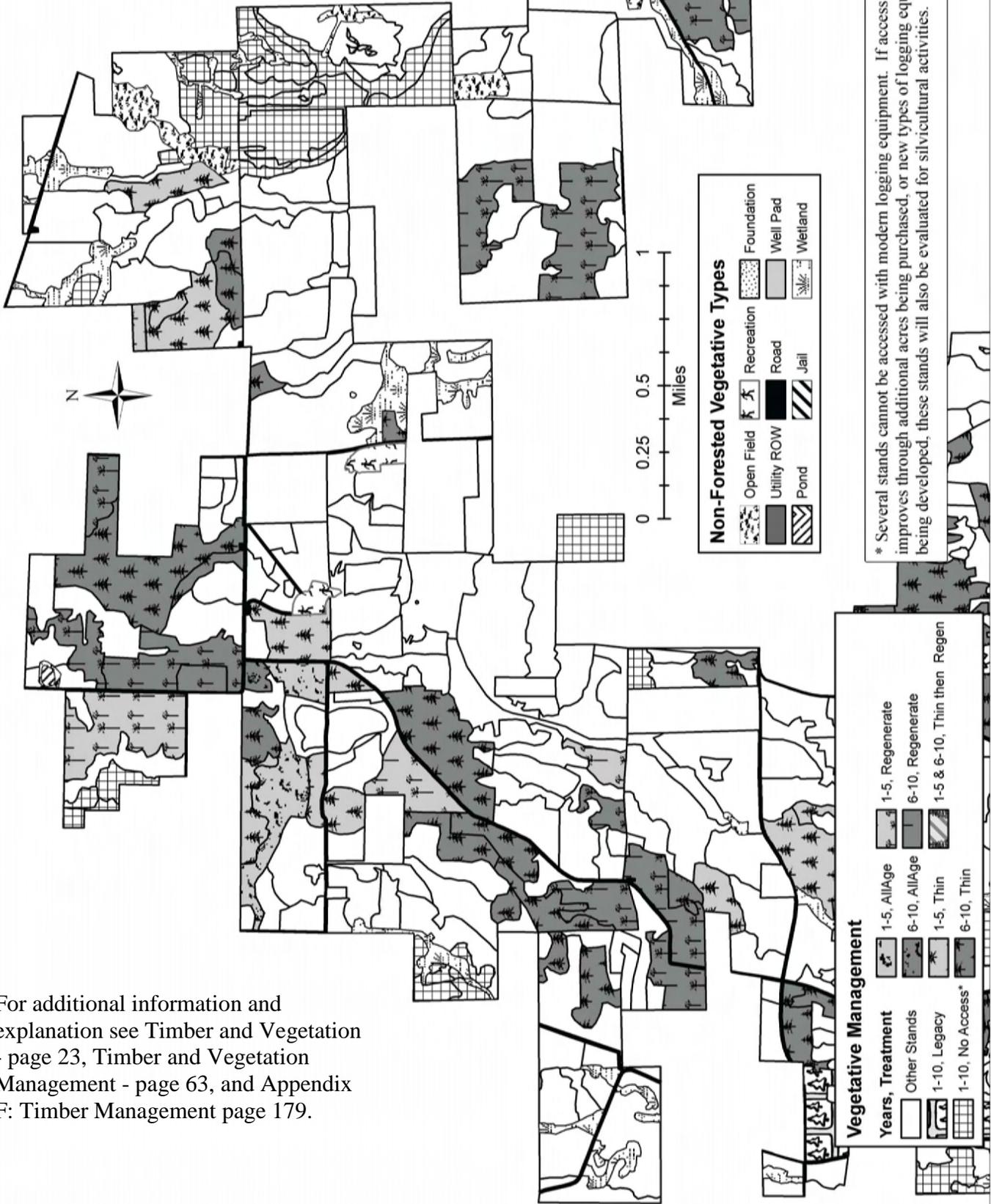
Vegetative Management

Years, Treatment	Symbol	Description
1-5, Thin		1-5, Thin
6-10, Thin		6-10, Thin
1-10, Legacy		1-10, Legacy
1-5, Regenerate		1-5, Regenerate
1-10, No Access*		1-10, No Access*
6-10, Regenerate		6-10, Regenerate
1-5, AllAge		1-5, AllAge
1-5 & 6-10, Thin then Regen		1-5 & 6-10, Thin then Regen
6-10, AllAge		6-10, AllAge
Other Stands		Other Stands

* Several stands cannot be accessed with modern logging equipment. If access improves through additional acres being purchased, or new types of logging equipment being developed, these stands will also be evaluated for silvicultural activities.



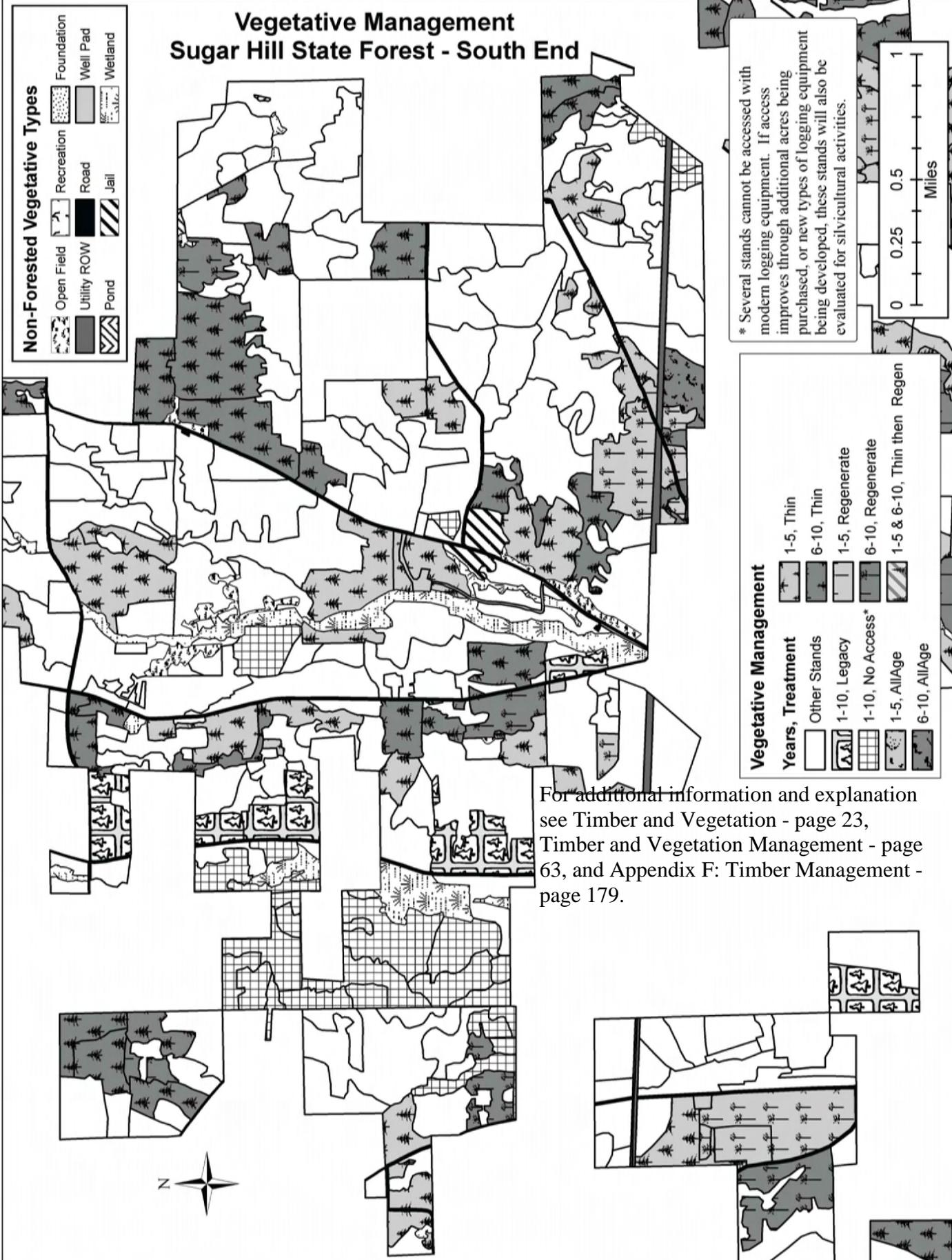
Vegetative Management Sugar Hill State Forest North End



* Several stands cannot be accessed with modern logging equipment. If access improves through additional acres being purchased, or new types of logging equipment being developed, these stands will also be evaluated for silvicultural activities.

For additional information and explanation see Timber and Vegetation - page 23, Timber and Vegetation Management - page 63, and Appendix F: Timber Management page 179.

Vegetative Management Sugar Hill State Forest - South End



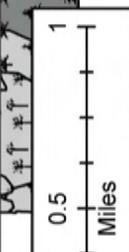
Non-Forested Vegetative Types

- Open Field
- Utility ROW
- Pond
- Recreation
- Road
- Jall
- Foundation
- Well Pad
- Wetland

Vegetative Management

Years, Treatment	Symbol
1-5, Thin	[Pattern]
6-10, Thin	[Pattern]
Other Stands	[Pattern]
1-10, Legacy	[Pattern]
1-10, No Access*	[Pattern]
1-5, AllAge	[Pattern]
6-10, AllAge	[Pattern]
1-5, Regenerate	[Pattern]
6-10, Regenerate	[Pattern]
1-5 & 6-10, Thin then Regen	[Pattern]

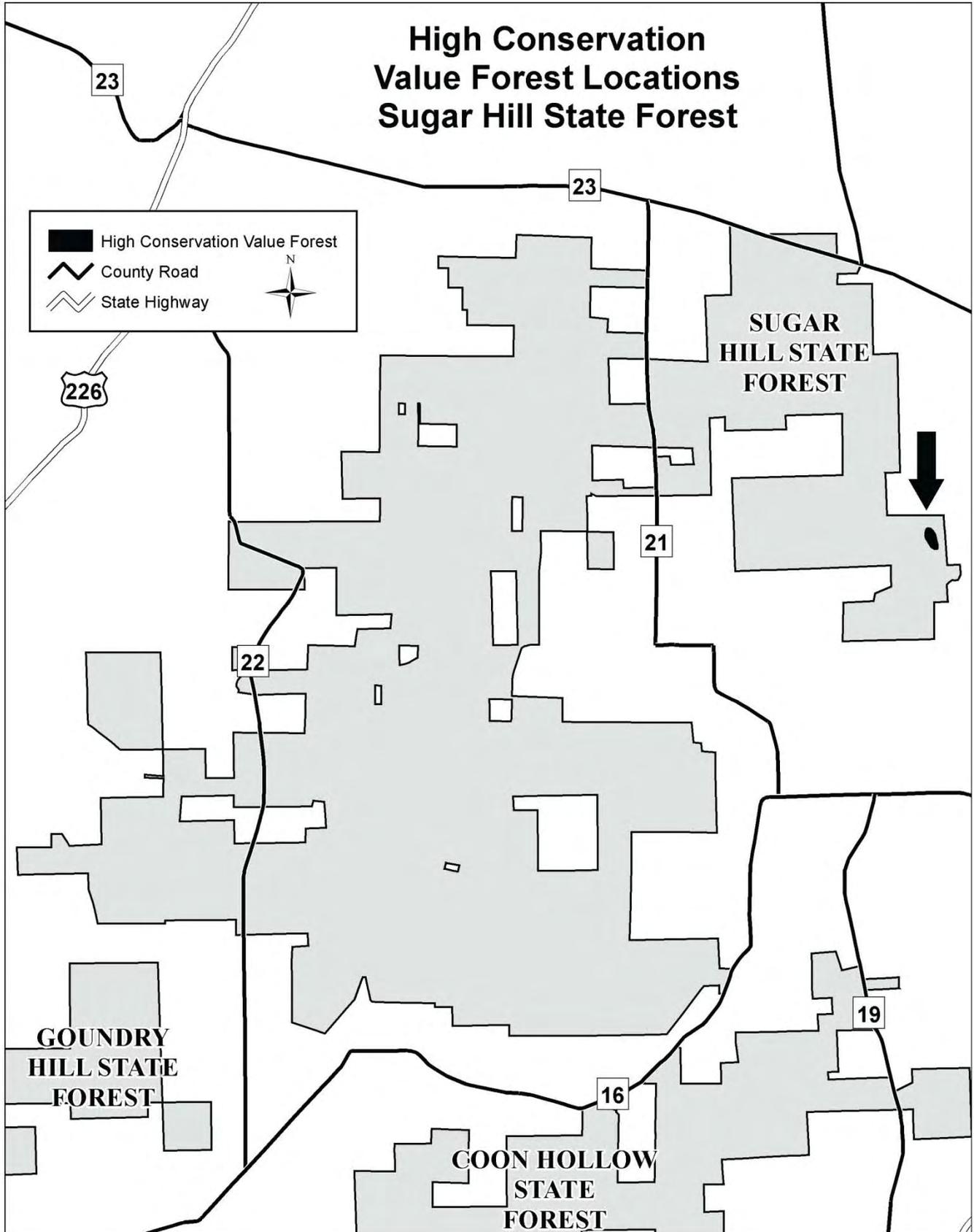
* Several stands cannot be accessed with modern logging equipment. If access improves through additional acres being purchased, or new types of logging equipment being developed, these stands will also be evaluated for silvicultural activities.

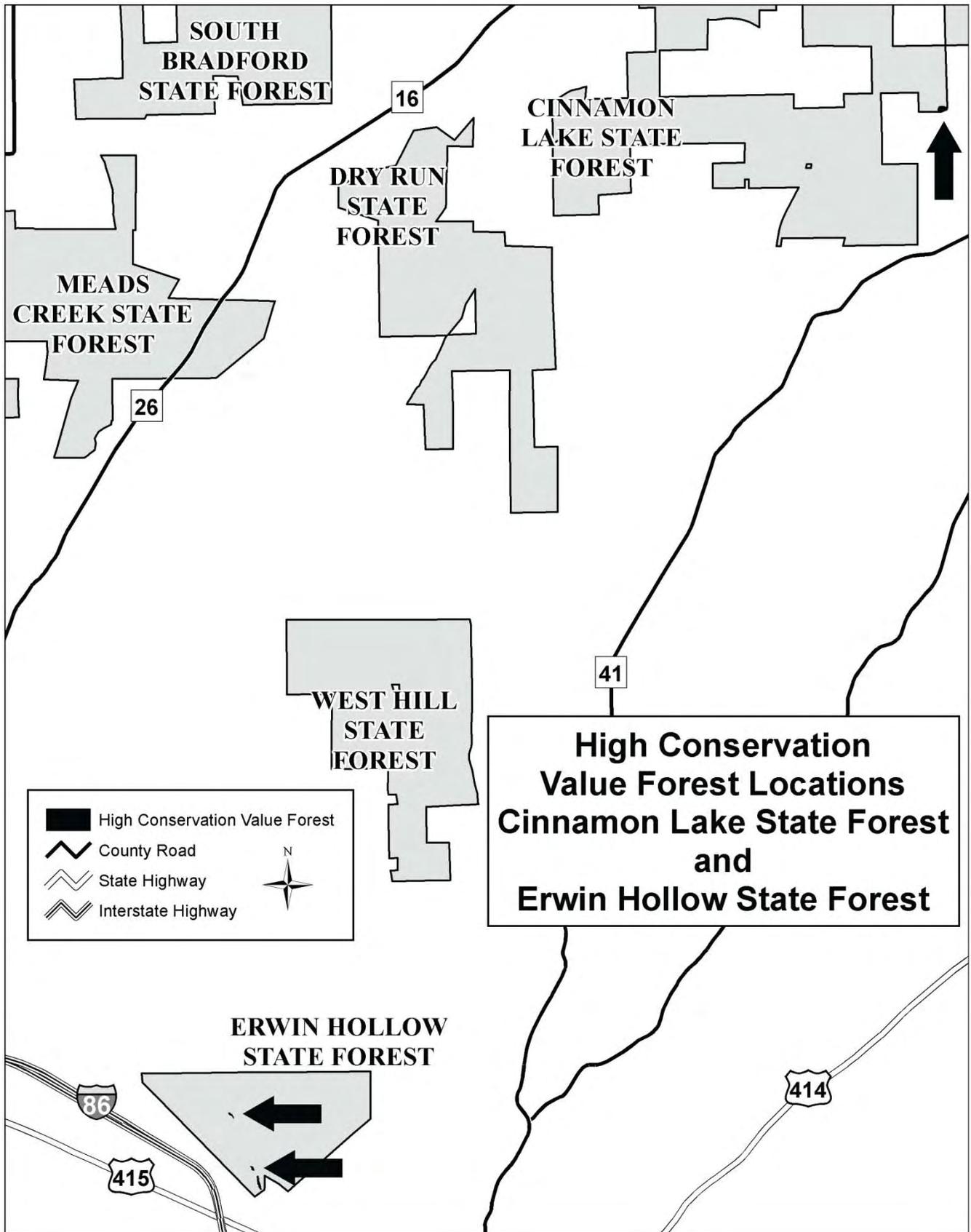


For additional information and explanation see Timber and Vegetation - page 23, Timber and Vegetation Management - page 63, and Appendix F: Timber Management - page 179.

High Conservation Value Forests

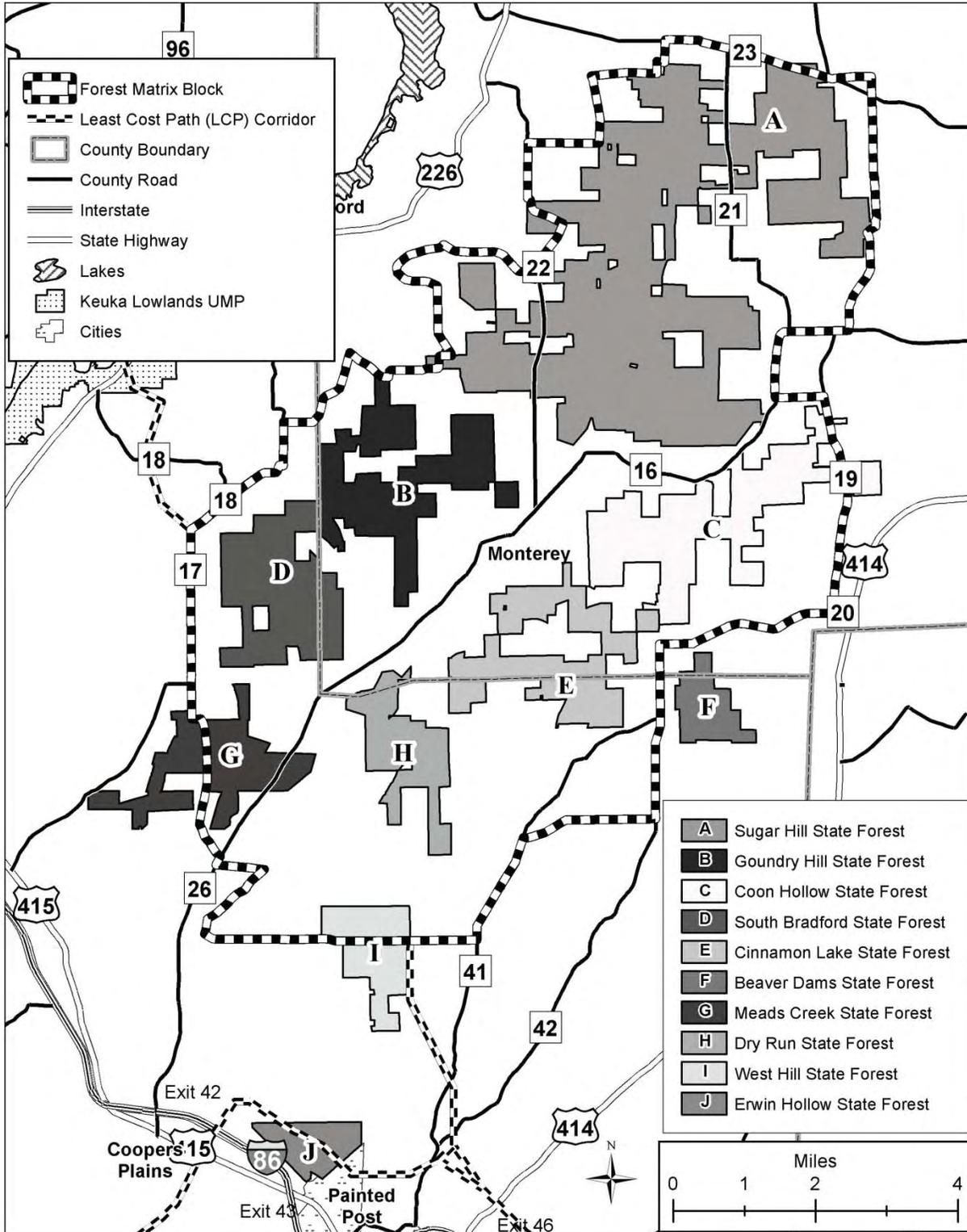
See also High Conservation Value Forest (HCVF) page 26.



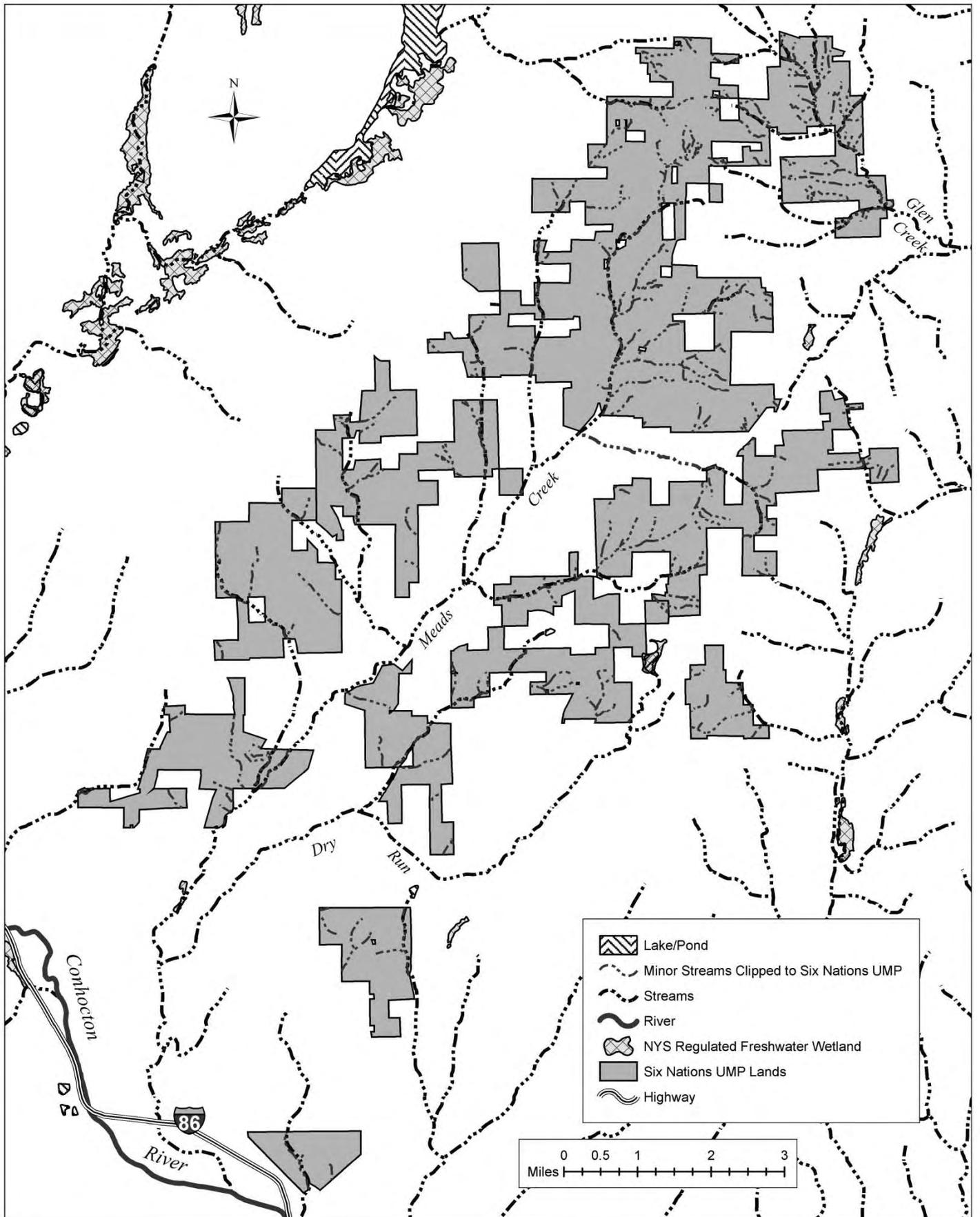


Forest Matrix Block and Least Cost Path Corridors

See also Forest Matrix Blocks and Least Cost Path Corridorson page 27. In addition, this plan does not, and cannot, cover any actions or activities on private land within the Forest Matrix Block but outside the boundaries of the Six Nations Unit. For assistance in managing your own forest, please contact the DEC Bureau of Private Land Services for help. Visit www.dec.ny.gov/lands/4972.html or call the Bath or Avon offices.

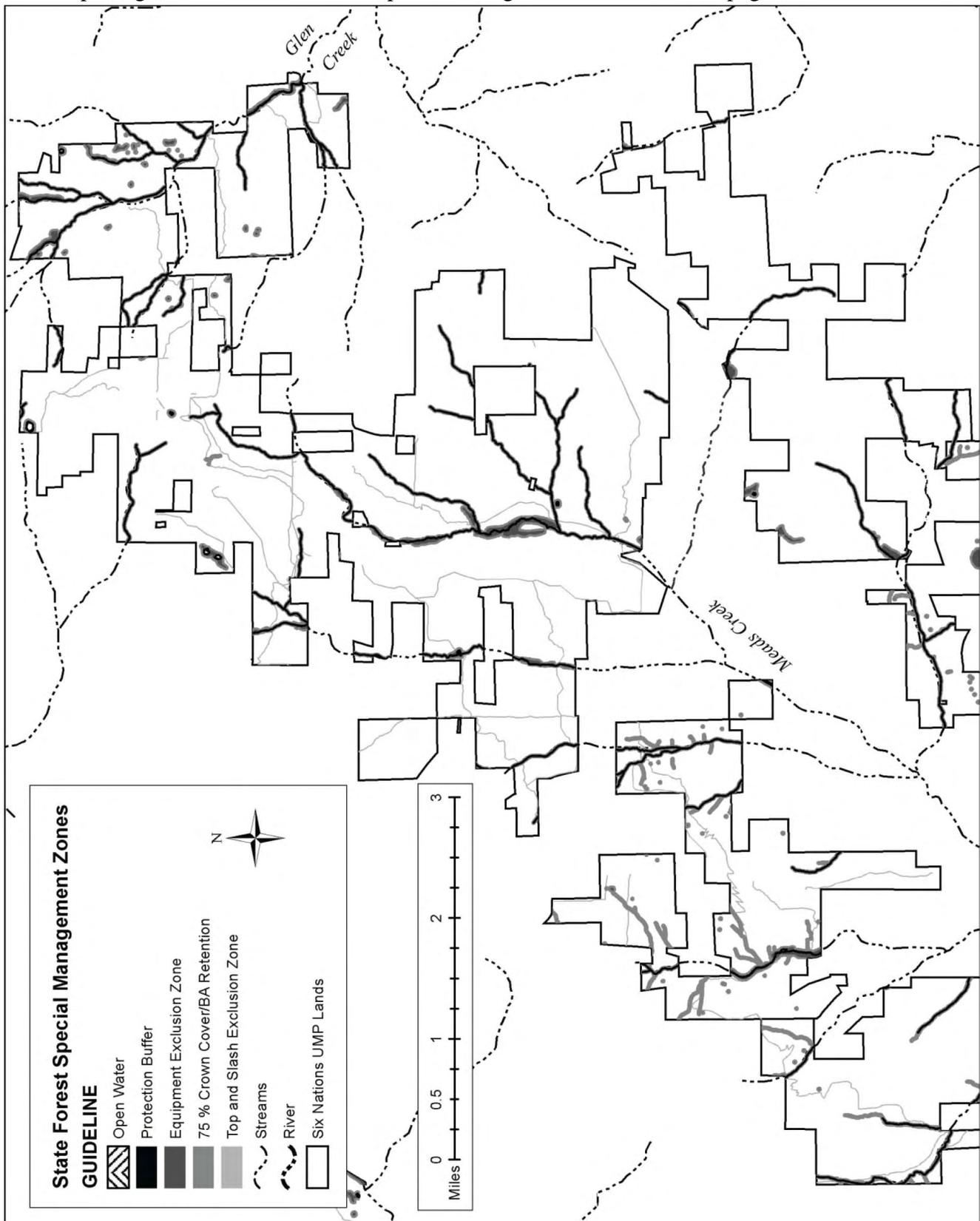


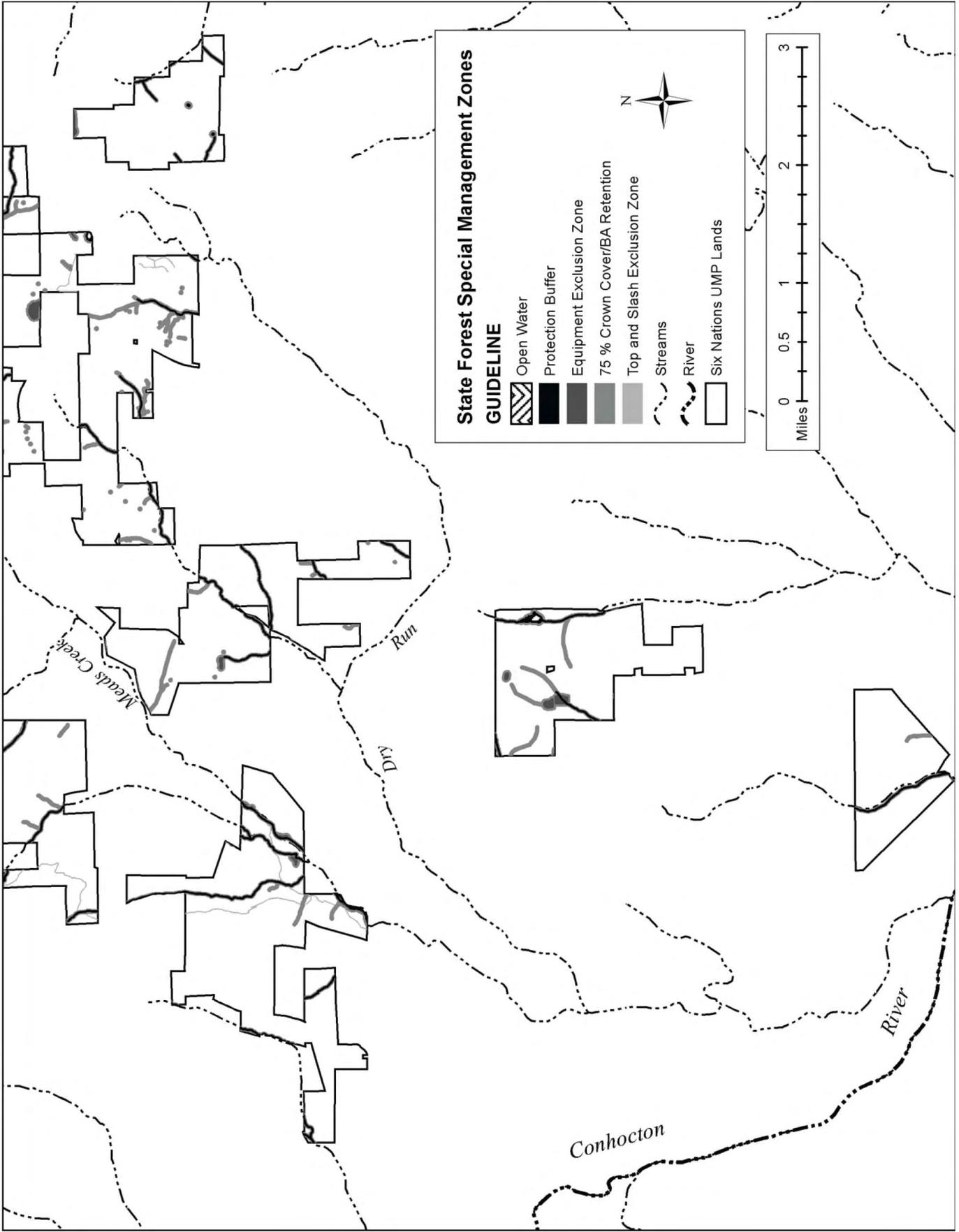
Streams, Ponds and Wetlands



Special Management Zones

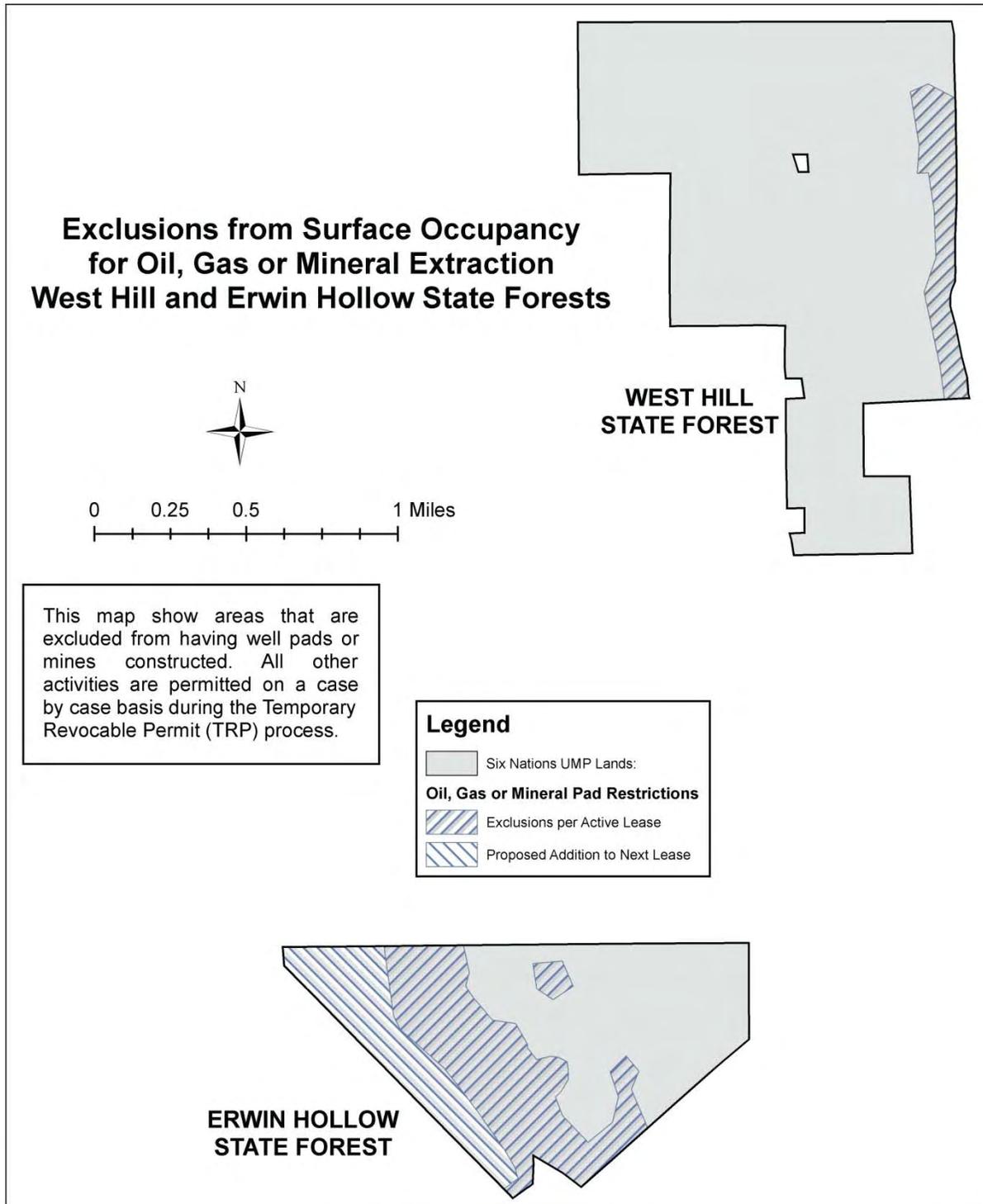
Computer generated location of the Special Management Zones, see also page 32 and 69.





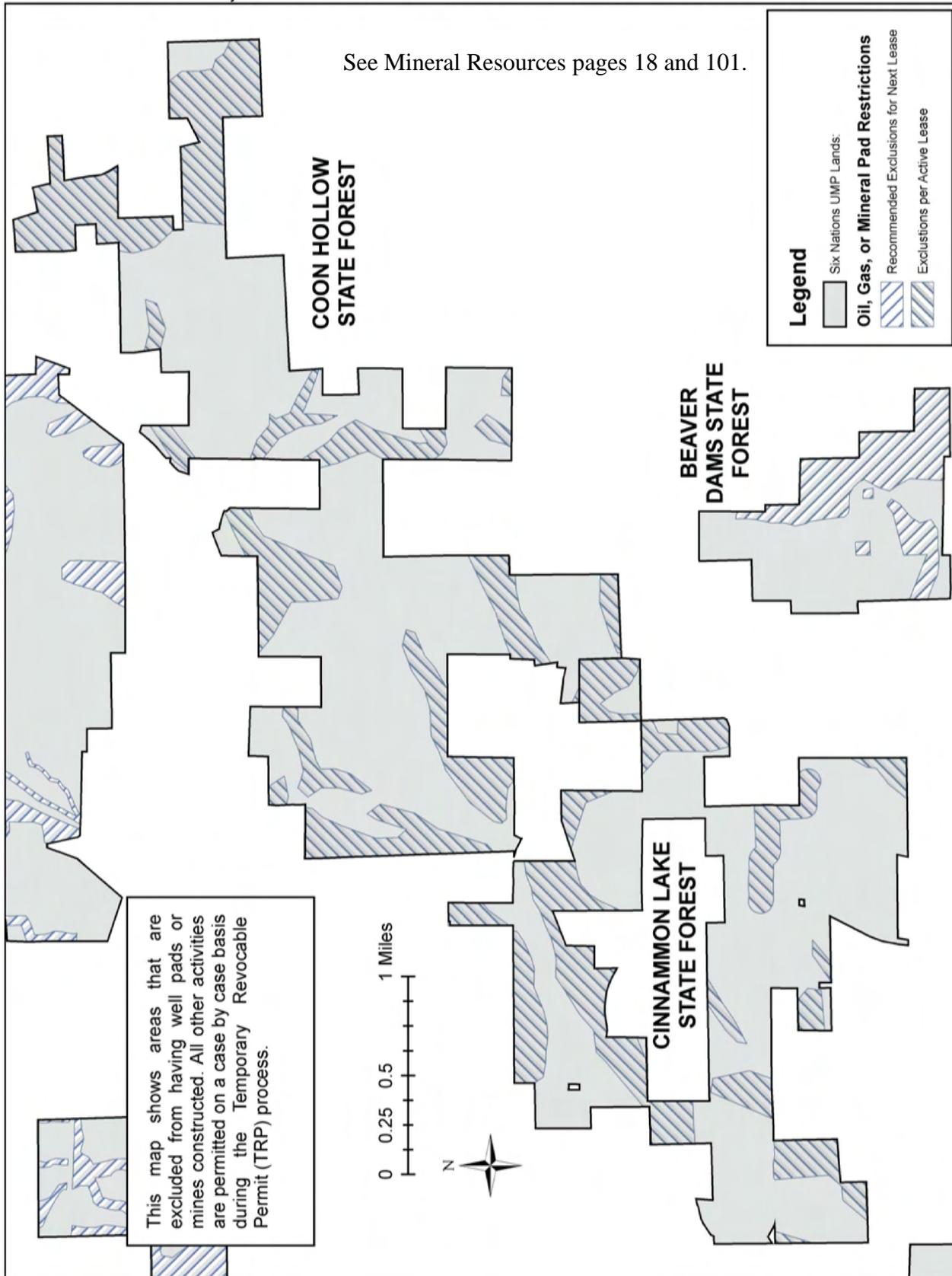
Recommended Exclusions from Surface Occupancy for Oil, Gas, & Mineral Extraction

The following maps show areas that are excluded from having well pads or mines constructed. All other activities are permitted on a case by case basis during the Temporary Revocable Permit (TRP) process. See Mineral Resources sections pages 18 and 101.

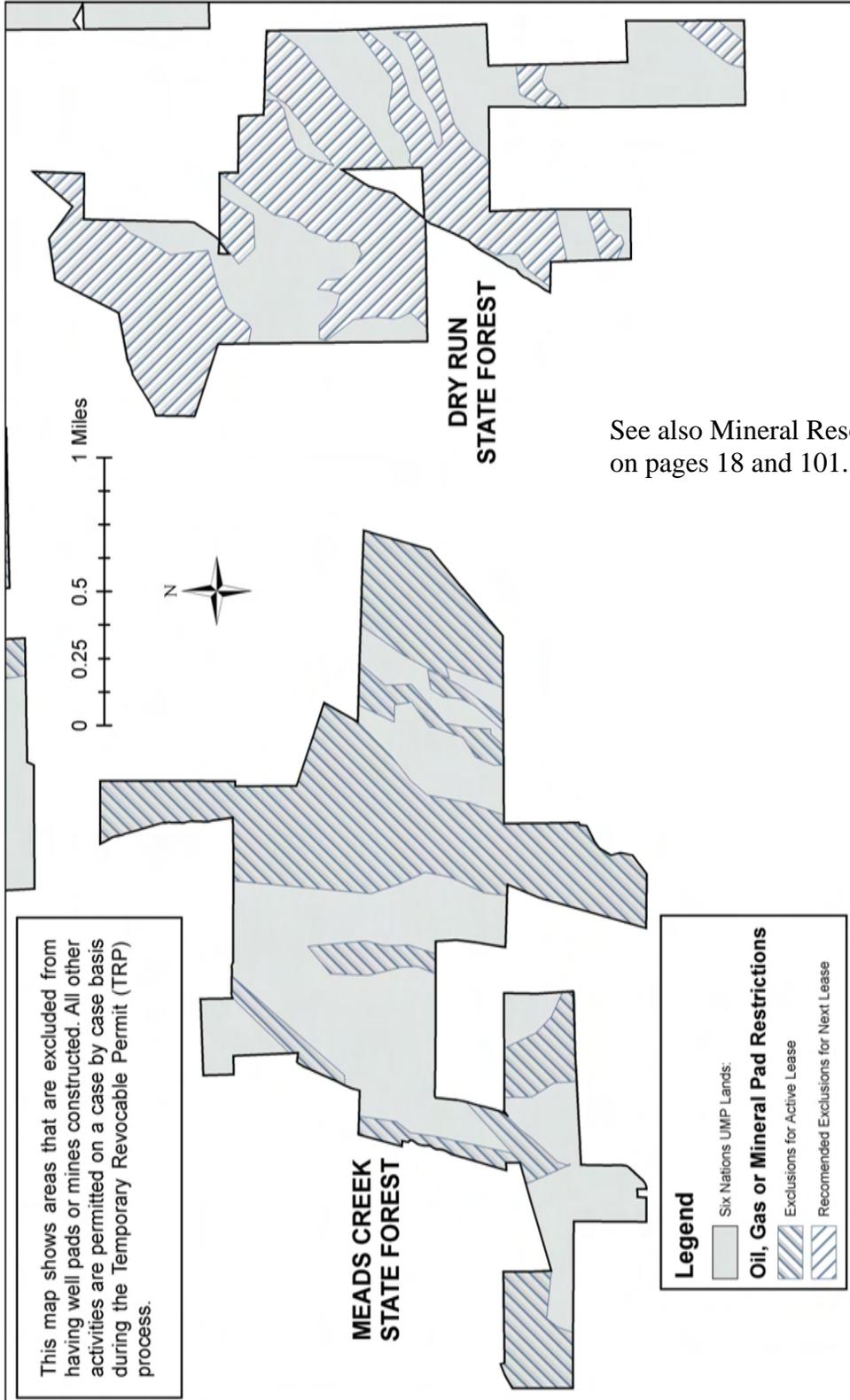


Exclusions from Surface Occupancy for Oil, Gas or Mineral Extraction Coon Hollow, Cinnamon Lake and Beaver Dams State Forests

See Mineral Resources pages 18 and 101.



Exclusions from Surface Occupancy for Oil, Gas or Mineral Extraction Meads Creek and Dry Run State Forests

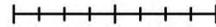


See also Mineral Resources on pages 18 and 101.

Exclusions from Surface Occupancy for Oil, Gas or Mineral Extraction Sugar Hill State Forest

See also Mineral Resources
on pages 18 and 101.

0 0.25 0.5 1 Miles




**SUGAR HILL
STATE FOREST**

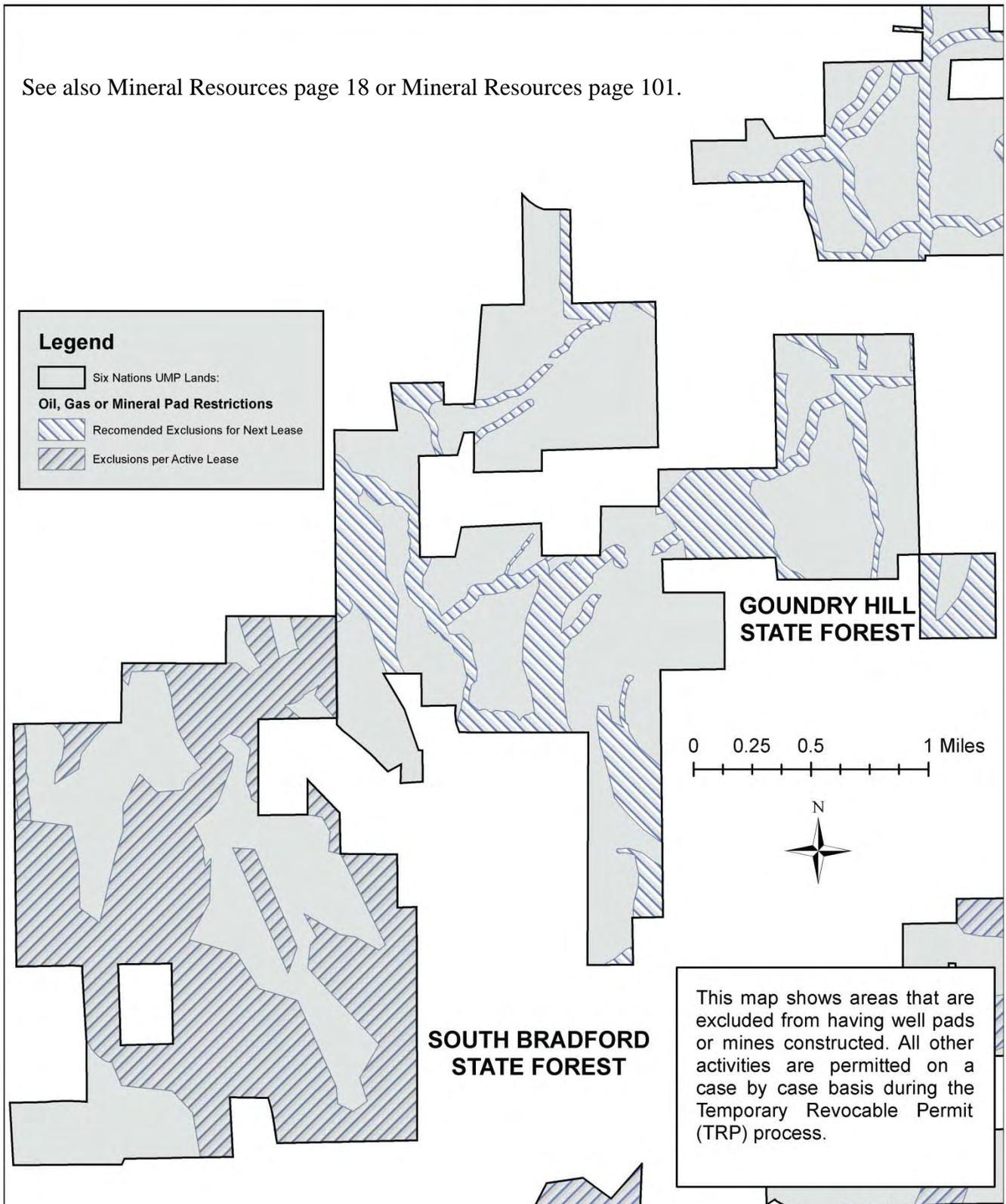
This map shows areas that are excluded from having well pads or mines constructed. All other activities are permitted on a case by case basis during the Temporary Revocable Permit (TRP) process.

Legend

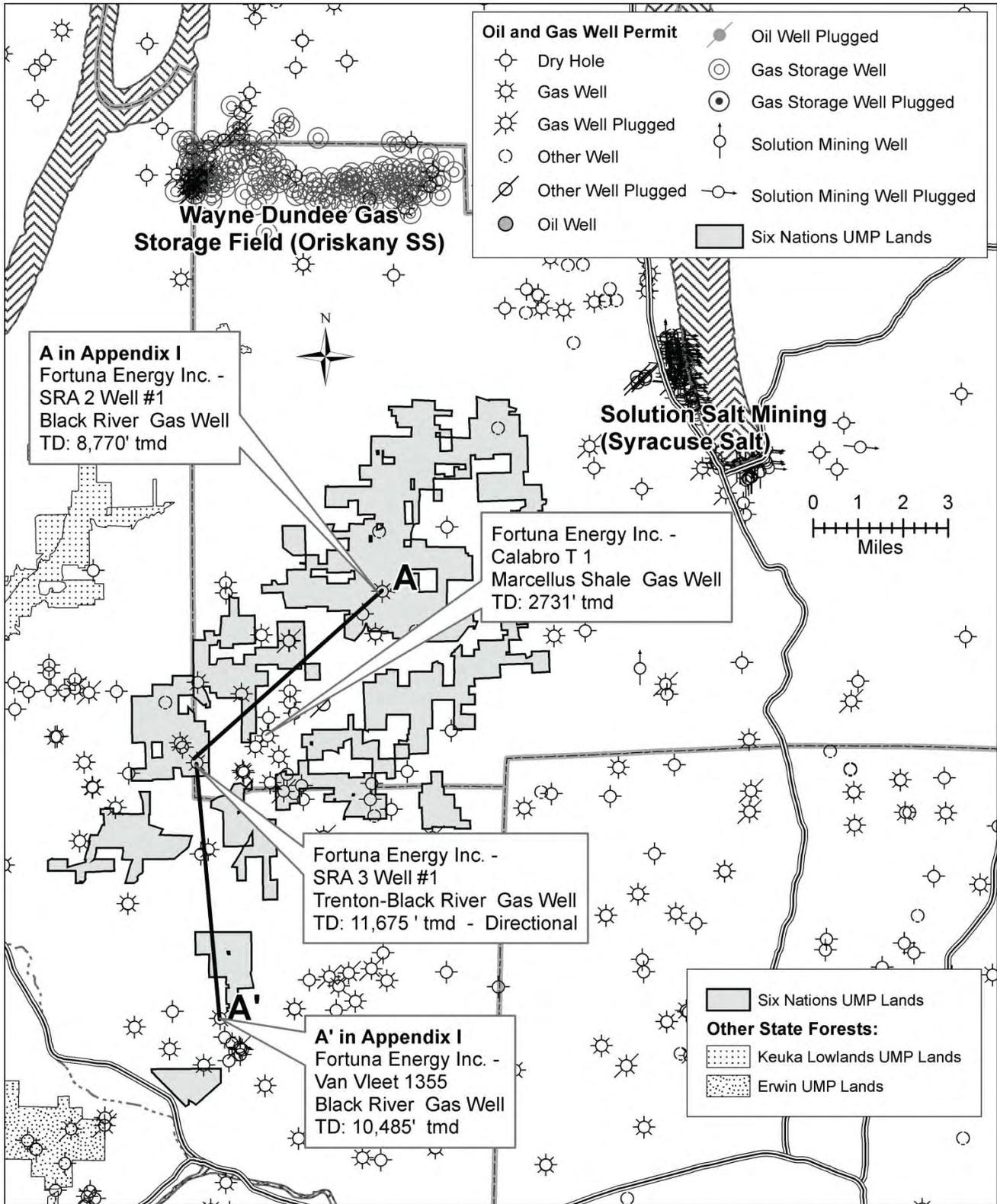
-  Six Nations UMP Lands:
- Oil, Gas or Mineral Pad Restrictions**
-  Recommended Exclusions for Next Lease
-  Exclusions per Active Lease

Exclusions from Surface Occupancy for Oil, Gas or Mineral Extraction Goundry Hill and South Bradford State Forests

See also Mineral Resources page 18 or Mineral Resources page 101.

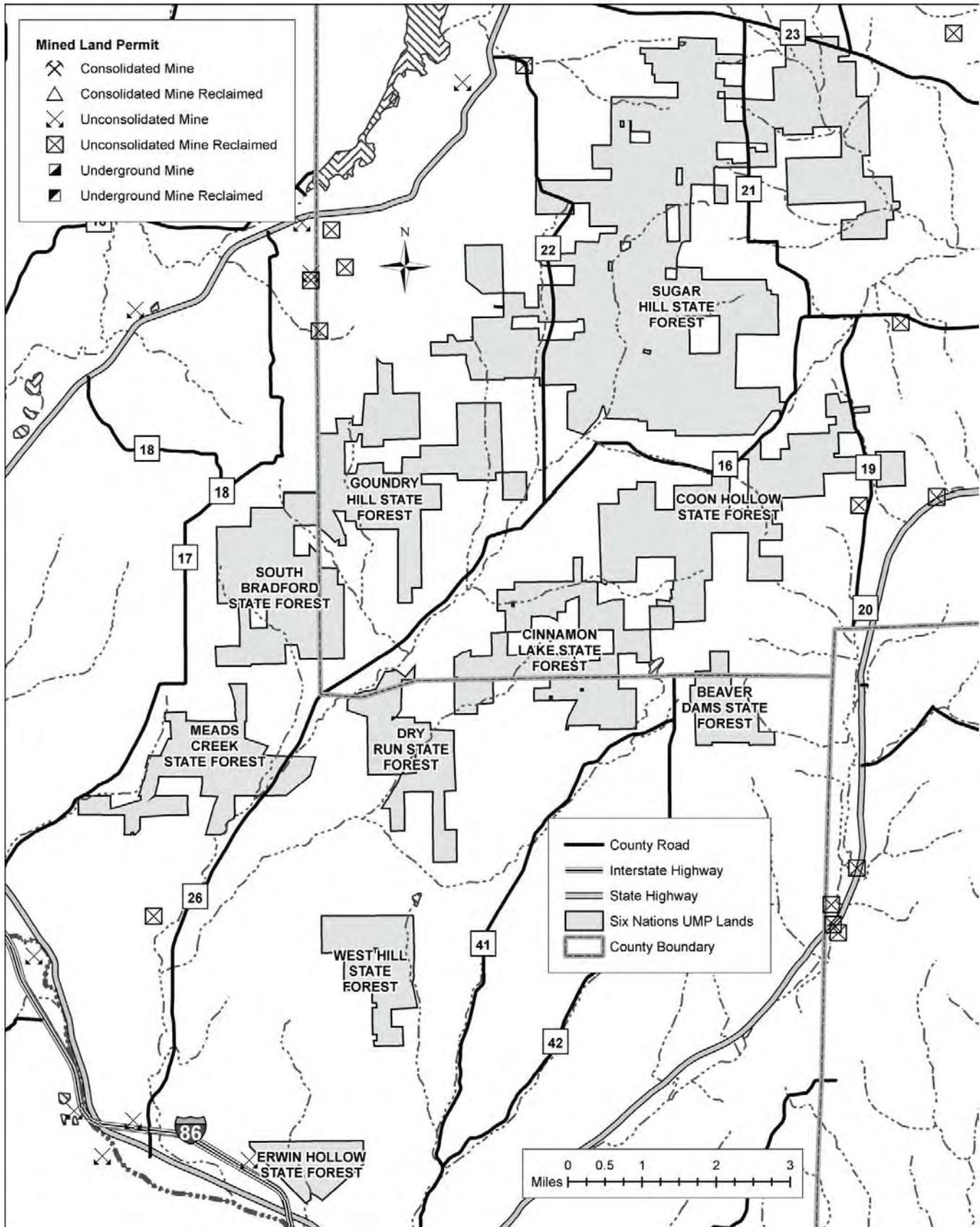


Geology – Oil, Gas, and Solution Mining Map



- Gas extracted from these State Lands through 2009 has exceeded 25 billion cubic feet
- Enough gas to heat 25,000 average New York State households for more than 10 years
- More than 19 million dollars have been paid to the New York State General Fund.

Sand, Gravel and Hard Rock Mine Locations

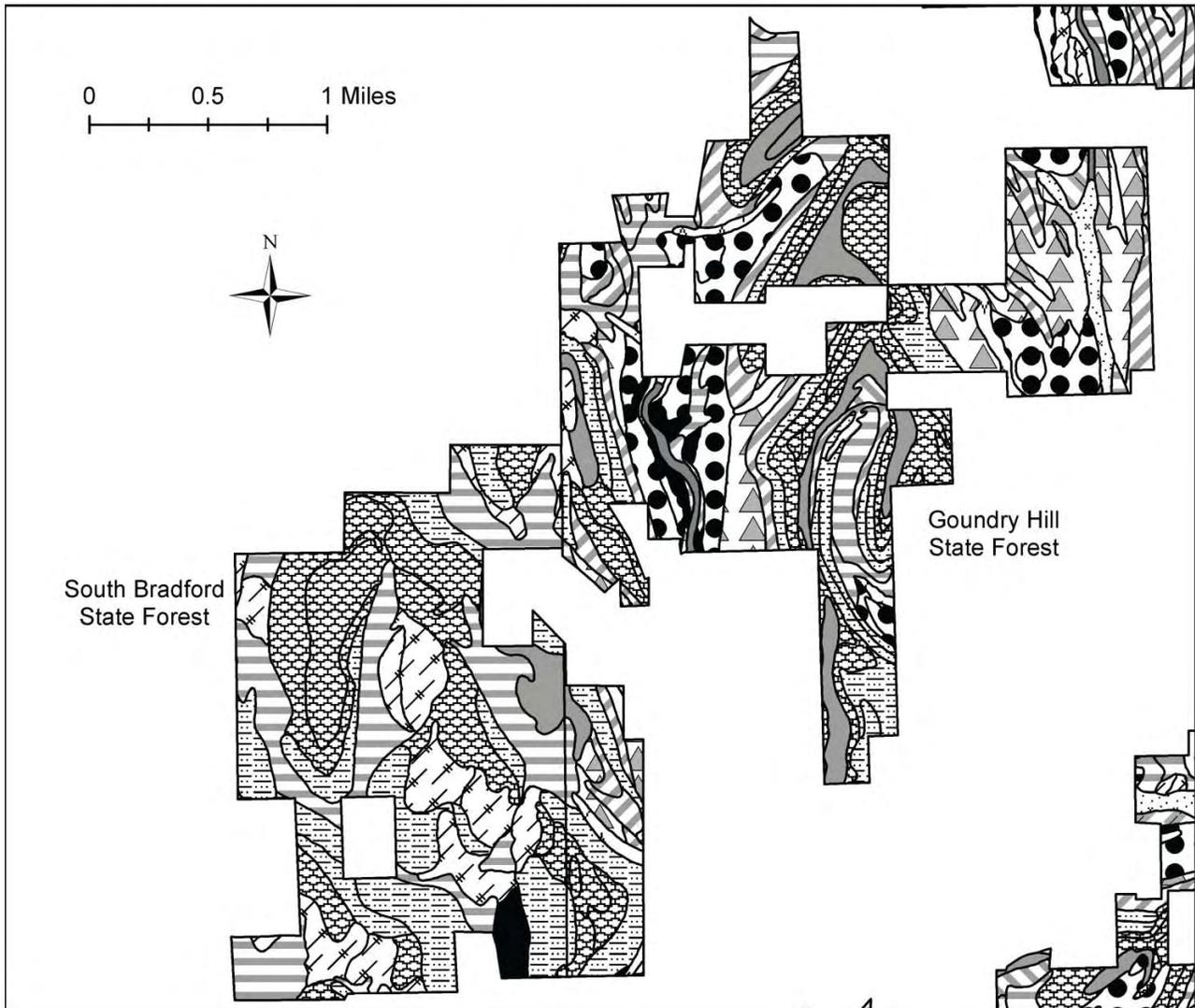


Soil Maps

Key - for all the following soil type maps.

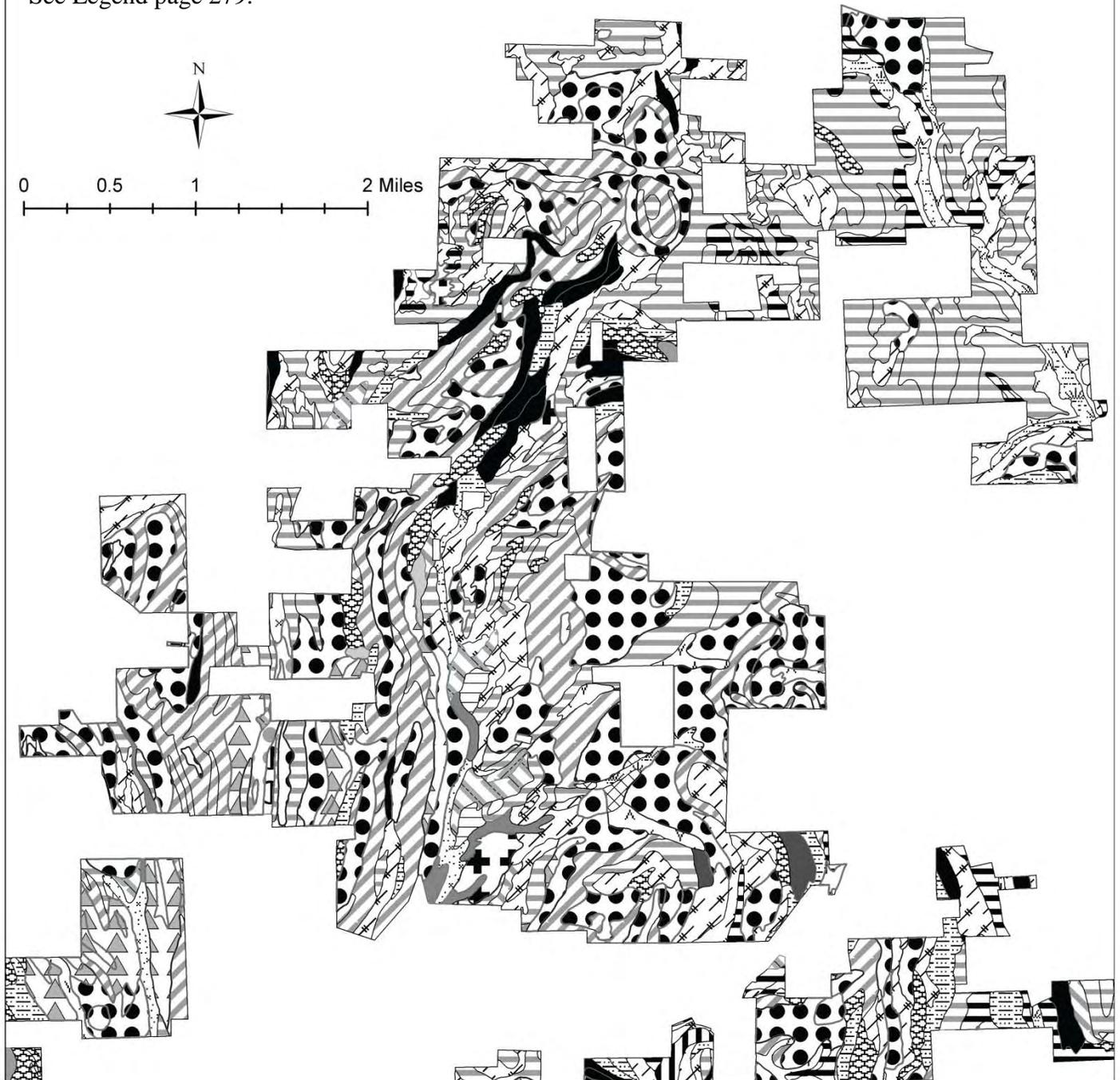
Soil Types	Chenango Channery	Lordstown	Scio
Alden	Chenango Gravel	Lordstown - Arnot	Tioga
Angola	Chenango Silt	Mardin	Tuller
Arnot	Chippewa	Middlebury	Valois
Atkins	Fluvaquents	Ochrepts	Valois - Howard
Aurora	Fremont	Philo	Volusia
Bath	Halsey	Red Hook	Walkill
Burdett	Hornell	Rhinebeck	Water
Castile	Howard	Rock Outcrop - Arnot	Wayland
Chenango	Howard - Madrid	Schuyler	

South Bradford and Goundry Hill State Forests Soil Types

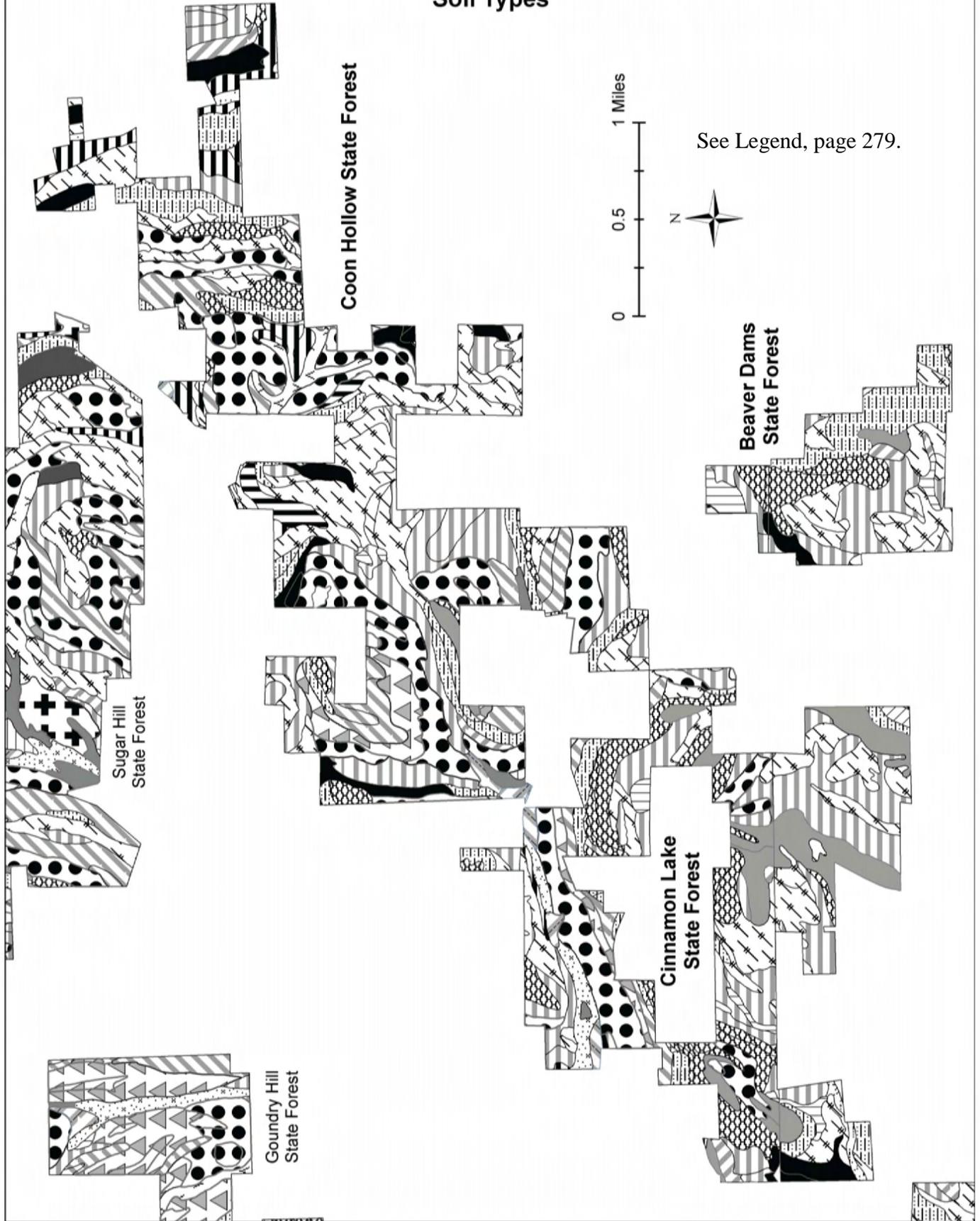


Sugar Hill State Forest Soil Types

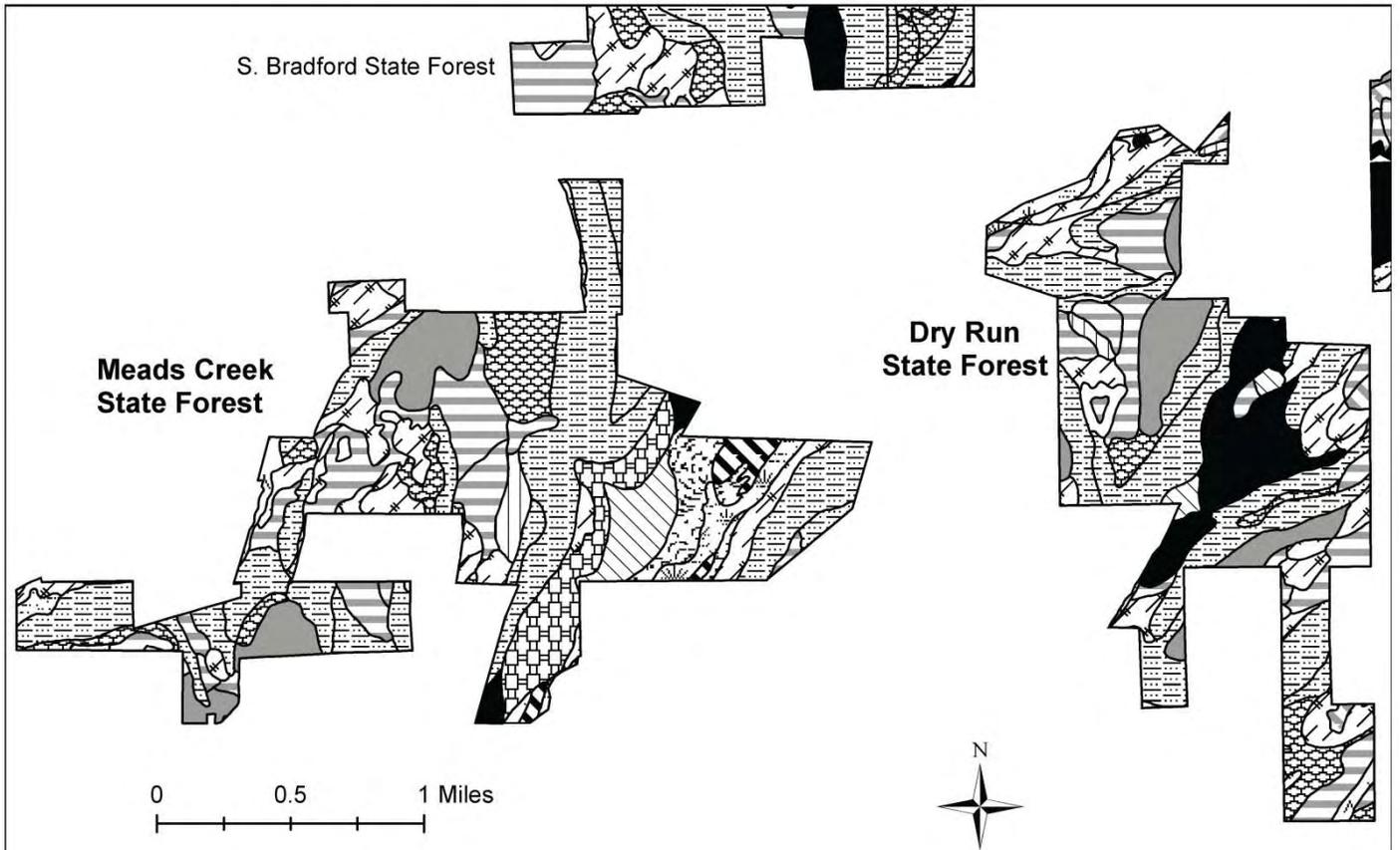
See Legend page 279.



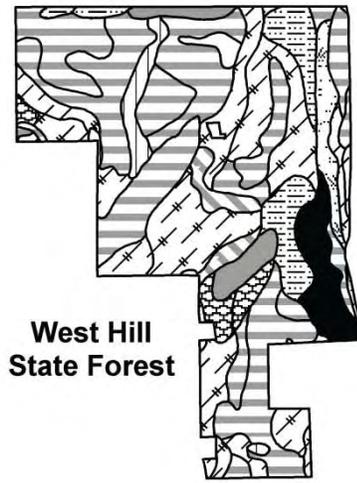
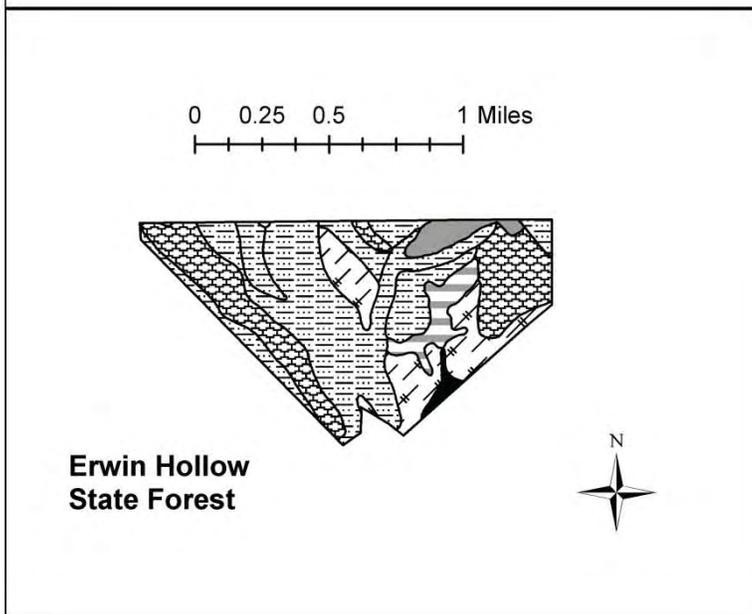
Coon Hollow, Beaver Dams, and Cinnamon Lake State Forests Soil Types



Meads Creek, Dry Run, West Hill and Erwin Hollow State Forests Soil Types



See Legend, page 279.



For additional information contact:

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This Plan will be located at: www.dec.ny.gov/lands/22559.html