

CHAUTAUQUA UNIT MANAGEMENT PLAN

A Management Unit Consisting of Three State Forests
in Northern Chautauqua County

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PREFACE

It is the policy of the Department to manage State lands for multiple benefits to serve the People of New York State. The Chautauqua Management Unit comprised of three *State Reforestation Areas* is the basis for supporting a *multiple-use** goal through implementation of specific objectives and management strategies. This management will be carried out to be *sustainable* and biologically diverse, protect the Unit's *ecosystems* and optimize the many benefits to the public. The multiple-use goal will be accomplished through the applied integration of compatible and sound land management practices.

The plan has been developed to address management activities on this Unit for the next 20-year period with a review and update due in 10 years. Some management recommendations may extend beyond the 10-year period.

Factors such as budget and staffing constraints, changing social values, wood product markets, and forest health problems may necessitate deviation from the scheduled management activities at the judgement of the Regional Forester.

The DEC Region 9 staff members who serve on the Chautauqua Unit Management Plan are assigned primarily to the Falconer and Allegany Offices. Following is a listing of the DEC Offices which may be contacted regarding your questions and/or interest within the Region:

- i Regional Headquarters
270 Michigan Avenue
Buffalo, NY 14203
716-851-7000

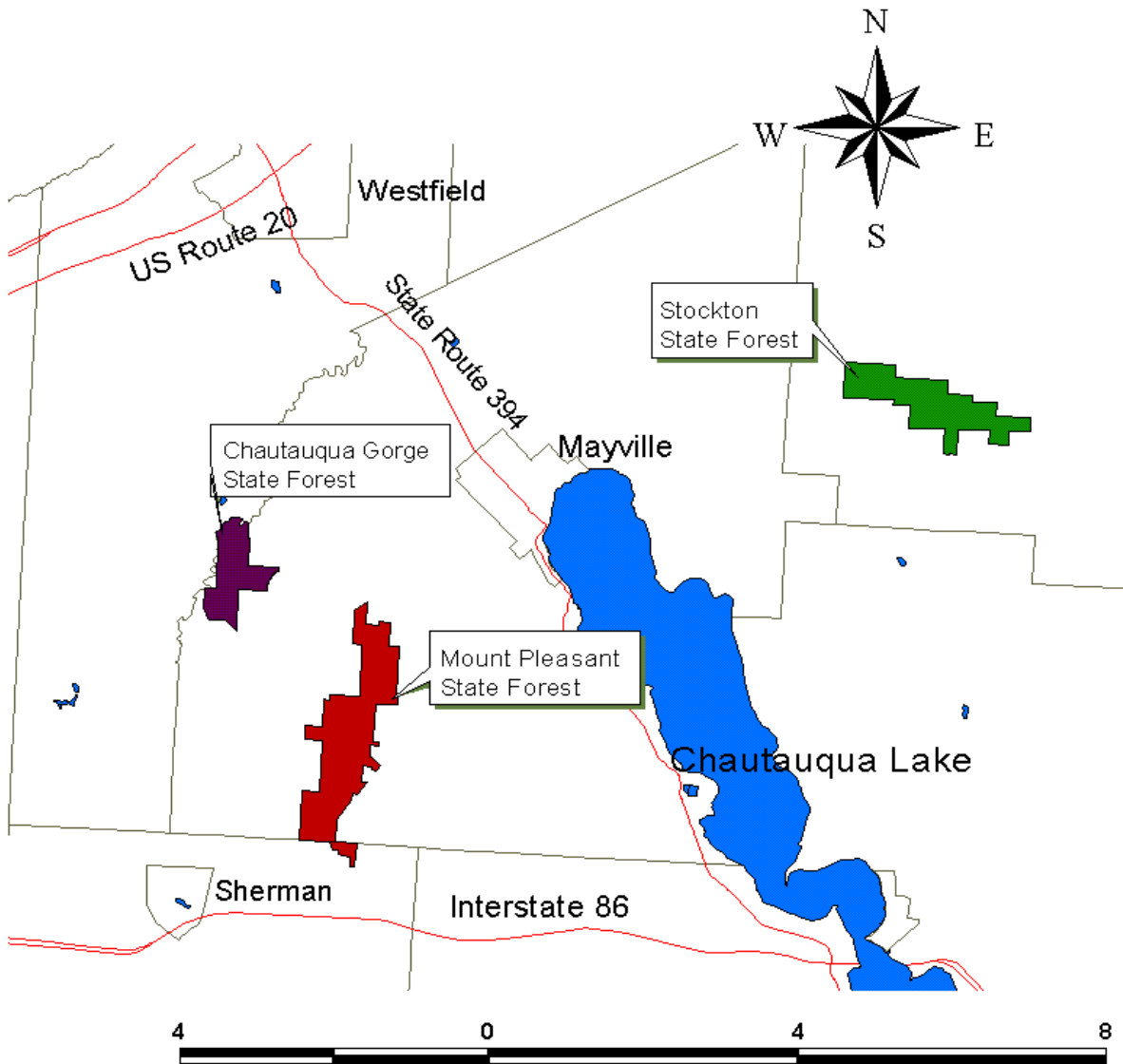
- c 215 South Work Street
Falconer, NY 14733
716-665-6111

- c 182 East Union Street, Suite 3
Allegany, NY 14706-1328
716-372-0645

- c 5425 County Route 48
Belmont, NY 14813
716-268-5392

****Words in bold italic throughout the plan are defined in the glossary.***

Chautauqua Unit Location



INTRODUCTION

HISTORY OF NEW YORK STATE FORESTS

The *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 percent of woodlands were cleared for cultivation and pasture.

Early farming efforts met with limited success. As the less fertile soil proved unproductive, farms were abandoned and settlement was attempted elsewhere. The stage was set for *succession* and new forests of young saplings reoccupied the ground once cleared.

The State Reforestation Law of 1929 and the Hewitt Amendment of 1931 set forth the legislation that authorized the Conservation Department to acquire land by gift or purchase for reforestation areas. 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 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 lands. 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 very little was accomplished on the State lands. Plans for further planting, construction, facility maintenance and similar tasks had to be curtailed. However,

through postwar funding, conservation projects again received needed attention.

The Park and Recreation Land Acquisition Bond Act of 1960 and the Environmental Quality Bond Acts of 1972 and 1986 contained provisions for the acquisition of State 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.

Today there are nearly 700,000 acres of State Forest land throughout the State. The use of these lands for a wide variety of purposes such as timber production, hiking, skiing, fishing, trapping and hunting is of tremendous importance economically and to the health and well-being of the people of the State.

LOCAL HISTORY

Chautauqua County was known to be inhabited by the Erie Indians prior to being wiped out in a war with the Iroquois Indians in 1656. The area was then utilized as hunting grounds by the Senecas. Archeological maps indicate many historical sites along Lake Erie and Chautauqua Lake, usually in proximity to modern-day villages.

Chautauqua Gorge features in one of many stories about how the name Chautauqua came to be. The following story has been retold many times and is credited to various sources: one a Cayuga chief and another being a Seneca tradition. It revolves around the Portage Trail and a fish known to us as the muskellunge.

“Supposedly a party of Senecas returning from Ohio one spring made their way onto Chautauqua Lake via the outlet or Chadakoin River, as it is now known. As they were paddling through the lake, they caught a strange fish that they were not familiar with. They threw it on the bottom of their canoe and left it there. At the head of the lake they portaged over to Chautauqua Creek which was

swollen with spring freshets.

They went down the creek to Lake Erie where they discovered the strange fish was still alive. The fish was thrown into the lake and it swam away. After a period of time that type of fish became common in Lake Erie where they had never caught it before. They assumed that all these fish had come from the one they carried there from Chautauqua Lake. This they gave the name of, "Ga-ja-dah'-gwah," which came from two Seneca words Ga-jah, meaning fish, and Ga-dah'-gwah, meaning taken out. Over time the word became contracted into Jah-dah-gwah with the prefix Ga being dropped."

As the Senecas were called "the keepers of the western door of the longhouse" of the Iroquois, so Chautauqua County is keeper of the western gateway of New York State. It lay across the route of the Indians going east or west and well-marked Indian paths have been recorded on early maps. Many of the settlers bound for Ohio went this way - some of them decided to go no further. The Erie Railroad built its first terminus here. The route of the New York Thruway (Interstate 90) follows the Lake Erie shore.

Settlers came by two main routes. Some came by land from the Mohawk Valley westward. Some came by water up the Susquehanna River and the Sinnemahoning, over the 23-mile portage to Port Allegany and the Allegany River; then they floated down that river to Warren and paddled up the Conewango and its tributaries to their destination in Chautauqua County.

The Portage Trail which connects with Chautauqua Gorge was a well known passage between Lake Erie and Chautauqua Lake. This trail was well established prior to the settlers coming to the area in the 1600s and 1700s. Once on Chautauqua Lake one can travel the connecting waterways all the way to New Orleans and the Gulf of Mexico.

The Town of Chautauqua was formed from the Town of Batavia, April 11, 1804, and embraced all the territory now within the limits of Chautauqua County, excepting the 10th range of Townships, which was added in the formation of the County.

The County of Chautauqua was formed in 1808 and in the years following various towns were formed from the Town of Chautauqua. The Town of Stockton was formed February 9, 1821 and was named for Richard Stockton, a signer of the Declaration of Independence. These are interior towns with the surface being elevated and rolling, hilly upland soils of clay loam. An 1870 accounting shows there to be at least five or six sawmills, a lath and shingle mill, and two manufactory of churns and butter tubs and firkins each located adjacent to one of the streams.

Rail transportation played an important role in the settlement of Chautauqua County and the counties of the "Southern Tier." These "sequestered counties" as they had long been called, were at length favored with a "road to market." The occasion for these statements was the completion of the New York & Erie Railroad. At 445½ miles long it was the longest railroad in the world at the time built under one charter. It stretched from the lower Hudson Valley (New York City) to Dunkirk on Lake Erie. According to one historian, the completion of the New York & Erie Railroad to Dunkirk was perhaps the most important single event in the history of Chautauqua County. Chautauqua County can take credit for the railroad as the first positive step and meeting took place in Jones' Tavern of Jamestown in September 1831. The inaugural trip was May 14, 1851.

The Buffalo & Erie Railroad along the Lake Erie shoreline was completed in 1852 and was later consolidated into the Lake Shore & Michigan Southern Railroad with connections into Chicago. The Atlantic & Great Western Railroad followed in 1860 passing through Jamestown and is regarded as ending the pioneer period in Chautauqua County. Other railroads completed in the county were the Buffalo, Corry & Pittsburgh (Cross Cut) Railroad - 1867; the Dunkirk, Allegany Valley & Pittsburgh Railroad - 1871; and the Buffalo & Jamestown Railroad - 1872. At this time Chautauqua County had more miles of railroad than any other county in the State.

The railroad was important, especially to Jamestown, for three reasons: the raw materials for

factories were no longer just local products but were shipped in; factories were no longer run by water power but by electricity from coal which was shipped in; and the products were no longer floated to market down the Allegheny River but were shipped by rail.

In the early days Chautauqua County was covered with the finest timber. A few places had been cleared by the Indians for planting, but most of the land was virgin forest. As the settlers were interested in farming, the forest was an obstacle to be removed. The softwood trees were sawed into lumber and taken to market floating it in rafts down the Allegheny River. In Chautauqua County log rafts were the exception and lumber rafts the rule, with the logs being sawn into boards which were formed into a raft. On top of the raft were usually great stacks of shingles, cords of hemlock bark and shanties for the crew. This lumber trade continued until the forests were nearly gone, about 1870. The hardwood trees were usually piled and burned as they would not float. It seems shocking to us, with all our ideas of conservation, that the hardwood trees were burned. The ashes from these trees yielded valuable chemicals which were sold for cash to pay taxes. Among these were potash and saleratus ("black salts").

Furniture manufacturing was at one time a major industry in Jamestown and various other county locations. Historians report the first furniture manufacturing concern began in 1811. The need to import hardwood lumber became necessary later in the 1800s as the surrounding hillsides were cut over and railroads provided the needed transportation. Jamestown had more workers in the wood furniture industry in the 1870s than any other industry. In 1900 there were 15 factories employing from 10 to 225 people doing much of the hand work. In 1911 Jamestown was second only to Grand Rapids in wood furniture production. During the depression the area became a specialist in hardwood furniture with an abundant supply and the development of practices and techniques that were refined and continued.

Chautauqua Creek, which in part starts on both Mount Pleasant State Forest (Chautauqua 3) and

passes along and through Chautauqua Gorge State Forest (Chautauqua 5), is the water supply source for the Village of Westfield. The water works system had its beginnings in 1884 and was put into use in 1890. In 1915 the village was struck by typhoid fever caused by a farmer five miles upstream and this prompted them to install a modern filtration system with chlorination. Runoff from highways, farms, outhouses and trains were prone to influence water quality in the early days; fortunately, most were minor problems.

In 1948 the Westfield Rotary Club proposed that the Chautauqua Creek Gorge be developed as a State Park. Such would consist of a highway around the rim of the gorge with access into the bottom provided. Several property owners were willing to donate property or grant privileges for crossing. The Allegheny State Park Commission would have been the administrator and showed interest in the proposal. Engineers visited the gorge area, reviewing the recreational potential as good, but the cost of development was considered high. Interest in and support for the park project continued through the 1950s. In 1960 the State Park Commission determined that the area was not suited for development as a State Park and turned their attention to making Long Point a State Park on Chautauqua Lake.

Nearby Chautauqua Management Unit lies the Chautauqua Institution which president Theodore Roosevelt called "the most American thing in America." It certainly is the most famous and influential thing in Chautauqua County, dating from 1874. It started as a 12-day training program for Sunday School teachers in a tent village with light for the evening meetings furnished by burning pine knots. Chautauqua Institution can be described as a nine-week, summer center for the arts, religion, education and recreation, and a festival for the mind and body in a Victorian village adjacent to Chautauqua Lake. It is Chautauqua's extraordinary mix that draws over 142,000 people each summer to their 750-acre educational

center. By 1880 the institute had established itself as a national forum for open discussion of public issues, international relations, literature and science. Approximately 100 lecturers appear during the season. 1999 was a season long celebration marking their anniversary of 125 years.

INFORMATION ON THE UNIT

GEOGRAPHICAL AND GEOLOGICAL INFORMATION

The Chautauqua Management Unit is located in the Towns of Chautauqua, Sherman, Westfield and Stockton in Chautauqua County. The lands are situated north and south of State Route 430, west of the Village of Mayville and north of County Route 54, south of County Route 58, west of

County Route 380, southwest of the Hamlet of Stockton.

The unit consists of three State Forests:

Chautauqua #3 Mount Pleasant State Forest	1,522 acres
Chautauqua #5 Chautauqua Gorge State Forest	538 acres
Chautauqua #6 Stockton	

State Forest 977 acres
Total 3,037 acres

The unit lies in the Allegheny Plateau physiographic province. Elevations range from 1,200 feet in Chautauqua Gorge to 1,775 feet on the rolling uplands. Climate is dominated by cold

snowy winters with an average January temperature of 26 and 200 plus inches of snow to cool, wet summers with an average July temperature of 71 and up to 20 inches of rainfall.

Approximately 12,000 years ago the Wisconsin Glacier cut and etched the landscape. The plateau is characterized by steep valley walls along streams, wide ridge-tops and flat-topped hills. The bedrock is composed of shale, siltstone and sandstone formed in the Devonian period.

Two soil associations are found on the Unit. The Busti-Chautauqua-Chadakoin soils are very deep, somewhat poorly drained to well drained and medium-textured soils of the uplands which make up about 34 percent of the county. The Erie-Lanford soils are very deep, somewhat poorly drained to moderately well drained, medium textured with a fragipan and a medium content of lime on the uplands. These soils were formed in loamy glacial till derived from siltstone, sandstone and shale, with some limestone in the later.

VEGETATION TYPES AND STAGES WITHIN THE UNIT

LAND CLASSIFICATION	ACRES BY DBH				
	ACRES	1-5" DBH	6-11" DBH	12"+ DBH	% TOTAL
Northern Hardwoods	1,164	163	417	584	38
Northern Hardwoods - Hemlock	348	0	174	174	12
Conifer Plantations	1,208	51	699	458	40
Spruce - Northern Hardwood	49	-	49	-	2
Wetlands	99	0	0	-	3
Ponds	0	-	-	-	0
Open/Brush	66	-	-	-	2
Other, i.e., Gas Wells & Access Roads	103	-	-	-	3
TOTALS	3,037	214	1,339	1,216	100

explained as follows:

Northern hardwood stands are indigenous species consisting of **hardwood** trees such as sugar and red maple, white ash, black cherry, American beech, Aspen and yellow birch.

The above data was compiled from forest inventory records. Land classification categories are

Conifer plantations contain trees established by human or mechanical means and are composed of *softwood* species such as red pine, white pine, Scotch pine, Norway spruce, white spruce and larch.

Spruce-Northern Hardwood stands contain planted spruce species and naturally-seeded spruce and hardwood trees.

Wetlands range from open wet meadows to wooded swamps, including classified wetlands.

Open/Brush are early successional communities commonly containing shrubs, apple and thorn apple trees with openings containing grasses, brambles and Forbess.

Other are 31 acres of created openings for gas well pads with an associated 6.3 miles of limited access roads on 42 acres and 4.4 miles of forest access roads on 30 acres.

WILDLIFE

The Chautauqua Unit lies within the Cattaraugus Highlands ecological subzone (Dickenson 1979). Physically, the area is characterized by flat-topped uplands with deeply dissected ravines. Primary land uses adjacent to the Unit include active and abandoned dairy farms and timber management. Northern hardwoods, hemlock-northern hardwoods and shrubs are the dominant plant communities within this ecological subzone.

The Chautauqua Unit supports a variety of birds, mammals, reptiles and amphibians. No formal studies have been conducted on the Management Unit; however, species likely to inhabit the area are listed in the Appendix (Chambers 1983). A heron rookery has been identified as existing approximately 1.2 miles south of Stockton State Forest near Waterman Road.

The primary game species pursued on the Unit are white-tailed deer, wild turkey, grey squirrel and ruffed grouse. Some waterfowl hunting occurs on the man-made marshes and beaver impoundments. Fur bearing species trapped on the Unit include red

and grey fox, beaver, mink, skunk, muskrat, raccoon and coyote. The tables listed in the Appendix list recorded harvest numbers for a few wildlife species harvested in three Townships of the Unit.

WETLANDS AND WATER RESOURCES

In New York State wetlands qualify as legally protected if they meet the criteria found in section 24-0107 of the Freshwater Wetlands Act for *wetlands classes* and have at least 12.4 acres. The Chautauqua Unit contains one Class I wetland and part of one Class II wetland. There are seven other stands of various acreage which do not qualify for protection inclusion.

The Mount Pleasant Marshes are both within a Class I wetland (SH-21). They were built in the 1950s with Federal Pittman-Robertson funding. This wetland covers 22 acres of which two acres are on private property and the rest is on Mount Pleasant State Forest. Vegetative cover types are: open water, wet meadow, emergent marsh, shrub swamp and submergent/floating vegetation.

Rotary Marsh is within a Class II wetland (HF-1) and was built in 1955 with Federal Pittman-Robertson funding. The wetland covers 27 acres, approximately one-half of which is on private property and the rest being on Stockton State Forest. Vegetative cover types are: open water, submergent/floating vegetation and shrub swamp.

There are a number of classified and unclassified streams on the Unit. Tributaries of Dewittville Creek are occupied by warm water fish species and conditions are insufficient to support trout. Tributaries to Bear Lake Outlet can be expected to support small populations of trout, and Wing and Chautauqua Creeks support substantial wild brown and rainbow trout populations respectively. Three and eight-tenths miles are classified as A (T) (drinkable) and 2.9 miles are classified as C (T) (supporting trout) on State Forest lands. An additional 1.8 miles of main streams and their tributaries are recommended to be upgraded to C (T) when the watersheds are reclassified. The *water quality* classification system regulations and

accompanying authority are found in ECL Sections 15-0313 and 17-0301.

No “significant” fish or mollusk species have been found within the boundaries of this management unit.

Fish species and streams found on the Unit are listed in the Appendix.

OIL AND GAS DEVELOPMENT

The elevations in the Unit range from 1,200 to 1,800 feet above sea level. Oil and gas deposits are generally found only in sedimentary rock, which begins near the surface and extends to approximately 5,800 feet below sea level. Thus the potential oil and gas bearing rock under the Unit ranges in thickness from 7,000 to 7,600 feet. Current gas production in the Unit is from the Medina Sandstone Formation which is found at approximately 2,900 to 3,500 feet below the surface.

The entire Unit has been under lease to oil and gas companies since 1974. In 1980 and 1981, 31 successful gas wells were drilled to the Medina Sandstone. All 31 wells continue to produce today, although production has declined steadily through the years. It is difficult to estimate when the wells will be permanently plugged and abandoned, but clearly they are more than halfway through their production life.

The total gas sales from the wells in the Unit amounted to \$4,036,728 as of January 1, 2000. The State has received a total of \$504,591 in royalties and rental payments. Currently, the State is receiving about \$776 per month in

royalties. These figures include royalty payments from wells on adjacent properties.

Due to spacing requirements, the 31 existing gas wells in the Unit are the maximum number of wells which can legally be drilled to the Medina Formation. However, further drilling could potentially be done to other formations under the Unit. Deep gas discoveries drilled using seismic

data have been developed recently in Region 8. It is entirely possible that similar deep gas zones are present under the lands managed in this Unit.

SIGNIFICANT PLANTS AND PLANT COMMUNITIES

A review of the NYSDEC Natural Heritage Program database revealed that no *endangered, threatened or special concern* species are documented as present on the management area. However, a significant natural community of Northern Hemlock Forest is recorded as being approximately 0.5 miles north of Chautauqua State Forest.

CULTURAL RESOURCES

Because of their historic significance, resources that are culturally important are protected under the New York State Archeological and Historic Preservation Act. The New York State Archeological Site Index Map does not identify any historic sites within the Chautauqua Unit.

ROADS

The State Public Forest Access Road System provides for both public and administrative access to the Unit. The roads are constructed to standards that will provide reasonably safe travel and keep maintenance costs to a minimum. These roads are not normally plowed or sanded. There are three types of roads: *public forest access roads* (forest roads), *haul roads* (administrative roads) and *access trails* (administrative roads). They provide different levels of access depending on the standards to which they are constructed.

These current roads and trails exist within the unit:

Public Forest Access Roads (forest road)	
Beck Forest Road	0.6 miles
Blackman Forest Road	1.4 miles
Brumagin Forest Road	0.8 miles
Hanum Forest Road	0.6 miles
Spruce Forest Road	1.0 miles

Haul Roads (administrative, gas well access)
Mount Pleasant S.F. 9- 2.8 miles
Chautauqua Gorge S.F. 6- 1.9 miles
Stockton S.F. 5- 1.4 miles

Access Trails
None

The speed limit on forest roads is 25 m.p.h. Only those motor vehicles registered for travel on public highways may be operated on State Forest roads, with the exception of snowmobiles, which may be operated on State Forest roads during periods of sufficient snow cover. Only those roads posted and signed may be used for vehicular travel and off-road travel by motorized vehicle is prohibited unless otherwise authorized.

RECREATION

The philosophy of multiple-use management is the predominant influence on recreation on the Chautauqua Management Unit. Compatible uses will be encouraged whenever reasonable. Hiking, Nordic skiing, snowmobiling, camping, hunting, mountain biking, fishing, trapping and bird watching are some of the recreational uses of the Unit.

Hunting, trapping and fishing are permitted anywhere except where prohibited by regulation or law. Big game season shows the highest amount of activity on the Unit.

Horseback riding is currently allowed anywhere on State Forest lands except on foot trails, snow-covered ski and snowmobile trails and where prohibited by signs. Occasional scattered use is found on the Unit.

Camping is currently allowed for three nights with groups of less than ten persons without a permit. Camping is not allowed within 150 feet of a road, trail or water body unless otherwise permitted. Camping is otherwise not restricted. It is scattered throughout the Unit--most popular near the Hanum Day Use Area.

Snowmobiling is currently allowed anywhere on

State Forest lands except on Nordic ski trails or where prohibited by signs. Use is high on 10 miles of designated trail system currently maintained under a Temporary Revocable Permit agreement with a local club. An Adopt-A-Natural Resource Agreement may be a better management tool.

Any competitive events require a Temporary Revocable Permit.

Mountain biking is currently allowed anywhere on State Forest lands except where prohibited by signs. Use is moderate, centered around the Overland Trail system.

All-terrain vehicle (ATV) use is currently prohibited everywhere on these State Forest lands. Illegal use of trails is widespread across the unit. Gas well access roads, pipelines and designated trails are frequently misused.

An Adopt-A-Natural Resource Agreement with Chautauqua County DPW/Parks Division is used to cover the Fred J. Cusimano Westside Overland Trail. This is a County-developed and maintained hiking trail from Hanum Road (Chautauqua Gorge S.F.) South to Brokenstraw Forest Road/Townline Road (Brokenstraw S.F.). The trail is 24 miles in length, with 5.15 miles on the Chautauqua Management Unit.

There currently is a 24-car parking lot on Route 430 at the north end of Mount Pleasant S.F. and another 24-car parking lot at the south end of Mount Pleasant S.F. to accommodate some of the 2,400 registered users of the trail.

There is a Day Use Area on Chautauqua Gorge S.F. on Hanum Forest Road. The site includes a small parking lot, four covered picnic pavilions with braziers and a seasonal port-a-john adjacent to the tributary to Chautauqua Creek. Use is fairly high due to the proximity to Chautauqua Creek, the tributary and the Fred J. Cusimano Westside Overland Trail.

Chautauqua Creek in the gorge is a popular summer destination for many people. A great

number of these enter the gorge and stream bed from Hanum Forest Road via the old town road. The problem is the State does not own the entire trail to the stream. Since the State does not own all the property containing Chautauqua Creek, it is very likely most people using the gorge are trespassing. Use here is moderately heavy in the summer season.

Facilities Inventory

	CHAUTAUQUA GORGE STATE FOREST	MOUNT PLEASANT STATE FOREST	STOCKTON STATE FOREST
Boundary Lines, Approved to Maintain	4.4	9.6	8.8
Boundary Lines, Total	5.6	12.5	8.8
Area ID signs	2	2	1
Road ID signs	1	3	1
Gates	3	3	5
Parking Lots	1	3	0
Marsh Ponds	0	2	2
Day Use	1	0	0
Pavilions	4	0	0
Port-A-John	1	0	0
Overland Trail	1.5 miles	4.65 miles	0
Snowmobile	1 mile	6 miles	3 miles
Gas Wells	8	17	6
Gas Collection Lines	2.8 miles	5.2 miles	3.2 miles
Gas Transmission Lines	0	0	1 mile
Electric & Telephone Utility Lines	0	0	0.4 miles

There may be other facilities not listed.

DEMANDS ON THE UNIT

The Chautauqua Unit Management Plan strives to manage the diverse biological and social resources to serve the multiple use needs of the people of New York State. NYS DEC must manage the ecosystem in a holistic manner while reconciling the many and sometimes conflicting demands on the unit. The framework of DEC rules and regulations, department policies and procedures, and the Environmental Conservation Law (ECL) guide this management.

CURRENT KNOWN DEMANDS

Commercial wood products;
Trails for hiking, snowmobiling, cross-country skiing, mountain biking, ATV and horseback riding;
Camping;
Hunting, fishing and trapping;
Commercial oil & gas leases;
Birding and nature observation; and
Parking lots.

IDENTIFIED ISSUES BY THE PUBLIC

Public Recreation

- Need better accessibility via parking, facilities and maps
- Do hiking trails; non-motorized
- No hiking trails; limit the number of people passing thru state lands; protect the watershed
- Consider ATV trails
- Better hunting opportunities
- Limit hunting near boundaries
- Better police camping activities

Timber Management

- Do not log - because it makes a mess
- Let nature take its course, it is doing just

- fine without “help” or management
- Establish “old growth” areas
- Do small hardwood sales
- Do even-age management for shade-intolerant species
- Aggressively pursue a commercial timber sales program for health, diversity and to defray property taxes
- Do timber sales to help provide for wildlife
- Monitor sales better and do better post harvest cleanup

Planning

- Do a Biodiversity inventory
- Do a Natural Heritage biological study
- All for any plan
- Maps showing intentions with public and private lands
- Educate the people

Wildlife

- Manage for deer and turkey
- Manage for habitat
- Better hunting opportunities
- Bluebird boxes

Other

- Do watershed protection
- Acquire more lands for better water quality
- Consider experimental work with American Chestnut
- Consider educational uses
- Limit gas well disturbances

MANAGEMENT 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, private vendors and www.dec.state.ny.us/website/regs/index.htm on the Internet.

Environmental Conservation Law (ECL):

Article 8 - Environmental Quality Review
Article 9 - Lands and Forests
Article 11 - Fish and Wildlife
Article 15 - Water Resources
Article 23 - Mineral Resources
Article 24 - Freshwater Wetlands
Article 33 - Pesticides
Article 51 - Implementation of Environmental Quality Bond Act of 1972
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- Sub-chapter A
Implementation of EQBA of 1972
Chapter X - Division of Water Resources

Public use
Temporary Revocable Permits
Motor vehicle use
Timber management
State Forest Master Plan
Unit Management planning
Pesticides
Prescribed burns
Inventory
Acquisition
Road construction
Motor Vehicle Access for People with Disabilities Policy
Best management practices
Recreational use

Physical:

Soil properties
Drainage
Presence and location of recreational trails
Geologic properties

Administrative:

Inadequate staffing levels
Insufficient funding
Rules and Regulations, laws, and policies
Oil and gas Leases

Societal:

Public opinion regarding:
Timber harvesting
Clearcutting
Old Growth Forest
Hunting
Forest reserve (preserve)
Recreational desires

Department Policies:

GOALS AND OBJECTIVES

VISION

It will be the goal of the Department to manage State lands for multiple benefits to serve the needs of the people of New York State. This management will be considered on a *landscape* level, 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.

We recognize that society values clean water, diverse habitats and the opportunity to use resources without diminishing their availability. State land management horizons extend over a long time frame. This allows us to envision a landscape that provides for the sustainability of diverse habitats, forest products and recreational opportunities.

ACCESS

The existing network of roads and parking lots is

sufficient for intended uses. Restricted access to administrative roads by gates and signs will continue. The cost to upgrade administrative roads to public access roads is prohibitive. Access restrictions are needed to give one somewhat of a “backwoods” feeling for the land.

The present Department policy is to permit qualified persons with certified disabilities to use motor vehicles to access roads, trails or geographical areas which have been designated by the Department for such use. The disabled individual must have an approved Temporary Revocable Permit before accessing state land.

In general, where new construction or modification of existing developed assets occurs, provision will be made to accommodate persons with disabilities. Standards established to implement the requirement of the Americans with Disabilities Act (ADA) and guidelines will be followed.

Management Objectives	Mgmt. Action	Management Actions	Frequency of Action
1. Identify need for additional access	1	Survey site(s)	As Needed
	1.1	Receive public comments	On-Going
	1.2	Solicit public comments	Every 10 yrs.
2. Construct identified additional facilities	2	Construct road if identified	One Time
3. Maintain roads	3	Inspect road and culverts	Annually
	3.1	Replace inoperable culverts	As Needed
	3.2	Forest Roads - Grade and maintain surface of 4.4 miles	Annually
	3.3	Administrative access roads - Grade and maintain surface of 6.1 miles	Every 5 yrs.
	3.4	Mow 4.4 miles of Forest Road ROWs	Annually
	3.5	Mow 6.3 miles of Administrative ROW	Every 2 yrs
	3.6	Maintain and replace ID signs	As Needed
3.7	Establish status of town roads	As Needed	
	Mgmt.	Management	Frequency

Management Objectives	Action	Actions	of Action
4. Maintain parking areas	4	Mow all parking areas	As Needed
	4.1	Maintain curbing	Annually
	4.2	Post regulations signs	Annually
	4.3	Maintain drive surface	As Needed
	4.4	Trash removal	As Needed
	4.5	Construct new parking areas	As Needed
	4.6	Construct and maintain 2 ADA accessible spaces each in the Route 430 and Titus Parking Lots.	As Needed
5. Control access	5	Identify the need for gates and signs	As Needed
	5.1	Install gates and signs	As Needed
	5.2	Maintain gates and signs	Annually
	5.2.1	Maintain forest road gates and signs for seasonal closure	Annually
	5.2.2	Maintain the administrative access road gates for year-round closure	Annually
	5.3	Enforce NYS DEC Policies	On-Going
	5.4	Maintain barricades	As Needed
6. Identify state land boundaries	6	Survey and blaze boundary	As Needed
	6.1	Paint, sign and post boundaries	Every 7 yrs.
	6.2	Repair and replace area ID signs	As Needed

TIMBER AND VEGETATION MANAGEMENT

The Chautauqua Unit Management Plan will attempt to bring about a balance of vegetative stages. The balance is intended for *sustained yield* of marketable forest products and to enhance wildlife diversity and abundance. The present balance of vegetative stages is weighted heavily in the pole and small *sawtimber* sized trees in both conifer plantations and natural hardwoods. Large diameter sawtimber stands with old growth characteristics are limited and may become a reality in the eight percent protection areas of forest wetland and steep slopes. Medium diameter

sawtimber stands will be created by thinnings in the pole and small sawtimber diameter stands. Seedling sapling-size stands will be created as the pine plantations convert to hardwoods with natural regeneration.

In order to create a better distribution among the vegetative stages throughout the Unit, forest products will be sold. All sales over \$500 will be publicly bid and administered by a state forester. The best available silvicultural techniques will be used in hardwoods to promote improved growth, size distribution and *regeneration*.

Establishment of conifers through planting and

natural regeneration created a significant conifer component which is important to maintain in the ecosystem. Natural regeneration will be relied upon to maintain a coniferous component. Where possible a hemlock component will be encouraged in stands, striving for a minimum of 15 square feet of basal area for song birds. **Silviculture** practices in the conifer plantations will usually lead to conversion to natural hardwoods, while some Norway spruce stands exhibit naturalized conifer regeneration which may continue into the next crop **rotation**. Norway spruce regeneration should be encouraged with light thinnings at frequent intervals, approximately every 10 years or less.

If unique plant communities are identified on the Unit, they will be managed for protection and maintenance. An example is the Northern Hemlock Forest approximately one-half mile north of Chautauqua Gorge State Forest.

Forest regeneration is so complete on the Unit that only a small portion is maintained as grassland and is associated mostly with gas well development. Grassy vegetation provides habitat for small mammals and insects, a foraging area for many birds and animals and open lands for courtship, nesting and brood cover. The gas well openings are limited in providing good grass cover due to the extremely disturbed soil and poor growing site conditions. These are maintained at least every other year by regular mowing. Other grassy areas will be dynamic

openings as timber is harvested and regenerated. To create and maintain more would be cost prohibitive.

Various endemic and epidemic occurrences of insect, diseases, fires and storms will periodically impact the Unit. Infestations of Fall Cankerworm, Pear Thrips and Forest Tent Caterpillar are cyclic in population and may impact vegetation at some time in the future as they have in the past. Some levels of insect, disease and natural disaster are recognized as being beneficial in shaping our vegetation, although quantifiable results are not presently available.

We plan to observe and monitor the effects of these factors which influence the vegetation. Management may then be able to ameliorate undesirable impacts.

A forest inventory is recommended a minimum of every 15 years.

A forest stand listing by silvicultural management style is in the Appendix.

Present & Objective Distribution

Land Classification	Present Acres	%	Objective Acres	%
Northern Hardwood	1,164	38	1,828	60
Northern Hardwood-Hemlock	348	12	348	12
Conifer Plantation	1,208	40	89	3
Spruce-Northern Hardwood	49	2	500	17
Wetland	99	3	101	3
Ponds	0	0	0	0
Open Brush	66	2	66	2

Land Classification	Present Acres	%	Objective Acres	%
Other	103	3	105	3
TOTALS	3,037	100		100

Management Objectives	Mgmt. Action	Management Actions	Frequency of Action
1. Maintain knowledge of forest stands	1	Perform State Forest Inventory	Every 15 yrs.
2. Maintain healthy vegetation	2	Practice Integrated Pest Management	On-Going
3. Develop the following balance:			
2% Openings	3.1.1	Mow 10-acre field	Annually
	3.1.2	Mow 62 acres of gas well pads and access roads	Even yrs.
8% No Cut (Protection)	3.2	Protect 231 acres	On-Going
23% 685 acres of Uneven-aged Hardwood Silviculture at 20-year cutting interval	3.3	Regenerate an average of 35 acres	Annually
20% 621 acres of Even-aged Hardwood Silviculture at 100- year rotation	3.4.1	Thin an average of 31 acres	Annually
	3.4.2	Regenerate an average of 31 acres	Annually
41% 1,236 acres of Even-aged Conifer Silviculture at 80-year rotation- 491 acres	3.5.1	Thin an average of 32 acres and final harvest an average of 16 acres	Annually
	3.5.2	Thin an average of 36 acres	Annually
at 100-year rotation- 711 acres			
at 80 year- rotation- 34 acres	3.5.3	Thin or harvest 22 acres of hardwood plantation	Over 10 yrs.

FISH, WATERSHED AND WETLANDS

The ECL requires that State Forests within this Unit be managed for watershed protection as was specifically mentioned in the Reforestation Act of 1929. Mandatory Timber Harvesting Guidelines of all silvicultural practices on state lands, require conservation practices which protect soils and water quality. Compliance with the New York State Freshwater Wetlands Act (ECL Article 24) and the Protection of Waters Act (ECL Article 15) is required by NYS DEC when

conducting management activities that involve activities within protected wetlands, water bodies or streams. Regulated activities are such things as clearcutting of timber and construction of road or trail stream crossings. Well-managed water resources and *riparian* zones have multiple benefits including quality fish and wildlife habitats, aesthetically pleasing sites, ground water protection and flood water retention. The four streams which interact with the State Forests of the Unit may or do support small populations of wild trout. Due to the presence of wild trout

and the small size of the streams and their inaccessibility, the stocking of hatchery trout is not recommended. The primary objective for these streams is to maintain or improve the existing habitat. Stream corridor integrity, including course, flow, gradient, shelter, over-head cover, temperature and turbidity should be enhanced or maintained. Where wild trout exist, maintaining or increasing abundance of wild trout is desirable. If trout are absent from streams that appear to have acceptable conditions for natural reproduction, the stocking of wild trout to develop self-sustaining populations may be conducted. No effort will be made to promote recreational fishing on these streams because of their small size and vulnerability to over fishing.

Management Objectives	Mgmt. Action	Management Actions	Frequency of Action
1. Use watershed protection guidelines	1	Utilize Best Management Practices (BPMs)	On-Going
	1.1	Control road erosion with proper maintenance	On-Going
	1.2	Comply with the Freshwater Wetlands Act and Protection of Waters Acts	On-Going
2. Maintain riparian zones	2	Limit timber harvest activities within 75 feet of streams and on steep slopes	On-Going
3. Maintain stream integrity	3	Limit road and skid trail construction and use within 75 feet of streams	On-Going
	3.1	Provide retention basins where runoff occurs	As Needed
4. Maintain or increase distribution abundance of wild trout	4	Utilize best management practices (stocking)	On-Going
	4.1	Maintain 75 ft. buffer along streams	On-Going
	4.2	Stock wild trout where feasible	Periodic

WILDLIFE MANAGEMENT

Wildlife objectives for the Unit will focus on

enhancing overall species diversity and abundance by protecting *rare* and endangered species, and attempting to

achieve the appropriate wildlife populations. The preservation of rare and endangered species involves direct and indirect protection through law enforcement and critical habitat management. Achieving appropriate populations involves measures of public satisfaction with wildlife-related recreation and relief from nuisance and damage on adjacent properties. Improving habitat and advocating public use of the Unit's resources assists in achieving the desired population balance. Management objectives, season length and bag limits set for the Wildlife Management Units, such as deer permits through public participation, contribute to achieving the appropriate populations.

Timber harvest is the most significant wildlife habitat management practice to be applied to Chautauqua Unit lands. The even-aged harvest cuts on the Unit will create a series of early successional forests to benefit wildlife, such as ruffed grouse and deer. Protected forest lands provide habitat for interior species. As stated in the Timber and Vegetation Management section, a hemlock component will be encouraged in the natural hardwood stands for song birds.

Snags and cavity trees provide a number of habitat functions for animal species. They are perching sites, food repositories, shelter and eventually become downed wood debris. A range of tree diameters will accommodate large and small cavity users. Where feasible, three to five snags and cavity trees will be left per acre. Emphasis will be given to maintain these situations near water, fields and edges where possible. This will be applied in both even and

uneven-aged systems, where snags and cavity tree retention does not create a potentially hazardous situation. An alternative is to retain 10 to 40 square feet of basal area per acre in live overstory trees during the final regeneration cut of even-aged management stands. Leaving trees as **green tree retention** provides microclimates for seedling establishment which may become snags, contain or develop cavities or survive into the new stand.

Permanent forest openings provide foraging opportunities for game birds, raptors, mammals, deer, bats and some song birds. The herbaceous habitat provides cover for brood rearing of turkey, grouse and small mammals. They also provide members of the public increased opportunities for wildlife viewing. Certain management practices that are easily incorporated into timber harvesting operations or gas well development can greatly enhance wildlife habitat; for instance, seeding log

landings or well pads to native grass for either cool season, warm season or a combination of both. Suggested grasses are Slender wheatgrass,

changes, and which disturbances are adverse, is needed.

Northern wheatgrass and Canada wildrye for a cool season mixture; or Switchgrass, Big Bluestem, Little Bluestem, Indiangrass and Site oats for a warm season mixture. An alternative might be to plant legume mixtures containing birdsfoot trefoil, clover or flat pea along with Orchard grass or Kentucky bluegrass. Any of these mixtures can provide for a valuable wildlife opening.

Red-shouldered hawks are a threatened species in New York. Logging and gas well development activity in the vicinity of nests are likely to have a negative impact on active nests, but site specific information is needed. Management guidelines from Allegheny National Forest (Nelson and Titus 1989) are: (1) regularly survey the area for nests, (2) prohibit disturbances within 100 meters of each nest, (3) prohibit significant changes in the landscape within 200 meters of each nest and (4) restrict activities that result in adverse disturbance to nesting birds within 400 meters of each nest. Further definition of what constitutes significant

Management Objectives	Mgmt. Action	Management Actions	Frequency of Action
1. Enhance species diversity	1	Protect Red-shouldered Hawk nests	Annually
	1.1	Relocate problem black bears	As Needed
	1.2	Survey existing populations	As Needed
2. Achieve appropriate populations	2	Review hunter satisfaction Surveys	On-Going
	2.1	Provide relief from agricultural deer damage	As Needed
	2.2	Monitor deer and turkey wintering sites	Annually
	2.3.1	Utilize the Deer Management Team	Every 5 yrs.
	2.3.2	Encourage use of the deer permits	Annually
3. Manage woodland habitats	3	Protect den trees during timber harvests	As Needed
	3.1	Replant portions of gas well pads to native trees	As Needed
	3.2	Create early successional forest stands	On-Going
4. Manage wetland habitats	4	Maintain PR marsh control boxes and mow dikes	If Time Allows
	4.1	Regulate PR marsh water levels	If Time Allows
5. Manage grassland habitats	5	Seed log landings and portions of gas well pads to native grasses or other grass/legume mixtures	Upon Completion
	5.1	Mow Administrative access ROWs and around gas wells as per the Access Section	Every 2 yrs.

MINERAL RESOURCE MANAGEMENT

The Unit Management Plan considers future leases as well as the existing lease agreements. Division of Minerals is responsible for the administration of the mineral leases for State Forest lands as the leasing agent. Prior to a State Forest being leased, the Bureau of Public Lands reviews the tract proposal and other lease documents to exclude and protect areas from drilling where necessary. Items to be protected are: threatened and endangered species, designated wetlands, wet areas, riparian

zones, intensive use recreational facilities, sensitive habitats (Natural Heritage Program), steep slopes, cultural and historic sites, and scenic viewsheds and vistas. Unit management plan actions as detailed cannot overwrite the lease agreement -- when a drilling permit application is applied for they describe the current system.

The maps in the Appendix show the current well pads under the 1974 leases and the recommended non-drilling zones. The Unit is fully developed with 31 gas wells into the Medina Sandstone along with their administrative roads. New exploration to

other potential zones will be encouraged to utilize the existing well pads and access roads when practical in order to minimize new openings in the forest. Lease holders will be encouraged to utilize techniques to reach their target zone from the existing well pads.

When the Lessee notifies either the Division of Minerals or the Bureau of Public Lands of their intent to survey a potential well site, the State Land Permit Procedures will be implemented.

Together minerals and forestry review proposed drilling locations with the lease holder to determine whether that site is acceptable. Site specific issues will be addressed through the drilling permit and a Temporary Revocable Permit for the well pad development. They also periodically meet with the lease holder to review each well pad for lease agreement compliance issues, particularly as related to health and safety.

Management Objectives	Mgmt. Action	Management Actions	Frequency of Action
1. Protect sensitive habitats, endangered plants and animals	1	Provide maps and explanations to the Division of Minerals	As-Needed
	1.1	Review each drilling permit application	As-Needed
	1.2	Appropriate permit action based on data surveys	As-Needed
2. Protect intensive use recreational areas	2	Provide maps and explanations to Division of Minerals	As-Needed
	2.1	Review each drilling permit application	As-Needed
	2.2	Appropriate permit action based on data surveys	As-Needed
3. Protect wetlands, riparian zones and steep slopes	3	Provide maps and explanations to the Division of Minerals	As-Needed
	3.1	Review each drilling permit application	As -Needed
	3.2	Appropriate permit action based on data surveys	As-Needed
4. Administrate seismic activity	4	Provide TRPs	As-Needed
	4.1	Monitor activity	As-Needed
5. Administrate well drilling and well sites	5	Participate in the pre-work and field review meeting with the lease holder, contractors and Division of Minerals	As-Needed
	5.1	Forestry site condition details based on field review	As-Needed
	5.2	Monitor drilling and site Reclamation	As-Needed
	5.3	Monitor gas collection pipeline location and reclamation	As-Needed
	5.4	Monitor well pad and pipeline conditions	Annually
	5.5	Review the well and pad site with the lease holder and Division of Minerals	Every 4 yrs.

Provide conditions for well site following plugging

As-Needed

PUBLIC RECREATION AND USE

A goal of NYS DEC is to provide suitable opportunities for the public enjoyment of compatible recreational pursuits in a natural setting. The public has an undeniable stake in identifying both “beneficial uses” and “undesirable consequences.” Recreational opportunities for people with disabilities will be planned in perspective with those available elsewhere in the Region on NYS DEC lands. At a minimum, parking will comply with the Americans with Disabilities Act Accessible Guidelines (ADAAG).

Recreational activities most actively pursued are: wildlife hunting and trapping; use of trails for hiking, skiing, mountain biking and snowmobiling; and camping. The Fred J.Cusimano Westside Overland Trail system provides extensive access to the Unit through an

Adopt-A-Natural Resource Agreement. A current agreement also provides for an extensive snowmobile trail system. Administrative and public access roads add to existing trails to form an excellent network to access recreational opportunities. Camping and day use picnicking are acceptable uses of the Hanum DUA on Chautauqua State Forest. There are no plans for increased recreational facilities at this location until financial resources are available to construct, maintain and supervise the site.

Use of the Fred J. Cusimano Overland Trail and the Hanum Day Use Area (DUA) by persons with disabilities is limited due to the uneven and rough terrain. An assessment of the facilities for compliance with the ADAAG using the Universal Trail Assessment Program (UTAP) should be done. Before upgrading either the trail or DUA, serious scrutiny must be exercised given the misuse, abuse and lack of site supervision.

Management Objectives	Mgmt. Action	Management Actions	Frequency of Action
1. Assess user satisfaction with recreational opportunities	1 1.1	Receive public opinion Survey users thru the trail head registers	On-Going On-Going
2. Identify additional recreational needs	2	Receive public opinion	On-Going
3. Coordinate with volunteer groups to construct and/or maintain existing or future facilities	3	Continue the Adopt-A-NR Agreement with Chautauqua County DPW-Parks Division	Every 5 yrs.
	3.1	Continue the Adopt-A-NR/TRP Agreement with Chautauqua Lake Snowmobile Club	On-Going
	3.2	Coordinate with users to designate trail uses	On-Going
	3.3	Identify resources and/or volunteer groups to form partnerships	On-Going
	3.4	Provide technical support for volunteer groups	As - Needed
4. Determine feasibility and/or compatibility of proposed additional recreational	4	In-house review of proposed projects	As-Needed
	4.1	Negotiate with sponsoring	As-Needed

opportunities and assessment of facilities for compliance with ADAAG.

groups

Management Objectives	Mgmt. Action	Management Actions	Frequency Of Action
	4.2	Enter into agreements with volunteer groups	As-Needed
	4.3	Contract for ADAAG assessment of facilities; trails and day-use area	As-Needed
	4.4	Train staff in the fundamentals of the ADA, ADAAG and UTAP process.	As-Needed
5. Construct additional recreational facilities	5	Construct barriers to discourage motorized use of skid trails after logging operations	As-Needed
	5.1	Construct new facilities if identified	As-Needed
6. Identify needed maintenance and enhance visual appeal	6	List and prioritize facilities in need of maintenance	On-Going
	6.1	Establish a litter free environment by promoting the carry in/carry out policy	On-Going
	6.2	Remove litter from state land	On-Going
	6.3	Enhance law enforcement	On-Going
	6.4	Provide restroom facility	Annually
7. Increase public awareness of recreational opportunities	7	Continue to provide brochures with maps	On-Going
	7.1	Promote outreach/events	On-Going
	7.2	Install kiosks for information and surveys	Annually
8. Advocate wildlife based recreation	8	Promote hunting, fishing and trapping according to State Regulations	On-Going
	8.1	Promote bird watching	On-Going

ARCHAEOLOGICAL AND HISTORIC RESOURCES

It is the goal of NYS DEC to preserve any archaeological or historic sites on State land. The Department has followed procedures established in concert with the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) in determining the presence of cultural resources on this Unit. This

involved completion of the Structural-Archaeological Assessment Form (SAAF) and reviewing the New York State Archaeological Site Locations map. ORPHP and the New York State Museum have been consulted in any instance where the Site Locations Map indicated an archaeological or historical site may occur on the Management Unit lands. The SAAF will be updated at the time this plan is updated.

Management Objectives	Mgmt. Action	Management Actions	Frequency Of Action
1. Preservation of historical and archaeological resources	1.1	Avoid any activity which may disturb any historical or archaeological resource	On-Going
	1.2	Comply with the State Historic Preservation Act	On-Going

LAND ACQUISITION

Certain parcels of land will be considered for purchase if they contain rare, endangered or threatened species in New York; improve access; enhance recreational opportunities;

buffer significant resources; or consolidate public ownership by eliminating in-holdings or linking parcels of state land. It should be clearly understood that the Department intends to acquire these parcels from willing sellers as funding becomes available.

Management Objectives	Mgmt. Action	Management Actions	Frequency of Action
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1. Provide improved access to Chautauqua Management Unit	1 1.1	Identify acquisition needs Acquire desired properties from willing sellers as funding permits	On-Going On-Going
2. Consolidate public ownership by eliminating in-holding	2 2.1	Identify acquisition needs Acquire desired properties from willing sellers as funding permits	On-Going On-Going
3. Recreational opportunity	3 3.1	Identify acquisition needs Acquire desired properties from willing sellers as funding permits	On-Going
	3.2	Open Space Plan Project - Lake Erie Gorges Unique Area	"A" List
4. Significant ecological areas	4 4.1	Identify acquisition needs Acquire desired properties from willing sellers as funding permits	On-Going On-Going
	4.2	Open Space Plan Project - Lake Erie Gorges Unique Area	"A" List

MANAGEMENT ACTIONS SUMMARY

Priority Codes:

C - Critical, necessary to ensure public health and safety; To stabilize structures so as to not lose the money and time invested; Mandated by legislation

H - High, necessary for public use and/or to improve habitat or other nature resources. Often this will be for new projects.

L - Low, important for the enhancement of public use, habitats or other natural resources.

***Actions are Subject to Available Funding**

Management Action Item			Priority Code	*Frequency of Action	Est. 10-yr. Cost	Est. 10-Yr. Income	Comments
Access	1	Survey Site(s)	H	As Needed	10 Workdays		

Management Action Item		Priority Code	*Frequency of Action	Est. 10-yr. Cost	Est. 10-Yr. Income	Comments
	1.1	Receive Public Comments	H	On-Going	10 Workdays	
	1.2	Solicit Public Comments	H	Every 10 yrs.	10 Workdays	
	2	Construct Road If Identified	L	One Time	--	
	3	Inspect Road and Culverts	C	Annually	20 Workdays	Public Access Roads - 24 Administrative Roads - 17
	3.1	Replace Inoperable Culverts	C	As Needed	\$30,000	
	3.2	Forest Roads - Grade and Maintain Surface of 4.4 miles	C	Annually	\$15,000	
Access	3.3	Administrative Access Roads - Grade and Maintain Surface of 6.1 miles	H	Every 5 yrs.	\$10,000	Most are the responsibility of the oil & gas lease holder
	3.4	Mow 4.4 Miles of Forest Road ROW	C	Annually	\$12,000	
	3.5	Mow 6.3 Miles of Administrative ROW	H	Every 2 yrs.	\$8,000	
	3.6	Maintain and Replace ID Signs	L	As Needed	\$20,000	
	3.7	Establish Status of Town Roads	L	As Needed	5 Work days	
	4	Mow All Parking Areas	C	As Needed	\$20,000	

Management Action Item		Priority Code	*Frequency of Action	Est. 10-yr. Cost	Est. 10-Yr. Income	Comments
	4.1	Maintain Curbing	H	Annually	\$10,000	
	4.2	Post Regulation Signs	H	Annually	\$10,000	
	4.3	Maintain Drive Surface	H	Annually	\$20,000	
	4.4	Trash Removal	H	As Needed	\$25,000	
	4.5	Construct New Parking Areas	L	As Needed	\$10,000	
	4.6	Construct and Maintain 2 ADA accessible spaces each-Route 430 and Titus Parking Lots	H	Annually	\$10,000	
Access	5	Identify the Need for Gates and Signs	H	As Needed	3 Workdays	
	5.1	Install Gates and Signs	L	As Needed	\$5,000	
	5.2	Maintain Gates and Signs	H	Annually	\$6,000	
	5.2.1	Maintain Forest Road Gates and Signs for Seasonal Closure	H	Annually	\$4,000	
	5.2.2	Maintain the Administrative Access Road Gates for Year-Round Closure	H	Annually	\$2,000	
	5.3	Enforce NYS DEC Policies	C	On-Going	\$250,000	
	5.4	Maintain Barricades	L	As Needed	\$10,000	

Management Action Item		Priority Code	*Frequency of Action	Est. 10-yr. Cost	Est. 10-Yr. Income	Comments
5.5	Maintain Proper Trail Entrances	H	Annually	\$10,000		
6	Survey and Blaze Boundary	H	As Needed	\$20,000		
6.1	Paint, Sign and Post Boundaries	H	Every 7 yrs.	\$20,000		
6.2	Repair and Replace Area ID Signs	H	As Needed	\$10,000		

Management Action Item		Priority Code	*Frequency of Action	Est. 10-yr. Cost	Est. 10-Yr. Income	Comments	
Timber and Vegetation	1	Perform State Forest Inventory	H	Every 15 yrs.	50 Workdays		
	2	Practice Integrated Pest Management	H	On-Going	20 Workdays		
	3.1.1	Mow 10-Acre Field	H	Annually	\$10,000		
	3.1.2	Mow 62 Acres of Gas Well Pads and Access Roads	H	Even-Numbered Years	\$20,000		
	3.2	Protect 231 Acres	C	On-Going	–		
	3.3	Regenerate an Average of 35 Acres	H	Annually	\$25,000	\$350,000	Based on \$1,000/acre
	3.4.1	Thin an Average of 31 Acres	H	Annually	\$20,000	\$31,000	Based on \$100/acre
	3.4.2	Regenerate an Average of 31 Acres	H	Annually	\$20,000	\$465,000	Based on \$1,500/acre
	3.5.1	Thin an Average of 32 Acres Final Harvest an Average of 16 Acres	H	Annually	\$20,000	\$32,000	Based on \$100/acre
				Annually	\$10,000	\$48,000	Based on \$300/acre
	3.5.2	Thin an Average of 36 Acres	H	Annually	\$25,000	\$36,000	Based on \$100/acre
3.5.3	Thin or Harvest 22 Acres of Hardwood Plantation	L	Over 10 yrs.	\$5,000	\$22,000	Based on \$100/acre	

Management Action Item			Priority Code	*Frequency of Action	Est. 10-yr. Cost	Est. 10-Yr. Income	Comments
Fish, Watershed and Wetlands	1	Utilize Best Management Practices (BPMs)	C	On-Going	--		
	1.1	Control Road Erosion with Proper Maintenance	C	On-Going	--		See Access
	1.2	Comply with the Freshwater Wetlands Act and Protection of Waters Act	C	On-Going	--		
	2	Limit Timber Harvest Activities Within 75 Feet of Streams and On Steep Slopes	C	On-Going	--		Best Management Practice
	3	Limit Road and <i>Skid Trail</i> Construction and Use Within 75 Feet of Streams	C	On-Going	--		Best Management Practice
	3.1	Provide Retention Basins Where Runoff Occurs	C	As Needed	--		Best Management Practice
	4	Utilize Best Management Practices (Stocking)	H	On-Going			Best Management Practice
	4.1	Maintain 75 ft. Buffer Along Streams	C	On-Going			
	4.2	Stock Wild Trout Where Feasible	H	Periodic	10 Work Days		Potential pockets
Wildlife	1	Protect Red-Shouldered Hawk Nests	C	Annually	--		May lose some timber sale acreage

Management Action Item		Priority Code	*Frequency of Action	Est. 10-yr. Cost	Est. 10-Yr. Income	Comments	
Wildlife	1.1	Relocate Problem Black Bears	L	As Needed	10 Workdays		Not likely
	1.2	Survey Existing Populations	L	Every 5 yrs.	10 Workdays		
	2	Review Hunter Satisfaction Surveys	H	On-Going	10 Workdays		
	2.1	Provide Relief from Agricultural Deer Damage	H	As Needed	10 Workdays		
	2.2	Monitor Deer and Turkey Wintering Sites	L	Annually	10 Workdays		
	2.3.1	Utilize the Deer Management Team	H	Every 5 yrs.	10 Workdays		
	2.3.2	Encourage Use of the Deer Permits	H	Annually	20 Workdays		
	3	Protect Den Trees During Timber Harvests	L	As Needed	10 Workdays		Part of timber sale marking
	3.1	Replant Portions of Gas Well Pads to Native Trees	L	As Needed	20 Workdays		Can be part of oil and gas lease conditions
	3.2	Create Early Successional Forest Stands	H	On-Going	3 Workdays		Part of timber sale marking
	4	Maintain PR Marsh Control Boxes and Mow Dikes	L	If Time Allows	10 Workdays		

Management Action Item			Priority Code	*Frequency of Action	Est. 10-yr. Cost	Est. 10-Yr. Income	Comments
Wildlife	4.1	Regulate PR Marsh Water Levels	L	If Time Allows	5 Workdays		
	5	Seed Log Landings and Portions of Gas Well Pads to Native Grasses or Other Grass/Legume Mixtures	H	Upon Completion	10 Workdays		
	5.1	Mow Administrative Access ROWs and Around Gas Wells as per the Access Section	H	Every 2 yrs.	--		See Access
Minerals	1	Provide Maps and Explanations to the Division of Minerals (Sensitive)	C	As Needed	10 Workdays		
	1.1	Review Each Drilling Permit Application	C	As Needed	10 Workdays		
	1.2	Appropriate Permit Action Based On Data Surveys	C	As Needed	10 Workdays		
	2	Provide Maps and Explanations to Division of Minerals (Recreation)	C	As Needed	10 Workdays		
	2.1	Review Each Drilling Permit Application	C	As Needed	10 Workdays		
	2.2	Appropriate Permit Action Based on Data Surveys	C	As Needed	10 Workdays		

Management Action Item		Priority Code	*Frequency of Action	Est. 10-yr. Cost	Est. 10-Yr. Income	Comments
Minerals	3	Provide Maps and Explanations to the Division of Minerals (Wetlands)	C	As Needed	10 Workdays	
	3.1	Review Each Drilling Permit Application	C	As Needed	10 Workdays	
	3.2	Appropriate Permit Action Based on Data Surveys	C	As Needed	10 Workdays	
	4	Provide TRPs	H	As Needed	--	
	4.1	Monitor Activity	C	As Needed	10 Workdays	
	5	Participate in the Pre-Work and Field Review Meeting with the Lease Holder, Contractors and Division of Minerals	C	As Needed	? 10	As each drilling permit application request is filed
	5.1	Forestry Site Condition Details Based on Field Review	C	As Needed	? 10 Workdays	Each well pad
	5.2	Monitor Drilling and Site Reclamation	C	As Needed	50 Workdays	Each well pad
	5.3	Monitor Gas Collection Pipeline Locations and Reclamation	C	As Needed	10 Workdays	
Minerals	5.4	Monitor Well Pads and Pipeline Conditions	H	Annually	20 Workdays	Each well pad

Management Action Item		Priority Code	*Frequency of Action	Est. 10-yr. Cost	Est. 10-Yr. Income	Comments
	5.5	Review the Wells and Pad Sites with the Lease Holder and Division of Minerals	H	Every 4 yrs.	8 Workdays	Each well pad
	6	Provide Conditions for Well Pad following Plugging	C	As Needed	? 20 Workdays	Each well pad
Public Recreation and Use	1	Receive Public Opinion - Satisfaction	H	On Going	--	
	1.1	Survey Users thru the Trail Head Register	H	On-Going	5 Workdays	
	2	Receive Public Opinion - Needs	L	On-Going	--	
	3	Continue the Adopt-A-Natural Resources Agreement with Chautauqua County DPW-Parks Division	H	Every 5 yrs.	15 Workdays	Fred J. Cusimano Westside Overland Trail
	3.1	Continue the Adopt-A-Natural Resources Agreement /TRP with Chautauqua Lake Snowmobile Club	H	On-Going	10 Workdays	Snowmobile Trails
	3.2	Coordinate Assessment with Users to Designate Trail Uses	L	On-Going	20 Workdays	
Public Recreation and Use	3.3	Identify Resources and/or Volunteer Groups to Form Partnerships	L	On-Going	20 Workdays	
	3.4	Provide Technical Support for Volunteer Groups	H	As Needed	10 Workdays	

Management Action Item		Priority Code	*Frequency of Action	Est. 10-yr. Cost	Est. 10-Yr. Income	Comments
	4	In-House Review of Proposed Projects	H	As Needed	25 Workdays	
	4.1	Negotiate with Sponsoring Groups	H	As Needed	25 Workdays	
	4.2	Enter into Agreements with Volunteer Groups	H	As Needed	25 Workdays	
	4.3	Contract for ADAAG Assessment of Facilities; Trails and Day-Use Area	H	Each Plan Review	\$10,000	
	4.4	Train Staff in the Fundamentals of the ADA, ADAAG and UTAP process	H	As Needed	\$3,000	
	5	Construct Barriers to Discourage Motorized Use of Skid Trails after Logging Operations	C	As Needed	\$3,000	
	5.1	Construct New Facilities if Identified	L	As Needed	\$1,000 to \$50,000	
Public Recreation and Use	6	List and Prioritize Facilities in Need of Maintenance	H	On-Going	10 Workdays	
	6.1	Establish a Litter-Free Environment by Promoting the Carry-In/Carry Out Policy	H	On-Going	\$2,000	
	6.2	Remove Litter from State Land	H	On-Going	\$10,000	

Management Action Item		Priority Code	*Frequency of Action	Est. 10-yr. Cost	Est. 10-Yr. Income	Comments
	6.3	Enhance Law Enforcement	H	On-Going	20 Workdays	
	6.4	Provide Restroom Facility	H	Annually		
	7	Provide Brochures with Maps	H	On-Going	\$20,000	
	7.1	Promote Outreach/Events	L	On-Going	20 Workdays	
	7.2	Install Kiosk for Information and Surveys	H	Annually	\$2,000	At Titus Road Parking Lot
	8	Promote Hunting, Fishing and Trapping According to State Regulations	H	On-Going	10 Workdays	
	8.1	Promote Bird Watching	H	On-Going	10 Workdays	
Archaeological and Historic Resources	1	Avoid Any Activity Which May Disturb Any Historical or Archaeological Resource	C	On-Going	\$5,000	
Archaeological and Historic Resources	1.1	Comply With the State Historic Preservation Act	C	On-Going	\$2,000	
Land Acquisition	1	Identify Acquisition Needs - Access	H	On-Going	5 Workdays	
	1.1	Acquire Desired Properties From Willing Sellers as Funding Permits	H	On-Going	?	Unable to Predict Costs

Management Action Item			Priority Code	*Frequency of Action	Est. 10-yr. Cost	Est. 10-Yr. Income
	2	Identify Acquisition Needs - In-holdings	L	On-Going	2 Workdays	
	2.1	Acquire Desired Properties From Willing Sellers as Funding Permits	L	On-Going	?	
	3	Identify Acquisition Needs - Recreational	L	On-Going	3 Workdays	
	3.1	Acquire Desired Properties form Willing Sellers as Funding Permits	L	On-Going	?	
	3.2	OSP Project - Lake Erie Gorges Unique Area	H	On Going	50 Workdays	
	4	Identify Acquisition Needs - Ecological	H	On-Going	3 Workdays	
	4.1	Acquire Desired Properties form Willing Sellers as Funding Permits	H	On-Going	?	
Land Acquisition	4.2	OSP Project - Lake Erie Gorges Unique Area	H	On-Going	50 Workdays	

APPENDIX

GLOSSARY OF TERMS

ACCESS TRAILS - May be permanent, unpaved and do not provide all-weather access within the Unit. These trails are originally designed for the 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.

ALLEGHENY HARDWOODS - Second and third-growth forests that originated following extensive commercial clearcutting during the railroad logging era of 1890 to 1930. They are generally considered to be even-aged stands composed primarily of black cherry, red maple, sugar maple and white ash.

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).

BIOLOGICAL DIVERSITY - 1. The diversity of life in all its forms and levels of organization (Hunter, Malcolm, "Wildlife, Forests and Forestry", 1990, p.28). 2. The variety and variability among living organisms and the ecological complexes in which they occur ("Technologies To Maintain Biological Diversity", U.S. Congress, Office of Technology Assessment 1987, p.313).

BOARD FOOT - A piece of lumber 1 inch thick, 12 inches wide, and 1 foot long, or its equivalent (Forestry Handbook, 2nd edition, 1984, p.254).

BUFFER ZONE - Areas on the edge of protected areas that have land-use controls and allow only activities compatible with protection of the core area ("Technologies To Maintain Biological Diversity", U.S. Congress Office of Technology Assessment, 1987, p.313). Can be uncut strips along streams or bodies of water, screens along travel corridors, etc.

CANOPY - The more or less continuous cover of branches and foliage formed collectively by the crowns of adjacent trees ("Silvics of North America", USDA Ag. Hndbk. #654 Vol. 1 p.636).

CAVITY TREES - Trees containing an excavation sufficiently large for nesting, denning or shelter; tree may be alive or dead (Chambers).

CLEARCUT - 1. A method of regenerating an even-aged stand in which a new age class develops in a fully exposed microclimate after removal, in a single cutting, of all trees in the previous stand. Regeneration is from natural seeding, planted seedlings, and/or advance regeneration. Harvesting may be done in groups, patches or strips (SAF Silviculture Working Group, Silviculture Terminology 1993). 2. The cutting method in which the entire stand is removed in one cutting, reproduction obtained artificially, or by natural seeding (Forestry Handbook, 2nd Edition, 1984 p.418). 3. The harvesting in one cut of all trees on an area for the purpose of creating a new, even aged stand ("Silvicultural Systems for the Major Forest Types of the United States",

USDA Ag. Hndbk. #445, 1973, p.2). 4. The cutting method in which all the trees in the stand are removed in one cutting, reproduction obtained artificially or by natural seeding, resulting in a new, even aged stand (combination of 2 & #3).

CLIMAX FOREST - 1. A plant community that represents for its locality and its environment the culminating stage of natural succession ("Silvicultural Systems for the Major Forest types of the United States", USDA Ag. Hndbk. #445, p.103). 2. The culminating stage in forest succession, where the vegetation has reached a highly stable condition. It is self perpetuating and in equilibrium with the environment. A climax forest will persist until a disturbance upsets the equilibrium (Brookfield Draft UMP).

COARSE WOODY DEBRIS - Large decaying tree trunks and stumps on the forest floor.

CONIFER- A cone bearing evergreen tree or shrub (Random House Dictionary).

CULTURAL RESOURCES - Any building, structure, district, area, site or object including underground and underwater sites, that is of significance in the history, architecture, archaeology or culture of the state, its communities or the nation (New York Code Rules and Regulations title 9 part 426.2).

DECIDUOUS - Falling off or shed seasonally or at a certain stage of the development in the life cycle (Webster's Ninth Collegiate Dictionary, 1991).

DEN TREE - A tree in which a cavity has formed from internal decay and which may be used for nesting, rest and/or protection by various wildlife species (Hunter, Malcolm "Wildlife Forests, and Forestry", 1990, p.161-162).

DIAMETER AT BREAST HEIGHT (DBH) - The diameter of a tree measured at 4.5' above ground level ("Forestry Handbook" 4th Edition, p.281).

ECOSYSTEM - 1. An ecological community together with its physical environment, considered as a unit ("Technologies To Maintain Biological Diversity", U.S. Congress, Office of Technology Assessment, etc. p.314). 2. All the interacting populations of plants, animals and microorganisms occupying an area, plus their physical environment (Hunter, Malcolm, "Wildlife Forests, and Forestry", 1990, p.15).

ECOSYSTEM MANAGEMENT - 1. Management decisions that are ecologically responsible, economically viable and socially acceptable (Comanor, Joan, "Ecosystem Based Management at the Public-Private Land Interface", 11/93, USDA FS). 2. The appropriate integration of ecological, economic, and social factors in order to maintain and enhance the quality of the environment to best meet our current and future needs. Means keeping natural communities of plants, animals, and their environments healthy and productive so people can benefit from them year to year. (Gelburd, Diane "Implementing Ecosystem-Based Assistance for The Management of Natural Resources in the Soil Conservation Service", USDA SCS). 3. Focuses on the condition of the forest, with goals of maintaining soil productivity, gene conservation, biological diversity, landscape patterns, and the array of ecological processes. Ecosystem management recognizes that natural disturbance regimes and ecosystem processes provide the basic blueprint for a sustaining pattern and process across the landscape. Management practices are sought that reflect (not duplicate) these landscape patterns and ecosystem processes (SAF Task Force Report on Sustaining Long Term Forest Health and Productivity, 1992).

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).

EVEN-AGED - A class of forest or stand composed of trees of about the same age. The maximum age difference admissible is generally 10-20 years ("Silvicultural Systems for the Major Forest Types of the United States", USDA Ag. Hndbk. #445, p.103).

EXOTIC - An organism that exists in the free state in an area but is not native to the area ("Technologies to Maintain Biological Diversity", U.S. Congress Office of Technology Assessment 1987 p.314).

FOREST - 1. Communities formed by trees with a canopy cover of at least 61 percent or more at maturity, with tree crowns usually interlocked ("Ecological Communities of New York State" N.Y. Natural Heritage Program, 1990, p.81). 2. A collection of stands administered as an integrated unit (Smith, David "The Practice of Silviculture", 1962, p.18).

FRAGMENTATION - The act or process of breaking into fragments. Forest fragmentation refers to a forested area being modified to have a great variation of stand sizes, structures and composition. Forest fragmentation can result from management actions and be impacted by natural occurrences or manmade features (Between Fords UMP).

GREEN TREE RETENTION - Retention of living trees on cut over areas for goals other than regeneration. These residual trees create higher levels of stand diversity, moderate the microclimate of the of the site and provide continuity of habitat for plant and animal species between uncut forests areas. Differs from a shelterwood because these residual trees are not cut after regeneration is established, but during the next rotation.

HARDWOOD - Broad-leafed trees, deciduous. Also refers to the wood produced by these trees.

HAUL ROADS - Permanent, unpaved roads but not designed for all-weather travel. They are constructed primarily for the removal of forest products and provide only limited access within the Unit. As such, these roads may or may not be open for public use. The standards for these roads are those of Class C roads as provided for in the Forest Road Handbook.

LANDSCAPE - A spatial mosaic of several ecosystems, landforms, and plant communities across a defined area irrespective of ownership or other artificial boundaries and repeated in similar form throughout.

LOG LANDING - A place where logs are assembled for transportation.

MULTIPLE USE - A strategy of deliberate land management for two or more purposes which utilizes, without impairment, the capabilities of the land to meet different demands simultaneously (SAF).

NATURAL STAND - A stand established and recreated by the germination of seeds from natural sources or other natural vegetative methods (i.e. sprouting from root systems).

NORTHERN HARDWOODS - Largely composed of sugar maple, American beech, yellow birch and other climax species with subclimax species in associations. These hardwoods are generally shallow rooted, long-lived and adapt well to uneven-aged management.

OLD GROWTH FOREST - No universally accepted definition exists, however, old growth stands would have these characteristics: large trees; dead snags; downed logs; broken, multiple-layered canopy; and

community would be in an advanced or "climax" successional stage.

OVERSTORY - That portion of the trees in a forest of more than one story forming the upper or uppermost canopy layer. ("Silvics of North America", USDA Ag. Hndbk. #654, p.641).

PIONEER - A plant species capable of invading bare sites (newly exposed soil surface) and persisting there until supplanted by successor species ("Silvicultural Systems for the Major Forest Types of the United States", Ag. Hndbk. #445, p.104).

PLANTATION - A forest established by planting of seeds or seedling trees.

POLETIMBER - Generally, trees 6-11" in DBH.

PROTECTION FOREST - Forest land excluded from active wood product management and some recreational practices to protect sensitive sites. These sites most often include steep slopes, wet woodlands and riparian zones along stream corridors.

PUBLIC FOREST ACCESS ROADS - Permanent, unpaved roads marked as motor vehicle trails. They may be designed for all-weather use depending on their location and surfacing. These roads provide primary access within the Unit. The stands 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/REPRODUCTION - The act of replacing old trees, either naturally or artificially. Also refers to the new growth that develops (Smith, David "The Practice of Silviculture", 1962, p.10).

RELATIVE DENSITY - An index of crowding for forest stands. It is expressed as the ratio of absolute density (number of trees or basal area per acre) to the density of a stand the same size and species composition at maximum density (i.e. an undisturbed stand).

RIPARIAN - Related to, living , or located on the bank of a natural watercourse, usually a river or stream, sometimes a lake or tidewater ("Technologies to Maintain Biological Diversity", U.S. Congress Office of Technology and Assessment, 1987, p.315).

ROTATION - The period of years required to grow a crop of timber to the optimum size or age (economic or natural maturity) (Smith, David, "The Practice of Silviculture", 1962, p.5).

SALVAGE CUTTING - The harvest of dead, dying, damaged, or deteriorating trees primarily to put the wood to use before it loses its economic value.

SAPLING - Generally, trees 1" to 5" in DBH.

SAWTIMBER - Generally, trees 12" and larger in DBH.

SEEDLING - A tree grown from seed, generally describes a young tree before it reaches the sapling stage. Also, in nursery practice, a tree that has not been transplanted in the nursery (Forest Terminology, SAF).

SELECTION CUT - 1. The removal of the mature timber, usually the oldest or largest trees, either as single

scattered individuals or in small groups at relatively short intervals, repeated indefinitely, by means of which the continuous establishment of reproduction is encouraged and an uneven-aged stand is maintained (Smith, David "The Practice of Silviculture, 1962" p.355).

2. The removal of trees over the entire range of size classes either singly or in groups at relatively short intervals, resulting in continuous establishment of reproduction, and the perpetuation of an uneven aged stand. Individual trees are chosen for removal due to their maturity, because they are of poor quality or thinning is needed to improve the growth rate of the remaining trees.

SELECTION METHOD - An uneven aged management method which removes the mature and immature trees either singly or in groups at intervals. Regeneration is established almost continuously.

SHELTERWOOD METHOD - An even-aged management method which removes the mature stand in a series of cuts. Regeneration of the new stand occurs under the cover of a partial forest canopy.

SHELTERWOOD CUT - The removal of the mature timber in a series of cuts which extend over a relatively short portion of the rotation, by means of which the establishment of essentially even-aged reproduction under the partial shelter of seed trees is encouraged (Smith, David "The Practice of Silviculture", 1962 p.354).

SILVICULTURE - The art of producing and tending a forest; the application of knowledge of silvics in the treatment of a forest; the theory and practice of controlling forest establishment, composition and growth (Smith, David "The Practice of Silviculture," 1962, p.1).

SKID TRAIL - The trail used to drag, or skid, trees from the stump to the log landing.

SNAGS - Dead trees with or without cavities: functions as perches, foraging sites and/or a source of cavities for denning, roosting and/or nesting (Between Fords UMP).

SOFTWOOD - Needle bearing trees (see conifer). Also refers to the lumber derived from these trees.

SPECIAL CONCERN - Native plants and animals which are not yet recognized as endangered or threatened, but for which documented concern exists for their continued welfare in New York. These species could become threatened or endangered in the future and should be closely monitored.

STAND - A contiguous group of trees sufficiently uniform in species composition, arrangement of age classes, and condition to be a homogenous and distinguishable unit (Smith, David, "The Practice of Silviculture", 1962, p.18).

STATE FOREST - STATE REFORESTATION AREA - Lands owned by the State of New York, administered by the Department of Environmental Conservation and authorized by Environmental Conservation Law to be devoted to the establishment and maintenance of forests for watershed protection, the production of timber and other forest products, and for recreation and kindred purposes. These forests shall be forever devoted to the planting, growth and harvesting of such trees (Title 3, Article 9-0303 ECL).

STRUCTURE - The spatial arrangement of vegetation layers within a community (Ecological Communities of New York", New York Natural Heritage Program, 1990, p.85).

SUCCESSION - The gradual supplanting of one community of plants and animals by another ("Silvicultural Systems for the Major Forest Types of the United States", USDA Ag. Hndbk. #445, 1973, p. 105).

SUSTAINABLE - Meeting of the needs of the present without compromising the ability of future generations to meet their own needs (Minnesota Forest Resources Council, Chapter 89A).

SUSTAINED YIELD - 1. The achievement and maintenance in perpetuity of a reasonable regular periodic output of the various renewable resources without impairment of the land's productivity (Chambers, Robert "Integrating Timber and Wildlife Management Handbook", chapter 1, p 1-2). 2. The continuous production with the aim of achieving, at the earliest practicable time, an approximate balance between net growth and harvest, either by annual or somewhat longer periods (SAF Forest Terminology, 1958, p.96).

THINNING - A cutting made to reduce stand density of trees primarily to improve growth, enhance forest health or to recover potential mortality (SAF Silviculture Working Group -Silvicultural Terminology 1993).

THREATENED - Native plants (and animals) that are likely to become endangered within the foreseeable future throughout all or a significant portion of their ranges in the state (NYCRR Title 9 part 193.3).

TOP LOPPING - The cutting of limbs from the tops of felled trees to a specified height above the ground to reduce fire danger, speed up the decaying process of the logging debris, and/or to improve the appearance of the stand.

UNDERSTORY - Generally, those trees and woody species growing under an overstory ("Silvicultural Systems for the Major Forest Types of the United States", USDA Ag. Hndbk. #445, 1973, p. 105).

UNEVEN-AGED - A class of forest or stand composed of intermingled trees or groups of trees that differ markedly in age ("Silvicultural Systems for the Major Forest Types of the United States", USDA Ag. Hndbk. #445, 1973, p.105).

WATERSHED - Drainage basins or catchments which possess physical, chemical and biological properties that give it a unique set of hydrologic characteristics (Forestry Handbook, 4th Edition, p.638) .

WATER QUALITY CLASSES - A system of classification set forth in ECL Articles 15 and 17 which presents a ranking listing of the State's surface waters by the letters AA, A, B, C or D according to certain quality standards and specifications. AA is the highest quality rank and has the greatest suitability for mans' usage (Between Fords UMP).

WETLANDS CLASSES - A system of classification set forth in ECL Article 24, section 664.5 which ranks wetlands I through IV based upon wetland function and benefits, I being the highest rank (DEC publication WM-P11, 6/80 & Between Fords UMP).

State Environmental Quality Review
NEGATIVE DECLARATION
Notice of Determination of Non-Significance

Project Number _____

Date September 27, 2001

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

Name of Action:

Adoption of the Chautauqua Unit Management Plan

SEQR Status: Type 1 :
 Unlisted

Conditioned Negative Declaration: Yes
 :
 No

Description of Action:

The Chautauqua Unit Management Plan sets forth the proposed goals, management objectives and associated costs for a 3,037 acre unit of State Reforestation and Multiple Use lands in northern Chautauqua County. The plan details proposed management activities for a 20-year period, dating from the time of approval and adoption. A review and update process will take place at the end of the tenth year. Public input will be sought via a public meeting.

Management activities planned for the Unit include: boundary line maintenance, forest inventory, wood products harvesting, creation of formal and informal parking areas, maintenance of grasslands by mowing, maintenance and rehabilitation of facilities, acquisition of inholdings, wildlife habitat maintenance, recreational trail maintenance, oil and gas lease monitoring for compliance, law enforcement, and fire detection and suppression.

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

The three state forests in the management unit are located in the Towns of Chautauqua, Westfield, Sherman and Stockton in Chautauqua County (see attached map).

SEQR Negative Declaration

Page 2 of 2

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 generic impact statements: State Forest Commercial Products Sales Program, Red Pine Plantation Clearcut Program, Wildlife Management Program, Fish Species Management Activities, State Forest Recreation Management Program, Acquisition of Lands by DEC, and Conserving Open Space in NYS. 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 Generic Environmental Impact Statements, DEC will undertake a site-specific Environmental review for such activities.

Activities in the plan will be performed in accordance with the standards and policies and procedures set forth in the following DEC documents: *Continuous Inventory Handbook*, *State Forest Multiple Use Management Plan Handbook*, *Mineral Resources Rules and Regulations*, *Unpaved Forest Road Handbook*, 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, minerals specialist and biologists and the views expressed by the participating public.

(CONT'D ON PAGE 3)

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: Stephen A. Smith, Forester

Address: 215 South Work Street, Falconer, NY 14733

Telephone Number: 716-665-6111

For Type 1 Actions and Conditioned Negative Declarations, a Copy of this Notice is sent to:

Chief Executive Officer, Town/City/Village of

Other involved agencies (If any)

Applicant (If any)

Environmental Notice Bulletin, NYS Department of Environmental Conservation, 625 Broadway, 4th Floor, Albany, NY 12233-1750

Reasons Supporting This Determination: (cont'd from page 2)

Rehabilitation of existing facilities shall involve improving existing forest roads, gates, parking lots, and marshes. This entails spreading of gravel, grading, ditching, installation of water control devices, etc. When degradation of resources occurs due to normal use or because of poor siting, recommendations shall be made for rehabilitation, maintenance or relocation as is most appropriate. The aesthetic resources will be protected by law enforcement activities, minimizing impacts of harvesting activities and with the establishment of regeneration prior to harvesting mature forests and limiting disturbances in sensitive areas along wet areas.

There are 2,766 acres of forests under even- and uneven-aged management to approximately 100 to 200 years of age. The shelterwood silvicultural system will be used to secure reproduction under a partial canopy prior to removal of the mature forest overstory in those areas under even-aged management. Non-threatened or non-endangered species will be slightly impacted due to the change in the canopy level. Group selection and single tree selection systems will be used in those areas under uneven-aged management to maintain a continuous "high forest" canopy with natural regeneration underneath; impact to non-threatened or non-endangered species is negligible.

Acquisition of inholdings will be from willing sellers and will be considered for purchase if they improve access, consolidate existing state lands or provide recreational opportunities.

Oil and gas lease activities will utilize the state land permit procedures for drilling permit applications. All exploration, extraction and occupation of the property by the Lessee shall be subject to the direction and control of the Lessor in so far as may be necessary to achieve compliance with the policies and provisions of the ECL and rules and regulations issued thereunder to protect the environment.

STREAM CLASSIFICATION

Table 1. Classification of stream mileage within the Chautauqua Management Unit State Lands.			
Mount Pleasant State Forest #3			
Stream	Current Stream Classification	Section Classified as C(T) in State Forest	Additional Mileage that Should be C(T)
Wing Creek (PA 63-13-4-P122-15-3)	C(T)	1.3	0.0
Wing Creek Tributaries			
PA 63-13-4-P122-15-3-8	C(T)	0.8	0.0
PA 63-13-4-P122-15-3-10	C(T)	0.4	0.0
PA 63-13-4-P122-15-3-11	C(T)	0.2	0.0
PA 63-13-4-P122-15-3-12	C(T)	0.2	0.0
Chautauqua Gorge State Forest #5			

Chautauqua Creek (E68)	A(T)	0-CT, 1.2 AT	0.0
Chautauqua Creek Tributaries			
E68-10A	A(T)	0.1	0.0
E68-11	A(T)	1.3	0.0
E68-13	A(T)	0.5	0.0
E68-14	A(T)	0.7	0.0
Stockton State Forest #6			
Dewittville Creek Tributary (PA63-13-4-P122-22-8)	C	0	
Bear Lake Outlet Tributaries			
PA63-13-23-2	C	0.0	1.8
PA63-13-23-2-3	C	0.0	0.4

FISH SPECIES

Table 2. Fish species present in the Chautauqua Management Unit State lands.		
Species	Latin Name	Streams
brook trout	<i>Salvelinus fontinalis</i>	BLOT**
brown trout	<i>Salmo trutta</i>	WC, WCT*, CC*
rainbow trout	<i>Oncorhynchus mykiss</i>	CC, CCT
central stone roller	<i>Campostoma anomalum</i>	WC, WCT*, BLOT
blacknose dace	<i>Rhynichthys atratulus</i>	WC, WCT*, BLOT, CC
longnose dace	<i>Rhynichthys cataractae</i>	CC
common shiner	<i>Luxilus cornutus</i>	WC, WCT*, CC
creek chub	<i>Semotilus atromaculatus</i>	WC, WCT*, BLOT, CC
redside dace	<i>Clinostomus elongatus</i>	WC, WCT*, CC

white sucker	<i>Catostomus commersoni</i>	WC, WCT*, CC
northern hog sucker	<i>Hypentelium nigricans</i>	WC, WCT*, CC
rainbow darter	<i>Etheostoma caeruleum</i>	WC, WCT*, CC
johnny darter	<i>Etheostoma nigricans</i>	DCT*, CC,
mottled sculpin	<i>Cottus bairdi</i>	WC, WCT*, DCT*, CC, CCT*

WC-Wing Creek (PA 63-13-4-P122-15-3)
WCT-Wing Creek Tributaries (PA 63-13-4-P122-15-3-8,10 &12)
CC-Chautauqua Creek (E68)
CCT-Chautauqua Creek Tributaries (E68-12, 13, &14)
DCT-Dewittville Creek Tributary 8 (PA63-13-4-P122-22-8)
BLOT-Bear Lake Outlet Tributary 2 (PA63-13-23-2)

* - likely present but not verified by field collections
** - may be reintroduced to this stream

MAMMALS, AMPHIBIANS AND REPTILES

	Common Name	Scientific Name	NYS Status
Mammals			
	Shrews	<i>Sorex spp.</i> , <i>Microsorex spp.</i> , <i>Cryptotis spp.</i> , <i>Blarina spp.</i>	U
	Myotis	<i>Myotis spp.</i>	U
	Star-nose mole	<i>Condylura cristata</i>	U
	Hairy-tail mole	<i>Parascalops breweri</i>	U
	Deer mouse	<i>Peromyscus maniculatus</i>	U
	White-footed mouse	<i>Peromyscus leucopus</i>	U
	Red-backed vole	<i>Clethrionomys gapperi</i>	U
	Pine vole	<i>Pitymys pinetorum</i>	U
	Woodland jumping mouse	<i>Napaeozapus insignis</i>	U

	Common Name	Scientific Name	NYS Status
	Eastern chipmunk	<i>Tamias striatus</i>	U
	Big brown bat	<i>Eptesicus fuscus</i>	U
	Red bat	<i>Lasiurus borealis</i>	U
	Hoary bat	<i>Lasiurus cinereus</i>	U
	Shorttail weasel	<i>Mustela erminea</i>	G
	Longtail weasel	<i>Mustela frenata</i>	G
	Mink	<i>Mustela vison</i>	G
	Gray squirrel	<i>Sciurus carolinensis</i>	G
	Fox Squirrel	<i>Sciurus niger</i>	G
	Red squirrel	<i>Tamiasciurus hudsonicus</i>	U
	Northern flying squirrel	<i>Glaucomys sabrinus</i>	U
	Beaver	<i>Castor canadensis</i>	G
	Muskrat	<i>Ondatra zibethica</i>	G
	Virginia opossum	<i>Didelphis virginiana</i>	G
	Raccoon	<i>Procyon lotor</i>	G
	Woodchuck	<i>Marmota monax</i>	U
	Striped skunk	<i>Mephitis mephitis</i>	G
	Coyote	<i>Canis latrans</i>	G
	Red fox	<i>Vulpes fulva</i>	G
	Gray fox	<i>Urocyon cinereoargenteus</i>	G
	Eastern cottontail	<i>Sylvilagus florindanus</i>	G
	Porcupine	<i>Erethizon dorsatum</i>	G
	White-tailed deer	<i>Odocoileus virginianus</i>	G
	Black bear	<i>Ursus americanus</i>	G
	Snowshoe hare		G
Amphibians			
	Red-spotted newt	<i>Notophthalmus viridescens</i>	U
	Northern dusky salamander	<i>Desmognathus fuscus</i>	U

	Common Name	Scientific Name	NYS Status
	Mountain dusky salamander	<i>Desmognathus ochrophaeus</i>	U
	Redback salamander	<i>Plethodon cinereus</i>	
	Northern spring salamander	<i>Gyrinophilus porphyriticus</i>	U
	Northern slimy salamander	<i>Plethodon glutinosus</i>	U
	Northern two-lined salamander	<i>Eurycea bislineata</i>	U
	American toad	<i>Bufo americanus</i>	U
	Northern spring peeper	<i>Hyla crucifer</i>	U
	Gray treefrog	<i>Hyla versicolor</i>	U
	Bullfrog	<i>Rana catesbeiana</i>	G
	Green frog	<i>Rana clamitans melanota</i>	G
	Wood frog	<i>Rana sylvatica</i>	G
	Northern leopard frog	<i>Rana pipiens</i>	G
	Pickerel frog	<i>Rana palustris</i>	G
Reptiles			
	Eastern box turtle	<i>Terrapene carolina</i>	G - SC
	Common snapping turtle	<i>Chelydra serpentina</i>	U
	Eastern painted turtle	<i>Chrysemys picata</i>	U
	Wood turtle	<i>Clemmys insculpta</i>	G - SC
	Northern water snake	<i>Natrix sipedon</i>	U
	Northern brown snake	<i>Storeria dekayi</i>	U
	Northern redbelly snake	<i>Storeria occipitomaculata</i>	U
	Eastern garter snake	<i>Thamnophis sirtalis</i>	U
	Northern ringneck snake	<i>Diadophis punctatus edwardsi</i>	U
	Eastern smooth green snake	<i>Opheodrys vernalis</i>	U
	Eastern milk snake	<i>Lampropeltis triangulum</i>	U

U - "Unprotected" - Species may be taken at any time without limit; however, a license to take may be required.

G - Any variety of "big game" or "small game" species as stated in the Environmental Conservation Law; many normally have an open season for at least part of the year and are protected at other times.

P - "Protected" means "wild game, protected wild birds and endangered species of wildlife" as defined in the Environmental Conservation Law.

SC - "Special Concern Species" are those native species which are not yet recognized as endangered or threatened, but for which documented evidence exists relating to their continued welfare in New York State. The special concern category does not in itself provide protection; therefore, a second notation indicating whether or not such species is otherwise protected.

T - "Threatened" determined by DEC as likely to become an endangered species within the foreseeable future in New York State or federally listed as threatened.

BIRDS

Scientific Name	Common Name	NYS Status
<i>Accipiter cooperii</i>	Cooper's Hawk	P SC
<i>Accipiter striatus</i>	Sharp-shinned hawk	P
<i>Actitis macularia</i>	Spotted sandpiper	P
<i>Aegolius acadicus</i>	Northern saw-whet owl	P
<i>Agolius phoeniceus</i>	Red-winged blackbird	P
<i>Aix sponsa</i>	Wood duck	G
<i>Armodramus henslowii</i>	Henslow's sparrow	P SC
<i>Armodramus savannarum</i>	Grasshopper's sparrow	P SC
<i>Anas acuta</i>	Northern pintail	G

Scientific Name	Common Name	NYS Status
<i>Anas americana</i>	American wigeon	G
<i>Anas crecca</i>	Green-winged teal	G
<i>Anas discors</i>	Blue-winged teal	G
<i>Anas platyrhynchos</i>	Mallard	G
<i>Anas ruebripes</i>	American black duck	G
<i>Anas strepera</i>	Gadwall	G
<i>Anthus rubescens</i>	Water pipit	P
<i>Archilochus colubris</i>	Ruby-throated hummingbird	P
<i>Ardea herodias</i>	Great blue heron	P
<i>Ardea affinis</i>	Lesser scaup	G
<i>Aythya americana</i>	Redhead	G
<i>Aythya marila</i>	Greater scaup	G
<i>Aythya valisineria</i>	Canvasback	G
<i>Bartramia longicauda</i>	Upland sandpiper	P SC
<i>Bombycilla cedorum</i>	Cedar waxwing	P
<i>Bonasa umbellus</i>	Ruffed grouse	G
<i>Bubo virginianus</i>	Great horned owl	P
<i>Bucephala albeola</i>	Bufflehead	G
<i>Buteo Jamaicensis</i>	Red-tailed hawk	P
<i>Buteo lagopus</i>	Rough-legged hawk	P
<i>Buteo lineatus</i>	Red-shouldered hawk	T
<i>Buteo platypterus</i>	Broad-winged hawk	P
<i>Butorides striatus</i>	Green-backed heron	P
<i>Cardinalis cardinalis</i>	<i>Northern cardinal</i>	P
<i>Caruelis pinus</i>	<i>Pine siskin</i>	P
<i>Carduelis tristis</i>	<i>American goldfinch</i>	P
<i>Carpodacus mexicanus</i>	<i>House finch</i>	P
<i>Carpodacus purpureus</i>	<i>Purple finch</i>	P
<i>Cathartes aura</i>	<i>Turkey vulture</i>	P

Scientific Name	Common Name	NYS Status
<i>Cathmus fuscescens</i>	Veery	P
<i>Catharus guttatus</i>	Hermit thrush	P
<i>Catharus ustulatus</i>	Swainson's thrush	P
<i>Certhia americana</i>	Brown creeper	P
<i>Ceryle alcyon</i>	Belted kingfisher	P
<i>Chaetura pelagica</i>	Chimney swift	P
<i>Charadrius vociferus</i>	Killdeer	P
<i>Chen caerulescens</i>	Snow goose	G
<i>Chordeiles minor</i>	Common nighthawk	P SC
<i>Circus cyaneus</i>	Northern harrier	T
<i>Cistothorus palustris</i>	Marsh wren	P
<i>Coccothraustes vespertinus</i>	Evening grosbeak	P
<i>Coccyzus americanus</i>	Yellow-billed cuckoo	P
<i>Coccyzus erythrophthalmus</i>	Black-billed cuckoo	P
<i>Colaptes auratus</i>	Northern flicker	P
<i>Colinus virginianus</i>	Northern bobwhite	G
<i>Columba livia</i>	Rock dove	U
<i>Contopus virens</i>	Eastern wood-pewee	P
<i>Corvus brachyrhynchos</i>	American crow	G
<i>Cyanocitta cristata</i>	Blue jay	P
<i>Cygnus columbianus</i>	Tundra swan	P
<i>Dendroica caerulescens</i>	Black-throated blue warbler	P
<i>Dendroica castanea</i>	Bay-breasted warbler	P
<i>Dendroica cerulea</i>	Cerulean warbler	P
<i>Dendroica fusca</i>	Blackburnian warbler	P
<i>Dendroica magnolia</i>	Magnolia warbler	P
<i>Dendroica palmarum</i>	Palm warbler	P
<i>Dendroica pensylvanica</i>	Chestnut-sided warbler	P
<i>Dendroica petechia</i>	Yellow warbler	P
<i>Dendroica striata</i>	Blackpoll warbler	P

Scientific Name	Common Name	NYS Status
<i>Dendroica tigrina</i>	Cape may warbler	P
<i>Dendroica virens</i>	Black-throated green warbler	P
<i>Dolichonyx oryzivorus</i>	Bobolink	P
<i>Dryocopus pileatus</i>	Pileated woodpecker	P
<i>Dumetella carolinensis</i>	Gray catbird	P
<i>Empidonax minimus</i>	Least flycatcher	P
<i>Empidonax traillii</i>	Willow flycatcher	P
<i>Empidonax virens</i>	Acadian flycatcher	P
<i>Eremophila alpestris</i>	Horned lark	P
<i>Euphagus carolinus</i>	Rusty blackbird	P
<i>Falco sparverius</i>	American kestrel	P
<i>Fulica americana</i>	American coot	G
<i>Gallinago gallinago</i>	Common snipe	P
<i>Gallinula chloropus</i>	Common moorhen	P
<i>Geothypis trichas</i>	Common yellowthroat	P
<i>Hirundo pyrrhonota</i>	Cliff swallow	P
<i>Hirundo rustica</i>	Barn swallow	P
<i>Hylocichla mustelina</i>	Wood thrush	P
<i>Icteria virens</i>	Yellow-breasted chat	P
<i>Icterus galbula</i>	Northern oriole	P
<i>Icterus spurius</i>	Orchard oriole	P
<i>Junco hyemalis</i>	Dark-eyed junco	P
<i>Lanius excubitor</i>	Northern shrike	P
<i>Larus argentatus</i>	Herring gull	P
<i>Larus delawarensis</i>	Ring-billed gull	P
<i>Larus marinus</i>	Great black-backed gull	P
<i>Larus philadelphia</i>	Bonapate's gull	P
<i>Lophodytes cucullatus</i>	Hooded merganser	G
<i>Melanerpes carolinus</i>	Red-headed woodpecker	P
<i>Melanerpes erythrocephalus</i>	Red-headed woodpecker	P

Scientific Name	Common Name	NYS Status
<i>Meleagris gallopavo</i>	Wild turkey	G
<i>Melospiza georgiana</i>	Swamp sparrow	P
<i>Melospiza lincolnii</i>	Lincoln's sparrow	P
<i>Melospiza melodia</i>	Song sparrow	P
<i>Mergus merganser</i>	Common merganser	G
<i>Mergus serrator</i>	Red-breasted merganser	G
<i>Mimus polyglottos</i>	Mockingbird	P
<i>Mniotilta varia</i>	Black-and-white warbler	P
<i>Molothrus ater</i>	Brown-headed cowbird	P
<i>Myiarchus crinitus</i>	Great crested flycatcher	P
<i>Oporornis philadelphia</i>	Mourning warbler	P
<i>Otus asio</i>	Eastern screech-owl	P
<i>Oxyura jamaicensis</i>	Ruddy duck	G
<i>Parus atricapillus</i>	Black-capped chickadee	P
<i>Parus bicolor</i>	Tufted titmouse	P
<i>Passer domesticus</i>	House sparrow	U
<i>Passerculus sandwichensis</i>	Savannah sparrow	P
<i>Passerella iliaca</i>	Fox sparrow	P
<i>Passerina cyanea</i>	Indigo bunting	P
<i>Phasianus colchicus</i>	Ring-necked pheasant	G
<i>Pheucticus ludovicianus</i>	Rose-breasted grosbeak	P
<i>Picoides pubescens</i>	Downy woodpecker	P
<i>Picoides villosus</i>	Hairy woodpecker	P
<i>Pipilo erythrophthalmus</i>	Rufous-sided towhee	P
<i>Piranga olivacea</i>	Scarlet tanager	P
<i>Plectrophenax nivalis</i>	Snow bunting	P
<i>Pluvialis dominica</i>	Lesser golden-plover	P
<i>Podiceps auritus</i>	Horned grebe	P
<i>Polioptila caerulea</i>	Blue-gray gnatcatcher	P
<i>Pooecetes gramineus</i>	Vesper sparrow	P SG

Scientific Name	Common Name	NYS Status
<i>Porzana carolina</i>	Sora	G
<i>Progne subis</i>	Purple martin	P
<i>Quiscalus quiscula</i>	Common grackle	P
<i>Rallus elegans</i>	King rail	P
<i>Rallus limicola</i>	Virginia rail	G
<i>Regulus satrapa</i>	Golden-crowned kinglet	P
<i>Riparia riparia</i>	Bank swallow	P
<i>Sayornis phoebe</i>	Eastern phoebe	P
<i>Scolopax minor</i>	American woodcock	G
<i>Seiurus aurocapillus</i>	Ovenbird	P
<i>Seiurus motacilla</i>	Louisiana waterthrush	P
<i>Seirus noveboracensis</i>	Northern waterthrush	P
<i>Setophaga ruticilla</i>	American redstart	P
<i>Sialia sialis</i>	Eastern bluebird	P SC
<i>Sitta canadensis</i>	Red-breasted nuthatch	P
<i>Sitta carolinensis</i>	White-breasted nuthatch	P
<i>Sphyrapicus varius</i>	Yellow-bellied sapsucker	P
<i>Spizella arborea</i>	American tree sparrow	P
<i>Spizella pallida</i>	Clay-colored sparrow	P
<i>Spizella passerina</i>	Chipping sparrow	P
<i>Spizella pusilla</i>	Field sparrow	P
<i>Stelgidopteryx serripennis</i>	Northern rough-winged swallow	P
<i>Sterna forsteri</i>	Forester's tern	P
<i>Strux varua</i>	Barred owl	P s
<i>Sturnella magna</i>	Eastern meadowlark	P
<i>Sturnella neglecta</i>	Western meadowlark	P
<i>Sturnus vulgaris</i>	European starling	U
<i>Tachycineta bicolor</i>	Tree swallow	P
<i>Thryothorus ludovicianus</i>	Carolina wren	P
<i>Toxostoma rufum</i>	Brown thrasher	P

Scientific Name	Common Name	NYS Status
<i>Tringa flavipes</i>	Lesser yellowlegs	P
<i>Tringa melanoleuca</i>	Greater yellowlegs	P
<i>Tringa solitaria</i>	Solitary sandpiper	P
<i>Troglodytes troglodytes</i>	House wren	P
<i>Tryngites subruficollis</i>	Buff-breasted sandpiper	P
<i>Turdus migratorius</i>	American robin	P
<i>Tyrannus tyrannus</i>	Eastern kingbird	P
<i>Tyto alba</i>	Common barn-owl	P SC
<i>Vermivora celata</i>	Orange-crowned warbler	P
<i>Vermivora chrysoptera</i>	Golden-winged warbler	P
<i>Vermivora pinus</i>	Blue-winged warbler	P
<i>Vermivora ruficappilla</i>	Nashville warbler	P
<i>Vireo flavifrons</i>	Yellow-throated vireo	P
<i>Vireo philadelphicus</i>	Philadelphia vireo	P
<i>Vireo gilvus</i>	Warbling vireo	P
<i>Vireo olivaceus</i>	Red-eyed vireo	P
<i>Vireo philadelphicus</i>	Philadelphia vireo	P
<i>Vireo solitarius</i>	Solitary vireo	P
<i>Wilsonia canadensis</i>	Canada warbler	P
<i>Wilsonia citrina</i>	Hooded warbler	P
<i>Wilsonia pusilla</i>	Wilson's warbler	P
<i>Zenaidura macroura</i>	Mourning dove	P
<i>Zonotrichia leucophrys</i>	White-throated sparrow	P
<i>Zonotrichia leucophrys</i>	White-crowned sparrow	P

WILDLIFE HARVEST TABLES

*Deer Harvest For 10-Year Period
Towns of Chautauqua, Stockton and Westfield
Which Includes the Chautauqua Management Unit*

YEA R	CHAUTAUQUA	STOCKTON	WESTFIELD
1999	623	526	469
1998	594	410	354
1997	496	430	403
1996	646	544	414
1995	300	282	379
1994	325	333	228
1993	523	431	259

YEAR	CHAUTAUQUA	STOCKTON	WESTFIELD
1992	458	451	361
1991	490	490	315
1990	490	435	313

*Beaver and Coyote
Towns of Chautauqua, Stockton and Westfield
Which Includes the Chautauqua Management Unit*

YEAR	CHAUTAUQUA		STOCKTON		WESTFIELD	
	BEAVER	COYOTE	BEAVER	COYOTE	BEAVER	COYOTE
1998-99	20	0	35	1	4	0
1997-98	25	0	33	0	66	3
1996-97	80	1	70	1	23	3
1995-96	39	0	56	0	14	0
1994-95	79	1	38	2	26	0

*Reported Spring Turkey Harvest
Towns of Chautauqua, Stockton and Westfield
Which Includes the Chautauqua Management Unit*

YEAR	CHAUTAUQUA	STOCKTON	WESTFIELD
1999	27	25	20
1998	33	29	17
1997	24	17	12

OIL AND GAS LEASES

The following lease agreements were executed by the Department of Environmental Conservation through the Division of Minerals:

Chautauqua 3, Mount Pleasant State Forest, R82745
August 20, 1974 to Seis-ex Geophysical Ltd., 1,416 Acres

Chautauqua 3, Mount Pleasant State Forest, Amended Lease R82745
September 20, 1977 to Seis-ex Geophysical Ltd., adding 156.8 Acres

Chautauqua 5, Chautauqua Gorge State Forest, R84211
November 19, 1974 to Seis-ex Geophysical Ltd., 538 Acres

Chautauqua 6, Stockton State Forest, R84150

November 19, 1974 to Seis-ex Geophysical Ltd., 977 Acres

Each of the lease agreements read the same except for the dollar amounts, acreage and location map.

TAXES

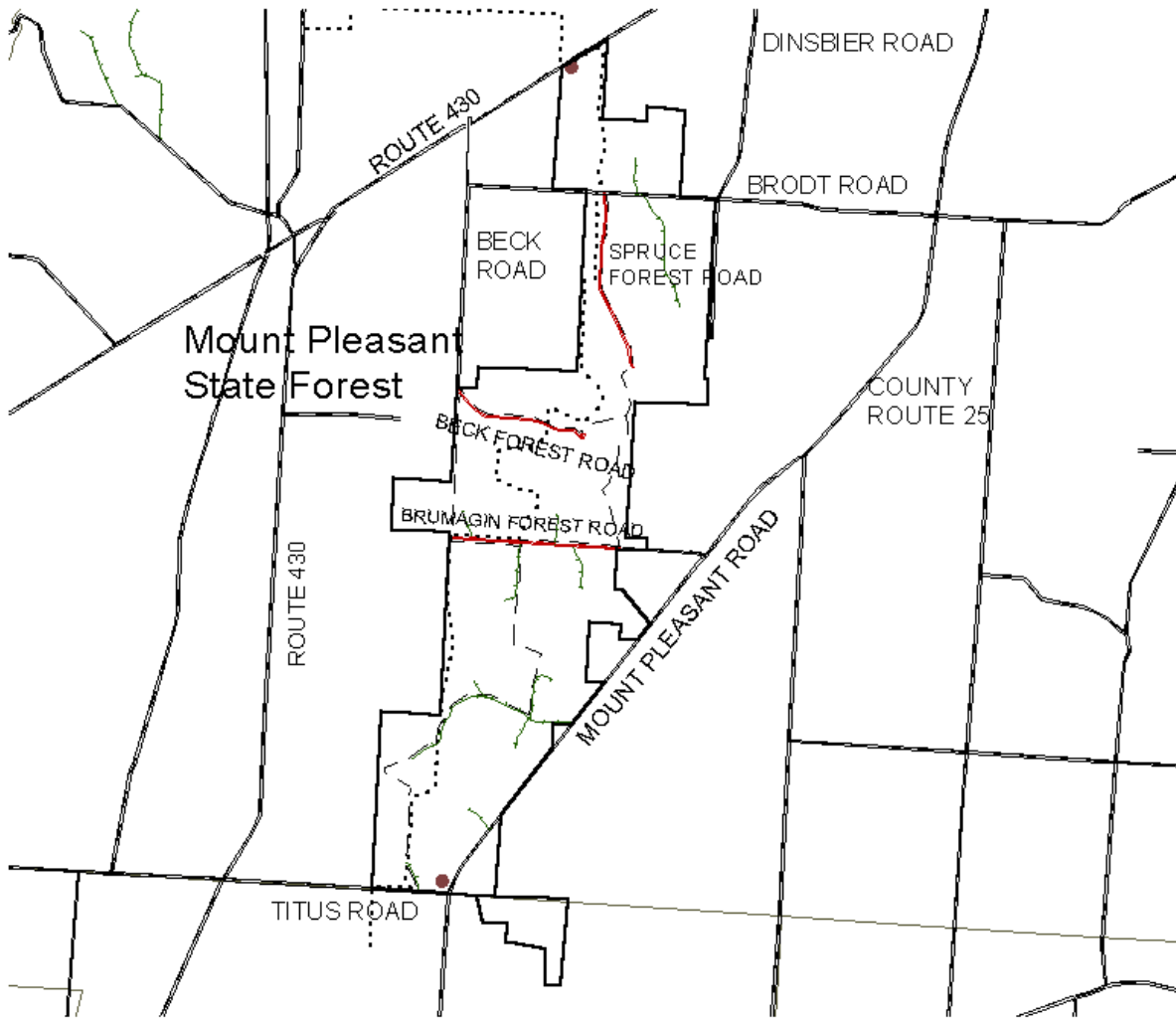
Town	Real Property Taxes - 2000	Fire District Taxes - 2000	School Property Taxes - 1999-00
Charlotte	\$ 5,451.57	\$ 438.92	\$ 12,739.80
Chautauqua	406.64	1,221.31	19,850.93
Cherry Creek	3,208.77	222.91	7,188.69
Clymer	568.52	88.70	1,788.68
Ellington	3,668.22	607.17	4,379.94

Gerry	7,955.44	2,216.59	27,494.07
Harmony	12,531.95	1,516.89	35,827.92
North Harmony	7,022.80	2,192.71	36,333.06
Sherman	1,599.01	197.53	3,602.27
Stockton	1,923.49	494.05	5,288.48
TOTALS	\$44,336.41	\$9,196.78	\$154,493.84
GRAND TOTAL			\$208,027.03

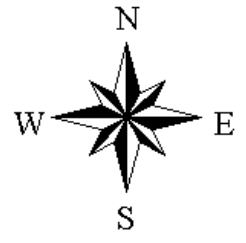
STATE FOREST INVENTORY

MAPS

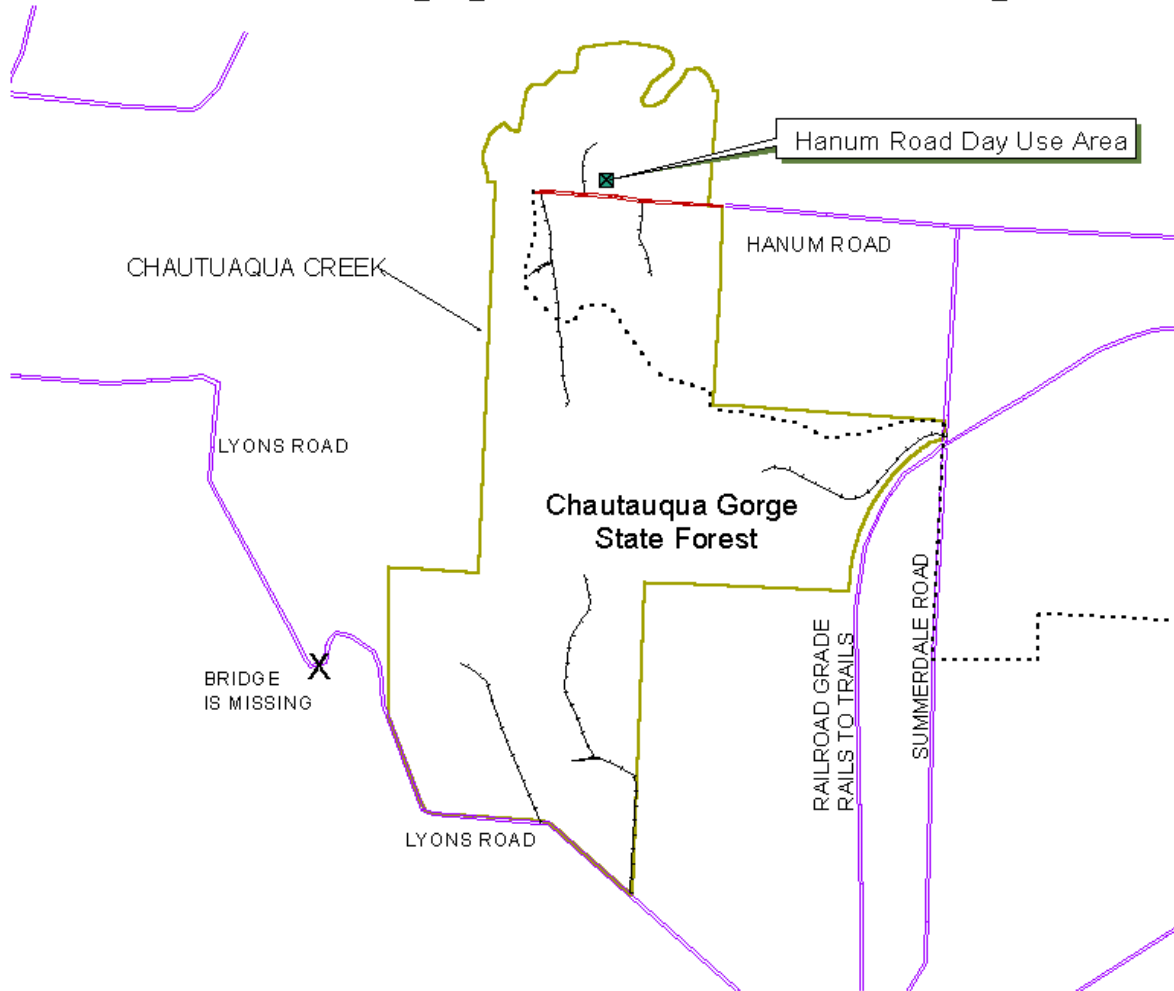
Access and Trails



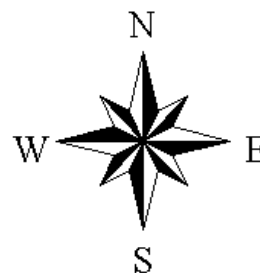
-  Public Roads
-  Forest Roads
-  Administrative Roads
-  Parkinglots
-  Westside Overland Trail
-  Snowmobile Trail



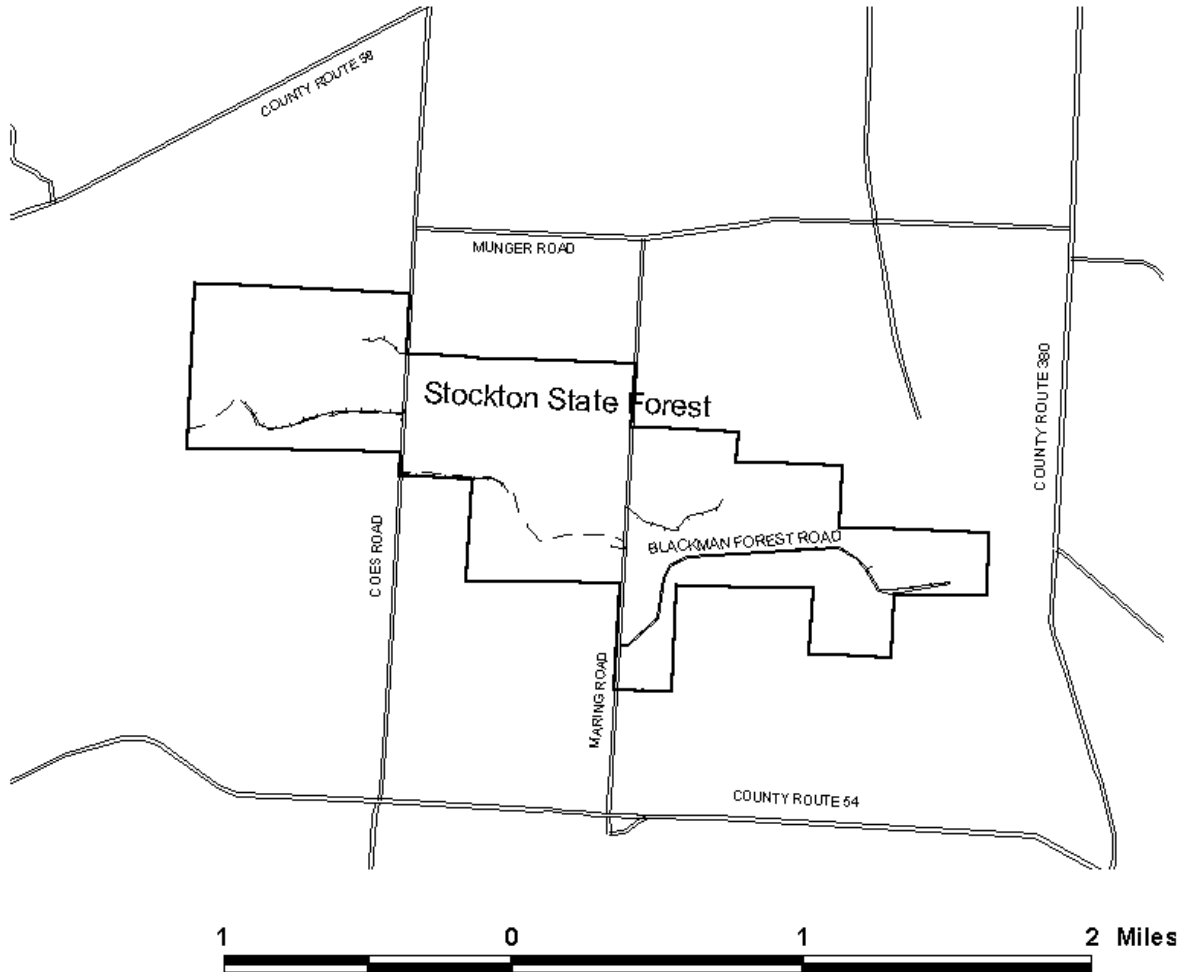
ACCESS AND TRAILS



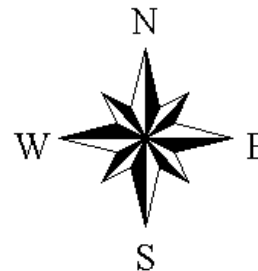
- Westside Overland Trail
- Forest Roads
- Administrative Roads
- Public Roads



Access and Trails








- Public Roads
- Forest Roads
- Administrative Roads
- Snowmobile

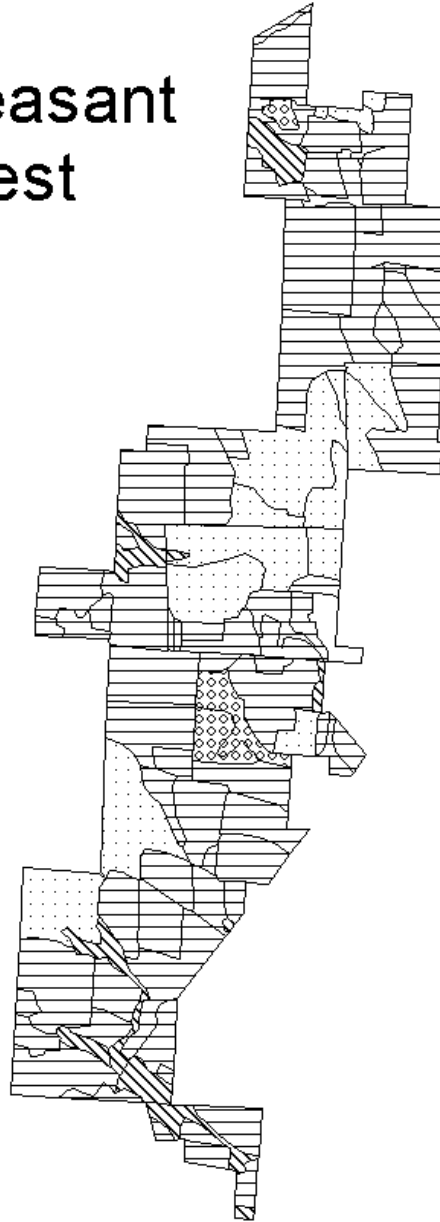
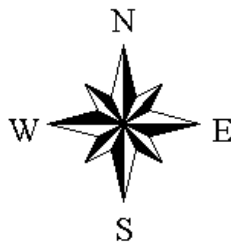


Management Type

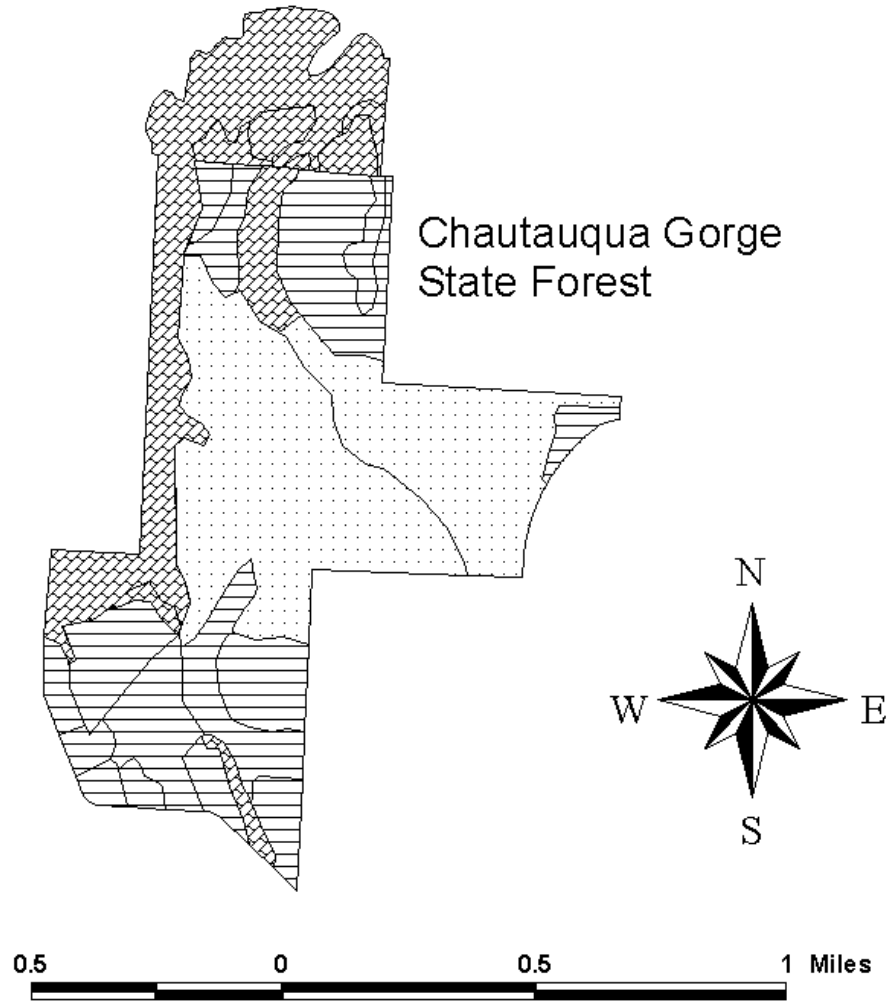
Mount Pleasant State Forest

Management Type

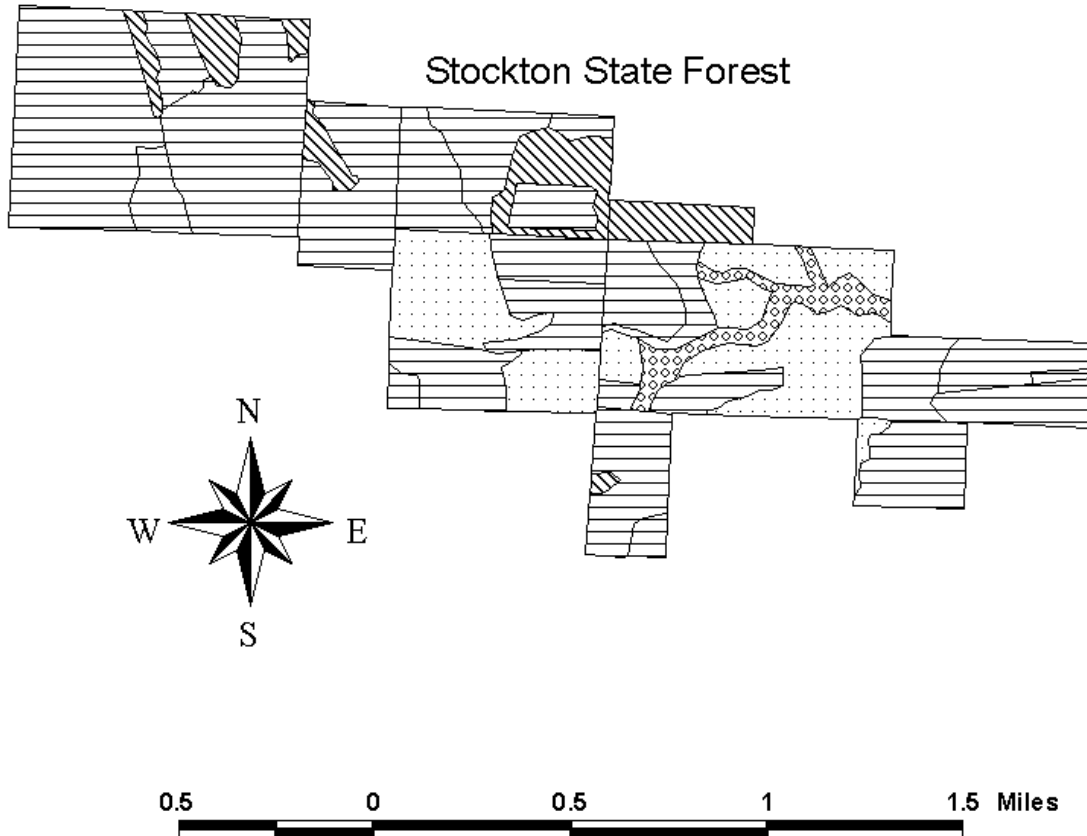
-  Even-age
-  Field
-  Protection
-  Uneven-age
-  Wet/Open



Management Type



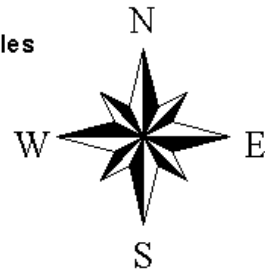
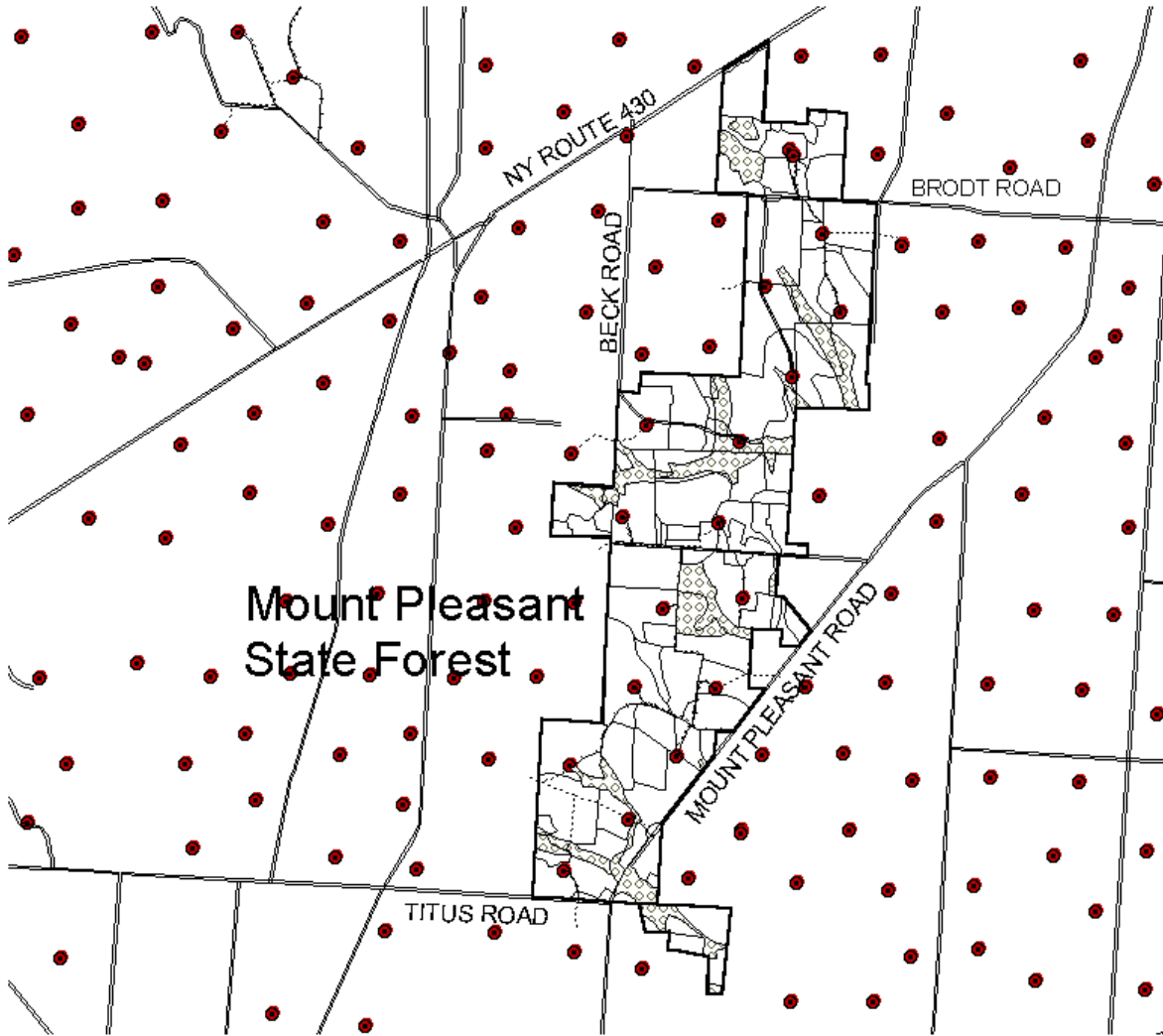
Management Type









Management Type

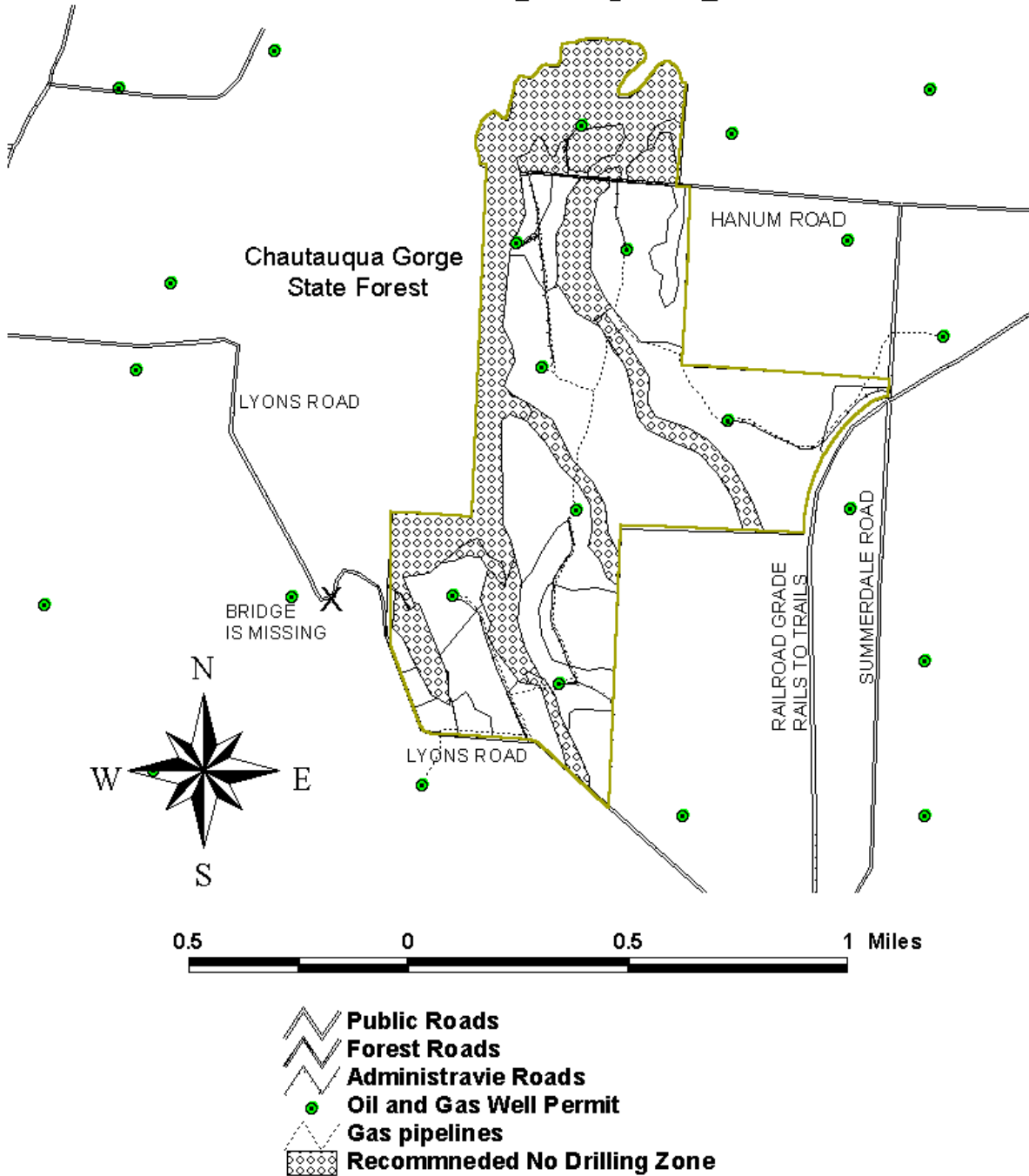
-  Even-age
-  Protection
-  Uneven-age
-  Wet/Open

Minerals

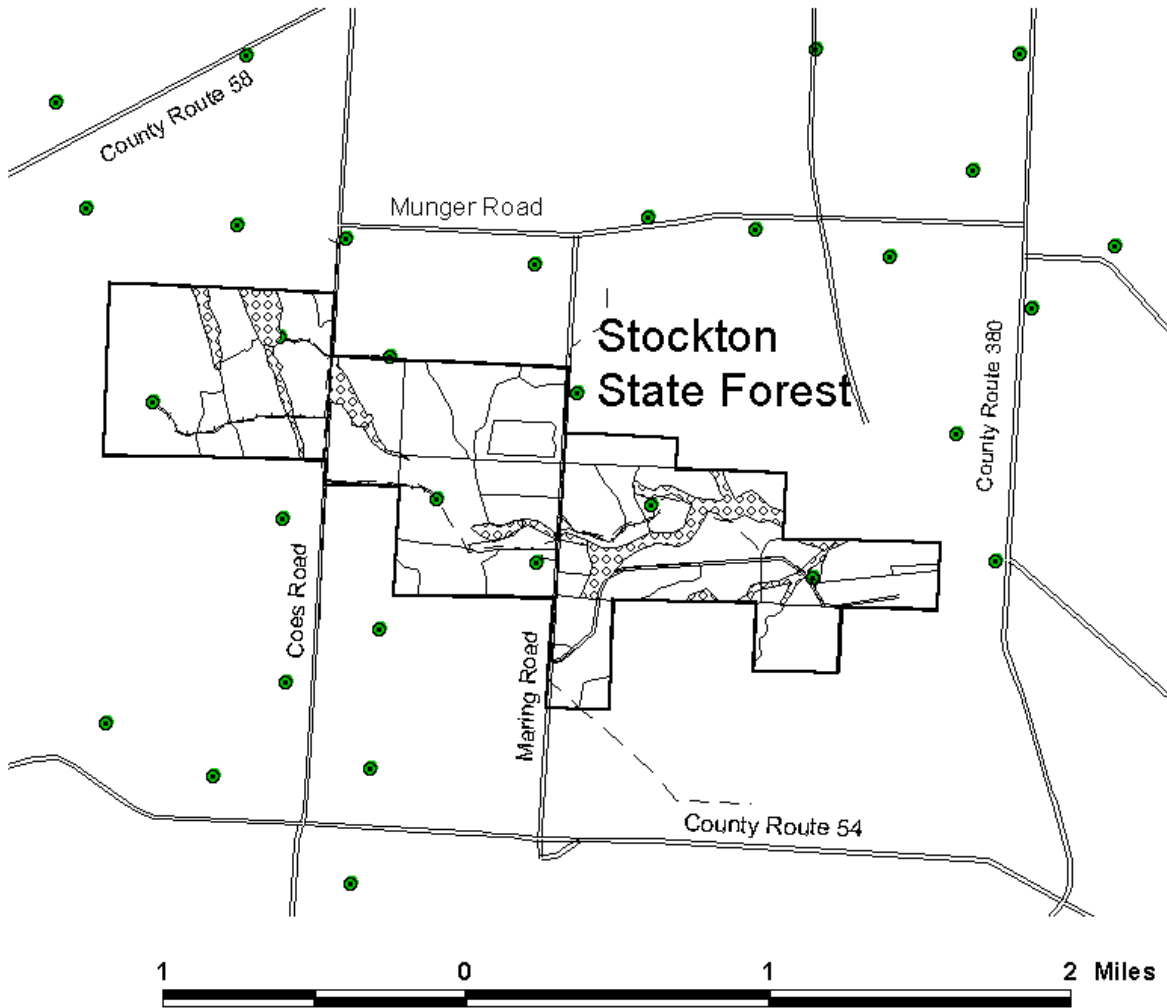


-  Public Roads
-  Forest Roads
-  Administrative Roads
-  Oil and Gas Well Permit
-  Gas pipelines
-  Recommended No Drilling Zone

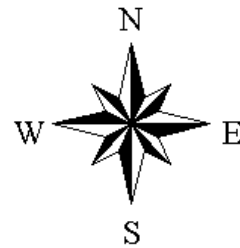
Minerals



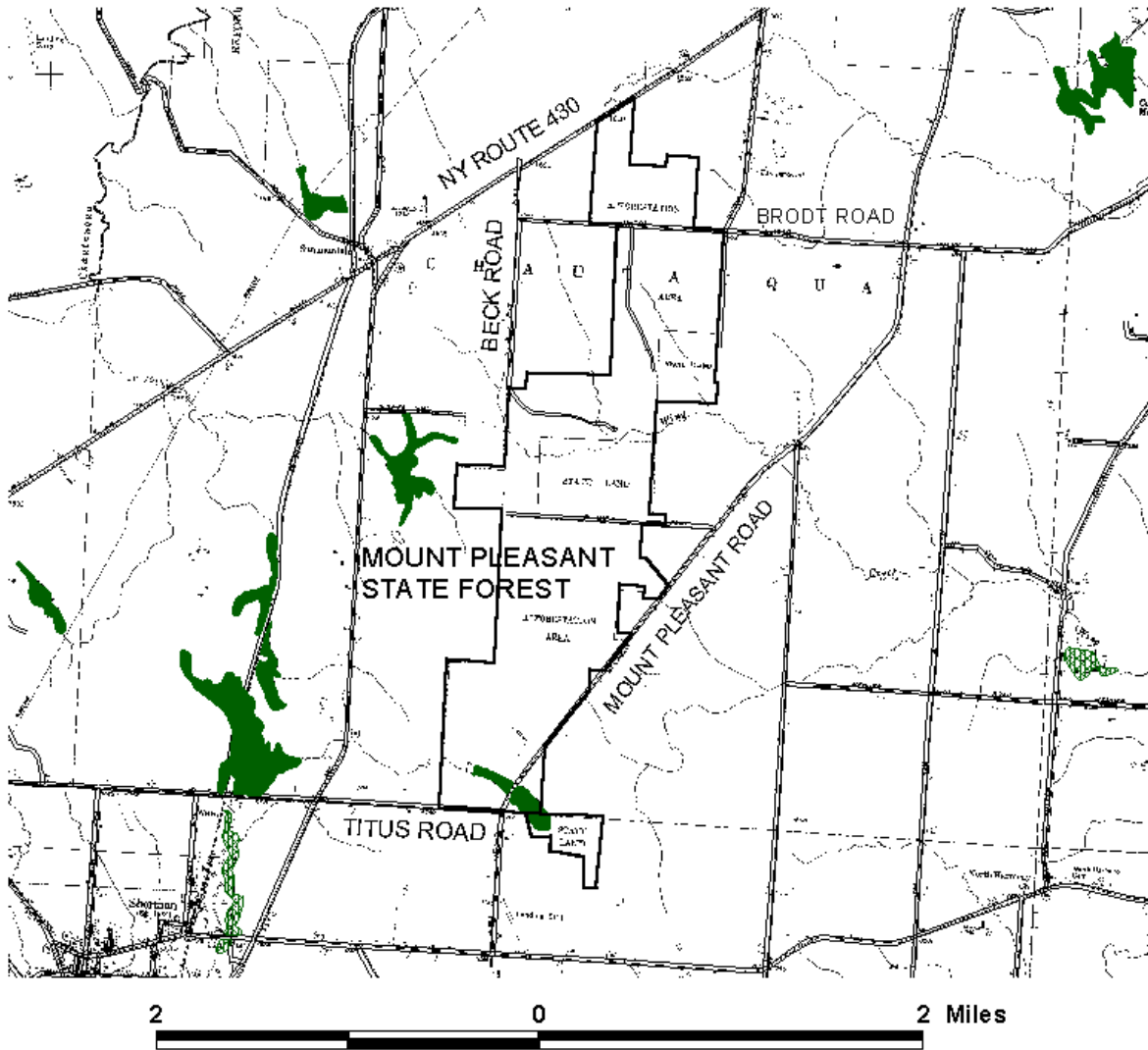
Minerals



-  Public Roads
-  Forest Roads
-  Administrative Roads
-  Oil and Gas Well Permit
-  Gas pipelines
-  Riparian & steep



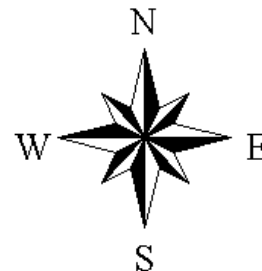
Streams and Wetlands



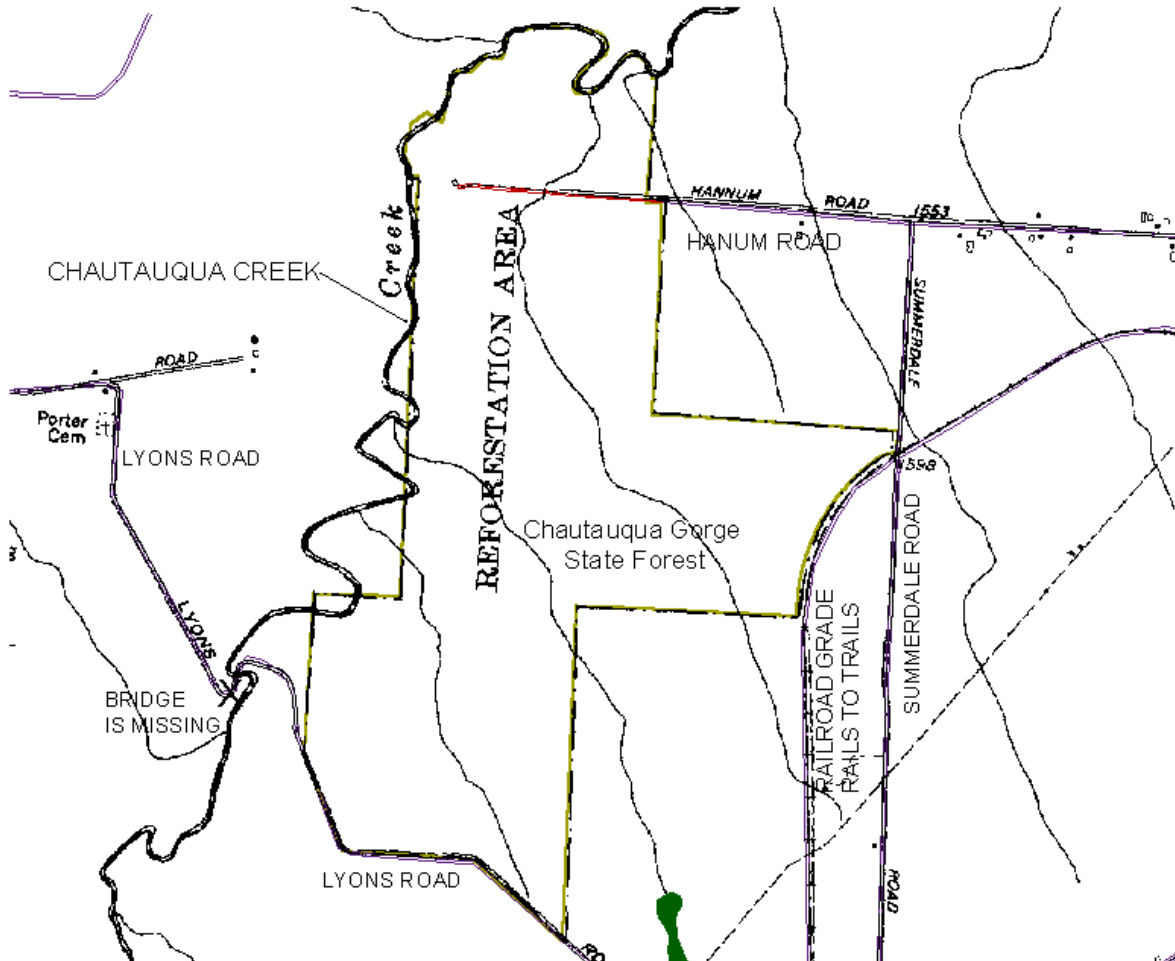
NYS Regulatory Freshwater Wetland

- Class 1
- Class 2
- Class 3
- Class 4
- Uncoded
- Public Roads
- Forest Roads

ALL STREAMS ON STATE FOREST ARE CLASSIFIED C(T)



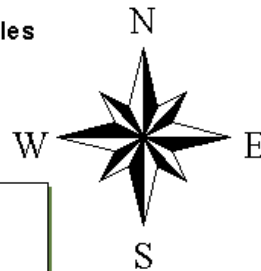
STREAMS AND WETLANDS



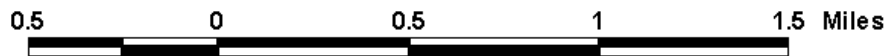
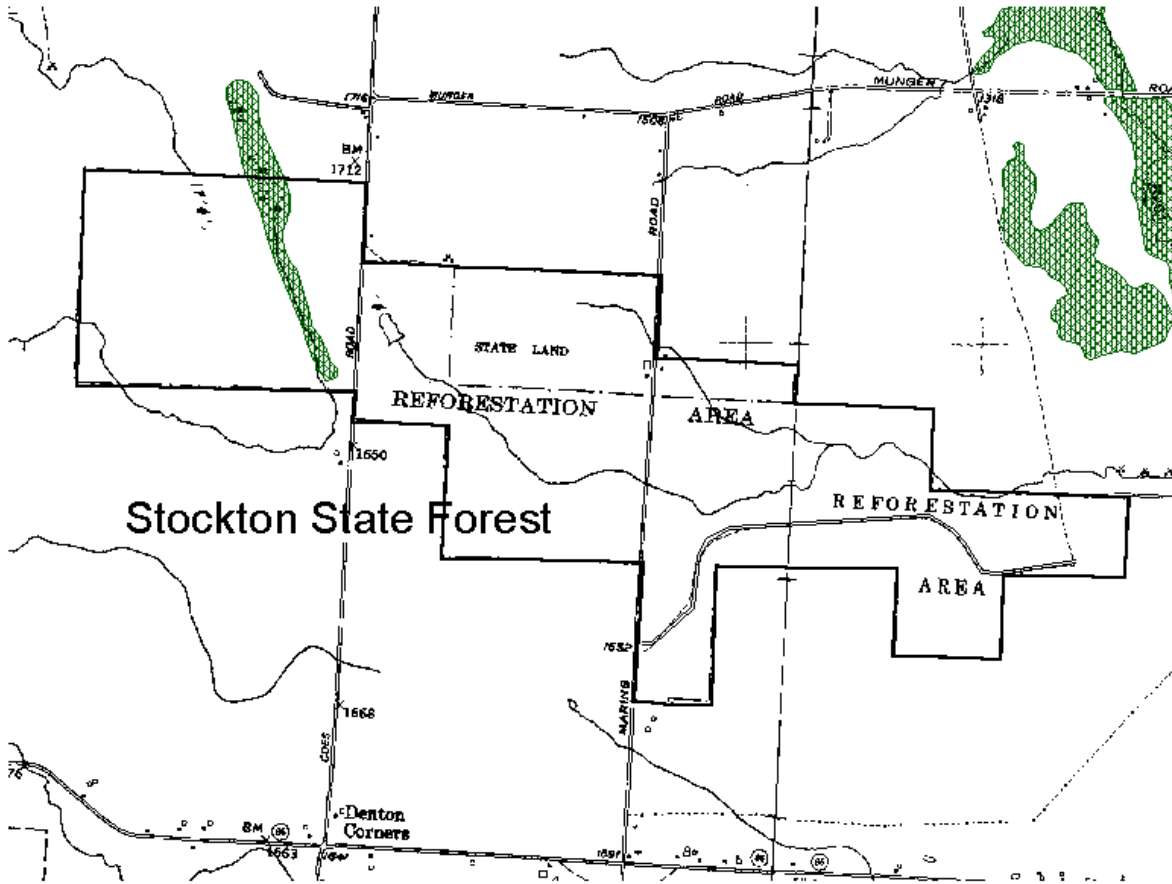
NYS Regulatory Freshwater Wetland








-  Class 1
-  Class 2
-  Class 3
-  Class 4
-  Uncoded
-  FOREST ROAD
-  Public Roads

ALL STREAMS ARE CLASSIFIED C(T) OR BETTER



Streams and Wetlands



-  Forest Roads
-  NYS Regulatory Freshwater Wetland
-  Class 1
-  Class 2
-  Class 3
-  Class 4
-  Uncoded

