NEW YORK STATE OF OPPORTUNITY. | Department of Environmental Conservation

Northern Chenango

UNIT MANAGEMENT PLAN

DRAFT

Towns of Georgetown, Lebanon, Lincklaen, Otselic, Pitcher, Smyrna

Counties of Chenango and Madison

September 2016

DIVISION OF LANDS AND FORESTS
Bureau of State Land Management, Region 7

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Sherburne, New York 13460
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DRAFT

NORTHERN CHENANGO
UNIT MANAGEMENT PLAN

COVERING NINE STATE FORESTS IN CHENANGO AND MADISON COUNTIES, NY:

BEAVER MEADOW - CHENANGO R.A. # 2 & 25
BUCKS BROOK - CHENANGO # 20
LINCKLAEN-CHENANGO # 18 & 23
OTSELIC – CHENANGO #21
EARLVILLE – MADISON #2
LEBANON – MADISON #7
TEXAS HILL – MADISON #8

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DEC's Mission

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

* Highlighted (**bold**) terms are defined in the Glossary.

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Preface

State Forest Overview

The public lands comprising this unit play a unique role in the landscape. Generally, the State Forests of the unit are described as follows:

- large, publicly owned land areas;
- managed by professional Department of Environmental Conservation (DEC) foresters;
- green certified jointly by the Forest Stewardship Council (FSC) & Sustainable Forestry Initiative (SFI);
- set aside for the sustainable use of natural resources, and;
- open to recreational use.

Management will ensure the sustainability, **biological diversity**, and protection of functional **ecosystems** and optimize the ecological benefits that these State lands provide, including the following:

- maintenance/increase of local and regional **biodiversity**
- response to shifting land use trends that affect habitat availability
- mitigation of impacts from invasive species
- response to climate change through carbon sequestration and habitat, soil and water protection

Legal Considerations

Article 9, Titles 5 and 7, of the Environmental Conservation Law (ECL) authorize DEC to manage lands acquired outside the Adirondack and Catskill Parks. This management includes **watershed** protection, production of timber and other forest products, recreation, and kindred purposes. For additional information on DEC's legal rights and responsibilities, please review the statewide Strategic Plan for State Forest Management (SPSFM) at http://www.dec.ny.gov/lands/64567.html. Refer specifically to pages 33 and 317.

Management Planning Overview

The Northern Chenango Unit Management Plan (UMP) is based on a long range vision for the management of Beaver Meadow, Buck's Brook, Lincklaen, Otselic, Earlville, Lebanon, and Texas Hill State Forests, balancing long-term ecosystem health with current and future demands. This Plan addresses management activities on this Unit for the next ten years, though some management recommendations will extend beyond the ten-year period. Factors such as budget constraints, wood product markets, and forest health problems may necessitate deviations from the scheduled management activities.

Strategic Plan for State Forest Management

This unit management plan is designed to implement DEC's statewide Strategic Plan for State Forest Management (SPSFM). Management actions are designed to meet local needs while supporting statewide and eco-regional goals and objectives.

The SPSFM is the statewide master document and Generic Environmental Impact Statement (GEIS) that guides the careful management of natural and recreational resources on State Forests. The plan aligns future management with principles of landscape ecology, ecosystem management, **multiple use** management and the latest research and science available at this time. It provides a foundation for the development of Unit Management Plans. The SPSFM divides the State into 80 geographic "units," composed of DEC administered State Forests that are adjacent and similar to one another. For more information on management planning, see SPSFM page 21 at http://www.dec.ny.gov/lands/64567.html.

DEC's Management Approach and Goals

Forest Certification of State Forests

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

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

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

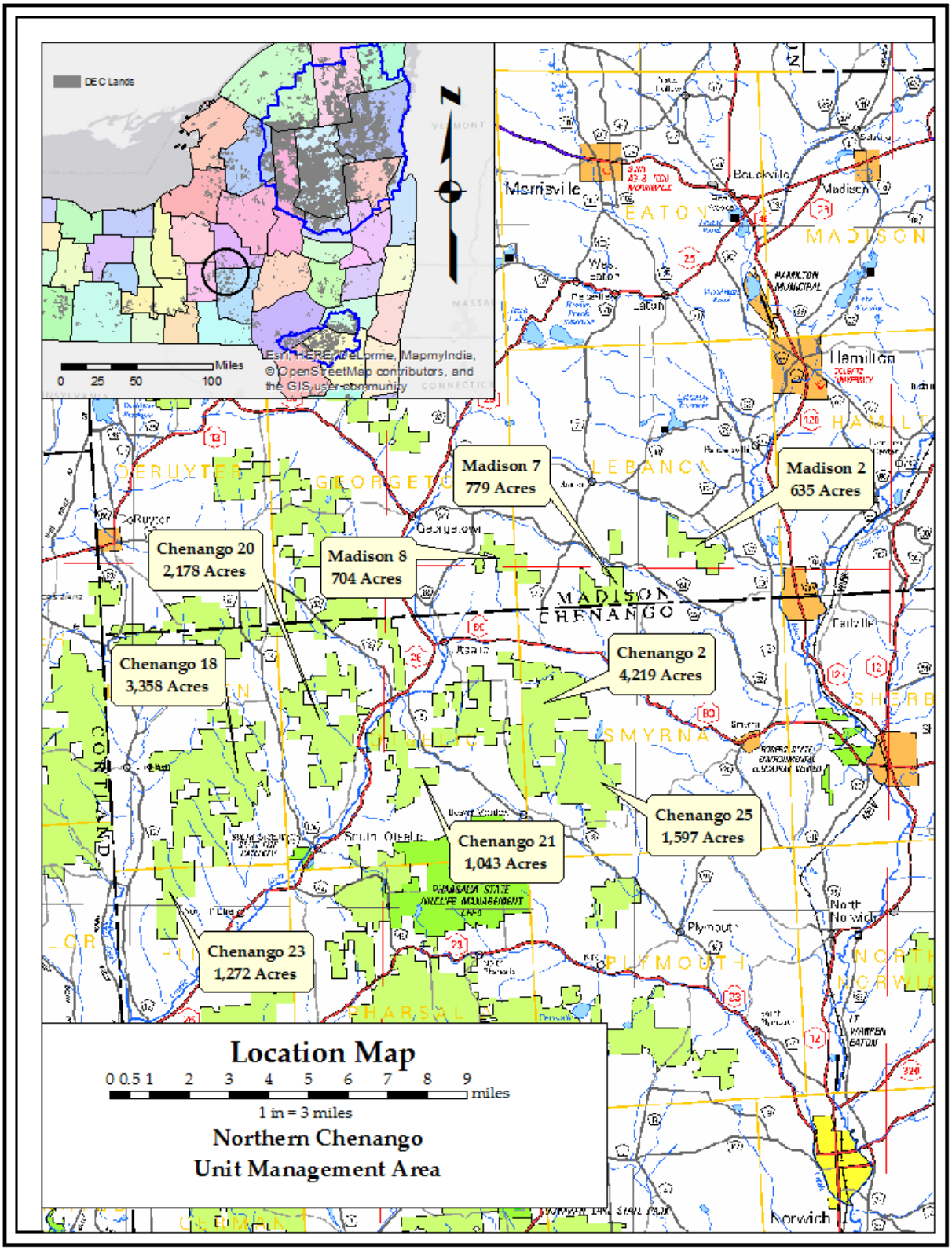
State Forests continue to maintain certification under the most current FSC and SFI standards. Forest products derived from wood harvested off State Forests from this point forward may now

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

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

The mark of responsible forestry

FSC® C002027


DEC Lands
Miles
0 25 50 100
Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community
Madison 7
779 Acres
Madison 2
635 Acres
Chenango 20
2,178 Acres
Madison 8
704 Acres
Chenango 18
3,358 Acres
Chenango 2
4,219 Acres
Chenango 25
1,597 Acres
Chenango 21
1,043 Acres
Chenango 23
1,272 Acres
Location Map
0 0.5 1 2 3 4 5 6 7 8 9 miles
1 in = 3 miles
Northern Chenango
Unit Management Area

I. Historical Background Information

A. State Forest History

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 90% of the woodlands were cleared for cultivation and pasture.

Early farming efforts met with limited success. As the less fertile soils proved to be unproductive, farms were abandoned and settlement was attempted elsewhere. This set the stage for vegetative **succession** and new forests of young **sapling**s began to occupy the ground once cleared.

The State Reforestation Law of 1929 and the Hewitt Amendment (of the NYS Constitution) of 1931 set forth the legislation which authorized the Conservation Department to acquire land by gift or purchase for reforestation areas. This legislation was used to purchase the lands associated with seven of the **State Forests** addressed in this Unit Management Plan (UMP). These State Forests, consisting of not less than 500 acres of contiguous land are 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. Shortly after his inauguration in 1933, President Theodore Roosevelt signed legislation authorizing the Civilian Conservation Corps (CCC) program. Under the supervision of Army personnel, men between the ages of 18 and 26 were employed to plant trees, construct ponds, bridges and roads, as well as other forest improvement activities. Thousands of young men were assigned to plant millions of trees on the newly acquired State Forests. Most of the **plantations** of red pine and Norway Spruce on the forests of this Unit were planted in the 1930s by the CCC.

During the war years of 1941-1945, very little was accomplished on the **reforestation** areas. Plans for further planting, construction, facility maintenance, and similar tasks had to be curtailed. However, through postwar funding, conservation projects once again received needed attention. The Park and Recreation Land Acquisition Act of 1960, as well as the Environmental Quality Bond Acts of 1972 and 1986, contained provisions for the acquisition of additional State Forest lands, including in-holdings or parcels adjacent to existing State Forests. A total of 1,773.7 acres were purchased with these funds for acquisitions to the State Forests addressed in this UMP. All of

these lands were acquired for the conservation and development of natural resources, including the preservation of scenic areas, watershed protection, **forestry**, and recreation.

In 1970, the New York State Department of Environmental Conservation (DEC) was established. This new agency took over the mission of the old Conservation Department with the addition of various State environmental quality Divisions such as air and water. DEC's Division of Lands & Forests is now responsible for the management and stewardship of the State Forests.

New York State totals just over 30 million acres. The state-owned Forest Preserves in the Adirondack and Catskill Parks contain nearly 3 million acres, or very nearly 10 percent of the State's land area. These New York State Constitution, Article XI, Section mandates that Forest Preserve land be "forever kept as wild forest lands". No timber may be cut from the Forest Preserves. State Forests outside of the Adirondack and Catskill Preserves total over 780,000 acres. These lands are managed for a wide variety of purposes such as timber production, hiking, skiing, fishing, trapping and hunting. These State Forests are of great economic importance to the People of New York State. These forests also contribute greatly, in many additional ways, to the health and well-being of our communities.

B. Local History

Prior to the conclusion of the Revolutionary War in 1783, the northwestern portion of present-day Chenango County was inhabited by the Oneidas of the Iroquois Confederacy. Early settlers reported finding hunting trails through the forests and arrowheads in the plowed fields.

The eastern boundary of the Oneida territory was established as the Unadilla River in a treaty between the Federal government and the Oneida Nation dated November 5, 1768. On October 22, 1784, a treaty was drawn at Fort Stanwix which resulted in the Oneidas ceding much of their land west of the Unadilla River (including Chenango County) to the Federal Government.

Chenango County
Chenango County was formed on March 25, 1798, from Herkimer, Montgomery, and Tioga Counties. Named after the river flowing south through the County, Chenango is an Indian word meaning "beautiful waters flowing through the land of the bull thistle".

Smyrna was one of the six townships originally purchased from New York State by William S. Smith. In 1794, he sold most of the town to John Lawrence of New York City. The Township of Smyrna was created on March 25, 1808. It was originally called Stafford, but the name was later changed to Smyrna. This name was derived from the ancient city in Turkey.

The first settler in the Smyrna Township was Joseph Porter of Conway, Massachusetts. In 1792 he built a log cabin one-half mile south from the Village of Smyrna. Subsequent settlers arrived in this

region from New England and began clearing the forests, first in the river valleys and later in the hills. As the population grew, a wide variety of occupations developed. Some of these in the Smyrna area included farming, grist milling, milk, butter, cheese, and maple syrup production, saw milling, logging, and hide tanning. There were also blacksmiths, cobblers, road workers, wagon and carriage shops and cheese box factories.

The Atlas of Chenango County, New York, dated 1875 indicates the location of a few of the activities that took place on land owned by the State today. A sawmill was located east of the George Crumb Road in what is now a Norway spruce plantation. A family cemetery is located in another spruce plantation on the north side of the George Crumb Road.

One of the most prominent people to have lived in the Town of Smyrna was Bringham Young. Bringham Young was born on July 1, 1801, in Whitingham, Vermont. His family moved to Chenango County around 1804, and he lived in Smyrna during his youth until 1817. Today there is a New York State historic sign on County Route 21, south of Smyrna, indicating the location where Bringham Young lived. Bringham Young was introduced to Mormonism after he left Smyrna. He eventually converted to Mormonism at age 31 and later, in 1844, he succeeded Joseph Smith to become president of the Church of Jesus Christ of Latter-Day Saints. In 1847 he led 143 men, three women and two children to the Great Salt Lake Valley in Utah. Forty-nine years later Utah became a state, and today, this is the location of the Mormon Church headquarters.

To the west of Smyrna is the Town of Otselic. The name "Otselic" is an Indian word meaning "plum creek", which refers to the wild plum trees that once grew along the banks of the Otselic River. Settlement in the Town of Otselic was several years behind that occurring in the townships to the east. The first settlement in Otselic was made by Ebenezer Hill of New England, in 1800. He settled at present-day Otselic and later built the first tavern and sawmill in the town. The town proceeded to grow slowly after this settlement, and on March 28, 1817, the township was formed from German. The Otselic River, flowing south and west through the township, provided water necessary for powering sawmills, and the operation of creameries and cheese factories. In 1880, the Otselic Creamery, located at Otselic, was one of the largest in New York State.

Historically, the largest industry in the town of Otselic has been the Gladding Cordage Corporation located at South Otselic. The company was established by John Gladding VII in 1816 and was originally located at Northwest Corners in the Town of Pharsalia. Here, the company manufactured pulley cords, halters, bed cords, chalk lines and fishing lines. In 1892, the company was moved to South Otselic where a two-story water powered factory was built. The B. F. Gladding Company was the first fishing line manufacturer to waterproof black silk lines for bait casting, and eventually the company became the largest producer of the best fishing lines in the world. At its peak years of production, the Gladding Cordage Corporation produced 250,000 miles of fishing line a year. Today, the Gladding Corporation continues to operate in South Otselic at a reduced scale.

In the late 1840's a wooden plank road was built to connect South Otselic with Norwich. This road, presently known as the Plank Road, enabled settlers to transport heavy produce to the market in

Norwich. This was operated as a toll road; however, maintenance costs were higher than the tolls collected so in 1860, the road was given back to the towns.

In the southeast corner of the Otselic Township is the hamlet of Beaver Meadow. The name of this community comes from the historic existence of a beaver dam across the East Branch of the Canasawacta Creek. This dam was reportedly large enough to flood 100 acres of land.

In July 1833, a huge storm, described as a hurricane, passed through this area and adjoining towns traveling southwest to northeast. The storm left behind a one mile wide swath of devastation, uprooting trees and destroying houses and barns as it swept across the landscape.

The Atlas of Chenango County, New York, indicates the historic location of a school house on Chenango #2 in the Town of Otselic. This school was located on Beaver Meadow State Forest on the east side of the Reit Road at its intersection with the Stannard Road.

The Township of Lincklaen was formed on April 12, 1823, and is located in the northwest corner of Chenango County. It was named after Col. John Lincklaen who was an agent of the Holland Land Company and the founder of Cazenovia, located two townships north of Lincklaen. Lincklaen came to this area in 1792 to survey a 135,000 acre tract of land ranging from Cazenovia south to German. He later built his estate called Lorenzo on Cazenovia Lake.

The first settlement in the Town of Lincklaen was by Deacon and Jesse Catlin in 1784. The brothers established Catlin Settlement at what is now the hamlet of Lincklaen and sixteen years later they constructed the town's first sawmill. The early settlers found that the hills of Lincklaen were ideal for sheep grazing, so this town had proportionately more sheep than others in Chenango County. After the Civil War there was an increased demand for dairy products so the agricultural trend shifted towards dairying. Today, the valleys of Lincklaen are used for dairy farming while the hills tend to be forested, as a result of trees becoming established on abandoned farm lands.

The Chenango Experimental Forest

The State began purchasing lands and started to establish plantations during the period of farm abandonment in the early 1930's. On July 25, 1933, a cooperative agreement was formed between the New York State Conservation Department and the United States Forest Service. This agreement established the Chenango Experimental Forest at the center of Beaver Meadow State Forest on Chenango RA #2.

The first work on the Chenango Experimental Forest began with experimental tree plantings in the spring of 1933. The following year, an office for the Forest Service staff was constructed on the south side of the Coye Hill Road, between the Reit Road and the Gibson-Taylor Road. During the following years, the Chenango Experimental Forest was the site of extensive experiments on tree planting. Between 1934 and 1937, 150,400 trees were planted on the Chenango Experimental Forest. Using the Civilian Conservation Corps (CCC) for much of the labor, studies were conducted to determine the best species and planting methods to use for reforesting the large areas of

abandoned farm lands purchased by the State. Various pesticides and herbicides were also tested for effectiveness in killing white pine weevil, mice, and undesirable trees. Drainage ditches were often dug to improve growing conditions in wet fields. In 1937 the Civilian Conservation Corps constructed the weir dam on Chenango #2, at the south end of the truck trail. This dam was built by African American World War I veterans from the Civilian Conservation Corps Camp S-132 located in Pharsalia. After the dam was built, researchers measured water flow through this drainage to determine the effects of tree planting. A meteorological station was also built at this site. In 1938, four wells were constructed to measure ground water levels, 110 locations were established for measuring stream sedimentation, and six snow depth measuring stations were established. Over the following years, detailed measurements were collected of water depth at the weir dam, ground water levels, snow depth, air temperature, soil temperature and frost depth.

The Forest Service planted some unusual tree species for their experiments. Some of these included Japanese red pine, Chinese elm, eastern red cedar, Douglas fir, Kaempfer larch, black oak, and Balkan white pine. One of the experiments involved stripping the roots of red oak seedlings and treating them with hormones to stimulate root development. Other experiments involved planting white pine from different seed sources and separating the plantings by different classes of root, stem, and crown development. Another experiment involved planting the seeds of six hardwood species (red oak, sugar maple, black cherry, white ash, basswood and black locust) to determine which grew the best.

Numerous other experiments were conducted on the Chenango Experimental Forest and in 1939, people interested in the studies came from as far away as Yale University in Connecticut. In 1941, many of the experiments on the forest were discontinued because C.C.C. labor crews and sufficient funding were not available as the war effort directed these resources elsewhere.

Madison County

Georgetown - Originally known as "Slab City" for its three slab covered houses, Georgetown was renamed after the first president, George Washington. Georgetown was part of the Town of DeRuyter until April 7, 1815. Early settlers set out to "rid the land of forests" and had to confront bears, panthers and wolves. In 1870, Georgetown had 1,423 residents, 243 farms and much of the town was in an open, improved condition producing potatoes, hops, cheese, butter, and apples. Sheep were the dominant livestock and cloth was manufactured on local looms. Both the West Shore and the New York Oswego and Midland Railroads passed through Georgetown linking distant markets with locally produced farm and manufactured goods. In 1870, “improved land” occupied much of the landscape and it is estimated that as little as 30% of central New York was forested.

Lebanon - Lebanon was created from Hamilton Township on February 6, 18O7. The Town of Lebanon was originally purchased in 1794 by Revolutionary War Colonel William S. Smith, who then sold the land to settlers. Colonel Smith married Abigail Adams, daughter of President John Adams. Two of the earliest settlers were Jonathan Bates of Vermont and Enoch Stowell of New Hampshire. Lebanon may have been named after Lebanon, Connecticut, home of many early

settlers. However, another origin of the name is attributed to General Erastus Cleveland, a member of the New York State legislature. General Cleveland advocated the bill forming the new township from the Town of Hamilton. The town had no name, and General Cleveland, thinking of the town's magnificent forests, proposed the poetical Biblical name. A stone gristmill, built prior to 1825, was located 1/4 mile east of the present day Lebanon village. The mill dammed a pond covering over 5O acres on Stone Mill Brook. The mill was first owned by Sephus Ostram and later by John Paddleford.

As late as 1815, wolves were hunted in the township. The Syracuse and Chenango Valley Railroad opened in 1872 connecting Earlville to Syracuse. While blasting rock for the rail bed near "Rock Cut", north of Earlville, a landslide on Christmas Eve, 187O killed many Irish rail workers. The rail provided commerce and transportation to local residents, and served as a school bus to children attending Earlville schools. The last passenger train traveled across the rails in 1933. John Buckley originated the famous "Chenango Strawberry Apple" near the village of Lebanon.

A family named Willcox settled on the present day Madison #2. Their cemetery can be found there today. The Atlas of Madison County, N.Y., published in 1875, names many early settlers who occupied the present day State lands.

Madison #2 - O. Hutchins, W.L. Hutchins, E.E. Morgan, D. Mowrey, C. Mowrey, Willcox.
Madison #7 - H.C. Wilcox, G. Kerncross, Miss B. Rice, C. Sherman.
Madison #8 - T. Sharp, W. Wilcox, E. Durphy, E. Humphrey, W. Thayer. L. Martin.

Earlville State Forest was established in 1929 when a large farm property was acquired from Floyd Nowers. Soon after acquisition, thousands of conifer trees, including red pine and Norway spruce, were planted on 400 acres of old fields. Many of these trees were planted using the “Duplex” reforesting machine, a recently developed implement designed by the Champion Sheet Metal Company of Cortland, New York. More recently two ponds were constructed and a popular snowmobile trail was routed through the forest.

Recent History of the Northern Chenango Highlands Unit

The first unit management plan for the forests in the Northern Chenango Highlands Unit (NCH UMP, 2000) included a variety of land use and public use and recreation management objectives. The following is a review of the work done under NCH UMP, 2000 describing the status of those objectives that have been accomplished and those that were not completed for various reasons. Land Management objectives described in NCH UMP, 2000 and new activities that have been accomplished:

- The NCH UMP, 2000 recommended timber harvests or non-commercial thinning treatments on approximately 7,498 acres of the Unit between 2000 and 2013. Harvests or non-commercial thinnings have been conducted on 5,617 acres (41% of the Unit) between

2000 and 2013 generating a direct revenue of approximately 3.3 million dollars to New York State and jobs and raw materials for the wood products industry.

- All of the 1,379 acres recommended for protection or management as Natural Areas have been maintained in that status. Additional areas have been designated for protection status as a result of field analysis indicating that those areas are best suited for non-timber management purposes.
- Since 2000, all taxes have been paid annually to local communities. See Appendix VII for detailed information about taxes paid.
- NCH UMP, 2000 recommended maintaining 45 acres of grasslands and 271 acres of shrubland. Recent forest inventory of the Unit indicates the presence of 10 acres of grasslands and 127 acres of shrublands. There have been inadequate resources available to maintain the former grasslands through periodic mowing. In addition, the Department has since determined that this region is not suitable to identify as a Grassland Focus Area, so grassland and shrub land areas have been allowed to grow into seedling/sapling forested conditions. However, new early successional vegetation conditions have been created through timber harvests in many areas.

The status of the public use and recreation objectives in NCH UMP, 2000 are as follows:

- An informative sign was installed at the site of the tornado blowdown on Ridge Road on Chenango RA #20.
- A public use map and brochure was not produced. Instead the information was placed on the DEC website at: http://www.dec.ny.gov/lands/34531.html
- The two segments of snowmobile corridor trail were established on Beaver Meadow State Forest, Chenango RA #s 2 & 25.
- A hardened, signed designated parking area and off-road trail has been established for people with disabilities on Chenango RA #2, south of the Bliven Road. This trail is 0.7 miles in length and may be used for motorized access under the terms and conditions of the DEC Motorized Access Program for People with Disabilities.
- The truck trail also known as the Weir Dam Road was washed out by a severe storm. The road was rebuilt with new culverts. The road was then washed out a second time by another severe storm. After the second storm it was decided to not rebuild the road and to block vehicle access after the first 0.2 mile of the road and before the impassable portion of the road begins. This resulted in abandonment of about 0.2 miles of the former truck trail.
- A small parking area and kiosk map and sign have been installed on Chenango RA #2 on the Reit Road to provide people with information about Beaver Meadow State Forest.

- An expanded deer hunting program has been established on Beaver Meadow State Forest. Since 2010, the Department has been issuing Deer Management Area Permits for hunters to shoot antlerless deer. This program is currently ongoing as the Department monitors the vegetation response to higher annual deer harvest.

2. Management Objectives not completed

The following projects were planned but not completed as outlined in the first approved UMP:

- Approximately 1,881 acres were scheduled for timber harvest or non-commercial thinning but were not treated.

  Reason: Many stands have not been treated after site analysis revealed that they would not be practical to harvest for reasons such as no feasible access, excessive distance to log landings, and excessive tree mortality from the forest tent caterpillar infestation that occurred in 2006 - 2009.
- There has been no progress on surveying the 8.92 miles of boundary that was identified in NCH UMP, 2000 as being in need of survey delineation.

  Reason: The lack of funding and staffing resources have prevented this from being accomplished.
- NCH UMP, 2000 recommended development of four forest access roads on the Unit comprising a total length of 0.9 miles.

  Reason: After further consideration and site review, the decision was made to not construct any of these access roads to prevent forest fragmentation and eliminate future long term maintenance costs associated with maintaining roads.
- Upgrading the south 0.25 mile section of abandoned road on Chenango RA #25, between George Crumb Road and Coye Hill Road.

  Reason: This road was not improved to eliminate future long term maintenance costs associated with maintaining roads.
- Develop trails on the unit that will be part of the Genny Green Trail System.

  Reason: There has been no funding dedicated to the development of the Genny Green Trail System, so no trails have been constructed.
- Acquire 320 acres of inholding private properties.

  Reason: The acquisition process is limited to people willing to donate or sell their land to the State and there must be available funding for the purchase. Since the development of NCH UMP, 2000, the Department has acquired 4 acres of additional private land from a willing seller. The Department continues to pursue desirable acquisitions where there is a willing seller and available funding.

Recent History of the Lebanon Hill Unit

The Lebanon Hills unit management plan (LHUMP) was completed in 1994 and included a variety of land use and public recreation management objectives. The following is a brief review of work accomplished under LH UMP, 1994:

- silvicultural treatments have been accomplished on 1,116 acres or approximately 77% of the acreage proposed in the LH UMP. Since 1994 these treatments have generated $787,697 in revenue to New York State and contributed raw material to the forest products industry.

-forty five acres of protection forest have been maintained in that status. Additional areas have been designated for protection as a result of field analysis indicating that those areas are best suited for non-timber management purposes.

-since 2000, all taxes have been paid annually to local communities. See Appendix VII for detailed information about taxes paid.

- LH UMP recommended maintaining 26 acres of shrubland. Recent forest inventory of the Unit indicates the presence of 19 acres of shrubland exist on the unit. There have been inadequate resources available to maintain the former shrubland through periodic treatments, however early successional vegetation conditions have been created through timber harvests in many areas.

The status of the public use and recreation objectives in NCH UMP, 2000 are as follows:

-A vehicle pull-off with an informational kiosk was constructed on Madison R.A.#2 stand A-27 (instead of A-20).

-A vehicle pull-off was constructed on Madison R.A.#2 stand A-31.

-A vehicle pull-off was constructed on Madison R.A.#2 stand A-23 (on Morgan Road)

-Abandoned road on west edge of Madison R.A.#2 (stand A-4) was blocked.

-A State Forest identification sign was erected on Madison R.A.#2 (Stand A-29).

-Site preparation and reforestation was completed on Madison R.A.#2 stand A-36

-A vehicle pull-off with an informational kiosk was constructed on Madison R.A.#7 stand A-1.

-Access road on Madison R.A.#7 stand A-1 was rehabilitated.

-A State Forest identification sign was erected on Madison R.A.#7 stand A-1.

-A vehicle pull-off with an informational kiosk was constructed on Madison R.A.#8 stand A-12 (instead of A-3).
-Qualified abandoned road on Madison R.A.#8 stand A-20 was blocked.

-A State Forest identification sign was erected on Madison R.A.#8 stand A-11.

-All forest inventory and boundary line maintenance scheduled for Madison RA# 2, 7, & 8 has been completed.

-The 2.2 miles of Public Forest Access Roads on Madison R.A.#2 & 7 have been maintained on an annual basis.

The following projects were planned but not completed as outlined in the first approved UMP:

-Boundary line surveys on Madison R.A. #2 (Proposal A), R.A.#7 (Proposal A), and R.A.#8 (Proposal D) has not been accomplished. The lack of funding and staffing resources have prevented these surveys from being accomplished.

-Pond deepening and dike rehabilitation on Madison R.A.#2, stand A-13 has not been accomplished. The lack of funding and staffing resources has prevented this project from being accomplished.

-Site preparation and reforestation have not been accomplished on 26 acres on Madison R.A.#2 stands A-3 and A-29 due to a change in management direction. These two stands were thinned and not clearcut.

-Site preparation and reforestation have not been accomplished on 15 acres on Madison R.A.#8 stands A-3,4&5 due to ample stocking of advanced natural regeneration at time of harvest. Site preparation and reforestation was not accomplished on 35 acres on Madison R.A.#8 stand A-9 due to a change in management direction. This stand was thinned and not clearcut.

II. INFORMATION ON THE UNIT

A. Geographic and Geologic Information on the Unit

1. Geography

The Chenango Highlands Unit is located within the Chenango County towns of Lincklaen, Otselic, Pitcher and Smyrna and the Madison County towns of Georgetown and Lebanon. The landscape is occupied by flat-topped hills with second growth forest and wide valleys where agriculture and housing are the primary land uses. A network of tributary streams feed the Otselic and Chenango Rivers with many of the local highways following these meandering channels. State Highway 26 bisects the area and a number of county, town and seasonal roads provide access into remote sections of the unit.

The Unit consists of seven State Forests which occupy approximately 11% of the land area of the six towns.

Table 1. Forests on the Unit

State Forest Name	Reforestation Area	Acres	Townships
Beaver Meadow State Forest	Chenango 2 & 25	5,816	Otselic & Smyrna
Otselic State Forest	Chenango 21	1,043	Otseilc
Buck's Brook State Forest	Chenango 20	2,178	Otseilc
Lincklaen State Forest	Chenango 18 & 23	4,630	Lincklaen & Pitcher
Earlville State Forest	Madison 2	635	Lebanon
Lebanon State Forest	Madison 7	779	Lebanon
Texas Hill State Forest	Madison 8	704	Lebanon & Georgetown
Total		**15,785**	

The 2010 census reports that 5,839 people live within the six towns, and at a density of 27 people per square mile it is well below the New York State average of 412 people per square mile. There are 2,471 people employed in the civilian labor force with 29% working in education and health care, 12% in manufacturing, 9% in retail trade, 9% in construction, and 7% in agriculture, forestry and related occupations. Per capita income within the six towns is $21,723 and 13.9% of the population is living in poverty. (US Census Bureau)

South Otselic, Georgetown and Smyrna are centers of local social and economic life with each supporting churches, residential areas and small businesses. B.F. Gladding Company, a manufacturer of braided products including steel cable and cordage is located in South Otselic and Baille Lumber, a manufacturer of hardwood lumber, is located in Smyrna. Regional firms or institutions employing more than 500 people include Amphenol, Bassett Healthcare, New York Central Mutual, Chobani, MeadWestvaco, Colgate University, The Raymond Corporation, and Sherburne-Earlville Central Schools. (Commerce Chenango)

Local government is organized at the township level with an elected supervisor, town council and highway superintendent. Each town supervisor is represented on the County Board of Supervisors and has committee appointments. Parts of four central school districts-DeRuyter, Otselic Valley, Cincinnatus, and Sherburne/ Earlville- are located within the unit and have a combined student population of 3,256. (Education.com)

In 2012 approximately 35% of the land area (354,722 acres) of Chenango and Madison Counties was in farms. This represents a decrease of 3,522 acres or less than 1% since 2002. Dairy farming is the most important sector of the region's agricultural economy with Madison and Chenango Counties ranking 12 and 22 respectively in milk production in New York State's 62 counties. Despite a 19% decrease in the dairy herd size, milk production in the two counties has increased by nearly 24% since 2002. Technology has restructured dairy operations and changed the look of barns and fields. The emergence and growth of a regional yogurt industry, with its reliance on local milk, suggests that dairy farming will continue to have an important impact on the social, economic and environmental conditions of Chenango and Madison Counties. (USDA)

2. Geology

Surface Geology

The Northern Chenango Unit is located at the northern edge of the Allegheny Plateau. This large upland plateau extends from central and western New York into the northern portions of Pennsylvania. Most surface geology in the Allegheny Plateau was influenced by the processes of glaciation that occurred during the Pleistocene Epoch. Ice sheets from the last glaciation episode (Wisconsin glaciation episode) retreated from the area about ten thousand (10,000) years ago. Glacial activity left behind numerous sedimentary deposits and surficial features which included elongate scour features. Weathering and erosion by streams and rivers has continued to sculpt the surface geology of the Allegheny Plateau to present day, resulting in the hills and valleys prevalent throughout the region. Some features filled with water creating numerous lakes, small and large. A number of these lakes to the west of this area are now called the Finger Lakes.

Most soils and sediments in the region are related to past glacial activity, and subsequent weathering and erosion processes over the last 20,000 years. The underlying parent rocks (rocks that were subjected to the processes of glaciation, weathering and erosion) of this region are sedimentary rocks - specifically shale, siltstone, sandstone, and minor limestone - that were deposited in shallow seas that existed in this region during the Devonian Period of the Paleozoic Era approximately 370 million years ago. Any post-Devonian rocks have been eroded from the region. The presence of rounded igneous and metamorphic clasts is indicative of past glacial activity transporting material into the region from the Canadian Shield to the north. The resulting surface geology of the state lands included in this UMP is similar due to their close proximity.

Surficial deposits overlying bedrock in the UMP area are predominantly glacial till with occasional bedrock outcrops located intermittently on the flanks and crests of ridges and hills most likely due to erosion of overlying glacial till causing the exposure of the bedrock. Recent alluvial and glacial outwash and kame deposits occur in the stream valleys in the UMP area. The alluvial deposits are generally confined to floodplains within stream and river valleys and consist of sand, gravel and silt deposits. The outwash and kame sand and gravel deposits are associated with glacial meltwater fluvial systems and deposition adjacent to the ice.

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

Bedrock Geology

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

Younger bedrock units deposited during the post-Devonian periods (such as Mississippian and Pennsylvanian periods) have been subsequently eroded away by erosional and glacial processes. Underlying the Paleozoic rocks are pre-Paleozoic Era or Pre-Cambrian rocks which are composed of igneous and metamorphic rocks. These rocks are generally referred to as “basement” rocks.

The majority of bedrock outcropping or subcropping beneath surficial deposits in the Northern Chenango Unit consists of shale and siltstones of the Upper Devonian age Genesee Group - particularly the West River Shale. This shale comprises the bedrock on the hilltops and slopes of the UMP area while the Tully Limestone and shales of the Middle Devonian age Hamilton Group are exposed in the tributaries and stream valleys of the Otselic and Chenango Rivers and their associated tributaries. Shale and siltstone can be excavated near the surface where it is weathered and used as a source of aggregate.

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

Geologic Structure

Subsurface rock formations dip (become deeper) to the south-southwest at an average dip angle of about one (1) degree or deepens 100 feet per each mile traveled to the south/southwest. The *Geologic map of New York - Finger Lakes Sheet #15, 1970*, depicts progressively older rock units outcropping farther to the north, confirming the southerly dip of strata in the region.

Geologic structural features in the region generally trend in a northeast to southwest direction. Structural reference is available at the *Preliminary Brittle Structures Map of New York, New York State Museum-Map and Chart Series No.31E, 1977*.

3. Soils

The predominant soil series found on the Northern Chenango Unit are Mardin, Lordstown and Volusia which collectively comprise 84% of the Unit. Some of the other less common but present soil series types on the Unit include Arnot, Bath, Chippewa and Greene soils types.

The typical landscape for these soils consists of broad, rolling, or undulating uplands dissected by a few narrow valleys. Many of the soils on the Unit are typified by a fragipan layer or a seasonably high water table perched above the substratum. Soil slopes are commonly between 3 and 20 percent, but can range from 0 to 50 percent. Soils are generally deep to moderately deep with medium texture. Limitations of the soils are seasonally high water tables, low fertility, high acidity, and erosion on the steeper slopes. Plant rooting is frequently limited by a firm substratum or bedrock. These limitations impact the vegetative composition and growth, as well as management activities including the location and construction of forest roads, trails, and other facilities, and in particular the harvesting of forest products.

Although soil description provides information on subsurface characteristics, ground-level conditions reveal much about land use history and ecological complexity. The relatively smooth ground surface condition in most plantations is due in part to repeated plowing and cropping during the 19th and early 20th centuries. These soils typically have a well-defined plow layer and soil properties such as porosity and availability of nutrients have been altered from pre-settlement conditions. Stones and other impediments to plowing have been removed resulting in a relatively uniform soil texture. Unplowed soils in contrast, have an undulating surface condition with a well-developed hummock and hollow micro topography. Created when a tree becomes wind thrown, the hollows are the hole left from the upturned soil and tree root system, while the hummocks are the mounds formed of those same toppled remains.

More detailed information on the soils in this area can be obtained from the Soil Survey of Madison County, New York and the Soil Survey of Chenango County (USDA, 1985). A map displaying the location of soil types on the Unit is in **Appendix X**, Soil Series and Drainage Classes map.

B. History of the Forest Cover

The forests of the Northern Chenango Unit today contain tree species of both native and non-native origin. The **native tree species** include black cherry, white ash, sugar maple, red maple, basswood, red oak, American beech, yellow birch, eastern hemlock eastern white pine, aspen, striped maple, eastern hop hornbeam and a few others. Most of the non-native species were introduced to the landscape in the 1930s, after New York State had purchased many of the undesirable farmlands and the Civilian Conservation Corps was directed to reforest these lands. Large plantations of red pine, Norway spruce, white spruce, Scotch pine, Japanese larch and European larch were established in the open fields of these newly created State Reforestation Areas. This blend of natural forest **cover types** and plantation forest cover types is one of the defining characteristics of the State forests.

The term "forest cover type" refers to the type of tree or vegetation that dominates the site. However, many more species of plants and animals are found within the type. The interrelationship of these species is known as an **ecological community**.

Two of the most prevalent native ecological communities found on the forests of the Unit are Beech-Maple **Mesic** Forest and Hemlock-Northern Hardwood Forest. The following descriptions (edited) of these communities were developed by the New York State Natural Heritage Program.

Beech-Maple Mesic Forest - A **hardwood** forest with sugar maple and beech co-dominant. These forests occur on moist, well-drained, usually acidic soils. The term "mesic" refers to the balanced moisture level of the **habitat**. The soils are not typically saturated or dry. Common associates are basswood, red maple, white ash, yellow birch, and Eastern hop hornbeam. There are relatively few shrubs and herbs. Characteristic small trees or tall shrubs are American hornbeam, striped maple, witch hazel, hobblebush and alternate-leaf dogwood. Characteristic ground layer species are blue cohosh, christmas fern, jack-in-the-pulpit, white baneberry, wild leek, wild ginger, false Solomon's seal and bloodroot. There are many spring ephemerals which bloom before the canopy trees leaf out. Typically, there is also an abundance of tree seedlings, especially of sugar maple. Beech and sugar maple saplings are often the most abundant "shrubs" and small trees. Hemlock may be present at a low density. Characteristic birds include the American redstart, red-eyed vireo, ovenbird, black-throated blue warbler, least flycatcher, Acadian flycatcher and red-bellied woodpecker.

Hemlock-Northern Hardwood Forest - A mixed forest that typically occurs on middle to lower slopes of ravines, on cool, mid-elevation slopes, and on moist, well-drained sites at the margins of swamps. In any one **stand**, hemlock is codominant with any one to three of the following: beech, sugar maple, red maple, black cherry, white pine, yellow birch, and basswood. The relative cover of hemlock is quite variable, ranging from nearly pure stands in some steep ravines to as little as 20% of the canopy cover. The shrub layer may be sparse. Characteristic shrubs are hobblebush, maple-leaf viburnum and raspberries. Canopy cover can be quite dense, resulting in low light intensities on the forest floor and hence a relatively sparse ground layer. Characteristic ground

layer plants are Indian cucumber-root, Canada mayflower, shining clubmoss, common wood fern, Christmas fern, star flower, bellwort, common wood-sorrel, partridge berry, foamflower, round-leaf violet, twisted stalk and purple trillium. In forests that have beech as codominant, beech-drops is a common herb. Characteristic birds include wild turkey, pileated woodpecker, golden-crowned kinglet, black-throated green warbler and Acadian flycatcher.

There are about 25 different tree species that are commonly found on the forests of the Unit. Although additional species, such as white oak, black willow, American elm and butternut may be found on the Unit, their occurrence is quite rare. The most common tree species that occur on the forests are listed below.

Native Hardwood Species

Black cherry
White ash
American beech
Basswood
Red maple
Northern red oak
Sugar maple
Aspen (big tooth & quaking)
Yellow birch
Black locust
American hornbeam (blue beech)
Eastern hop hornbeam (ironwood)
Striped maple
Shadbush
Apple (various species)

Native Softwood Species
Eastern white pine
Eastern hemlock

Plantation Softwood Species
Norway spruce
White spruce
Japanese, European and Dunkeld larch
Scotch pine
Red pine
Eastern white pine

C. Major Land Classifications Within The Unit

Table 2, following, identifies eight major categories of land found within the Unit. Some of these categories are quite broad, but they are useful in developing forest management goals from a landscape perspective. Definitions for each category are listed below.

Table 2. Land Classifications On the Unit

Land Class	Acres	Acres by DBH		Class	% of Total
		1" - 5"	6" - 11"	12" +	
Ponds	16				<1
Old Fields	17				<1
Shrub land	75				1
Wetland	172				1
Mixed Hwd/Natural Conifer	1,942	3	350	1,589	12
Natural Hardwood	5,414	561	1,210	3,643	34
Conifer Plantation	6,188	11	1,170	5,007	40
Mixed Hwd/Plantation Conifer	1,729	397	457	875	11
Shale Pits	5				<1
Roads	219				1
Totals	**15,777***	**972**	**3,187**	**11,114**	
% of Total Forested Area		**6**	**21**	**73**	**100**

* Note: The total acres used for this plan is based upon Arc GIS calculations and is slightly different than the deeded acres listed in Table 1.

The Land Class categories listed in Table 2 are described below:

Ponds include both man-made and natural origin ponds on the Unit.

Old fields are essentially treeless and contain a mix of grasses and **forbes** growing on upland **sites** that are not wetlands. These are old agricultural fields, from 1 to 20 acres in size, which have not reforested.

Shrub lands are early successional communities that are not on wetland sites and are dominated by woody shrubs, apple and thorn apple trees along with scattered openings and larger trees.

Wetlands include open wet meadows and areas dominated by alders or other shrub species on wetland sites. Scattered trees may be mixed with the shrubs.

Mixed hardwood/natural conifer stands are comprised of at least 10% native conifers (eastern white pine, eastern hemlock, balsam fir, or cedar) in a mixture with hardwoods. This category also includes 211 acres of forested wetlands containing native conifers.

Natural hardwoods consist of areas where at least 90% of the forest cover within these stands consists of native hardwood species (white ash, red maple, sugar maple, beech, black cherry, aspen, etc.).

Conifer plantations contain planted trees of species such as red pine, Norway spruce, white spruce, Scotch pine, larch and white pine.

Mixed hardwood/plantation conifer includes those stands dominated by native hardwoods, where less than 50% of the trees are planted conifers.

Shale pits include the pits on the Unit used to maintain the road system.

Roads include the area occupied by forest access roads and town roads on the Unit. Full road **corridor width** is considered to be 50 feet in width and may contain trees, shrubs, or **grassland** habitat along its **edges**.

As the above table shows, the forests on the Unit are dominated by pole (6"-11") and saw timber (12"+) size trees which together comprise 94% of the Unit's forest cover. In comparison, only 972 acres (6%) of the forested area on the Unit are in seedling/sapling sized trees, 1"-5" in diameter. Early-successional habitat consisting of open or shrub lands combined with seedling or sapling size forested areas comprise 1,064 acres or about 7% of the unit.

Detailed information about vegetative communities can be found in the Department of Environmental Conservation publication Ecological Communities of New York State (Edinger et al. 2014).

D. Wetlands and Water Resources

1. Wetlands

Wetlands vary widely, across the landscape, because of differences in characteristics such as: hydrology (temporarily/seasonally flooded to permanently flooded), soils, topography, and vegetation (submergent aquatic plants to forested tree cover). Common freshwater wetlands include marshes, bogs, fens, swamps, vernal pools, **forested wetland**s, and spring seeps. Wetlands

perform many functions that provide numerous benefits to people, fish, and wildlife. Wetlands provide flood protection and abatement; erosion control and containment of sedimentation; improved water quality; recharge of groundwater supplies; regulation of surface water flows; essential fish and wildlife habitat; production and recycling of nutrients; recreational opportunities; open space; and **biological diversity**.

Both the federal and State government regulate use of wetlands to protect the numerous functions and benefits of wetlands. Wetlands are protected pursuant section 404 of the Federal Clean Water Act. The Army Corps of Engineers regulates activities that may impact wetlands, such as placement of fill. Most designated wetlands have been classified by the U.S. Fish & Wildlife Service and are listed in the National Wetlands Inventory. In New York State, all freshwater wetlands are protected pursuant to the New York State Freshwater Wetlands Act, if they are at least 12.4 acres in size and meet criteria specified in section 24-0107 of the Act. Certain wetlands that are smaller than 12.4 acres may also be protected by the Act. DEC's regulations, 6 NYCRR Part 664 establishes a classification system of freshwater wetlands. This system creates four classifications for freshwater wetlands (class I, class II, class III, and class IV). The classification of a freshwater wetland, regulated under the New York State Freshwater Wetland Act, is based on the ability of the wetland to perform functions and provide benefits. Class I wetlands perform the most functions, while Class IV wetlands perform the least amount of functions.

Approximately 407 acres have been identified as open, shrub or forested wetlands on the Unit. The Unit includes all or portions of two wetlands that are designated as Class II under the New York State Freshwater Wetlands Act. These classified wetlands comprise a total of 33 acres.

See Appendix I for additional information about the wetlands regulated under the New York State Freshwater Wetland Act. There are other wetlands on the Unit that are not classified under Federal or State Laws. These non-classified wetlands include spring seeps, riparian areas, and other types of wetlands. All of these wetlands will be protected from activities such as timber harvesting and mineral or gas exploration through the implementation of Special Management Zone rules developed by the Division of Lands and Forests, and the use of **best management practices**. However, gaining access to other managed sections of the forests may require crossing some of these wetlands. If a crossing is necessary, measures such as temporary bridges, seasonal restrictions, or surface mats will be utilized to limit the impact to the wetland.

2. Ponds

There are three constructed ponds on the Unit comprising 8 acres. In addition to the constructed ponds, there are many beaver or otherwise naturally formed ponds. For the location of the ponds, see the Water Resources and Special Management Zones map in **Appendix X**.

3. Streams

All perennial streams within the Unit have a designated water quality classification of either C(t) or C. Class C and class C(t) streams are capable of supporting fisheries, more specifically, class C(t) streams are capable of supporting a trout population. The Unit has about 32 miles of intermittent streams which are not classified. There are 12 miles of class C(t) streams on the Unit and approximately 17 miles of class C streams. The main streams on the unit that are named include Alder Meadow Brook, Ashbell Brook, Buck's Brook, Coit Brook, Middletown Brook, Stone Mill Brook, Pleasant Brook and a short section of the Otselic River. See Water Resources and Special Management Zones map in **Appendix X** for their locations.

E. Mineral Resources

1. Oil, Gas and Solution Exploration and Development

Oil and natural gas are valuable resources which may be located under State Forests. The extraction of these resources generates revenue and provides raw material for energy products. Due to the infrastructure necessary to extract oil and natural gas resources, as with any other human activity on State lands, oil and natural gas exploration and its development can have negative impacts on the environment. Some of the impacts are short term such as those occurring during the siting and drilling phases of a well. Other impacts, such as forest **fragmentation,** have a more persistent effect. In all areas covered by this Unit Management Plan, New York State manages the surface estate through the NYSDEC Division of Lands and Forests, and the mineral estate is managed through the NYSDEC Division of Mineral Resources.

Oil and gas production from State Forest lands, where the mineral rights are owned by the state, are only undertaken under the terms and conditions of an oil and gas lease. As surface managers, the Division of Lands and Forests will evaluate any concerns as they pertain to new natural gas leases on State Forest lands. Consistent with past practice, prior to any new leases, DEC will hold public meetings to discuss all possible leasing options and environmental impacts. A comprehensive tract assessment will be completed as part of this process. For more information on natural gas and other mineral resource policies, please see SPSFM Chapter 5, page 225 at http://www.dec.ny.gov/lands/64567.html. At this time, there are no leases for oil or gas exploration or development on the Unit.

2. Shale Pits

There are a number of shale pits on the Unit. Most of these pits were created when the Public Forest Access Roads were being constructed. Today, shale is occasionally removed from these pits primarily for landing resurfacing the Public Forest Access Roads. The Northern Chenango Unit

contains three shale pits located on Chenango RA #s, 21, 20 and Madison RA # 2. These pits are also sometimes used for target shooting.

F. Wildlife Resources

The Unit and the landscape surrounding the Unit contain a variety of wildlife including many species of mammals, birds, amphibians, reptiles, fish, and invertebrates such as snails, mussels, insects, spiders and worms. Many resources were consulted to assess the variety of wildlife and wildlife habitat in and around the Unit.

1. Wildlife on the Unit

Species of Greatest Conservation Need

In 2005, the Department released New York State's Comprehensive Wildlife Conservation Strategy. It can be found at: http://www.dec.ny.gov/animals/30483.html
This plan addresses the conservation of those "species of greatest conservation need" (SGCN). This list of species was developed by DEC staff in consultation with experts and scientists from across the State. In the plan, the State is examined by major watersheds to determine those species in greatest need of conservation. The Unit is in the Susquehanna Basin portion of the plan. Table 3 lists those SGCN species known to be on or in the vicinity of the Unit and their population trends.

Table 3. SGCN Species by Species Group Found On or In the Vicinity of the Unit

SGCN Birds: Species Surveyed on or in the Vicinity of the Unit, NYS Breeding Bird Atlas 2000 – 2005 data.

Species Group	Population Trend
Early successional forest/shrubland birds	
American woodcock	Decreasing
Black-billed cuckoo	Decreasing
Blue-winged warbler	Decreasing
Brown thrasher	Decreasing
Canada warbler	Decreasing
Ruffed grouse	Decreasing
Willow flycatcher	Decreasing
Deciduous/mixed forest breeding birds	
Black-throated blue warbler	Stable
Wood thrush	Decreasing

Forest breeding raptors	
Cooper's hawk	Stable
Northern goshawk	Increasing
Red-shouldered hawk	Increasing
Sharp-shinned hawk	Increasing
Grassland birds	
Bobolink*	Decreasing
Eastern meadowlark*	Decreasing
Northern harrier	Unknown

* These are upland grass dependent species that likely use large fields found outside the Unit. Suitable habitat for these species does not exist on the Unit.

SGCN Reptiles & Amphibians: Species Surveyed on or in the Vicinity of the Unit, NYS Amphibian and Reptile Atlas Project, 1990 – 1999 data.

Species Group	**Population Trend**
Vernal Pool Salamanders	
Blue-spotted salamander	Unknown
Jefferson salamander	Unknown
Snapping turtle	
Snapping turtle	Unknown
Uncommon Turtles of Wetlands	
Spotted turtle	Unknown
Woodland/Grassland Snakes	
Smooth greensnake	Unknown

SGCN Mammals: Species Likely to be on or in the Vicinity of the Unit, The New York Gap Program, U.S. EPA EMAP Hexagons 381 and 384 data.

Species Group	**Population Trend**
Tree Bats	
Eastern red bat	Unknown
Hoary bat	Unknown
Silver-haired bat	Unknown
Furbearer	
River otter	Stable

As shown in the table above, the many species with decreasing population trends are those bird species that require early successional forest/shrublands or **grasslands** for habitat. These types of habitats are declining throughout the northeast as abandoned agricultural lands revert back to forest cover. Historically, these habitats were created by periodic disturbances such as fire, beaver flooding, river flooding, Native American burning activities, and wind storms. Elsewhere, native grasslands have been used for agriculture. Today, most of the disturbance factors are minimized or eliminated to accommodate the needs of society. Provision of these habitats for species dependent upon them will largely depend upon active management in the future.

Birds

The New York State Breeding Bird Atlas is a comprehensive, statewide survey that reveals the distribution and protective status of breeding birds in New York State. The most recent data, for the Breeding Bird Atlas, was collected from 2000 to 2005. Sixteen Breeding Bird Atlas blocks (4271 A & B; 4272A, B, C & D; 4372A, B, C & D; 4373D; 4472A & C; & 4473B, C & D) were assessed to determine the possible, probable, and confirmed breeding bird species found on the Unit and surrounding vicinity. The Breeding Bird Atlas confirmed or predicted that there are 133 bird species breeding on the Unit or the surrounding vicinity. **Appendix V** shows these species by common name, scientific name, breeding status, and protective status. For information about rare bird species, see section G. 3. Significant Animals portion of this plan.

Amphibians and Reptiles

The Amphibian and Reptile Atlas Project was a survey, conducted by the DEC, which documented the geographic distribution of New York's amphibians and reptiles. The survey was conducted from 1990 to 1998. The project predicts 30 species of amphibians and reptiles on or in the vicinity of the Unit. A complete list of the 30 species, by common name, scientific name, and protective status is found in **Appendix IV**.

Mammals

The New York GAP Mammal Hexagon Database was used to determine the distribution of mammals on or in the vicinity of the Unit. Other sources were used to determine the protective status of these species. The sources include: the NYS DEC public website, the U.S. Fish and Wildlife Service website, and the New York Natural Heritage Program (NYNHP) website.

The New York State GAP confirmed or predicted 51 mammalian species on or in the vicinity of the Unit. A complete list of mammals that were confirmed or predicted, on the Unit or surrounding area, can be found in **Appendix V**. For information about rare mammal species, see section G. 3. Significant Animals portion of this plan.

Fish

Ponds: The impoundments on the unit are all small and likely too shallow to support fish life although no formal fisheries surveys have been done on them. Anoxic conditions generally occur

in shallow ponds with an abundance of organic material. Once permanent ice cover forms, pond water can no longer be re-oxygenated at the surface. Through the winter, aerobic decay of organic matter, along with respiration of plants and animals, depletes the limited oxygen supply under the ice. Depending on the amount of organic matter, duration of ice cover, and the depth of snow, complete exhaustion of oxygen can occur. A heavy snow cover will exacerbate the situation by blocking light penetration and shutting down any photosynthesis which would otherwise add oxygen to the water. This condition can render a pond incapable of supporting any fish through the winter in some years. Some fish, like bullheads, are more tolerant of low oxygen levels than other fish and larger fish will usually succumb before smaller ones.

Streams: The streams on the unit are mostly small headwater streams which likely support a minimal level of sport fishing. Some of the streams have had fisheries surveys conducted on them. The results of those surveys are listed in Appendix VI. The streams on the Unit are composed of the typical species associated with headwater streams in the Susquehanna River drainage. Species typically found in these waters include mottled sculpin, longnose dace, blacknose dace, Johnny darter, and creek chub. The unit includes two short sections (comprising about 1,050 feet) of the Otseilc River on the west side of Chenango RA #21. Brown trout are stocked in the Otselic River and this is the largest stream on the Unit and it has the greatest diversity of fish species. Several classified trout (C (t)) streams are located on the Unit. These include but are not limited to the Otselic River, Alder Meadow Brook, Middletown Brook, Bucks Brook, Ashbell Brook, Coit Brook and numerous unnamed streams which support native brook trout. All of the C(T), and likely several C classified, streams in the unit presumably contain trout at least part of the year. Brown trout are most prevalent in the main stem Otselic River and the lower ends of its main tributaries. Brook trout inhabit the smaller tributaries and sub tributaries of the Otselic River. They do however drop into the main stem river, particularly during spawning time as they seek suitable spawning locations. Some fairly large brook trout have been recently caught by anglers in the Otselic River proper.

The tributaries located in the Unit are critical to the brook trout population in the Otselic River drainage. Because they are located on State Forest land they are typically shaded and much cooler than the Otselic River, making them ideal for brook trout. Brook trout have been caught in the most recent survey (2011) of Pleasant Brook. Therefore it is highly likely that the tributaries to Pleasant Brook, including those that are currently classified as “C” streams support brook trout at least part of the year. Even small streams that dry up during the summer may provide spawning and nursery habitat during the other three seasons.

A list of fish species on the Unit is found in Appendix VI, Fish.

Game Species

There are many game species located on or in the vicinity of the Unit. Game species are protected by regulated hunting/trapping seasons. Game species, on or in the vicinity of the Unit include a

variety of birds and mammals. Game species contribute to the local economy and provide outdoor recreation. More details of some of the major game species can be found below.

White-tailed Deer - The Department manages deer populations in Wildlife Management Units (WMUs). The Unit falls within WMU number 7M. A Citizen Task Force (CTF), made-up of local interest groups such as farmers, foresters, hunters, motorists, and the tourism industry, recommends a desirable deer population to the Department. Deer populations are controlled with regulated hunting through the use of Deer Management Permits (DMP). DMPs are permits to harvest antlerless deer. Using the recommendations, of the CTF, Department biologists determine the number of DMPs to issue within each WMU.

Excessive deer populations can be detrimental to forested **ecosystems**. Deer can alter the forest **understory** by over-browsing. Over-browsing can completely eliminate certain tree, shrub, and herbaceous species. Over-browsing may eliminate the forest understory layer, which can cause increased nest predation to ground-nesting and shrub-nesting birds, alters food sources for a variety of wildlife, can impact the future forest composition and structure.

For many years Department staff suspected that deer were having a significant impact by restricting the regeneration of desirable species in the forest understory. In 2006 the Department conducted a regeneration study which confirmed that regeneration of desirable species often failed to develop and the widespread establishment of interfering species had become a significant problem. In 2007, the Department began conducting an annual deer density and browse impact survey on Chenango RA #s 2 & 25, Beaver Meadow State Forest. In response to these surveys and other studies, in 2010 the Department began issuing special tags for the fall harvest of antlerless deer from Beaver Meadow State Forest. This is an ongoing pilot project to determine if increased deer harvest combined with timber harvesting activities can improve the quality of deer habitat and the forest understory species composition. More information on the relationship between deer populations and the vegetation composition of the forest can be found in this plan under Section L, Forest Health.

Turkey - Once extirpated from New York State as a result of over-hunting and habitat loss, the wild turkey currently has a secure population throughout the State. Wild turkeys are protected as a game species and can be hunted during two seasons (Spring and Fall).

Ruffed grouse and American woodcock – These are upland game birds that are also SGCN species. Their populations are in decline in the northeast, primarily due to the declining amount of young forest habitat which they are dependent upon.

Furbearers - There are many species, on or in the vicinity of the Unit, that are considered furbearers. Within the Unit, some of the furbearers that can be hunted and/or trapped include the American beaver, mink, common muskrat, short-tailed weasel, long-tailed weasel, red fox, gray fox, common raccoon, coyote, gray squirrel, Virginia opossum, and the striped skunk.

2. Important Habitat Features

The Northern Chenango Unit and the surrounding landscape provide diverse habitats for a variety of wildlife species. The assessments conducted above, along with forest inventories, have revealed important habitat features within the Unit. The following habitat features must be considered to ensure a healthy diverse wildlife population:

Coniferous Forest Cover Type

Coniferous (evergreen) or mixed conifer-hardwood conditions comprise 62% of the Unit compared to just 17% of the surrounding landscape. Some birds require a conifer component as part of their habitat. Some of the conifer dependent birds, which are confirmed or predicted to be on or near the Unit, include pine siskin, purple finch, hermit thrush, yellow-rumped warbler, blackburnian warbler, magnolia warbler, pine warbler, black-throated green warbler, dark-eyed junco, red crossbill, golden-crowned kinglet, red breasted nuthatch, winter wren, and the blue-headed vireo.

There are also mammals that require and/or benefit from conifer or mixed conifer-hardwood conditions. Mammals that require and/or benefit from the coniferous forests on the Unit include the red squirrel, deer mouse, Southern red-backed vole, porcupine, white-tailed deer, and Hoary bat.

Continuous Forest Canopy

State forests provide large blocks of continuous forest cover in a landscape that is often dominated by relatively fragmented forest areas. Some species prefer large forested areas for their habitat. These areas contain a variety of forest canopy conditions ranging from young forest to **late successional** habitat that are remote with minimal amounts of non-forest cover. The Cooper's hawk, Northern goshawk, red-shouldered hawk, and sharp-shinned hawk have some variations in their habitat requirements, but they all prefer a continuous forest canopy. Many Neotropical migratory songbirds are considered to be forest interior breeders. Some of these species which are often found on the Unit include the wood thrush, red-eyed vireo, ovenbird, black-throated blue warbler, black-throated green warbler, and scarlet tanager among others. Other bird species that also prefer a continuous forest canopy include the pileated woodpecker, common raven, and broad-winged hawk. Fewer mammals tend to be dependent upon blocks of continuous forest canopy. Some mammals that prefer this type of habitat include the fisher, porcupine and Northern flying squirrel.

Multi-Layered Forest Canopy Structure

There are many bird species, on or near the Unit, that require a multi-layered forest canopy structure as a habitat requirement. Some of the birds that require a multi-layered forest canopy structure are the golden-crowned kinglet, hermit thrush, black-throated green warbler, yellow-rumped warbler, ovenbird, red-eyed vireo, warbling vireo, black-and-white warbler, least flycatcher, scarlet tanager, yellow-throated vireo, black-throated blue warbler, Canada warbler, American redstart and veery.

Cavity Trees/Snags/Course Woody Material

Many wildlife species use **cavity trees**, **snags,** or **Coarse Woody Material (CWM)** for perching, feeding, nesting, and/or roosting. Some wildlife use live cavity trees while others use dead cavity trees.

Some of the bird species, on or near the Unit, that use cavity trees include: red-breasted nuthatch, brown creeper, Eastern bluebird, house wren, Northern mockingbird, tree swallow, American kestrel, Eastern screech owl, barred owl, black-capped chickadee, pileated woodpecker, tufted titmouse, downy woodpecker, great-crested flycatcher, Northern flicker, white-breasted nuthatch, hairy woodpecker, Carolina wren, winter wren, common merganser, hooded merganser, and wood duck.

Some of the mammals, in or around the Unit, that use cavity trees include: Indiana bat, little brown bat, silver-haired bat, big brown bat, Virginia opossum, gray squirrel, Northern flying squirrel, porcupine, gray fox, raccoon, fisher, short-tailed weasel, and long-tailed weasel.

Snags may have cavities or they may not. Snags without cavities are used mostly as perches or foraging sites. Birds, on or near the Unit, that utilize snags include: sharp-shinned hawk, Cooper's hawk, broad-winged hawk, red-tailed hawk, turkey vulture, American kestrel, bald eagle, brown creeper, great blue heron, green heron, great-horned owl, pileated woodpecker, and barred owl.

Mammalian species that may den in CWM include the Virginia opossum, Eastern chipmunk, Southern red-backed vole, gray fox, black bear, fisher, short-tailed weasel, and long-tailed weasel, mink, striped skunk, and bobcat. CWM is home to many wood-decaying insects that are used as a food source for many birds, mammals, amphibians, and reptiles. Many species of amphibians and reptiles live in or under the moist, soft, decaying wood of CWM.

Wetlands/Riparian Areas

Although all wildlife needs water to survive, there are many wildlife species that use water as their primary habitat. Many wildlife species depend upon the presence of wetlands or riparian areas including spring seeps, vernal pools, swamps, bogs, ponds, and streams. The birds, on or near the Unit, that utilize water as their primary habitat include the Canada goose, common merganser, hooded merganser, great blue heron, green heron, mallard, belted kingfisher, spotted sandpiper,

swamp sparrow, alder flycatcher, willow flycatcher, American black duck, wood duck, Northern waterthrush, bank swallow, common yellowthroat, and Wilson's snipe.

Mammals, on or in the vicinity of the Unit, that use water as part of their primary habitat include the American beaver, common muskrat, Southern bog lemming, big brown bat, little brown bat, Northern myotis, Indiana myotis, silver-haired bat, star-nosed mole, raccoon, mink, long-tailed weasel, and river otter.

Nearly all the amphibians and reptiles, on or near the Unit, require water for at least part of their life cycles.

Early Successional Habitat

The Unit does not contain sufficient habitat for grassland associated species. The Unit does have both upland shrub and wetland early successional habitat. There are currently a total of 1,236 acres of early successional habitat comprising about 8% of the Unit.

As shown in **Table 2**, 972 acres (6%) of the forested area on the Unit is in seedling/sapling sized trees, 1"-5" in diameter. Upland open and shrub lands combined with seedling or sapling size forested areas comprise 92 acres or <1% of the unit. Wetland early successional habitat on the Unit consists of 172 acres.

Some of the species on or in the vicinity of the Unit that may use open wetland early successional habitat include northern harrier, Wilson's snipe, spotted sandpiper, swamp sparrow, northern rough-winged swallow and killdeer. According to the New York Natural Heritage Program, there are two main reasons why the northern harrier is threatened: loss of large areas of grassland habitat and loss of wetland habitat.

Shrubs and **pioneer** tree species become established on open lands. Shrubs and seedling/sapling sized trees provide habitat to a variety of wildlife species. This early successional habitat is used by a number of bird species found in and around the Unit. The bird species include the ruffed grouse, Canada warbler, yellow-rumped warbler, Nashville warbler, blue-winged warbler, mourning warbler, yellow warbler, American crow, killdeer, white-throated sparrow, field sparrow, song sparrow, chipping sparrow, indigo bunting, Eastern bluebird, mourning dove, red-tailed hawk, turkey vulture, American goldfinch, American robin, American woodcock, cedar waxwing, Eastern towhee, gray catbird, house wren, Baltimore oriole, Northern mockingbird, and Eastern phoebe.

Many mammals also depend on early successional habitat for food and cover. Mammals on or in the vicinity of the Unit that utilize early successional habitat include the red fox, gray fox, white-tailed deer, Eastern cottontail, woodland vole, woodchuck, Southern bog lemming, and meadow jumping mouse.

G. Rare Species and Significant Ecological Communities

The New York Natural Heritage Program (NHP) is a partnership between DEC and The Nature Conservancy. The NHP conducts inventories for rare plants, animals, and significant ecological communities. These inventories are used to identify, track, protect and help manage biodiversity. In 2004, NHP staff conducted a comprehensive inventory of all state forests in DEC's Region 7.

1. Ecological Communities

A survey of the Unit by the NHP did not find any significant ecological communities on the Unit.

Representative Sample Areas

Representative Sample Areas (RSA) are stands which represent *common* ecological communities (i.e. forest types) of high or exceptional quality in their natural state. RSAs are setup to serve one or more of the following purposes:

1. To establish and/or maintain an ecological reference condition; or
2. To create or maintain an under-represented ecological condition (i.e. includes samples of successional phases, forest types, ecosystems, and/or ecological communities); or
3. To serve as a set of protected areas or refugia for species, communities and community types not captured in other protection standards such as an endangered species or a High Conservation Value Forest.

RSAs can simply be viewed as an effort to keep high quality examples of common ecosystems or assemblages from becoming rare in the landscape. An RSA designation does not prevent future management and in certain cases might require silvicultural treatment to achieve site conditions that will perpetuate the representative community. In addition, treatment of an RSA to mitigate unfavorable conditions that threaten the continuation of the target community will be allowed (ex. fire, natural pests or pathogens). Although allowed, silvicultural treatment or infrastructure development should not impact the RSA in a way that will degrade or eliminate the viability of the specific assemblage or community. For more information on RSAs please go to http://www.dec.ny.gov/lands/42947.html.

There are no RSAs located on the Unit.

2. Significant Plants

The NHP does not have any records of current or historical occurrences of rare plant species on the unit.

3. Significant Animals

Significant animal are rare species listed as Endangered, Threatened, or as Species of Special Concern. Species of Special Concern are those not yet recognized as Threatened or Endangered, but for which documented concern exists for their continued welfare in New York State.

Birds

The Atlas of Breeding Birds in New York State lists the breeding status of birds in the state. The atlas is based upon field observations of birds by volunteers and classifies their breeding status as either confirmed, probable or possible. The Atlas lists occurrences of the following rare bird species on the Unit:

Table 4: Rare Birds Possibly Occurring on the Unit Based on the Breeding Bird Survey Blocks Including the Unit

Common Name	Key Breeding Habitat	Breeding Status	NY Legal Status
American Bittern	Freshwater marshes	Confirmed	SSC
Cerulean Warbler	Deciduous forests with open understory	Possible	SSC
Cooper's Hawk	Forests	Probable	SSC
Horned Lark	Open lands	Probable	SSC
Northern Goshawk	Extensive forests	Confirmed	SSC
Northern Harrier	Open lands or large open wetlands	Possible	Threatened
Osprey	Lakes and rivers having good fish habitat	Possible	SSC
Red-headed Woodpecker	Dead snags for nesting and feeding	Probable	SSC
Red-shouldered Hawk	Extensive forests with wetlands	Confirmed	SSC
Sharp-shinned Hawk	Dense forests	Probable	SSC
Whip-poor-will	Ground nester in open forests with sparse understory near open areas	Possible	SSC

Source: 2000-2004 New York Breeding Bird Atlas; SSC – Species of Special Concern

The Northern Harrier is a raptor that nests on the ground in grassy marshes or meadows, and in particular favors areas with dense low cover. Small mammals, birds, reptiles, insects, and carrion are all eaten for food. Harriers hunt over open areas using a low slow flight over the ground, then plunge onto their prey.

Of the rare birds on the list above, four of them are forest breeding raptors. The species include the Cooper's hawk, Northern Goshawk, Red-shouldered Hawk and Sharp-shinned Hawk. All of these raptors nest in forest areas with a high percentage of canopy closure (Crocoll 2013). The

Sharp-shinned Hawk requires dense coniferous or mixed woods for nesting habitat. Maintaining a high percentage of forest cover around nesting sites is important for all of these species however, the Sharp-shinned Hawk is the most sensitive to canopy disturbance.

The greatest threat for forest raptors is the removal of forest cover and the development of existing habitat. Due to limited research, little specific information is available on management recommendations for individual species. However there are two general management recommendations that are valid for all raptors. Avoid nesting disturbance and maintain existing habitat, particularly around the nest site.

The Horned Lark is a species dependent on open lands with short grass so it is unlikely to be found on the Unit. The American Bittern requires marshes with thick vegetation of reeds, cattails or sedges. Osprey typically nest in large trees or snags in open areas. The Red-headed Woodpecker nests in dead or nearly dead trees in a wide variety of habitat conditions. The Cerulean Warbler and Whip-poor-will are also forest birds but prefer areas with sparse understory conditions.

Mammals

Three bat species may be in the vicinity of the Unit which have special status due to their rarity. The Indiana Myotis, (*Myotis sodalis*) or Indiana bat is predicted on or in the vicinity of the Unit and is listed as Endangered, by both the State and the Federal government. The Eastern small-footed Myotis, (*Myotis leibii*) is listed by New York State as a Species of Special Concern. Lastly, the Northern long-eared bat listed as a Threatened species by both New York State and the Federal government and is protected under the Endangered Species Act.

These bats share some habitat-requirement characteristics. During the winter, they all hibernate in caves or mines. When they emerge from their winter hibernacula, the Indiana bat and the Eastern small-footed bat hunt for insects near bodies of water, streams or wetlands. The Northern long-eared bat prefers to search for insects in the understory of forested areas. They all feed on beetles, ants and insects.

Any use of the Unit by any of these bat species would be when they are on their summer range. On their summer ranges, each species has somewhat different roosting habits. The Indiana bat prefers to roost under the bark of living or dead trees. The Northern long-eared bat roosts under tree bark, in tree cavities or in caves and mines. The small-footed bat is the most adaptable as it will utilize caves, rock crevices, areas behind loose tree bark, and even abandoned buildings and under bridges for their summer roosting sites.

The most serious threat to these bat species is white-nose syndrome (WNS). Thousands of dead bats have been found in their hibernacula with evidence of WNS. WNS is associated with a newly identified fungus (Geomyces sp.) that thrives in the cold and humid conditions characteristic of the bats hibernacula. This fungus may be directly responsible for bat deaths or it could be secondary to the cause.

There are several management recommendations that may be applied when managing the forested summer habitat of these three bat species. These recommendations include:

- Maintaining a mosaic of over-mature hardwoods, forest openings, water sources, and linear elements such as trails and roads.
- Retain large snag trees within stands, along stream courses, and around wetlands. Trees and snags with loose or fractured bark can be utilized as roost sites. Harvesting trees on the south side of roost sites aid in thermal heating of roosts.
- Maintain cavity trees.
- Preserve wetlands and other water bodies and establish and maintain areas of regenerating forest as feeding grounds.

Reptiles & Amphibians

Three reptile and amphibian species which are Species of Special Concern were found in the NYS Reptiles and Amphibians Atlas survey blocks that include the Unit. These species include the Jefferson salamander, *Ambystoma jeffersonianum;* the Blue-Spotted Salamander, *Abystoma laterale*, and the Wood Turtle, *Glyptemys insculpta.*

The Jefferson salamander is found in upland forested areas and breeds in vernal pools or seasonal wetlands. The Blue-spotted salamander is found in damp forests with vernal pools. Both the Jefferson and Blue-spotted salamanders can be found throughout New York State except for Long Island.

The Wood Turtle (*Glyptemys insculpta*) is a Species of Special Concern found on or in the vicinity of the Unit. Home ranges include some form of water habitat, typically a river or stream bordered by a mix of woodlands and meadows. Within these areas they tend to occupy open sites with low canopy cover. They are rarely associated with solid stands of habitat, instead preferring a mosaic of various forest types, meadows, active agricultural fields, swamps and other wetland habitats. Wood turtles are omnivorous with a vast and varied diet. The favored source of food is the earthworm where an interesting behavior is exhibited, stomping the ground with alternating hits of the front feet. This behavior is thought to imitate the sound of falling rain causing earthworms to rise to the surface and become easy prey. The greatest threat to Wood Turtle populations is habitat fragmentation and modification.

H. Cultural Resources

The New York State Archeological Historic Preservation Act protects resources of cultural importance because of their historical significance. Cultural resources are finite and non-renewable resources that once destroyed cannot be returned to their original state. As a state agency, the DEC is required to avoid or mitigate adverse impacts to cultural resources on the lands they manage.

A review of the GIS data set for archaeological sites of historical significance maintained by the state Historic Preservation Office or the New York State Museum indicates that there are no identified sites of historical significance on the Unit.

While there are no identified sites that have been determined to be of historical significance, the unit contains many cultural resources. Two cemeteries dating from the early 1800's are located on the unit. There are also many ordinary cultural artifacts including cellar holes, foundation remnants, and stone walls that provide clues about past settlement and land use. Each helps to tell the story of forest clearing and its transformation into a working landscape. Waterholes and other works constructed by the Civilian Conservation Corps displays the early history of the Unit under public ownership as the land was transformed once again back into a forested landscape. Most of these common cultural sites do not qualify as State or National Register historic resources. However, these artifacts from early settlement periods are still important cultural resources. As such, management practices are implemented to help retain and preserve these resources. Fieldstones are not sold from state forests and forest product sales are designed to avoid or limit impacts to these resources.

I. Recreational Resources

State Forests are managed for multiple uses. One of these uses is to provide the public with opportunities for many recreational pursuits in remote settings compatible with a rustic or primitive scale of development. For example, there are abundant opportunities for camping, but the camp sites are not developed to the extent that they are in State Parks or private campgrounds.

The Northern Chenango Unit offers a wide array of recreational activities and associated recreational facilities that the Department provides and maintains. Dispersed recreational activities that do not require facilities include opportunities such as nature observation, hunting or trapping which occur across the Unit. The Unit also includes opportunities for trail based activities such as snowmobiling and hiking.

Recreation opportunities on the Unit include the following:

Recreation Activities

1. Snowmobiling

Snowmobiling is popular trail activity on the Unit due to the abundance of snow fall. Four snowmobile clubs maintain trails on the Unit through volunteer agreements with the Department. Most of the snowmobile trails are on town or DEC roads with a minor amount located off-road. These trails are signed, cleared and groomed by their stewards. The following table lists their location and stewards.

Table 5. Snowmobile Trails on the Unit

Forest	Steward	Miles
Chenango RA #2	Chenango Sno-Riders	4.78
Chenango RA #23	Cortland-Chenango Trail Hounds	1.27
Chenango RA #25	Sherburne Area Snow Travelers Association	4.15
Madison RA #2	Moonlight Riders	1.60
Madison RA #8	Moonlight Riders	0.9
Total		**12.7**

2. Hiking, Cross Country Skiing & Snowshoeing

The Finger Lakes Trail (FLT) maintained by the Finger Lakes Trail Conference is a long distance hiking trail that goes across New York State in the Southern Tier. Segments of the FLT located on the Unit include 4.15 miles on Chenango RA #20 and 4.85 miles on Chenango RA #21 for a total of 8.99 miles on the Unit. Many people also enjoy cross country skiing and snowshoeing on the FLT during the winter months.

3. Hunting & Trapping

Big game deer hunting is the most common form of hunting on the Unit and may be the most popular recreational activity on the Unit. Turkey hunting is also a popular activity. Active management of the deer population is an increasingly important factor in allowing forest habitats to produce viable tree regeneration, a diversity of herbaceous plants in the forest understory, and hunter harvest opportunities. The Department has offered additional deer hunting opportunities on Beaver Meadow State Forest in the form of permits for the harvest of antlerless deer. Hunters have been an important partner with the Department in participating in this program. Additional information on this program is described in this plan under Section F, Wildlife Resources under the Game Species section.

Other available hunting opportunities include the pursuit of upland game birds like grouse and woodcock. There are also opportunities for hunting coyote and fox. The Unit also provides good opportunities for furbearer trapping.

4. Auto-touring, Wildlife & Nature Observation

These activities occur across the Unit. The Unit is managed to provide a diversity of habitat conditions to support a wide variety of species. Softwood plantations provide habitat diversity at the landscape scale and offer habitat for some unusual bird species dependent upon conifers such as the pine siskin, red crossbill and white-winged crossbill.

5. Mountain Biking

The dirt town roads, abandoned roads, Public Forest Access Roads and haul roads provide opportunities for mountain biking on the Unit. While mountain biking occurs on the unit, it is not a common activity.

6. Horseback Riding

There are no designated trails or other facilities designed for horse riders on the Unit but horse riding is an activity that some local people enjoy on the dirt roads and abandoned roads of the unit.

7. Fishing

Fishing resources on the Unit are limited. Fishing opportunities on the Unit are generally restricted to small stream trout fishing. The remote, short section of the Otseilc River on Chenango RA #21 provides an opportunity for trout fishing on a larger river. The ponds on the Unit are likely too shallow to support game fish populations.

8. Geocaching

Geocaching occurs on the Unit. This is a low intensity, dispersed activity where people search for a hidden object or small container holding the "hidden treasure" based upon GPS coordinates posted on the internet. Geocache sites are located on the Unit. No developed facilities are needed for this activity.

Overall Assessment of the Level of Recreational Development

It is important that recreational use is not allowed to incrementally increase to an unsustainable level. DEC must consider the impact on the unit from increased use on other management goals or other recreational uses. DEC must consider the full range of impacts, including long-term maintenance and the balancing of multiple uses.

The Unit currently has a low level of recreational development consistent with the recreational demands in this area. These forests are best suited to provide opportunities for dispersed recreational activities, requiring a low level of development in a remote setting. Activities such as hunting, snowmobiling, hiking, nature observation, trapping and geocaching are all consistent with the character and features of the Unit.

Universal Access

DEC has an essential role in providing universal access to recreational activities that are often rustic and challenging by nature, and ensuring that facilities are not only safe, attractive and sustainable, but also compatible with resources. For more information on universal access policies, please see SPSFM page 173 at http://www.dec.ny.gov/lands/64567.html.

Beaver Meadow State Forest has a motorized access trail for permitted people with disabilities. This trail is 0.7 miles in length and provides permitted people the opportunity for off road access to the forest. A small parking area is at the trail head.

Application of the Americans with Disabilities Act (ADA)

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

Title II also requires that new facilities, and parts of facilities that are newly constructed for public use, are to be accessible to people with disabilities. In rare circumstances where accessibility is determined to be structurally impracticable due to terrain, the facility, or part of facility is to be accessible to the greatest extent possible and to people with various types of disabilities.

Consistent with ADA requirements, the Department incorporates accessibility for people with disabilities into the planning, construction and alteration of recreational facilities and assets supporting them. This UMP incorporates an inventory of all the recreational facilities or assets supporting the programs and services available on the unit, and an assessment of the programs, services and facilities on the unit to determine the level of accessibility provided. In conducting this assessment, DEC employs guidelines which ensure that programs are accessible, including buildings, facilities, and vehicles, in terms of architecture and design, transportation and communication to individuals with disabilities.

Any new facilities, assets and accessibility improvements to existing facilities or assets proposed in this UMP are identified in the section containing proposed management actions.

The Department is not required to make each of its existing facilities and assets accessible as long as the Department's programs, taken as a whole, are accessible.

For copies of any of the above mentioned laws or guidelines relating to accessibility, contact the DEC Universal Access Program Coordinator at 518-402-9428 or UniversalAccessProgram@dec.ny.gov

Regulations Applicable to Recreational Activities on State Forests

No fees are charged to the users of State Forest lands for recreational activities. However, a permit may be required for group activities or events. A **Temporary Revocable Permit (TRP)** is required for the following types of recreational activities on State Forests: organized and advertised events such as club-sponsored pleasure rides or scouting camporees or competitive events involving horse riding and orienteering tournaments. Chapter 5 of the Strategic Plan for State Forest Management provides specific details on the permitting process and the requirements for liability insurance.

J. Other Facilities

1. State Forest boundary lines.

The boundary line of each State Forest needs to be maintained in order to effectively manage the property. State Forest boundary lines are identified with metal signs, approximately 7"x10" in size, with the Department logo on a yellow background. The trees on the boundary line are also blazed with yellow paint. Periodic maintenance of the signs and paint, as well as survey records, are needed to protect the integrity of the boundary lines. The boundary lines are maintained on a seven year cycle.

Table 6: Boundary Line Maintenance Schedule

Year	State Forest	Miles
2015-2016	Chenango 2	27.7
2021-2022	Chenango 18	29.1
2015-2016	Chenango 20	20.9
2020 - 2021	Chenango 21	11.5
2021-2022	Chenango 23	8.9
2015-2016	Chenango 25	7.9
2020-2021	Madison 2	6.6
2019-2020	Madison 7	8.6
2019-2020	Madison 8	6.6

Year	State Forest	Miles
Total		**127.8**

2. State Forest Identification Signs.

Each State Forest has an identification sign, displaying the name of the forest and its acreage. The wooden signs are approximately 3' x 4' in size with yellow lettering on a brown background and fastened to a free standing wooden sign post.

Table 7. Forest Identification Signs on the Unit

Forest	# of Signs	Location
Chenango RA #2	1	Reit Road
Chenango RA #18	1	Upham Road and Hyer Road
Chenango RA #20	1	Bucks Brook Road
Chenango RA #21	1	Warner Road and Truck Trail
Chenango RA #25	1	Coye Hill Road
Madison RA #2	1	Morgan Road and Truck Trail
Madison RA #7	1	Bisbee Road
Madison RA #8	1	Texas Hill Road

3. Kiosks and Map Boards

State Forest Information Kiosks are weatherproof panels containing, photographs, maps, and written information relating to a specific State Forest. The Division of Lands & Forests in Region 7 is moving forward with a proposal to establish an Information Kiosk at each State Forest in the Region (9 Counties). All State Forests addressed in this UMP will have Information Kiosks installed in the near future as Department labor and funding permits.

Table 8. Kiosks and Map Boards on the Unit

Forest	Location
Chenango RA # 2 & 25	East side of Reit Road

Madison RA # 2	North side of Truck Trail
Madison RA # 7	North side of Truck Trail
Madison RA # 8	South side of Truck Trail

4. Impoundments

There are currently three earthen dams on the Unit which were constructed to create ponds. They are all small, shallow impoundments that provide habitat for amphibians and waterfowl.

Table 9. Impoundments on the Unit

Forest	Stand	Acres
Chenango RA # 2	D-18	2
Madison RA # 2	A-13	4
Madison RA # 2	A-17	2

5. Parking Areas

This Unit has five defined, designated, signed parking areas, each with a parking capacity of two to four vehicles. In addition, there are many other road-side pull-offs, log landing sites, or vehicle turn-arounds where people routinely park to access the Unit.

Table 10. Designated Parking Areas

Forest	Location of Designated Parking Areas
Chenango RA #2	East side of Ridge Road at kiosk
Chenango RA #2	South side of Bliven Hill Road
Madison # RA # 2	North side of Truck Trail at kiosk
Madison # RA # 7	East side of Bisbee Road at kiosk
Madison # RA # 8	South side of Truck Trail at kiosk

6. Roads

Roadways found on the Unit include Public Forest Access Roads, **Haul Roads**, **Access Trails**, Town Roads, County Roads, and Abandoned Town Roads. From this group, the Public Forest Access Roads, Town Roads, and County Roads are all designed for public use with motor vehicles.

Public Forest Access Roads have been built by and are maintained by the DEC. On this Unit, Pubic Forest Access Roads are also called Truck Trails (TT). The roads are constructed to standards that will provide reasonably safe travel and keep maintenance costs at a minimum. These roads are not normally plowed or sanded in the winter. Haul Roads are designed to facilitate forest products removal (e.g., use by log trucks). Access Trails have a low level of maintenance and provide limited access on the unit and may require a 4 wheel drive vehicle for travel. The entrances to haul Roads or Access Trails may be gated or otherwise barricaded. The historic corridors from some Abandoned Town Roads may also be found on the State Forests. These lanes are no longer suitable for passenger vehicles or log trucks, however some are designated for use as recreational trails. These corridors remain important for their historic values and provide information about the cultural development of these lands. The following roads on the Unit are maintained to provide access for passenger vehicles or log trucks:

Table 11. DEC Roads on the Unit

Forest	Description/Location	Length (miles)	Number of Culverts
Public Forest Access Roads			
Chenango RA #2	Weir Dam Road	0.2	Unknown
Chenango RA #21	Public Forest Access Road	3.1	Unknown
Madison RA #2	Public Forest Access Road	1.4	Unknown
Madison RA #8	Public Forest Access Road	0.7	Unknown
Haul Roads			
Chenango RA #20	East of Ridge Road, north of Bucks Brook Road	0.1	2
Chenango RA #20	East of Ridge Road, south of Bucks Brook Road	0.5	7
Chenango RA #18	West of Factory Gulf Road	0.1	1
Madison RA #7	East of Bisby Road	0.1	0
Abandoned Roads			
Chenango RA #2	West end of the Stowell Road	0.4	1
Chenango RA #18	Old Joe Road from south end going north to log landing	0.2	0
Madison RA #8	Weber Road	0.3	0

7. Gates

There are three metal gates on the Unit.

Table 12. Gates on the Unit

Forest	# of Gates	Location	Purpose
Chenango RA #2	1	Stowell Road	Prevent illegal motor vehicle use of snowmobile trail
Chenango RA #2	2	Graham Road	Prevent illegal motor vehicle use of snowmobile trail

K. Property Use Agreements

1. Deeded Rights-of-Way and Easements

Chenango 2
An easement granted to NYSEG for the placement of aerial cables across the Graham Road and through stands A-12, 19.3; B-11, 13.2, 12 and 13.1.

Chenango 18
9/11/1956, an easement granted to Niagara Mohawk and New York Telephone for placement of aerial cables between Kemak Rd. and Kibbie-Wilcox Rd.. This utility line runs through stand A-45 at the south end of Chenango 18.

Chenango 20
An easement granted to Chenango & Unadilla Telephone Co. for placement of a cable on the east side of Ridge Road along edge of stands C-19.1 and 19.3.

Madison 2
A spring house is located in stand A-29 adjacent t Morgan Road. Spring rights are conveyed to the property across the road.

2. Revocable Permits

Table 13. Utilities Established Through Revocable Permits

Forest	Road/Location	Permittee	Permit #	Utility Type
Chenango 25	West side of George Crumb Rd., opposite from stand C-14.1.	Contel of New York	90-4-2	Buried cable
Chenango 20	Ratville Rd. to Ridge Rd. to Buck's Brook Rd.	W. Ulrich (homeowner) for NYSEG	86-11-1	Aerial cable
Chenango 20	Ratville Rd. to Ridge Rd. to Buck's Brook Rd.	Chenango & Unadilla Telephone Co.	1/23/75	Aerial cable
Chenango 18	Joe Rd.	Niagara Mohawk	11/16/72	Aerial cable
Chenango 2	North side of Graham Rd. and west side of Coakley Rd.	Contel of New York	88-5-2	Buried cable
Chenango 2	Gray Rd. and Coakley Rd.	Contel of New York	88-5-2	Aerial cable
Chenango 2	South end of Coakley Rd. and west end of Gray Rd.	NYSEG Corp.	3/4/76	Aerial cable
Chenango 2	North side of Gray Rd. from Coakley Rd. to Benson Rd.	NYSEG Corp.	9/16/76	Aerial cable
Madison 7	South side of S. Lebanon Rd.	CTC of New York, Inc.	87-4-2	Buried cable

Table 14. Uses of State Lands Without Permits or Easements

Forest	Road/Location	Utility Type
Chenango 18	West side of Johnson Rd. along stands A-16, 19 & 21.	Buried phone cable
Chenango 20	West side of Valley View Rd. along stands C-17 & 18.	Buried phone cable
Chenango 21	West side of Flannigan Rd. along stand A-54	Buried phone cable
Madison 2	Morgan Road	Aerial phone cable

L. Forest Health

Many factors influence forest health including species of insects, diseases, pollutants and deer. All play important roles in the ecology of the forested landscape. Insects and diseases that affect trees are constant natural forces that shape the forest. Most insects and diseases have only negligible

impacts to overall forest health, and on a small scale even provide beneficial impacts. Some however, particularly invasive exotic species can be especially damaging. Important factors that currently or could potentially affect the forest health on the Unit are described below.

1. Deer Impacts on the Vegetative Composition of the Forest.

It is important to understand that the forest is an ecosystem and not simply a group of trees. The forest is the combination of all of the physical and biological elements in the environment and their interrelationships. One of the more prominent relationships in the forest exists between white-tailed deer and understory vegetation. The understory layer of the forest (between ground level and about 6 feet above the ground) is the feeding zone for white-tailed deer. High quality deer habitat includes areas with abundant food and cover in this zone. Typically this is described as an area with a mix of fields, shrub land, agricultural crops, **mast** trees such as beech or oaks and forest edges with some conifers for shelter. In contrast, poor quality habitat is characterized by large areas with little food or cover in the understory, such as may exist in dense conifer stands, where little undergrowth exists. High quality habitat can sustain a larger deer herd while maintaining the biodiversity of forest plant species than can low quality habitat because there is a greater diversity of and more abundant food resources available, and the deer are feeding less in the forest. The lands on the Unit are of moderate to poor habitat quality while better quality habitat is available on private lands in the vicinity of the Unit.

An adult white-tailed deer eats about 5–7 pounds of plant material each day. This may not sound significant but consider for example: If the deer are feeding in the forest and they are eating tree seedlings at about 600 seedlings per pound. If they are feeding in the forest only during the seven months of November through May, each deer is eating about 750,000 tree seedlings per year. Thus, the cumulative impact of a deer population on the forest vegetation can be very significant depending upon the habitat quality.

In the forest, deer have "favorite foods". Species that deer prefer to eat include sugar maple, white ash, red maple and red oak, while vegetation that they tend to avoid eating includes American beech, striped maple, and hophornbeam. While many plants can survive occasional browsing, repeated browsing can often cause direct mortality. The species that deer tend to avoid are also generally resistant to the effects of repeated browsing. When deer populations are high, relative to the quality of the habitat, repeated, preferential browsing over many years can lead to a decrease in plant diversity and an increase in the abundance of unpalatable species. Without the recruitment of young trees and shrubs, the understory layer is eventually reduced to a small collection of undesirable species including, fern, striped maple, American beech and hophornbeam. Over time, these species can develop in high densities and interfere or prevent other more desirable species from growing.

The presence of interfering species above threshold stocking levels will prevent the establishment of other tree species, resulting in greatly reduced vegetation diversity and severely limited

potential for future timber production (Bashant & Nyland, et al., 2005). Excessive deer browsing can also reduce understory plant species diversity. Forest herbaceous species sensitive to deer **browse** include trillium, Canada mayflower, and Indian cucumber. Furthermore, excessive deer browsing can have secondary impacts in the forest, such as a reduced diversity of breeding birds, due to the altered structure of understory vegetation.

New York fern, hay-scented fern, American beech, striped maple, and hophornbeam are the primary species of interfering vegetation on the Unit. Some stands on the Unit have dense interfering vegetation that is preventing the establishment of desirable regeneration. **Sustainable forest management** requires regeneration of the forest to desirable species following harvesting.

Monitoring of Deer Impacts on Beaver Meadow State Forest

The Department has several long term studies in place monitoring the deer population on this forest. Each spring since 2007, transects are walked and over 1,000 sample plots are examined for the presence of deer pellet piles and on half the plots, deer browse impact is recorded. Using this technique, an estimate of the deer population can be determined.

The Department also has 78 permanent vegetation plots located on six transects scattered across the forest. At these plots, the herbaceous vegetation is inventoried each year. In addition, the height growth is annually measured on 300 tagged white ash and hard maple seedlings and witch-hobble plants. These are ongoing studies to examine vegetation growth trends in relation to the estimated deer population on the forest.

Based upon the early data from these studies and field observations, it appears that the deer have a strong impact on the vegetation of Beaver Meadow State Forest. Deer likely also have a strong impact to the vegetation on the rest of the Unit, however the impact can vary by location.

2. Insects

a. Hemlock Woolly Adelgid (*Adelges tsugae*) - This **exotic**, or non-native insect from Asia is currently posing a significant threat to the health of eastern hemlock across much of its natural range. Adelgid infestations can cause rapid **defoliation** of hemlock trees and can result in the complete mortality of all hemlock trees in affected stands within four years. This insect has been the focus of many recent studies in an attempt to discover methods of reducing its impact. Presently, the adelgid is not known to be in the vicinity of the Unit however, its presence has been confirmed in Chenango County in the towns of Oxford and Coventry. It is also present throughout southeastern New York, the Finger Lakes region and Broome and Tioga counties. This insect pest has been devastating to hemlock in the lower Delaware and Hudson River valleys. It is highly likely that in the near future, this invasive insect will be found killing hemlock on the Unit. The adelgid attacks and kills all sizes of hemlock. Eastern hemlock is one of only a few native conifers found on the Unit and is the most abundant. It is considered a keystone species, because it is valuable in so

many ways to native habitats. It stabilizes the soil in moist areas and on slopes. It cools riparian areas in the heat of summer and provides thermal cover for deer and other wildlife during winter. Many wildlife species such as red squirrels and black-throated green warblers are strongly associated with hemlock. There are currently two strategies being employed to save hemlock trees from this insect. Bio-control efforts focus on the release of a beetle native to western North America where it preys on the hemlock wooly adelgid and other native adelgid species. Several other beetles are also being tested for control. If these biological controls prove unsuccessful, the long-term consequence could be the elimination of eastern hemlock from the landscape. The second method is the use of chemical control through the application of insecticides to trees. The insecticide treatment protects the trees for up to five years and may be a useful strategy to use until effective bio-control efforts are developed.

b. Gypsy Moth (*Lymantria dispar*) - Although present, this moth from Europe has not had significant outbreaks on the Unit. This may be due to the scarcity of its preferred oak species on the Unit. This insect has received much notoriety since it was introduced into the United States in 1868. Populations of this insect can periodically build to "outbreak levels" resulting in widespread forest defoliation. Gypsy moths will defoliate many species of northeastern trees, but they favor oaks. High populations of gypsy moths do not typically persist more than three years before they collapse. Until recently, a virus (*NucleoPolyhedrosis* Virus) has usually caused the rapid decline of Gypsy Moth populations. In recent years however, a fungus (*Entomophaga maimaiga*) has also proved to be effective in reducing moth populations. This fungus was introduced to the U.S. from Japan in 1910 and again in 1985. Its effectiveness had been dismissed until its presence was identified in seven states in 1989. Because of the presence of both the virus and the fungus, it is hoped that future Gypsy Moth outbreaks will be less severe and less frequent.

c. Forest Tent Caterpillar (*Malacosoma disstria*) - This insect can be a serious defoliator of sugar maple. Unlike other "tent caterpillars," the forest tent caterpillar does not construct a tent on the tree branches. Most healthy hardwoods can withstand a single defoliation from this insect. The summer seasons from 2004 through 2008 have brought heavy infestations of the forest tent caterpillar to localized areas in central New York. Numerous patches of forest canopy were defoliated on the hilltops during the summers of 2008 and 2009. Many of the trees, especially sugar maple, did not survive the consecutive defoliations.

d. Eastern Tent Caterpillar (*Malacosoma americanum*) - This is the most common "tent maker" in New York State. The caterpillars build the nests in the crotches of tree branches. They prefer cherry trees and apples trees. The nests are formed in late April or early May each year and the caterpillars feed on the leaves. Most of the feeding is done from dusk through the evening hours.

e. Pear Thrips (*Taeniothrips inconsequens*) - Introduced from Europe to the United States in 1904. It attacks a variety of orchard and forest trees. There were several population explosions of Pear thrips in the northeast during the late 1980s. The outbreak of 1988 damaged or defoliated more

than 1.5 million acres of sugar maple trees. In addition to causing leaf damage, Pear Thrips may also be capable of transmitting a fungal disease, maple anthracnose. This disease often coincides with Pear Thrip infestations. Maple anthracnose decreases the photosynthetic ability of leaves, which can kill trees, if they are severely infected.

f. Elm Spanworm (*Ennomos subsignarius*) (and other species of loopers) - The common name of this insect is deceiving, as it is not only associated with elm trees, but will defoliate beech, oak, hickory, maple, and ash as well. More than 20 major outbreaks have occurred in the past century. Typically, outbreaks of the Elm Spanworm succumb to mortality from a complex of natural agents, including egg parasites and larval diseases.

g. Peach Bark Beetle (*Phloeotribus liminaris*) - This insect has recently gained increased attention from foresters in the northeast due to the amount of damage it has caused to black cherry trees. Infestations of this insect can result in large amounts of gum deposits on the trunks of black cherry. The damage can significantly reduce the value of the timber and it causes a general decline in tree health. Peach Bark Beetle populations build up in the tree tops following the harvest of cherry timber. **Residual**, healthy cherry trees are then attacked. Cultural practices (e.g. reducing quantities of slash and seasonal cutting) are being investigated to minimize the negative impacts of peach bark beetles.

h. Asian Longhorned Beetle (*Anoplophora glabripennis*) - This black & white beetle with long antennae, is a native of Asia. Potential impacts from this invasive insect may be very devastating since it attacks a range of hardwood species. It prefers maple species in particular, which are major components of the northeastern forest and also important to the wood product industry. This insect was first detected in New York City in 1996. Populations of this pest have been established in central Massachusetts as well as Brooklyn and Amityville, NY. Host trees are predominantly maples. Since this pest is extremely destructive and has the potential to spread at a rapid rate, authorities are destroying all trees discovered with infestations. As of 2010, over 8,000 infested trees had been identified and removed in New York City and Long Island alone. There are no known natural factors which will limit the spread of this insect.

i. Emerald Ash Borer (*Agrilus planipennis* Fairmaire) - This metallic green beetle is native to Asia. It was first discovered in the US (Michigan) in 2002. Since that time, it has killed tens of millions of ash trees in southeastern Michigan alone, with tens of millions more lost in the eastern United States, including New York State. The larva feed on the inner bark of ash trees. They will feed on trees of any size and will usually kill the tree within 3 years of infestation. Quarantine zones have been established to restrict the transportation of infected wood. EAB was first discovered in New York State in 2009, at a site in Cattaraugus County and has since been found in many counties across New York State. The closest known infestations to the Unit are in Onondaga County and southern Otsego County. EAB will likely become established throughout the state within the next 10 years, unless an effective control is discovered. In 2010, the Department released the *Emerald*

Ash Borer Management Response Plan which defines goals to slow ash mortality in New York State. To date this approach is showing signs of success at slowing the EAB outbreak.

j. European Pine Shoot Beetle (*Tomicus piniperda*) - This beetle, native to Europe and Asia, attacks the new shoots of pine trees, including scotch pine and red pine, stunting the growth of the tree. The USDA's Animal and Plant Health Inspection Service (APHIS) has issued regulations resulting in "quarantines" within the infested counties of New York State, and other states, to prevent the spread of this insect. These quarantines are of significance because they affect the transportation of pine logs. In general, the regulation restricts the transportation of pine logs from a quarantined area to a non-quarantined area. In 2004, nearly every county in New York State was listed as quarantined, with the exception of the eastern-most counties and the downstate area. Chenango and Madison counties are in this Federal quarantine area which regulates and limits the transportation of pine logs to sawmills out of the area.

k. Sirex Woodwasp (*Sirex noctilio*) - This exotic pest was first discovered in New York State on September 7, 2004 in Fulton, NY (Oswego County). The Sirex woodwasp is native to Europe, Asia and Northern Africa, and it attacks most species of pine trees, including red pine and white pine, which are common in New York. The female woodwasp carries a fungus (*Amylostereum areolatum*) that it deposits in the tree while laying eggs. This fungus can kill the host trees in just a few weeks. It is anticipated that the woodwasp will easily adapt to most U.S. climates. As of late summer 2006, the Sirex woodwasp had been confirmed in most counties of central New York including Madison County. Significant, localized damage to pine trees from this pest has been observed. Control methods for the woodwasp are being researched, including a biological control involving the use of parasitic nematodes.

l. Viburnum leaf beetle (*Pyrrhalta viburni*) - A non-native beetle that first appeared in NYS along Lake Ontario in 1996. It currently infests almost all of New York State except Long Island. Both larvae and adults feed on viburnum shrubs. This insect has had a significant impact on native stands of arrowwood (*Viburnum dentatum*).

Additional information on invasive insects in New York State can be found at:

http://www.dec.ny.gov/animals/265.html

3. Diseases

a. Beech Bark Disease - This disease has caused a widespread decline in the health of American beech, and it limits the life span of these trees. Beech trees are infected when the beech scale (*Cryptococcus fagi*) punctures the bark, allowing the spores of the fungus (*Nectria coccinea*) to enter the tree. American beech saplings are still abundant in the understory of northeastern forests, however mature beech trees are declining and becoming less common.

b. Dutch Elm Disease - This disease entered North America in 1930, and it has killed most of the American elm trees in the northeastern United States. The causal agent is a fungus (*Certatocystis ulmi*) which is spread by elm bark beetles. Although the disease has killed most elms, a few resistant individuals have survived.

c. Chestnut Blight - This is one of the most famous plant diseases in North America. It has resulted in the near extinction of American chestnut trees throughout their natural range. The blight is caused by a fungus (*Cryphonectria parasitica*) that enters through wounds in the bark. The Unit is near the northern edge of the historical range of American chestnut.

d. Sirococcus Shoot Blight – This disease is caused by the fungus *Sirococcus strobilinus* and is known to infect a wide variety of North American conifer species in the northern United States and Canada, including red pine. It has recently been observed to be affecting many of the Norway spruce plantations on the Unit. Observed symptoms are generally thinning tree crowns and tree crowns dying from the bottom-up. In addition, it commonly kills Norway spruce seedlings growing in the understory of infected stands. Field observations seem to indicate that it is most common in dense plantations and areas sheltered from winds. It is uncertain what the long-term impacts of this disease will be on the Norway spruce plantations on the Unit. At a minimum it will cause reduced growth rates of surviving trees due to their smaller crowns. It will also make regeneration of Norway spruce difficult or impossible in some stands.

4. Invasive Species

As global trade and travel have increased, so have the introduction of non-native species. While many of these non-native species do not have adverse effects on the areas in which they are introduced, some become invasive in their new ranges, disrupting ecosystem function, reducing biodiversity and degrading natural areas. Invasive species have been identified as one of the greatest threats to biodiversity, second only to habitat loss. Invasive species can damage native habitats by altering hydrology, fire frequency, soil fertility and other ecosystem processes.

Across the landscape, people are constantly travelling to and from distant locations. Invasive species may potentially be introduced through natural means via wind or animals, or by humans through the movement of firewood, off-road motor vehicles or equipment, or the planting of infested vegetation. The known invasive species present on the Unit are listed below.

Table 15. Invasive Species Present on the Unit

Plants	Status
Buckthorn spp.	Documented on 14 stands of the Unit – all on Madison 2 or 7.
Garlic Mustard	Common on the Unit

Japanese Barberry	Uncommon, but present on the Unit. Documented in 3 stands – all on Madison 8.
Morrow's Honeysuckle	A significant problem on the Unit. Known to be present in at least 98 stands on the Unit. Many areas have heavy infestations of this species. Present on all forests of the Unit but most infestations are on Chenango 2 & 25, Madison 2 and Madison 8.
Multiflora Rose	Present on all forests in the Unit in a total of 29 stands. It is often found growing with Morrow's honeysuckle although it does not sites as the honeysuckle will.
Pale Swallowwort	Known to be present in 26 stands on the Unit. It is considered a high priority for control. When it is located, efforts are made to eradicate it. A very large infestation of over 14 acres in size is located on Chenango 18. Large infestations of over 1 acre in size are also located on Chenango 23 and Madison 2. Other known infestations are generally small sites.
Phragmites	Present, but rare on the Unit. Documented in 1 stand.
Japanese knotweed	Documented in 5 stands on the Unit. Four of the stands are on the north side of Chenango 18. The other stand is on the north side of Madison 2.
Insects	
Gypsy moth	Present but does not cause significant tree mortality.
Diseases	
Beech Bark Disease	Common in hardwood stands containing beech. Nearly all mature beech eventually become infected resulting in the decline of the tree.
Dutch Elm Disease	Present on the unit and across the northeast, however, occasional mature elms are still found on the Unit.
Animals	
	No known invasive animal species are present that have significant impact on the Unit.

The Brooklyn Botanic Garden (Brooklyn Botanic Garden, 2013) has ranked the invasiveness of plant species in New York State for the NYS Office of Invasive Species Coordination. All of the invasive plants in the table above have a New York State Invasiveness Rank of "Very High". Species that rank Very High or High are considered Invasive and are recommended candidates for action.

Pale Swallowwort is has been considered a high priority for control on the Unit due to its ability to prolifically reproduce in nearly any habitat and travel long distances on wind-blown seed. When it

is located in small spots, efforts are made to eradicate it by hand digging or **herbicide** application. Eradication of this invasive species from a growing site requires a multi-year effort.

The presence of invasive plants is a significant problem on the Unit. In many stands, the abundance of large numbers of invasive plants has made forest management impossible until adequate resources are available to effectively control the invasive species. In some locations, control of the invasive species is complicated by populations that cross over onto adjacent private lands. Additional seed source may also be found on nearby private lands. State-wide efforts to prioritize, develop effective strategies for control, and allocate resources are needed to address these invasive species.

M. Landscape Conditions and Trends

Current Landscape Conditions

To determine the current landscape conditions, a three mile buffer was placed around the Unit to define the landscape used for analysis. This area does not include the Unit. This 197 square mile landscape includes an area from just east of Route 12B between Earlville and Hamilton, extending southwest to just beyond the hamlet of Pitcher. The south boundary of the Unit is just north of Chenango County Route 23. The north boundary follows a path from just west of the village of Hamilton southwest to the southwest corner of Madison County. This landscape includes the Village of Earlville and the hamlets of Georgetown, Lebanon, Beaver Meadow, Otselic, South Otselic, North Pitcher and Pitcher.

The analysis of the surrounding landscape was done using the National Land Cover Multi-Resolution Land Characteristics, 2001 data set from the DEC Master Habitat Database (MHDB). This data was analyzed using ArcGeographic Information System (GIS) software.

Observations from the landscape analysis are as follows:

A. The landscape is at the northern edge of the High Allegheny Plateau Ecoregion. The landscape is in the northern part of the Susquehanna River watershed.
B. The landscape is 60% forest cover compared to 68.9% forest cover for the surrounding Ecoregion. The statewide average is 62%.
C. The Unit is in a generally forested landscape fragmented by open and developed areas. The forested areas are predominantly on hills or hilltops separated by valleys or low land areas that are largely open or developed. The landscape also includes nearby State forests located northwest, west and south of the Unit.
D. Approximately 31% of the landscape is in agricultural or open land cover. The statewide average is 18%.

E. Approximately 5.6% of the landscape is in shrub/scrub or seedling/ sapling vegetation. This is greater than that in the surrounding ecoregion. This cover type is scattered throughout the landscape along the interface between agricultural lands and forest land.

F. Approximately 2.5 % of the landscape is in developed residential/ commercial land cover.

G. There are no known **old growth** forest areas in the landscape.

H. The Unit is within a landscape forest "Linkage Zone" as determined by the New York Natural Heritage Program. The "Linkage Zones" are based on 2012 GIS analysis performed by New York Natural Heritage staff. The analysis used computer modeling to determine potentially desirable pathways for species migration between large forest matrix blocks in New York State. The "Linkage Zone" identified connects the Chenango Highlands forest matrix block in western Chenango County with the Rome Sand Plains matrix forest block. The corridor includes the east half of Chenango 18, all of Chenango 20 & 21, and most of Chenango 2, 25 and Madison 8. Connectivity corridors may be important to allow for species movements across the landscape as an adaptation strategy if they shift their ranges over time. For additional information, see Chapter 2, page 88 of the strategic plan at http://www.dec.ny.gov/lands/64567.html.

I. The landscape is dominated by mid-aged to mature forest cover with comparatively little **early successional**, seedling/ sapling habitat.

Table 16. Land Use and Land Cover for the Landscape Surrounding the Unit Compared to Surrounding Ecoregion.

	Unit Landscape: 3 Mile Distance Around Unit		**New York High Allegheny Plateau Ecoregion** (8,709,409 acres)	
Land Use or Land Cover	Acres	% of Unit Landscape	Current Percent of Ecoregion	20 Year Forecast, Percent Change
Deciduous Forest	52859	41.8	47.0	-0.1
Conifer Forest	9105	7.2	6.8	- 0.1
Forest Wetland	6442	5.1	2.9	- < 0.1
Mixed Forest	7521	5.9	12.2	+ 0.8
Shrub & Brush Rangeland (seedling/sapling)	7058	5.6	2.1	+ 0.9
Non-forested Wetland	213	0.2	0.2	- <0.1
Agricultural – Cropland, pasture	37983	30.0	22.1	- 3.5

Developed, residential and commercial	3220	2.5	4.7	+ 1.8
Open Water	370	0.3	1.1	+ < 0.1
Grass/ herbaceous	1630	1.3	0.8	+ 0.2
Barren land – mines quarries, gravel pits	35	<0.1	0.1	+ 0.1
Total	126436	100	100	

Source: Landscape data for the Unit was derived from National Land Cover Multi-Resolution Land Characteristics data set. For additional information about this data set see: http://www.mrlc.gov/. New York High Allegheny Plateau Ecoregion data is from NYS Strategic Plan for State Forest Management (SPSFM).

Landscape Trends

One of the most significant historical trends in the landscape is that areas of early successional vegetation have declined as abandoned farm lands have matured into forest cover. This loss of agricultural land is expected to continue in the future as shown in the table above. The Ecoregion forecast predicts a loss of agricultural land, but an approximately equal shift of an increase in shrub-brush land cover. This will provide a temporary increase in habitat for those species that can use this cover type. However, these lands will eventually grow into forest cover, losing their ability to support early successional associated species. Development of early successional cover types has been identified as a need in the SPSFM to promote habitat diversity for the many declining species of birds and other animals dependent upon early successional habitat conditions. See Section F. Wildlife Resources in this plan for information on species that require early successional habitat.

Forest management can provide early-successional habitat through the implementation of even-aged forest regeneration practices. However, private non-industrial forest lands of the region are typically treated with partial harvests leaving roughly similar **residual stand structure**s of mid-aged forests after the harvest. These privately owned forests are also usually harvested before they reach the late successional stage of development.

Late successional forests are those areas where there is a significant component of trees greater than 140 years old. Forests in this age are beginning to develop old-growth characteristics such as large size, large snags, large cavities, rough bark and large dead trees and fallen logs. While no wildlife species on the Unit are exclusively dependent upon old forest conditions for habitat, many are often associated with these types of areas. Late successional forests are also important because they may provide superior habitat quality for some species even though they are found in other forest conditions. State lands have the unique opportunity to provide late successional forest conditions on the landscape because of their long term continuity of ownership. In contrast, private lands in New York State have a relatively short average length of ownership resulting in little opportunity for the long term consistency of planning needed to allow forests to reach the

late successional stage of development. Late successional forests are adequately provided for in the Northern Appalachian – Acadian Ecoregion by Adirondack Forest Preserve lands, however, there are no documented examples of this type in the landscape surrounding the Unit.

The other significant trend is parcelization. Parcelization is the process of subdividing large parcels of land and selling them to separate individuals. Parcelization frequently occurs near State lands as these areas are deemed desirable for recreation properties. This trend is very evident near Beaver Meadow State Forest where several parcels have been subdivided into many lots smaller than 10 or 15 acres. Some of the impacts of parcelization include the increased need for road maintenance or other services such as electricity in remote areas as new landowners build residences on their parcels. The forest products industry is also impacted. As large parcels of forested land are split into smaller parcels with many different owners, it becomes difficult or impossible to profitably engage in timber management. Germain et.al., (2006) document the decline in average parcel size of nonindustrial private forest in Oneida County dropping from 36 to 24 acres between 1975 and 2000. The minimum threshold parcel size for profitability is considered between 10 – 25 acres (Germain et.al., 2006). While much of the nonindustrial private forest land remains above this threshold, parcelization of private lands continues to reduce the acreage of working forest that is available to support New York's forest product industries.

III. Resource Demands on the Unit

The charge of the Conservation Department in 1929 was to acquire lands adapted for reforestation and establish thereon forests for watershed protection, timber production, recreation and kindred purposes. Seventy-five plus years after the passing of the State Reforestation Act and the Hewett Amendment by the State Legislature, New York State continues to benefit from the careful management of natural resources on these State Forests.

Society's demand for natural resources continues to increase. In the United States, consumption of wood, water and non-renewable mineral resources surpasses that of other industrialized and developing countries. On a more local scale, recent trends reflect an ever steady to increasing demand for the natural resources available from State Forest lands throughout New York including those within the Northern Chenango Unit. The recent trend of business and industry capitalizing on global markets has spurred an increased demand for both hardwood and softwood lumber production on a regional scale. The desire for more domestic sources of oil and gas by our expanding economy has also added to the demand for exploration and extraction of these natural resources from both public and private lands within New York.

Larger tracts of public ownership allow for greater flexibility in protecting, managing or extracting natural resources as compared to private lands with similar resources. Although the vast majority of land acreage throughout Central New York is held in private ownership, the individual parcels

tend to be on a much smaller acreage scale as compared to the public land holdings. The private lands are held by a wide array of landowners exercising many diverse management views and actions throughout their time of ownership. Combined with frequent ownership changes and increased parcelization of existing properties, private lands and their associated natural resources tend to be in a much greater state of flux than those of the public lands.

The historic ownership of the State Reforestation Areas has allowed for several generations of resource managers to consider long range planning with a commitment to quality natural resource management. Societal views of natural resource management continually demand higher standards for sustainable practices and responsible management for the betterment of all people. State Forests will play a vital role in the balancing of natural resource use and protection for the foreseeable future.

A. Forest Products

Timber

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

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

The continuous, long term management of State Forests has resulted in a timber resource of very high quality. New York's State forests have been certified through the Sustainable Forestry Initiative® (SFI®) 2010 - 2014 Standard and the Forest Stewardship Council® (FSC®) FSC-US Forest Management Standard (v1.0). This process evaluates the Department's forest management program for the use of sustainable forestry practices which have met the policies and principles of the SFI and the FSC. Certification by these organizations indicates that the landowner is using scientifically, environmentally, socially and economically sustainable forestry practices.

At the regional scale, there is a steady demand for hardwood sawtimber from regional sawmills. **Appendix VII** illustrates the change in price for black cherry, white ash, hard maple, red maple and red oak based upon figures from the DEC **Stumpage** Price Report for the Western/Central region of New York State. The graph displays the trends in stumpage prices paid for standing timber based upon data for the 2005 season through the 2014 season. Market prices for hardwood sawtimber steeply declined from 2006 to 2011. It appears that prices may have stabilized in 2012 and may be beginning to increase in 2013. The value of high quality hardwood logs throughout New York and the northeast had reached historic high levels in 2004-2005 until this recent market decline. High quality hardwood stumpage prices depend on new home construction, especially homes with high-end cabinetry and flooring. Demand for hardwood lumber and the coinciding hardwood stumpage are expected to increase as the demand for new home construction increases and the state of the economy improves. While the local demand for hardwood sawtimber has been steady, competition for sales has declined due to a variety of factors including the presence of fewer sawmills compared to the 1990s.

The market for spruce is almost exclusively for saw logs. There are no spruce sawmills in New York State, so nearly all spruce logs are sold and trucked north to Canadian sawmills which process the logs into lumber. The Canadian demand for spruce logs fluctuates along with the general state of the economy since most Canadian mills are only hauling logs back north after they have delivered a load of retail products into New York State. The other primary factor affecting the demand for spruce logs is the demand for new home construction since spruce lumber is primarily used for wood framing.

There has been a steady demand for red pine sawtimber from regional industries which manufacture log homes, landscaping wood, fencing and utility poles. Because of the abundance of pine plantations on State forests and their scarcity on private lands, State lands are the primary source for the regional industries that use red pine.

The demand for softwood pulpwood is limited due to the long trucking distance to the nearest paper mills. When diesel fuel prices are high, it limits the distance from which it is profitable to ship pulpwood. Now increased trucking costs to distant markets have reduced the economic feasibility of marketing pulpwood for many local contractors, although there may be new markets available for “green certified” pulpwood.

As both plantation pine and spruce stands continue to mature, the supply of softwood sawtimber is expected to increase for the near foreseeable future. The supply of this softwood resource is expected to change over time as these stands reach and pass their economic and biological maturity.

At the local scale, there is a somewhat different demand for wood products. While many local loggers supply larger mills with hardwood logs, lesser valued products such as hemlock or larch logs and firewood can be profitably cut and sold to local markets. Hemlock and larch are often

sawn by small local band mills for use in barn construction. Firewood is cut by individuals for their own use or for resale to home owners. The 2010 census reports that 495 households or 25% of the total number of household, in the six towns within which the unit is located use wood as their primary fuel source for home heating.

The demand for timber on the Unit also is an indicator of those employed in the forest products sector of the economy who views State forests as a source of work. One rough measure of this is the number of people who want to receive notice of timber sales from State forests on the Unit. Currently over 90 individuals or companies have expressed interest in purchasing timber sales within the Unit. Most of these companies or individuals are located in central New York.

The rise in hardwood timber values during the late 1990's and early 2000's has been an incentive for **selective cutting** or **high-grading** on many private forest lands in the region. This is a type of logging where the trees of highest value and quality are cut from the wood lot, leaving a forest of low quality trees with reduced potential for growing high quality sawtimber in the future. If this trend continues, the future demand for high quality timber from State forests may increase as those high quality trees become increasingly scarce on private lands.

The original softwood tree planting of the 1930s was intended to bring abandoned farmland back into productive forests. Much of this effort was to conserve and restore soil productivity and control erosion from these sites. Throughout New York, thousands of acres were planted to the various softwood species in a relatively short time frame. Since then, the opportunity to replant on State lands has been limited by the lack of newly acquired agricultural lands and the gradual succession of plantations to natural hardwood species. As the number of plantation acres on State Forests is inevitably reduced over time, the supply of softwood timber will subsequently decrease in the long run.

Non-Timber Forest Products

Non-timber forest products include all forest products except trees that are of value to people for their use. Examples include maple syrup, nuts, forest plants, fungi, decorative greens, and fish and game species.

The most sought after non-timber forest product is deer during the fall hunting season. Venison provides a source of healthy, low fat protein for the families of successful hunters. Hunters also pursue wild turkey, ruffed grouse and other game species for their food value. Trappers seek furbearers such as mink, muskrat, beaver, coyote and fox for their pelts. New York City is a center for fur garment production and sales and the largest fur export markets are to China and Russia. The demand and price for fur tends to fluctuate with winter temperatures and the economies in North America, China and Russia.

While there is little demand for other non-timber forest products, local people are known to collect leeks, berries, mushrooms and fiddleheads (immature ferns) for food.

In 2012, there were approximately ten thousand gallons of maple syrup produced on twenty three farms in Chenango County. This is a 12% increase from 2002 production suggesting a stronger demand for maple syrup in the immediate future.
http://www.agcensus.usda.gov/Publications/2012/

There have been no specific requests or demands addressed to the Department for the collection of maple syrup or any other non-timber forest product on the Unit.

B. Mineral Resources

Hard Rock Mineral Resources
Mineral deposits available in central New York State include shale, sand, gravel, bluestone, salt, oil, and natural gas. There are presently no commercial mining contracts, permits, or other mineral resource operations on any of the State Forests of this Management Unit. Gravel and hard rock resources exist in the areas surrounding the Unit, and operations to extract these resources are located on privately-owned land. Several shale pits are located on the Unit which are used to provide surface material for Department roads, parking areas and log landings. There is currently no public demand for sand, gravel or other hard rock mineral resources on the Unit.

Energy Demand
There is currently a broad societal demand for energy since the United States is the largest consumer of energy in the world. Natural gas is the mineral resource of greatest concern on the Unit. The 2009 New York State Energy Plan examines the State's energy consumption and projected needs to year 2018. As reported in the plan, the demand for natural gas in New York State is expected to increase by about 5% by 2020. The residential and commercial sectors in the state are expected to increase demand by about 0.6% annually. About 80% of the increase in demand is expected to come from the New York City and Long Island regions of the state. Gas wells in New York State provide for about 5% of volume needed to meet the annual state demand. The remainder comes into the state through pipelines from primarily the Gulf Coast region and Canada.

Industry demand for access to the Marcellus and Utica shale formations as well as the development of gas fields in the vicinity of the Unit are the result of increased global demand for energy. This demand is expected to increase in the long-term future, with periodic fluctuations depending upon the market price of this commodity.

In December 2014 the Governor and the Commissioners of the Department of Health (DOH) and DEC announced that the DOH had completed its public health review of NYS DEC's SGEIS on the Oil, Gas and Solution Mining Regulatory Program and recommended that high-volume hydraulic fracturing should not move forward in New York State.

Gas Exploration in the Vicinity of the Unit

There has been a considerable number of natural gas wells drilled in the vicinity of the Unit although none have been drilled on any state land. Except for two exploratory wells drilled in the early 2000s to the south and west of Chenango RA #2, Beaver Meadow State Forest, the western portion of the Unit has not experienced any historic drilling activity. The majority of the wells are located north east of the Unit in close proximity to the Lebanon, Earlville and Beaver Meadow State forests. There have been approximately 100 wells drilled in the vicinity of the Unit - the majority within the past five to seven years. Out of the approximate 100 wells drilled in the vicinity of the Unit, 50 are located within 1.5 miles of a state forest boundary. The closest producing well is 700 feet from the eastern boundary of Chenango RA #25, Beaver Meadow State Forest. There are another half dozen approximately 1,200 feet from a State forest boundary and the remaining 50 wells are between 1,200 feet and 1.5 miles from any state forest.

Norse Energy, Inc. drilled the majority of these wells but they have since been taken over by EmKey Resources LLC. Production in the Bradley Brook field began in 1998 in the towns of Lebanon and Eaton, Madison County. The Beaver Meadow and Hawley Brook Fields were discovered in 2004 in the towns of Plymouth and Smyrna, Chenango County. The wells in the Beaver Meadow, Hawley Brook and Bradley Brook gas fields are producing natural gas from the Herkimer, Oneida, Oswego, and Vernon geologic formations. Though most of these wells are producing, approximately one dozen have been plugged and abandoned during recent years in accordance with DEC rules and regulations.

Production in all three fields was originally from the Oneida and Oswego Sandstones; however, recent drilling from 2007 to 2011 has extended the fields and has focused on horizontal wells drilled in the Herkimer Sandstone. No drilling has occurred in these gas fields since 2011.

Future Leasing Activity

Initial title review indicates the State owns the mineral estate under all State Forests covered by this Unit Management Plan, with the qualification that mineral reservations may exist and no expressed or implied warranty of title is being offered in this document. As of 2014, there are no oil and gas lease agreements pertaining to the mineral estate under the State Forests contained in this plan. In the future, the State may receive requests to nominate some or all of the tracts contained in this Unit for oil and gas leasing. Additional information on oil and gas leasing procedures can be found in
Chapter 5 of the Strategic Plan for State Forest Management, which can be found online at http://www.dec.ny.gov/docs/lands_forests_pdf/spsfmfinal.pdf.

For further information contact the NYSDEC Mineral Resource staff, Region 8, 6274 East Avon-Lima Road, Avon, New York 14414-9591.

Under Article 7 of the Public Lands Law, any citizen of the United States may apply for permission to explore and/or extract any mineral on State lands. However, to protect surface resources, current Department policy is to decline any commercial mining application(s) pertaining to any lands covered by this Management Plan.

C. Biological Resources

State forests were established in part, to meet the public demand for biological resources. The abandoned crop lands and eroding pastures were replanted with trees to prevent erosion and provide a timber resource for future generations. Biological resources have always been a public demand of State forests as expressed through the participation in traditional activities such as hunting, fishing and trapping. More recently, increasing interest in birding and general wildlife viewing activities, as well as the greater awareness of human impacts on the natural world has created additional interest in the management of public lands for a variety of biological-based values. These values may include commodity products such as timber or fur as well as non-commodity values such as trophy deer, small game, species diversity or old growth forests.

An important variety of biological resources exist on the Unit. Conservation of those resources is an increasing significant societal demand. Varied habitat types across the forests provide diverse conditions to an array of species. No comprehensive study has been made on the forests for a wholly inclusive list of species, but recognized fish, birds, mammals, reptiles, and amphibians are listed in several of the included appendices. More than 100 species of understory plants and over 30 tree species are known to exist on the Unit as well. In 2004 the New York Natural Heritage Program (NHP) which is a partnership between DEC and The Nature Conservancy conducted an inventory for rare plants, animals, and significant ecological communities on these forests. That inventory is used to help identify, track, protect, and manage biodiversity. The survey did not discover the presence of any significant ecological communities or rare plants or animals (see also the Rare Species and Significant Ecological Communities section).

The value of biological resources is often difficult to quantify since they are not easily measured in economic terms. The demand and potential conflict over how best to manage biological resources is expected to increase as the awareness of human induced impacts on the natural world multiply in the future.

D. Recreation Resources

The mission of the DEC Division of Lands and Forests is *"to care for and enhance the lands, forests and natural resources in the State of New York for the benefit of all through the care, custody, and control of state-owned lands, and promotion of the use and protection of all natural resources."* This is a broad mission which reflects that DEC has many other responsibilities beyond satisfying

public recreation desires. Rather, recreation opportunities are provided on DEC lands that are compatible with other multiple uses and the ecosystem management approach described previously in this plan.

The Northern Chenango Unit is used by many people for a wide variety of recreational activities. Parcelization and residential occupancy have restricted the access to private lands, resulting in an increased public use on State Forests. Activities people enjoy on the unit include, but are not limited to, pleasure driving, hunting, snowmobiling, hiking, horse riding, mountain biking, cross-country skiing, camping, wildlife/ nature observation, trapping, and fishing.

In New York State, the demand for outdoor recreation is periodically assessed by the Department of Parks, Recreation and Historic Preservation (OPRHP). The most recent assessment is published in the Statewide Comprehensive Outdoor Recreation Plan (SCORP), 2014-2019 (NYS OPRHP, 2014). While New York's population is expected to remain fairly constant through 2025, there will be a large increase in the number of people 65 and older. This aging of New York's population is the largest factor affecting future recreation trends. This will result is less future demand for highly vigorous activities such as team and court sports and increased future demand for less physically demanding activities such as picnicking, walking and nature observation. The 2013 General Recreation Survey surveyed the preferred activities of New Yorkers age 65 – 85. The top activities listed that may also occur on the Unit, included walking or day hiking, visiting nature areas, fishing, camping, and cross-country skiing or snowshoeing (SCORP 2014-2019). There will also be increased demand for *universally accessible* recreation opportunities as the number of people with limited mobility is expected to increase due to the aging of the population.

The following information about recreation activities includes observation about how people use on the Unit for their activities combined with broader future demand information derived from the SCORP 2014-2019 report.

1. Demand for Trail-Based Activities

The most popular trail based activities hiking and snowmobiling.

Snowmobiling - During the winter, snowmobiles are the primary use on the Unit. The nearly 12 miles of snowmobile trails on the Unit are maintained by four local snowmobile clubs through Adopt-A-Natural Resource Agreements or Volunteer Stewardship Agreements with the Department. One indication of snowmobile demand is the number of registrations. The number of snowmobile registrations steadily climbed each year from 1991 to a peak during the season of 2002-2003 at about 172,200. The season of 2011-2012 had large drop in registrations to about 90,400 but that was probably due to the unusually warm and snow-free winter. Statewide snowmobile registrations for the 2013-2014 season was 115,982. This is a slight decrease of 758 or 0.6% from the number for the 2012-2013 season. The demand to route snowmobile trails onto public lands is increasing due to conflicts associated with parcelization and changes in ownership of private lands. Increasing home development in rural areas near State forests often results in

plowing of previously unplowed town roads. This forces snowmobiles off of roads and onto trails on nearby State or private lands.

Walking for Pleasure/ Jogging/ Day Hiking – Based on the 2013 General Public Recreation Survey, SCORP reports that walking, jogging, and day hiking are the most popular outdoor activity. Over 88% of the population between ages of 18-85 participate in these activities. Recreational day hikers and long distance through hikers use the Finger Lakes Trail on the Unit. Local use numbers are not available for the Unit but SCORP forecasts a stable demand in the future.

Cross-country skiing/ Snowshoeing – The public can enjoy these activities along the FLT as well as off trail. Current use level for these winter activities on the Unit is generally low.

Mountain Biking – General bicycling (including both on and off-road use) was the fourth most popular activity in the 2013 General Public Recreation Survey. While the Unit does not have trails designated for off-road biking, the numerous dirt roads are well suited to this activity. Despite this, there appears to be low demand for this activity on the unit.

2. Demand for Dispersed Use Activities

Hunting & Trapping – Deer and turkey are the most popular game species pursued by hunters on the Unit. Bear, while very scarce on the Unit, may also be hunted. People also enjoy small game hunting for grouse, woodcock, squirrel, rabbit, waterfowl, raccoons, coyotes and foxes. Trappers pursue beaver, mink muskrat, fox and other fur bearers on the Unit. Trapping popularity usually fluctuates with fur prices.

Camping – SCORP forecasts a slight decrease in statewide demand for camping. Demand for camping on this Unit is expected to remain steady as it is generally occurs during the deer hunting season as it is done by hunters camping on the forests.

Fishing – There are very limited opportunities to do this activity on the Unit. Most of the waters on the Unit are small streams. Small stream trout fishing for brook and brown trout is the primary fishing opportunity available. Demand is expected to remain stable.

Auto Touring & Nature/ Wildlife Observation – There are no specific records for local participation in this activity. While SCORP does not address these activities, their demand is expected to increase because they are sedentary types of recreation that can be enjoyed by an aging population.

Geocaching – Geocaching is a growing outdoor activity where people use GPS units to locate hidden “treasures”. This is a challenging family activity that may be enjoyed by both the young and old on the Unit. Geocache sites are located on the Unit.

ATV Use - Currently, illegal off road vehicle and ATV use occurs on the Unit at various locations. It is unknown if this activity is increasing or decreasing. For information on DEC's policy regarding ATV use on State Forests, please refer to Chapter 5, page 213 of the Strategic Plan for State Forest Management.

For further discussion of the DEC's recreation goals and objectives on State Forests, please see Chapter 5 of the Strategic Plan for State Forest Management, which can be found online at

http://www.dec.ny.gov/docs/lands_forests_pdf/spsfmfinal.pdf

IV. Management Constraints on the Unit

A. Physical Constraints

Steep slopes
Wetlands
Geological characteristics
Soil characteristics
Climatic conditions
Storm damage
Potential insect and disease infestations and associated quarantines
Limited access
Presence of cultural resources
Electrical transmission and telephone lines
Deeded rights-of-way
Buried telecommunication lines
Fragmented configuration of State land
Vegetation composition

B. Administrative Constraints

Budget limitations
Staffing shortages
Availability of Operations work crews
Fluctuations in wood markets
Lack of demand for some wood products
Contract procedures

C. Societal Influences

There are differing public opinions on the management practices and uses of State Forests. All opinions are considered, but the degree to which they can be satisfied will vary. There are special interest groups for hunting, horseback riding, off-highway vehicles, bird watching, and many other recreational pursuits. There are industry demands for timber, natural gas, cell tower sites, field stone, rights-of-way and more. All of these demands need to be reviewed for their compatibility with the current laws, regulations, land management policies, the environmental conditions and the objectives for the forest property. It is recognized that these societal influences are dynamic and, if the State Forest resources are to continue to benefit the interests of the public, some flexibility must be incorporated into the management of these resources.

D. Department Rules, Regulations and Laws

Appendix IX lists the Department's Rules, regulations and laws governing management activities on the Unit. For additional information on the Department's Rules, regulations and laws, see Chapter 7 of the New York State Strategic Plan for State Forest Management.

V. Vision Statement

The Northern Chenango Unit will be a healthy, diverse and productive forest that provides social, economic and environmental benefits for current and future generations of New Yorkers.

State Forests on the Northern Chenango Unit will be managed in a sustainable manner by promoting ecosystem health, enhancing landscape biodiversity, protecting soil productivity and water quality. In addition, the State Forests on this unit will continue to provide the many recreational, social and economic benefits valued so highly by the people of New York State. DEC will continue the legacy which started more than 80 years ago, leaving these lands to the next generation in better condition than they are today.

This plan sets the stage for DEC to reach these ambitious goals by applying the latest research and science, with guidance from the public, whose land we have been entrusted to manage.

VI. Goals and Objectives

GOAL 1: Provide Healthy and Biologically Diverse Forest Ecosystems.

Biodiversity is the sum total of all forms of life including genes, microbes, fungi, plants, animals and **ecosystems** (Hunter 1999). State forests are managed for a variety of resources used by society including commodities such as timber, firewood and natural gas.

The Northern Chenango Unit offers a unique opportunity to blend conservation of biodiversity with commodity production because it includes large forested areas under the single, stable ownership of New York State so that long-term conservation practices can be implemented.

Principles for maintaining biodiversity in working forests have emerged in the fields of conservation biology and landscape ecology and provide guidance for land management on the Northern Chenango Unit. Following Hunter (1999) and Lindenmayer & Franklin (2002), conserving biodiversity on the Unit will be guided by five principles:

(1) Maintenance of landscape connectivity - An example of this is the protection of undisturbed **riparian zones** and maintenance of areas of continuous forest cover.

(2) Maintenance of landscape diversity - This is the diversity, size and spatial arrangement of habitat conditions.

(3) Maintenance of stand structural complexity - This refers to the provision of and spatial arrangement of multiple forest **age classes**, sizes of live trees, snags, cavity trees and downed wood.

(4) Maintenance of the integrity of aquatic ecosystems - There is a direct association between forest conditions and water quality. In addition to providing clean drinking water, wetlands, lakes, ponds, and riparian zones provide habitat for diversity of aquatic and terrestrial species.

(5) Implement multiple management strategies at the stand, forest and landscape level - This is necessary because conservation of biodiversity requires providing suitable habitat for a wide variety of species, each of which has unique habitat requirements. In addition, if one strategy fails, there will likely be others that may provide the necessary conditions for sensitive species.

The long-term maintenance of biodiversity on any ownership is a lofty goal. Achieving this goal will be increasingly complicated in the future due to the influence of external factors on the forest environment such as acid precipitation, climate change and invasive exotic species. Furthermore, the current knowledge of many species is insufficient. In addition, the fields of conservation biology, wildlife and forest ecology continue to evolve and provide new insights on the impacts of human activities on forest resources. In the absence of sufficient knowledge, decisions in this plan have leaned toward the values of conserving forest biodiversity rather than resource extraction.

State Forests on this unit will be managed using an ecosystem management approach which will holistically integrate principles of landscape ecology and multiple use management to promote biodiversity, while enhancing the overall health and resiliency of the State Forests Ecosystem management is a process that considers the total environment - including all non-living and living components; from soil micro-organisms to large mammals, their complex interrelationships and habitat requirements and all social, cultural, and economic factors. For more information on ecosystem management, see SPSFM page 39 at http://www.dec.ny.gov/lands/64567.html.

Objective 1.1 Protect soil and water quality by preventing erosion, compaction and nutrient depletion.

Protection of soil and water quality is one of the highest management priorities and is the foundation of sustainable forest management. Headwaters streams of the Chenango and Susquehanna Rivers are located on the Unit and management activities on these State Forest impacts downstream water quality. The greatest threat to water quality on the Unit is the potential disturbances to any streambed or adjacent area along with any soil erosion flowing into a water body. The primary management objective for all of the streams on the Unit is to maintain good water quality by maintaining streambank stability. Good water quality in these streams will help to ensure good water quality in their receiving waters.

The following are actions that will strive to protect the soils and waters of the Unit.

Action 1.1.1 Follow the DEC Special Management Zone (SMZ) Guidelines on all areas identified as a special management zone. These SMZ areas consist of buffer strip areas surrounding water bodies, streams, wetlands, vernal pools and spring seeps. The buffered areas will have different management action restrictions along with varying buffer widths depending upon the sensitivity of the riparian area designated. These rules are designed to minimize impacts to aquatic habitats from actions associated with gas and mineral extraction or forest management. For additional information on the protection of soil and water quality as well as SMZs, see the Strategic Plan for State Forest Management pages 107-110.

Action 1.1.2 Comply with the NYS publication Best Management Practices for Water Quality as described in the Strategic Plan for State Forest Management pages 110-112 during all timber harvesting and other management activities.

Action 1.1.3 Monitor BMP implementation by evaluating control structures after construction to assess effectiveness. A Statewide monitoring system will be implemented as per the SPSFM pg. 114.

Action 1.1.4 Maintain water quality standards during road maintenance on state forest lands including, but not limited to, ditch cleaning, stream bank stabilization, and culvert replacement. Road maintenance activities will comply with Bureaus of Fisheries and Habitat guidelines or as per the guidelines on the Department website at: http://www.dec.ny.gov/permits/49060.html and http://www.dec.ny.gov/permits/49066.html. Undersized culverts can prevent the movement of fish, particularly wild brook trout, in headwater streams effectively reducing the amount of available habitat. When existing undersized culverts are replaced, future culverts will be installed consistent with Department Stream Crossing Guidelines and Best management Practices.

Action 1.1.5 Restrict commercial use of water located wholly within the Unit. Wells will not be allowed to be drilled for personal or commercial water extraction.

Action 1.1.6 Protect 1,487 acres of forested wetlands, shrub wetlands, open wetlands, ponds and riparian forests. Ponds, wetlands and riparian forests are extremely complex and diverse ecosystems that provide environmental, biological and recreational benefits. They are distinct ecological communities that support a diversity of plant and animal species not often found elsewhere in the landscape (Calhoun, p. 300, Brinson, p. 652 in Hunter 1999 and Hunter 1991).

Protection of riparian zones will maintain stream bank stability to ensure a clean supply of water and protect the habitat of native fish and other species inhabiting these areas. Timber harvesting, gas well development and road construction are not permitted in wetland and riparian forests. Logging trails may cross riparian zones using Best Management Practices to protect water quality. Riparian forests are vulnerable to impacts resulting from logging and drilling with the potential of increasing stream sedimentation, disrupting habitat conditions and diminishing overall watershed quality. In the absence of disturbance, these areas will develop into late successional forest. See **Appendix X** "Management Direction" maps.

Action 1.1.7 Protect 625 acres of steep slopes and inaccessible sites by limiting management actions. Timber harvesting will not be permitted on steep slopes in excess of 40% because the terrain is extremely vulnerable to soil erosion. Sites having conditions suitable for management are designated inaccessible if riparian, wetland and other protection zones will be impacted as a result of management activities or if the environmental cost of establishing access outweighs the benefits derived from the management activity.

Action 1.1.8 Construct log landings and clearings for other management activities on slopes ≤10%. Significant slope modification increases the potential of impacting drainage patterns and creating abrupt and permanent contrasts in landscape patterns.

Action 1.1.9 Protect the water quality and habitat of all classified trout C(t) streams by complying with recommendations from the Bureau of Fisheries and the Bureau of Environmental Permits.

Action 1.1.10 Protect the forest and streams on the Unit from impacts associated with brine application to roads.

The development of gas drilling in central New York has led to the practice of disposing gas well production fluids, known as brine, onto town roads. Brine consists of the fluids produced by a gas well after the drilling phase is completed. This practice is allowed under permit (a Beneficial Use Determination) issued from the Department's Division of Solid & Hazardous Materials. The permits may be issued when requested by a waste transporter and where approved by the town government. The permit allows the conditional spreading of gas well brine on town roads for the beneficial purposes of road de-icing, dust suppression and road surface stabilization.

The Unit contains a wide variety of road conditions, some of which are more suitable for brine application than others. Application of brine on unsuitable roads may cause negative impacts to streams, wetlands and forest vegetation due to the high amounts of salts, heavy metals and other chemicals. Unsuitable roads may contain impermeable surfaces, surfaces that cannot be graded, lack of ditches, poor drainage or pot holes with standing water.

The application of brine will not be allowed on the portions of the following town roads and Public Forest Access Roads that are on State land:

Table 17. Roads on Unit Where Brine Application is Not Permitted

State Forest	Town(s)	Road Name
Chenango 2	Smyrna	Stowell Road
Chenango 2	Otselic	Gray Road (unplowed section)
Chenango 2	Smyrna-Otselic	Coye Hill-Bliven Road (west of Graham Rd.)

State Forest	Town(s)	Road Name
Chenango 2, 25	Smyrna	Gibson-Taylor Road
Chenango 18	Lincklaen	Husted Road
Chenango 18	Lincklaen	Murray Road
Chenango 21	Otseilc	DEC Truck Trail
Chenango 21	Otseilc	Warner Road
Chenango 20	Otselic	All DEC Haul Roads
Chenango 20	Otseilc	Buck's Brook Road
Chenango 20	Otseilc	Ratville Road
Chenango 23	Lincklaen & Pitcher	Freeman Road
Chenango 23	Pitcher	Cemetery Road
Chenango 23	Pitcher	Beardsley Road
Chenango 25	Smyrna	Beaver Meadow Road
Chenango 25	Smyrna	George Crumb Road
Madison 2	Lebanon	DEC Truck Trail
Madison 2	Lebanon	Morgan Road
Madison 7	Lebanon	Bisby Road
Madison 7	Lebanon	Carncross Road
Madison 8	Georgetown	DEC Truck Trail
Madison 8	Georgetown	Texas Hill Road

Objective 1.2 Provide forest vegetation types or features which are declining or rare in the landscape to enhance wildlife habitat diversity.

State lands comprise a significant portion of the landscape and are unique in that they have stable ownership and can be managed over long time frames for habitat conditions that can complement the surrounding privately owned landscape.

The landscape analysis used in this planning process indicates that only 6% of the landscape surrounding the Unit is in early successional shrub/scrub or seedling/ sapling vegetation. Also, due to past demands to clear land and a need for wood products in the late 1800s and early 1900s, there is little to no known late successional forests type in the landscape. The Unit contains 17 acres of open fields or grassland. The Department considers this region of the State to have only a marginal potential for grassland habitat management. As a result, it is not designated as a Grassland Focus Area. While the Unit has limited potential for grassland habitat management, it can provide **seedling/sapling** early successional habitat and eventually develop late successional forest stands which are often lacking on private lands.

Early successional habitat consists of areas dominated by grass or other herbaceous vegetation, shrub lands or young (seedling/sapling) forest cover. Recent research has also shown that upland

early successional habitats are heavily used by a wide variety of mature forest songbirds (Vitz, A.C., Rodewald, A.D., 2006, Chandler, C.C. et al., 2012). Specifically, mature forest songbirds were found to use the interior of small clearcuts (10-23 acres) during the post-fledgling period. The species using these areas included many that are typically considered "forest interior" species including ovenbird, wood thrush and scarlet tanager. It is thought that the mature forest birds use early successional areas because of the abundant food and cover these areas provide.

Although there has been much concern among conservationists about the decline of mature forest birds, surveys have shown that species dependent upon early successional habitats are declining even more rapidly. Much of the decline of early successional dependent species has occurred as a result of forest development on abandoned agricultural lands. In a forested landscape, even-aged management practices can provide habitat for these declining early successional species without necessarily conflicting with the needs of mature forest songbirds.

The New York State Comprehensive Wildlife Conservation Strategy (CWCS) plan recommends maintaining or increasing the amount of early successional forest and shrub land in the Susquehanna Basin. According to the CWCS, 92% of the bird species that depend upon early successional habitat are in decline in New York State. Some of the species designated in the CWCS as Species of Greatest Conservation Need that require early successional habitat include American woodcock, brown thrasher, Canada warbler, ruffed grouse and willow flycatcher. See Section F. Wildlife Resources in this plan or the CWCS, Susquehanna Basin, at http://www.dec.ny.gov/animals/30483.html for additional information.

Late successional habitat consist of forests with mature and older trees, greater than 140 years of age, being dominant in the forest canopy. Late successional forests may have been previously logged but are beginning to develop old growth forest attributes such as large tree size, large downed logs, large snags, cavities and species such as mosses, lichens, fungi and insects that are typically found in old growth forests. Hunter (1990) suggests that old forests are important because they represent the most biologically diverse portion of the successional sequence and, that with few old stands remaining, there is a scarcity of late successional habitats. These areas of significantly large and older trees also have social value and are appreciated by many people as places to camp, relax and reconnect with nature.

Action 1.2.1 Increase the amount of early successional habitat on the Unit.
Early successional habitat consists of a variety of vegetative conditions. The Unit has 13 acres of upland old field or shrub habitat that will be maintained. Over the next 20 years, early successional habitat will be provided on the Unit through even-aged regeneration harvests. Stands containing a significant amount of aspen comprising 75 acres will be managed on a 60 year **rotation** to enhance and perpetuate aspen **forest type** and early successional forest cover. Even-aged management using a 120 year rotation will be conducted on 7,755 acres of the Unit. These areas, consisting of conifer plantations and native hardwoods will provide early successional forest cover at the time of regeneration. Over the course of this 20 year plan, it is expected that approximately 1,098 acres will be regenerated using the clearcut or shelterwood method. An additional 3,160 acres will be

treated with the shelterwood method where adequate stocking of advance regeneration is present, or thinned to establish regeneration for a future shelterwood treatment. The Unit also contains 1,270 acres of seedling/sapling, open or shrub dominated wetlands that are expected to remain in this condition over the next 20 years. See Appendix IX "Management Direction" maps for locations of these areas.

Any treatments involving clearcutting will comply with the Department's program policy *ONR-DLF-3 / Clearcutting on State Forests (2011)*. Information on this policy can be found at http://www.dec.ny.gov/docs/lands_forests_pdf/policysfclearcutting.pdf.

Action 1.2.2 Increase the amount of late successional stage forest on the Unit.
Forested areas designated to be excluded from timber harvesting which will develop into late successional forests consist of 3,278 acres on the Unit. These areas include stands excluded from timber management to protect wetlands, riparian areas, steep slopes or other sensitive sites, visual buffers, areas that are inaccessible and Natural Areas. These protected areas are often in corridors linking streams with wetland areas to improve landscape connectivity. **Natural Areas** are forests withdrawn from timber production, natural gas exploration and other direct human disturbances. Within natural areas ecological patterns and processes will operate without direct human intervention and, together with riparian and wetland forests, upland stands will develop late successional characteristics with old trees, structural complexity and a seemingly chaotic appearance.

Natural areas are a critical component of any effort to conserve biodiversity because they develop ecological conditions distinct from those in forests managed for commodity production. Disturbances associated with timber harvesting and mineral extraction, however sensitive to biodiversity and environmental concerns, will trigger change that set them apart from natural areas. Natural areas also provide important reference areas against which to compare changes in working forests, such as the long term effects of timber harvesting on biodiversity. In the absence of logging and gas drilling, natural areas along with other protected stands will develop into late successional forests, conditions that are relatively scarce within the larger rural landscape of Chenango and Madison Counties.

See **Appendix X** "Management Direction" maps for locations of protected or natural areas.

Action 1.2.3 Increase the presence of native oak and hickory species on the Unit.
In the future, climate change is expected to cause northward or altitudinal shifts in the suitable climate for tree species ranges. Climate scientists predict that New York's climate will be comparable to present day Virginia - South Carolina by 2070 - 2090. This warmer climate in the future will favor the development of an oak-hickory forest type instead of the current species mix of northern hardwoods that dominate the natural forests on the Unit. The warming is expected to exceed historic rates of change and consequently occur at a pace that will likely exceed the natural migration rate of native tree species. As the climate warms, it is anticipated that species such as

eastern hemlock, hard maple and red maple will be stressed and increasingly vulnerable to mortality from other factors such as drought and insect or disease attack.

The Unit is within the existing range of native red and white oaks and shagbark hickory; however, these species are only present on the State forests in small isolated areas. Groups or patches of oaks and/or hickories will be planted on selected sites where existing pine plantations are harvested at the end of their rotation. Establishing oak and/or hickory in scattered locations on the forests will provide a future seed source for **natural regeneration** and may mitigate the severity of future impacts associated with climate change. In addition, increasing the presence of these species will increase forest diversity as well as provide a valuable food source (nuts) for a variety of wildlife species.

Objective 1.3 Protect at-risk species and significant ecological communities.

At-risk species are those species having the New York State legal status of Endangered or Threatened. Significant ecological communities are those unique areas identified by the New York State Natural Heritage Program as being significant due to rarity or high quality status. For additional information on at-risk species and communities, see the SPSFM, Chapter 3, pgs. 115-126. There are no known occurrences of significant ecological communities on the Unit.

Action 1.3.1 Protect any occurrences of at-risk species and significant ecological communities, if they become identified in the future. Management actions may be done to improve or enhance habitat necessary for at-risk species and communities in the future.

Action 1.3.2 Conduct a survey, for rare species or communities by Natural Heritage staff as time and resources become available, of any newly acquired lands and protect any new finds of at-risk species and significant ecological communities identified by New York State Natural Heritage.

A review of the State Forest Predicted Richness Overlay GIS data layer shows the *potential* occurrence of the rare species listed in the tables below. Sites where these potential occurrences are located will be protected and/or surveyed before any potential site disturbing activities occur.

Table 18. Rare Plant Species that May Potentially Occur on the Unit

Common Name, *Scientific name*	**Habitat**
Drummonds's Rock-cress, Boechera stricta	Rocky ledges, ravines; also disturbed areas including trails & mowed areas.
Rock-cress, Draba arabisans	Dry cliffs, rocky ledges, talus, open woods, bedrock of limestone, shale or siltstone.
Smooth Cliff Brake, Pellaea glabella ssp. glabella	A fern of calcareous cliffs and ledges, often with eroding limestone, often in/near stream gorges.
Jacob's Ladder*, Polemonium vanbruntiae*	Wet meadows, swamps, beaver meadows, edges of streams.

Mingan Moonwort, *Botrychium minganense*	White cedar, pastures with calcareous bedrock

Source: State Forest Predicted Richness Overlay GIS Data Layer

Table 19. Rare Animals that May Potentially Occur on the Unit

Common Name, *Scientific name*	**Habitat**
Gray Petaltail, Tachopteryx thoreyi	Small shallow streams in rocky gorges or glens fed by hillside seeps. The seeps are larval habitat, adults use both the streams and seeps. Possibly in Bucks Brook.
Eastern Hellbender, Cryptobranchus alleganiensis	Susquehanna River drainages, possibly in the Otselic River

Source: State Forest Predicted Richness Overlay GIS Data Layer and New York Natural Heritage

Objective 1.4 Conserve and Enhance Fish and Wildlife Habitat.

This plan includes multiple strategies to conserve and enhance fish and wildlife habitat. In addition to the actions listed below, see Objectives 1.1, 1.2 and 1.3 and their corresponding actions.

Action 1.4.1 Retain snags, cavity trees, reserve trees, conifers, **coarse woody material (CWM)** and **fine woody material (FWM)** as specified in the Division of Lands and Forests policy for retention on State Forests, *ONR-DLF2 / Retention on State Forests (2011)*. This policy sets forth guidelines for maintaining or obtaining a minimum number of retention trees within a forest stand. A detailed description of the retention policy may be found at http://www.dec.ny.gov/docs/lands_forests_pdf/policysfrention.pdf.

A variety of habitat structures are necessary components for biological diversity. These structures, live or dead, serve as biological legacies, providing habitat, shelter, feeding substrates, or nesting sites for a wide array of species. This Department policy addresses the retention of these important habitat structures and features in forest stands that are actively managed for timber production. Retaining these features will maintain the habitat for the wide array of forest wildlife species that depend upon them.

Action 1.4.2 Improve habitat for Species of Greatest Conservation Need.
See Objective 1.2 corresponding actions.

Action 1.4.3 Manage North American Beaver *(Castor canadensis)* where their actions threaten rare species or ecological communities, roads, culverts, trails or other access related infrastructure. Beaver are an important part of aquatic ecosystems because of their ability to create diverse habitat conditions that are beneficial to a wide array of species. They are an abundant species on the Unit. However, their actions can also have negative impacts to rare species or access infrastructure resulting in the need for costly repairs. Beaver problems will be addressed on a case by case basis after consultation with Bureau of Wildlife staff.

Action 1.4.4 Protect active nesting sites for raptors listed as species of Special Concern.

Many raptors in New York are listed as species of special concern. Within the Unit, these include: Sharp-shinned Hawk, Cooper's Hawk, Northern Goshawk and Red-shouldered Hawk. Each species has specific habitat requirements when nesting. The birds may occupy territory seasonally, or return to the same location yearly. During breeding season, usually between April and July, human activity near nests may disrupt breeding or cause the adult birds to abandon their young. The Bureau of Wildlife staff will be consulted and management activities will be adapted to minimize disturbance to birds that are known to be nesting on the Unit. Adaptive management strategies and actions will be developed and applied on a case by case basis. These strategies may place restrictions on timber harvesting and gas exploration activities and could include: setbacks, no-cut or no disturbance zones, or seasonal restrictions. For recreational uses, actions may include trail closures or rerouting of trails.

Bureau of Wildlife Staff will monitor the nesting status after implementation of the recommended management strategies to further our understanding of the nesting behavior and protection needed for these species. When specific management strategies for individual species are developed, they will be incorporated into the management plan.

Action 1.4.4.1 Permit licensed falconers to remove only one raptor **eyas** from the Unit every three (3) years, and in compliance with ECL Article 11 and 6 NYCRR Part 173. Permits for this activity are issued by the Bureau of Wildlife.

Action 1.4.4.2 Provide and maintain forest stand types acceptable for nesting habitat for northern goshawks on the Unit. Maintain 2,272 acres of mixed hardwood-conifer forest type consisting of white pine, hemlock, red pine, and hardwood species for the next 20 to 25 years. A significant amount of additional suitable habitat will also be present in stands managed for timber. The suitability of these areas will shift over the landscape depending upon harvest intensity, time since last harvest and size class of the stand.

Action 1.4.4.3 Continue to cooperate with the Bureau of Wildlife's effort in monitoring and providing data for research on the status of northern goshawks and other raptors to ensure their sustainable populations and to ensure that our knowledge of the natural history and ecology of these raptors continues to increase. Regional Forestry staff will consult with Bureau of Wildlife staff when raptor nest sites are discovered in the process of planning or conducting activities on State forests.

Action 1.4.5 Protect the habitat of any other at-risk or Special Concern species discovered on the Unit. Bureau of Wildlife staff will be consulted for habitat protection priorities if any at-risk or Special Concern species are found on the Unit.

Action 1.4.6 Maintain a variety of conifer species and at least 5% of existing red pine for wildlife species conservation.

Conifer trees are an important habitat feature used by a wide variety of wildlife species for shelter and cover, however one unique species dependent upon conifers is located on this Unit. According to the 2000 New York State Breeding Bird Survey published in *The Second Atlas of Breeding Birds in New York State,* a population of breeding red crossbills is located in western Chenango County with their eastern extent being in the Brookfield Unit area. The survey found that red crossbills are a probable breeding species on the Unit. As a species, they are unique because they are specially adapted to feed on conifer seeds and it is thought that they exist in this portion of the State due to the large amount of conifer plantations, located predominately on the State forests. Crossbills depend upon a variety of conifer species for food since good seed crops are sporadic for conifer tree species.

Over 5% (+/- 128 acres) of existing mature red pine will be retained in perpetuity in stands designated for protection or natural areas. Additional acres of red pine will be retained in scattered locations throughout the unit as a result of compliance with the Department's Forest Retention policy and in buffers along wetlands, streams and water bodies. Although the presence of red pine on the landscape can be prolonged by retention, they will eventually succumb to damaging high winds, ice storms, or inevitable death due to age related declining vigor. For additional information about red pine plantations, see Action 1.6.3.

Action 1.4.7 Maintain apple trees on 5 acres.
Apple trees are a food resource used by many wildlife species and are a legacy of the past settlers.

Objective 1.5 Monitor Ecosystem Health and Develop Response Strategies to Minimize Impacts from Damaging Agents.

Ecosystems are active and can change slowly over time or quickly from other influences. Periodic monitoring of the Unit is necessary to determine if change is occurring and if it is detrimental or beneficial to the Unit. With limited resources, it is unrealistic to monitor everything that may or can change. We can however monitor key species or community types which are indicators of a healthy ecosystem. Information gained from monitoring of forest cover and community types, rare plant & animal species, insect and disease outbreaks and invasive species enable Department staff to decide on the appropriate actions to take.

Action 1.5.1 Conduct periodic forest inventory of the State Forests within the Unit. The inventory will be updated prior to the 10 year plan update. Forest stands scheduled for silvicultural treatments will be analyzed prior to treatment. A post-harvest inventory will be conducted in treated stands.

Action 1.5.2 Continue the monitoring studies examining the impact of deer browsing on forest health and regeneration on Beaver Meadow State Forest. Deer have the ability to degrade forest health by eliminating species from the forest understory and ground layer through their repeated

browsing. Department protocol will be followed as described in Chapter 6 of the Strategic Plan for State Forest Management. Volunteer research efforts will be supported, provided they do not conflict with this plan's goals or objectives.

Action 1.5.3 Monitor Rare Species and Species of Special Concern through efforts by the New York Natural Heritage Program and develop an action plan as appropriate.

Action 1.5.4 Participate in the implementation of systemic statewide early detection program(s) to minimize amount of time between infestation and detection. Conduct annual insect and disease aerial surveys. As resources are available the Division will continue to conduct the aerial surveys for the entire state including this Unit.

Action 1.5.5 Monitor invasive species populations and encourage other partners or outside agencies to conduct periodic invasive species assessments of the Unit.

Action 1.5.5.1 Eradicate, where feasible, populations of invasive species using approved procedures. This may be accomplished through Regional staff, contracts or grant opportunities. Mechanical and/or approved chemical treatments may be applied depending upon the characteristics of the infestation. Chemical treatments will only be applied where mechanical methods will not be effective. Application of the herbicides or pesticides will be done according to the specifications of the label to protect water quality and prevent impacts to non-target species. All applications will comply with the State Environmental Quality Review law and State regulations.

Action 1.5.5.2 When invasive species are found, develop rapid and long term response capabilities at the local level to minimize degree of impact.

Action 1.5.5.3 Abide by all Federal and State restrictions and regulations as well as Departmental guidelines recommended in the SPSFM for the identification, prioritization and eradication of any invasive species found on the Unit.

Action 1.5.6 Support research and technology transfer on significant insects and diseases and their impacts on forest resources.

Action 1.5.7 Attempt to positively identify causal agents for all significant forest damages, in collaboration with state and local experts.

Objective 1.6 Apply forest management principals and silvicultural systems to maintain or enhance ecosystem health and biodiversity.

One of the previously mentioned principles for maintaining biodiversity is the maintenance of landscape diversity. This is the diversity, size and spatial arrangement of habitat conditions. In the process of forest management to produce wood products, foresters use two silvicultural systems which mimic natural disturbance patterns and create distinct habitat conditions. The two systems are referred to as even-aged and uneven-aged management.

Even-Aged Silviculture

Even-aged silvicultural practices are beneficial to many Species of Greatest Need early successional birds such as American woodcock, black-billed cuckoo, Canada warbler, brown thrasher, ruffed grouse and willow flycatcher as well as a wide variety of other species. Regenerating clearcuts and shelterwoods are used by early successional bird species that require this type of habitat for breeding and feeding. Each species has specific habitat requirements which occur during the development of the new age class of trees. After a period of 10-15 years, the new forest has become established and canopy closure has occurred. At this point, many early successional species no longer use the site and species numbers continue to decline until about the 25th year after the timber harvest. After this point, mature forest bird species gradually increase in abundance as the even-aged stand develops into a mature forest (Keller et al., 2003).

Even-aged **silviculture** is a management system that maintains a forest stand where the trees are about the same age. Conifer plantations and hardwoods established on old agricultural lands are examples of even-aged stands. This system is desired for creating periods of early successional habitat and other forest development stages beneficial to many plant and animal species. Even-aged silviculture also promotes natural regeneration of **shade intolerant** species such as black cherry, red oak, aspen and white ash. This system most often involves several intermediate thinning treatments in a stand over time to tend the stand and develop established regeneration. At the end of the rotation age, all or most of the overstory trees are removed to **release** a new stand of trees composed of seedlings or saplings. Rotation age on the Unit will vary from 60 to 140 years. Even-aged silviculture uses the **shelterwood, seed tree and clearcut** regeneration methods to establish a new age class of trees on the harvested site.

The clearcut method is the removal of all trees in a stand at the same time. There are insufficient amounts of desirable established regeneration present on the ground when the **overstory** trees are removed. After the harvest of the overstory trees, seedlings may become established through natural means or by tree planting. In clearcuts of 20 acres and larger, **variable patch retention** will be practiced. Variable patch retention involves leaving patches of uncut trees and large individual trees in the clearcut area. The patches provide islands of forest cover as well as seed source in the middle of the clearcut areas. The number and size of patches retained will vary depending on the size of the clearcut. The individual trees and some of the trees in the patch retention areas may blow down over time; these blown down trees will provide two important benefits to the forest ecosystem. First, they will create coarse woody material on the forest floor. Second, they will contribute to the establishment of pit and mound micro-topography. This is especially important in plantations where past agricultural practices had eliminated the natural micro-topography.

The shelterwood method is the removal of all trees in a series of two to three treatments. The trees are thinned over a series of harvests to improve the growth rate, size and species composition of the overstory timber trees and also to nurture the establishment of desirable seedlings and saplings in the understory. Finally, the removal cut is done to release tree seedlings when they are established. Most all of the overstory trees are removed in this treatment and a new stand is created. Scattered overstory reserve trees may be retained at the time of the final harvest to ameliorate the microclimate, provide future snags, cavity trees, coarse woody debris and other wildlife or visual benefits.

The seed tree method is the removal of all trees in a series of one or two treatments; this method is similar to the clearcut method except that a few individual trees or groups of trees are left to provide seed source. The remaining trees may or may not be removed once regeneration has become established.

Uneven-aged Silviculture

Uneven-aged silviculture is a system for maintaining and regenerating forest stands with at least three distinct age classes. Uneven aged silviculture mimics the natural process by which scattered older trees grow to maturity, die and are gradually replaced by young seedlings and saplings. Regeneration and control of uneven-age stand structure will be accomplished using the single tree and/or **group selection** system with periodic harvests using a 20-30 year **cutting interval**. Single tree selection is the selection of individual or very small groups of trees for harvest. Single tree selection tends to favor **shade tolerant** tree species such as hemlock, beech, and sugar maple. Group selection is the selection of a group of trees up to 2 acres in size for harvest. This method is used to create openings for the regeneration of a greater variety of species including shade shade-intolerant species such as black cherry and white ash. The larger canopy gaps also promote faster growth of the tree seedlings to enable them to grow beyond the reach of deer more quickly.

As most stands on the Unit are currently even-aged, conversion to uneven-aged conditions will require a long term commitment to regenerating at least two new age classes through controlled cutting of mature trees. This will require the use of group selection in conjunction with individual tree selection. Where conditions allow, **crop trees** will be grown to a maximum diameter of 26". Other trees may be selected as **recruitment trees** to be retained permanently within the stand for wildlife habitat or their unique features on the landscape.

Some trees of unique characteristics and size will be left as **biological legacy trees** as determined by the forester and in compliance with the DEC Program Policy, ONR-DLF-2 / Retention on State Forests.

Action 1.6.1 Manage the Unit's forests using silvicultural treatments for all forest cover types at a total annual average harvest of 361 acres per year for the 20 year planning period.

Action 1.6.2 During the next 20 years, maintain at least 7,230 acres (46%) of the Unit in a conifer component comprised of both planted and naturally reproducing conifer species. Natural conifer forest types comprised of stands containing hemlock and white pine will be maintained on 2,404 acres or 15% of the Unit. At least 4,826 acres (31%) of the Unit will be maintained in conifer plantation forest types consisting of primarily red pine, Norway spruce and larch.

The DEC Region 7 guideline has been to maintain a minimum of 20% of each State Forest in conifer cover. Conifer trees provide a variety of special functions for many species of wildlife. Conifer forests moderate temperature extremes, which can help provide winter thermal cover, help moderate snow depth, provide shelter from wind and provide escape cover on a year-round basis. Conifer stands provide valuable habitat for many groups of wildlife species, including white-tailed deer, grouse, wild turkey and various species of raptors.

Action 1.6.3 Manage 6,849 acres of conifer plantations (with varying amounts of mixed hardwoods) with the goal of eventually converting them to native hardwoods or naturally regenerated conifers. The Unit contains a total of 7,509 acres (48% of the Unit) of conifer plantations or mixed hardwoods with plantation conifers in pole timber or larger size class. Non-native conifer plantations on the Unit consist of primarily red pine and Norway spruce along with minor amounts of white spruce and larch. A large majority of these plantations were established in the 1930's by the CCC's with the trees now about 80 years old.

Red pine is not native to this portion of New York State and is vulnerable to damage from wind storms due to it being planted on shallow soils in many areas of the Unit. While many red pine plantations have grown well for decades, they are now at or near maturity. Many sites have trees with declining vigor as indicated by thin **crown**s. Red pine is adapted to reproduce on seedbeds after a fire has occurred. Otherwise, it only appears to regenerate in areas receiving full sunlight with exposed mineral soil, such as on logging trails in clear cuts. Therefore, widespread natural reproduction of this species is not possible on the Unit.

The Unit contains a total of 1,844 acres where red pine is the dominant species. This plan has identified 1,475 of these acres as suitable for timber management. Nearly all of these sites are designated for management using the even-aged silvicultural system. Over the course of this 20 year plan, 1,070 of these acres are scheduled for treatment. The treatment of these stands will focus on thinning to develop advance hardwood regeneration or overstory removal to release advance hardwood regeneration where it is present in adequate quantities.

The Unit has a total of 3,693 acres where Norway spruce is the dominant species. This plan has identified 3,149 of these acres as suitable for timber management. Nearly all of these sites are designated for management using the even-aged silvicultural system. Over the course of this 20 year plan, 2,774 of these acres are scheduled to be treated through thinnings to develop regeneration or overstory removal to release advance native hardwood or natural spruce regeneration.

Harvesting of the plantations will create important early successional conditions on the Unit which will provide habitat for many declining Species of Greatest Conservation Need (see Table 3). All management of plantations will comply with the Department program policy ONR-DLF-1 / Plantation Management on State Forests (2011). More information on the Plantation Management policy can be found at http://www.dec.ny.gov/docs/lands_forests_pdf/policysfplantation.pdf .

Action 1.6.4 Manage 7,755 acres using even-aged silvicultural systems. Areas designated for even-aged management include a mix of conifer plantations and native hardwoods.

Action 1.6.5 Manage 4,000 acres using uneven-aged silvicultural systems. Areas designated for uneven-aged management include primarily native hardwoods and hemlock.

Action 1.6.6 Harvest 860 acres using the variable retention system.
Variable retention is a method of harvesting designed to enhance biodiversity in stands managed for timber production (Franklin et. al., 1997, Lindenmayer & Franklin, 2002). It will be applied in both even- and uneven-aged stands to increase structural complexity by permanently retaining trees, uncut patches and coarse woody debris.

Variable retention will be applied in 194 acres of uneven-aged stands and 666 acres of even-aged stands. Retention patches will be no larger than one acre and represent no more than 50% of the stand area. In stands with native conifers, eastern hemlock and eastern white pine will be favored for retention. Riparian zones, wet seeps and poorly drained sites within the stand will be favored for retention and may expand upon required retention for Special Management Zones. Sites with snags, decaying logs and existing or potential cavity trees will be favored for retention. Sites with vernal pools, hedgerows, rock outcrops, abrupt **pit and mound topography**, steep slopes and other unique features will be favored for retention. Rotation in even-aged stands may be extended up to 160 years depending upon stand and site conditions. Individual wind thrown trees will not be salvaged.

The precise quantity and distribution of retention features will vary depending on analysis prior to stand treatments. Retention trees and patches will be identified during the planning of stand treatments and designated for retention. Retention features will be recorded in office inventory records. The result of these practices will be increased structural complexity providing features such as large snags, cavity trees and coarse woody debris on the forest floor. This increased structural complexity should benefit a wide array of species ranging from birds and mammals using the snags and cavity trees to woodland salamanders that need decaying logs for habitat.

Objective 1.7 Establish adequate regeneration of desired tree species so that within 10 years of plan implementation stands that are five years or older since being timber harvested are at least 50% stocked with desirable regeneration.

Repeated browsing by deer often results in the proliferation of interfering woody (striped maple, beech and hophornbeam) and herbaceous vegetation (hay-scented and New York fern) in the forest understory. These interfering species are either not preferred by deer or are resistant to the effects of repeated browsing. Furthermore, the presence of interfering species above threshold stocking levels will prevent the establishment of other tree species, resulting in greatly reduced vegetation diversity and severely limited potential for future timber production (Bashant & Nyland, et al., 2005).

Excessive deer browsing can also reduce understory plant species diversity. Forest herb species sensitive to deer browse such as trillium, Canada mayflower, Indian cucumber and others can be severely reduced in abundance or eliminated after years of repeated browsing. Furthermore, excessive deer browsing resulting in altered understory plant communities can have secondary impacts such as reducing the diversity of breeding birds.

The Department will use the following strategies to achieve successful regeneration:

Action 1.7.1 Increase the intensity of the timber harvest using large group selection and patch cuts along with individual tree selection in stands designated for uneven-aged management. Including the use of large group selection and patch cuts along with individual tree selection will create larger canopy gaps, up to one acre in size. This will have a variety of benefits including the potential for both shade tolerant and intolerant species of forest regeneration. Any regeneration that does become established in the larger gaps should grow at a faster rate, so that it can grow above the reach of deer more quickly.

Action 1.7.2 Remove interfering vegetation at select locations where it dominates the forest understory.

Interfering vegetation typically consists of dense stocking of New York or hayscented fern, beech, striped maple or hophornbeam in the forest understory. In areas where they dominate the forest understory, they can prevent the establishment of other species. Where interfering vegetation exceeds threshold levels and restricts the establishment of desirable tree species, a variety of methods will be used to reduce its dominance in the understory. These methods will include cutting of individual stems and herbicide application where necessary. Herbicides will only be applied where mechanical methods will not be effective. When herbicides are applied, the least toxic and most specific type of application will be used to achieve the desired objective. The preferred methods include backpack spraying of the foliage and applying herbicide to the cut stumps or bark of individual trees. The application methods will also include provisions for

protecting future stand species diversity since the objective is not to eliminate all interfering vegetation, but to reduce its dominance to allow other species to grow. Application of the herbicides will be done according to the specifications of the label to protect water quality and impacts to non-target species. All herbicide applications will comply with the State Environmental Quality Review law and State regulations.

Action 1.7.3 Implement an annual cyclic regeneration inventory to assess regeneration development 5-10 years after silvicultural treatments that were intended to develop desirable regeneration after harvest. An inventory of regeneration development will provide information necessary to evaluate the effectiveness of stand treatments. Silvicultural practices may then be modified to improve effectiveness of stand treatments.

Action 1.7.4 Continue implementation of the Beaver Meadow State Forest (Chenango 2 & 25) antlerless deer harvest under the Department's Deer Management Assistance Program (DMAP). This program has been ongoing since 2010 and has provided many hunters an additional deer hunting opportunity. The program will be continued until data from vegetation monitoring plots or the Department's biologists indicate that it is no longer needed.

Table 20. Present and Future Cover Types

Vegetation Type	Present Acres	% of Unit	Objective Acres	% of Unit
Northern Hardwoods	5414	35	8213	52
N. Hardwoods & Natural Conifer	1950	12	2282	15
N. Hardwoods & Plantation Conifer	1729	11	4482	28
Plantation Conifer	6180	39	324	2
Brush, Apple	75	<1	55	<1
Ponds & Wetlands	188	1	188	1
Old Field	17	<1	9	<1
Roads, Shale pits	224	2	224	2
Total	**15,777**	**100**	**15,777**	**100**

GOAL 2: Protect and Maintain State Forest Assets and Visual Resources of the Unit

State Forest assets on this Unit include historic or cultural resources, vehicle access infrastructure, shale or gravel pits, and boundary lines. This Unit also includes many visual resources important to the public such as scenic views from roads, trails, rivers and streams. The importance of the visual resources and the public's perception will always be considered in the decision making and implementation of activities on this Unit.

Objective 2.1 Preserve and Protect Historic and Cultural Resources on the Unit

Historic and archaeological sites located on State Forests, as well as additional unrecorded sites that may exist, are protected by provisions of the New York State Historic Preservation Act (SHPA-Article 14 PRHPL), Article 9 of the Environmental Conservation Law, 6NYCRR Section 190.8 (g) and Section 233 of Education Law. Unauthorized excavation and removal of materials from any of these sites is prohibited by Article 9 of Environmental Conservation Law and Section 233 of Education Law. In some cases additional protection may be afforded these resources by the federal Archaeological Resources Protection Act (ARPA). *(SPSFM pg141)*

Cultural resources on the Unit offer clues about the historic relationship between people and nature. Farm sites, graveyards, stonewalls and similar artifacts reveal cultural practices and provide clues about settlement patterns. Preservation of cultural resources will ensure that future generations have access to information about the past.

Action 2.1.1 Protect all cultural resource sites, including new discoveries from disturbances associated with timber harvesting, well site construction and recreational activities. Many sites of cultural significance have been identified including two cemeteries. Stone walls and other structures will not be dismantled and efforts will be made to accommodate access using existing gateways. Hedgerows, shade and fruit trees, and other ornamental plants associated with cultural sites will not be harvested.

Action 2.1.2 Follow all standard operating procedures for managing historic and cultural resources once developed and implemented as part of the SPSFM stated actions (HC Action 1).

Action 2.1.3 Implement a systematic and comprehensive archaeological inventory of the Unit as outlined in the SPSFM actions HC Action 2.

Objective 2.2 Maintain and enhance vehicle access infrastructure which includes forest access roads, haul roads, access trails, gates, parking areas, and associated facilities.

Action 2.2.1 Implement a standard process as identified in the SPSFM (pg 168) for assessing State Forest infrastructure needs and assign maintenance schedule priorities and budgets.

Action 2.2.2 Maintain 5.4 miles of Public Forest Access Roads (PFAR) and 0.8 miles of haul roads and all associated road culverts.

These roads provide the primary means of access for these forests. Routine upkeep includes ditch and culvert maintenance. The road sides are mowed annually. Periodic maintenance includes grading and crowning every other year and periodic road resurfacing with new gravel or shale and culvert replacement. During this 20 year plan 5.4 miles of the (PFAR) roads will be resurfaced and have the culverts replaced.

Action 2.2.3 Maintain three shale pits to provide material for the maintenance of Department facilities.

These shale pits, located on Chenango 20, 21 & Madison 2, will be maintained to provide surface material necessary for roads, trails, parking areas, log landings and camp sites. Shale or gravel extracted from these pits will be utilized exclusively for State land construction projects and will not be made available for commercial use. If annual extractions are determined to be greater than 1,000 tons or 750 cubic yards of material, then a mined land reclamation and recovery plan will be required. Regional staff from the Division of Minerals will be consulted at that time.

Objective 2.3 Maintain Boundary lines to identify State property and prevent timber theft and encroachments

Establishing visible boundary lines is a basic requirement for resource management and protection.

Action 2.3.1 Repaint boundary lines on a seven-year cycle utilizing the DECs Operations crews.

Boundary Line Maintenance Schedule

Year	State Forest	Miles
2015-2016	Chenango 2	27.7
2021-2022	Chenango 18	29.1
2015-2016	Chenango 20	20.9

Year	State Forest	Miles
2020 - 2021	Chenango 21	11.5
2021-2022	Chenango 23	8.9
2015-2016	Chenango 25	7.9
2020-2021	Madison 2	6.6
2019-2020	Madison 7	8.6
2019-2020	Madison 8	6.6
Total		**127.8**

Action 2.3.2 Identify and complete survey requests through the Bureau of Real Property as priorities and budgets allow.

Objective 2.4 This Unit will be managed so that the overall quality of the visual resources is maintained or improved.

State lands are dominated by forest cover which has created a unique visual character of these areas compared to roads through private lands. The visual resources of the Unit will be considered when planning management actions near roads, trails or high use recreational facilities. The visual quality along these roads and trails today is different from what it was 50 years ago and will change in the future. The forests on the Unit are a dynamic resource that is constantly changing in response to human or natural events. Timber harvesting, insect or disease infestation, or extreme weather events all have the ability to impact and change this visual resource. For additional information on the management of visual resources, see the *SPSFM, 2011, pg127*.

Action 2.4.1 Manage 5 miles of road corridors for visual qualities associated with a forested landscape.

The Unit includes over 5 miles of Public Forest Access Roads. The visual resources along these corridors will be considered when planning management actions. Hazard trees will be removed for road maintenance. Trees along roads or trails may be harvested or retained depending upon site conditions and specific management objectives. The forest will change in response to management actions and natural events but a forested character will remain along road and trail corridors. Fallen tree tops will be hauled back from trails and roads and the tree tops in the corridors will be cut down close to the ground to maintain visual qualities.

Action 2.4.2 Follow all guidelines, yet to be developed for visual impact assessment and mitigation around timber harvests, mineral extraction sites and infrastructure. The SPSFM has

scheduled this guidance to be developed and will include an updated Timber Management Handbook.

Action 2.4.3 Follow all visual resource protection requirements identified in the DEC policies for retention, plantation management and clearcutting.

Action 2.4.4 Construction materials which are aesthetically pleasing and complement the setting will be used for the construction of any necessary structures or barriers on the Unit.

Action 2.4.5 Place kiosks providing information on the Unit in locations where appropriate to reduce sign pollution by replacing multiple signs.

GOAL 3: Provide Forest Based Recreational Opportunities Compatible with the Units Resources.

State lands offer opportunities for recreational activities that are best enjoyed in remote, relatively undisturbed natural areas. Such activities typically require only a minimum of facility development or site disturbance. Activities meeting these criteria are compatible with maintaining and protecting the natural character and features of State land. Visitors to State Forests do not pay admission fees, and limited facility development and associated construction and maintenance costs are consistent with this principle.

In managing the recreational resources on the Unit many factors are considered. Constraints consist of property size, shape, topography, soils, access, wetlands, streams, existing uses, capital, staff, suitability, as well as enacted rules, regulations, policies, and laws. Other factors like nearby recreational opportunities, public input, history, cover type, maintenance, environmental impact, and general demand are considered also.

For further discussion of DEC recreation goals and objectives for State Forests, see Chapter 5 of the Strategic Plan for State Forest Management at http://www.dec.ny.gov/docs/lands_forests_pdf/spsfmfinal.pdf .

Objective 3.1 Provide recreational opportunities compatible with the resources on the Unit and maintain recreational facilities to ensure ecosystem sustainability.

State forests are best suited to low impact recreational activities that require a minimum amount of facility development and maintenance. Recreational activities shall not have negative impacts to rare species or ecological communities or cause degradation of the soil, water or vegetation

resources on the Unit. This objective focuses on the tasks needed to provide and maintain high quality recreational facilities while also protecting the environmental integrity of the Unit.

Action 3.1.1 Continue partnering with the Sherburne Area Snow Travelers Association, Chenango Sno-Riders, Moonlight Riders, Cortland-Chenango Trail Hounds and the Finger Lakes Trail to maintain the snowmobile and hiking trails on the Unit. The partnership agreements with these various groups will be through their respective Adopt-A-Natural-Resource agreements (AANRs) or Volunteer Stewardship Agreements.

Action 3.1.2 Encourage groups or individuals to participate in volunteer programs to promote the resources on the Unit or to help maintain the public use facilities on the Unit. The Department's ability to provide the needed funds and staffing to adequately maintain or improve recreational facilities is limited. Help from volunteers can be instrumental in improving, maintaining or preventing closure of recreation facilities. Volunteer Stewardship Agreements and DEC Volunteer programs allow volunteers the opportunity to propose activities that help the Department to achieve the goals and objectives for the Unit. Volunteer group activities may include group hikes, historic tours, birding walks or surveys, organized group hiking or snowmobile events and other Department approved group activities. Maintenance activities suitable for volunteer participation include upkeep of trails, parking areas, camping sites, cultural resources and wildlife habitat. Group activities involving 10 or more people may require a special permit. Applications and information are available through the Sherburne Lands & Forests office.

Action 3.1.3 Continue to allow dispersed recreation activities for which no trails or amenities exist or will be provided, such as hunting, trapping, hiking, fishing and nature observation.

Action 3.1.4 Maintain recreational facilities to provide a safe user experience by periodically closing trails impacted by timber harvests or extreme weather events.

Action 3.1.5 Prohibit public ATV use on the Unit in accordance with the Department's State Forest ATV policy as stated in the Strategic Plan for State Forest Management, 2010. As described in the SPSFM, ATV use is only compatible with State Forest management goals under the conditions described below:

As stated in the Strategic Plan for State Forest Management:

"…the Department will not permit ATV use on State Forests, except;

- as may be considered to accommodate a "connector trail" through Unit Management Planning or a similar public process; and
- on those specific routes designated for use by DEC-issued Motorized Access Permit for People with Disabilities (MAPPWD)."

"It is the policy of the Department of Environmental Conservation to: (1) prohibit ATV use on public lands managed by the Department; (2) allow ATV use by persons with disabilities pursuant to the terms of a CP-3 permit and (3) continue to consider the suitability of roads and trails for public ATV use to access recreational programs on conservation easements managed by the Department in accordance with the criteria set forth herein."

Action 3.1.6 Install gates to prevent illegal off-road motor vehicle use and trash dumping. Remote trails and roads accessible by vehicles are often sites chosen for illegal dumping of trash or are used for illegal bon fires and beer parties. Blocking vehicle access at or to these sites will mitigate this problem and reduce costs for maintenance and law enforcement. Vehicle access will be blocked at the following location:

- Chenango RA #20, Ridge Road, entrance to the shale pit.
- Chenango RA #2, snowmobile trail junction with New Road.

Objective 3.2 Provide recreational opportunities that are universally accessible and comply with the Americans with Disabilities Act.

Application of the Americans with Disabilities Act (ADA)

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

Title II also requires that new facilities, and parts of facilities that are newly constructed for public use, are to be accessible to people with disabilities. In rare circumstances where accessibility is determined to be structurally impracticable due to terrain, the facility, or part of facility is to be accessible to the greatest extent possible and to people with various types of disabilities.

Consistent with ADA requirements, the Department incorporates accessibility for people with disabilities into the planning, construction and alteration of recreational facilities and assets supporting them. This UMP incorporates an inventory of all the recreational facilities or assets supporting the programs and services available on the unit, and an assessment of the programs, services and facilities on the unit to determine the level of accessibility provided. In conducting this assessment, DEC employs guidelines which ensure that programs are accessible, including

buildings, facilities, and vehicles, in terms of architecture and design, transportation and communication to individuals with disabilities.

Any new facilities, assets and accessibility improvements to existing facilities or assets proposed in this UMP are identified in the section containing proposed management actions.

The Department is not required to make each of its existing facilities and assets accessible as long as the Department's programs, taken as a whole, are accessible.

For copies of any of the above mentioned laws or guidelines relating to accessibility, contact the DEC Universal Access Program Coordinator at 518-402-9428 or UniversalAccessProgram@dec.ny.gov

Universal access will be provided unless it fundamentally alters the character or recreational programs of the area. This objective strives to maximize accessibility while protecting the natural setting to the greatest extent possible, thereby preserving the fundamental experience for all. A minimal tool approach will be used to implement this vision, resulting in projects that blend into the natural environment and protect the landscape.

Action 3.2.1 Maintain one ATV Access Route for people with qualifying disabilities on Chenango RA #2, south of Bliven Road.

Objective 3.3 Provide and enhance information on the Unit.

This Unit contains numerous recreational opportunities that can be utilized throughout the year at various locations. Some of these opportunities may not be known or apparent to the general public. Each of the opportunities may also have specific rules or regulations not explained to the public. Clear and up to date information is needed to help guide the Units users as to where the opportunities exist as well as the areas restrictions or regulations. This will improve the public's use of the Unit as well as protect the resource from inappropriate or misuse from occurring.

Action 3.3.1 Develop and install kiosks describing the recreational opportunities of the Unit including designated trails, camping facilities, trail closures, access points and rules and regulations for State lands.

Standard design kiosks including a map, interpretive text and rules and regulations will be installed at:

- Chenango RA #20 at Ridge Road.
- Chenango RA #21 at the intersection of the Truck Trail and Warner Road.
- Chenango RA #s 18 & 23 near the junction of Hyer Roads and Upham Roads.

Action 3.3.2 Improve the availability of information to the public on the internet about the Unit. Current information about the Unit available on the DEC web site includes maps of the forests, descriptions of the forests, rules and regulations, and directions to the forests.

- Provide smart phone quick response bar codes (QR codes) at all new kiosks to access information about the Unit.

Action 3.3.3 Maintain all signs communicating information to the public on the Unit. This includes:

- Identification signs for four Truck Trails
- Five wooden State forest identification signs
- Installed State forest kiosks
- Designated parking area signs

Goal 4: Provide Economic Benefits to the People of the State

ECL §1-0101(1) provides in relevant part that "It is hereby declared to be the policy of the State of New York to conserve, improve and protect its natural resources and environment and to prevent, abate and control water, land and air pollution, in order to enhance the health, safety and welfare of the people of the state and their overall *economic* and social well- being" (emphasis added). In considering all proposed actions, DEC will attempt to balance environmental protection with economic benefit.

New York's State forests provide economic benefits to the People of the State through the variety of goods and services they produce as well as the tax revenue they provide to local communities. Goods provided by State forests include timber from the sale of forest products, fish and wildlife obtained for consumption, and potential mineral resources such as gas. Services provided by State forests include the opportunity for a wide variety of recreation activities and the services their natural ecosystems provide which help sustain and fulfill human life.

Objective 4.1 Provide a steady flow of forest products through sustainable forest management.

New York's public and private forests contribute over $9.9 billion annually to the State's economy through the forest products industry, while forest-based recreation and tourism businesses are worth an additional $8.2 billion (North East State Foresters Association, 2013). Over 43,000 people are directly employed in forest based manufacturing industries and over 31,000 people are employed in forest recreation based businesses.

Each 1,000 acres of forest land in New York supports 2.6 forest based manufacturing jobs with a payroll of $83,000 (North East State Foresters Association 2004). State forests make important

contributions to these economic categories resulting in economic benefits to local communities and their larger surrounding areas.

For additional information about forest product sales from State forests, see the Chapter 6 of the Strategic Plan for State Forest Management.

Action 4.1.1 Treat an average of approximately 380 acres each year through timber sales. Timber sold from the Unit will be purchased by businesses for manufacturing products such as construction lumber, paper, flooring, furniture, veneer, utility poles, fencing, pallets and fuel wood. These products are manufactured and sold locally and internationally in the global wood products market. The sale of timber provides jobs to loggers, truck drivers, and employees in wood products manufacturing businesses as well as revenue to New York State. Acres treated will be dependent upon staffing and suitable markets.

Objective 4.2 Provide Property Tax Income to Local Governments and Schools.

Action 4.2.1 Maintain annual tax payments to local governments and schools.

The State provides annual payments of approximately $658,478 (2012 data) in combined town, and school taxes on the lands in this Unit. See **Appendix VIII** for additional information.

Objective 4.3 Evaluate and consider surface disturbance associated with natural gas exploration, production and development on the Unit compatible with the goals and objections of the plan.

Action 4.3.1 Make no decision with respect to surface disturbances associated with oil and gas exploration, development and extraction on this unit in this management plan.

Should any portion, or all of the unit be nominated for oil and gas exploration, development and extraction, this will trigger a new public process before final decisions are made with respect to the proposal(s). The Department will conduct a tract assessment of the Unit, and hold a public meeting to receive comments in regard to the proposal(s). A 30 day public comment period would then follow the public meeting. The Department will consider all comments and the tract assessment prior to making a decision. If the Department decides to go forward with a lease proposal, the Division of Lands and Forests will collaborate with the Division of Mineral Resources to incorporate special conditions into the proposed lease. These conditions would include, but not be limited to criteria for site selection, mitigation of impacts and land reclamation upon completion of the proposal.

Action 4.3.2 Restrict surface mining.

Restrict surface mining of shale, sand, gravel or other aggregate and underground mining of "hard rock" minerals such as metal ores, gem minerals, and salt. The Department's current policy is to decline any commercial mining application(s) pertaining to any lands covered by this UMP as these activities are not compatible with the purposes for which State Forests were purchased.

Objective 4.5 Provide support to local communities through forest-based tourism.

New York forest-based recreations and tourism businesses employ about 32,000 people and support a payroll of $965 million annually (North East State Foresters Association, 2013). Recreation activities enjoyed on the Unit, such as hunting, snowmobiling, and hiking contribute to the local economy through the participant's purchase of supplies, food and lodging.

Action 4.5.1 Develop cooperative partnerships with organizations individuals or communities to sustain or enhance forest based tourism activities that are consistent with this plan and State forest rules and regulations. The Volunteer programs will be used to formalize such partnerships. The Department will also support approved volunteer activities that are consistent with the goals and objectives of this plan.

Action 4.5.2 Promote public awareness through kiosks, brochures, and Department website development to be utilized by local communities. See actions 3.3.1, 3.3.2 and 3.3.3.

Objective 4.6 Protect rural character and provide ecosystem services and open space benefits to local communities.

The presence of State forests maintains the rural character of much of New York State. Undeveloped lands, such as State forests, provide many important ecosystem services to society such as wildlife habitat, buffering of downstream communities from floods, pollination of crops, insect pest control, clean water and clean air. They also provide open space benefits such as free public recreational opportunities and places for relaxation and escape from the disruptions and stresses associated with urban areas.

Action 4.6.1 The Department will pursue possible purchases of lands, from willing sellers only, in fee or through conservation easement parcels (in-holdings and parcels bordered on two or three sides by State lands) that will consolidate State ownership or protect at-risk species or ecological communities. Acquisition of such lands will improve public and administrative access and provide larger consolidated blocks of State land for improved protection of rare species and enhanced recreational opportunities. For more information on the Departments land acquisition priorities please refer to the SPSFM page 149 at http://www.dec.ny.gov/lands/64567.html.

VII. Management Action Schedules

A. Tables of Land Management Actions

Land Management Actions Code Definitions

The following table presents a 20-year schedule of planned management actions referenced by stand number and year of management. Maps showing the specific stand locations are available for viewing at the Sherburne Office.

Abbreviations or codes for the following tables are listed below:

1. DEFINITION OF CODES USED

Forest Type Codes	Definition
APP	Apple
BR	Brush, woody shrub species
BUCKET	Mixed planted conifers
CEDAR, C	Northern White Cedar
BF, F	Fir, Balsam
DL	Dunkeld Larch
HEM	Hemlock
JL	Japanese larch
JP	Jack Pine
LARCH, L	Larch Spp.
MIXED	Mixed conifers
NH	Northern hardwoods
NS	Norway spruce
OPEN	Areas dominated by herbaceous species not mowed for habitat
OLD FIELD, OF	Grassy areas mowed for habitat
PH	Pioneer hardwoods - aspen
PIT	Shale or gravel pit
POND	Natural open water bodies, including beaver ponds
POND-MAN	Manmade ponds that are maintained.
RO	Red oak
RP	Red pine
SH	Swamp hardwoods - red maple, white ash

SP	Scotch pine
WET-ALDER	Wet areas dominated by alder or other wetland shrub species
WET-OPEN	Wet areas dominated by non-woody vegetation
WP	White pine
WS	White spruce

Objective Type Code	Definition
APP	Apple
BR	Brush or woody shrub species
CEDAR, C	Northern white cedar
BF, F	Fir, Balsam
GR	Grass spp.
HEM	Hemlock
JL	Japanese larch
L	larch spp.
MIXED	Mixed native conifers
NH	Northern hardwoods
NS	Norway spruce
OPEN	Areas dominated by herbaceous species not mowed for habitat
OLD FIELD	Grassy or herbaceous areas mowed for habitat
PH	Pioneer hardwoods
PIT	Shale or gravel pit
P	Pine spp.
POND	Man-made or natural, including beaver ponds
RO	Red oak
RP	Red pine
NAT	Native hardwoods
SH	Swamp hardwoods - red maple, white ash
WET-ALDER	Wet areas dominated by alder or other wetland shrub species
WET-O	Wet areas dominated by non-woody vegetation
WP	White pine
WS	White spruce

Management Direction Code	Definition
APP	Apple trees.
BR	Brush: Shrub species other than apple.

Management Direction Code	Definition
E	Even-aged: 100-160 year rotation for natural stands; up to 140 years for plantations.
EL	Even-aged, Long Rotation: Stands managed for rotation of greater than 140 years. This primarily applies to white pine stands.
ES	Even-aged, Short Rotation: Approximately 60 year rotations to maintain pioneer hardwoods such as aspen.
EVR	Even-aged, Variable Retention: Principles of even-aged silviculture applied while retaining individuals or groups of trees in the harvested stand for the next rotation.
FNA	Future Natural Area: Existing conifer plantation which will be harvested and converted to native species. After conversion the stand is managed as a Natural Area.
NA	Natural Area: Forest area managed to grow to and sustain a climax condition.
OF	Old Field: Grassy or herbaceous areas mowed for habitat.
PIT	Shale Pit
U	Uneven-aged: Stands managed to develop multiple age classes with a 20 year cutting interval.
UL	Uneven-aged, Long Cutting Interval: Stands managed using the Uneven-aged system with a greater than 20 year cutting interval.
UVR	Uneven-aged, Variable Retention: The principles of uneven-aged silviculture are applied while retaining individuals or groups of trees in the harvested stand. Retained trees will be allowed to grow to their full biological maturity.
ZA	Protection – Inaccessible: Stands which are not environmentally or economically unfeasible to access.
ZF	Protection – Recreation: Stands excluded from harvesting to protect recreation assets or facilities.
ZH	Protection – Historic: Stands excluded from harvesting to protect historic or cultural resources.
ZR	Protection - Riparian: Stands excluded from harvesting to protect stream banks and other zones near water features.
ZS	Protection – Steep: Stands excluded from harvesting to protect steep slopes.
ZV	Protection – Visual: Stands excluded from harvesting to protect visual resources.
ZW	Protection – Wetlands: Stands excluded from harvesting to protect wetlands.

Treatment Code	Definition
CTR	Crop tree release
FW	Firewood thinning
GC	Aspen clearcut to regenerate aspen for ruffed grouse and other species.

Treatment Code	Definition
GS	Group selection: removal of trees in groups up to 2 acres in size to regenerate a mix of species with various **shade tolerance**s.
H	Apply herbicide to control interfering vegetation or invasive species
IN	Improvement thinning, removing mostly low grade timber with some sawtimber
M	Mow to maintain grass or prevent succession to forest cover
PU	Spruce harvest - pulp or sawtimber
PT	Plant trees
RA	Release apple trees
RE	Remove over-story trees to maintain grass or brush types.
RT	Pine or larch thinning
SAL	Salvage harvest of damaged or dying trees to recover economic value
STS	Single tree selection: individual trees across all size classes are removed to uniformly thin the stand. This system encourages the development of shade tolerant species.
SW	Shelterwood treatment: An even-aged regeneration method where the stand has previously been thinned to establish regeneration. The over-story trees are now scheduled to be removed to release the regeneration in one or two harvests.
SW-SR	Shelterwood treatment with the objective of releasing established spruce regeneration.
SWR	Shelterwood with reserves: A harvest of most over-story trees to release established regeneration from competition with the overstory. Reserve trees comprising at least 30 square feet of **basal area** are retained to ameliorate the microclimate, provide future snags, cavity trees, coarse woody debris and other wildlife or visual benefits.
SWR-SR	Shelterwood with reserves treatment with the objective of releasing established spruce regeneration.
SWR-T	A combination treatment using the shelterwood with reserves regeneration method where adequate established regeneration is present and a thinning elsewhere in the stand to establish regeneration and increase growth of residual trees.
SWR-SR-T	A combination treatment using the shelterwood with reserves regeneration method to release established spruce regeneration and a thinning elsewhere in the stand to establish regeneration and increase growth rate of residual trees.
TSI	Timber stand improvement: A non-commercial thinning to improve stand quality.
VIH	Variable intensity harvest: thinning with intentionally varied marking rules including removal in groups or patches, thinning and unthinned areas.

The following tables present a 20-year schedule of planned management actions. The first table is referenced by forest, then stand number and the second table is referenced by the year of scheduled management. The State Forest Stand Mosaic Maps for this Unit show the specific forest stand locations.

2. Table of Forest Stand Management Actions by Forest

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 02	A	1.10	30.0	NH	SST	NH	U	ST/GS	2	-
CHENANGO 02	A	1.20	8.6	NH	SST	NH	ZR			
CHENANGO 02	A	1.30	28.2	NH-HEM	SST	NH-HEM	ZS			
CHENANGO 02	A	1.40	25.1	NH	SST	NH	U	FW	2	-
CHENANGO 02	A	1.50	7.8	NH-HEM	PT	NH-HEM	ZS			
CHENANGO 02	A	2.00	1.6	NH-WP	SST	NH-WP	U	ST	2	-
CHENANGO 02	A	3.00	12.7	HEM	SST	HEM	ZW			
CHENANGO 02	A	4.10	7.5	WP	SST	WP-NH	U	RT/FW	3	2016
CHENANGO 02	A	4.20	2.5	RP	SST	NH	E	H-SW	1	2032
CHENANGO 02	A	5.00	7.8	NH-WP	SST	NH-WP	UVR	H-ST	2	2023
CHENANGO 02	A	6.00	15.8	RP	PT	NH	E	SWR-T	1	2032
CHENANGO 02	A	7.10	7.0	NH	SST	NH	ZA			
CHENANGO 02	A	7.20	2.3	BR	PT	BR	ZR			
CHENANGO 02	A	8.00	40.2	RP	PT	NH	E	SWR-T	1	2029
CHENANGO 02	A	10.00	4.3	RP-WP	PT	NH-WP	EVR	SWR	1	2029
CHENANGO 02	A	11.00	11.4	NH	SST	NH	E	IN	1	2029
CHENANGO 02	A	12.00	22.6	JL	PT	NH	E	SWR-T	1	2025
CHENANGO 02	A	13.00	1.0	BR	Null	BR	ZW			
CHENANGO 02	A	14.10	7.0	HEM	PT	HEM	ZW			
CHENANGO 02	A	14.20	12.2	HEM	MST	HEM	ZA			
CHENANGO 02	A	15.00	8.0	HEM-NH	Null	HEM-NH	ZR			
CHENANGO 02	A	16.00	6.2	WS	PT	NH-PH	ZA			
CHENANGO 02	A	17.00	4.3	WET-O	Null	WET-O	ZW			
CHENANGO 02	A	18.10	2.2	NH	MST	NH	ZA			
CHENANGO 02	A	18.20	1.3	WET-A	Null	WET-A	ZW			
CHENANGO 02	A	19.10	11.0	WS	PT	PH	E	SWR-T	2	-

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 02	A	19.20	1.8	WET-A	Null	WET-A	ZW			
CHENANGO 02	A	19.30	1.1	BR-HEM	PT	PH-BR	ES	CC	3	-
CHENANGO 02	A	20.00	17.5	NH	SST	NH	E	H-SW	2	-
CHENANGO 02	A	24.00	1.8	WS	PT	PH-NH	E	SWR	3	-
CHENANGO 02	A	25.00	3.0	RP	SST	NH	E	SW	1	2023
CHENANGO 02	A	26.10	5.5	NH-HEM	SST	NH-HEM	ZW			
CHENANGO 02	A	26.20	6.7	NH	SST	NH	E	IN	2	-
CHENANGO 02	A	27.00	64.0	RP	SST	NH	E	SWR-T	1	2023
CHENANGO 02	A	28.00	4.2	NH	SST	NH	U	FW	1	2021
CHENANGO 02	A	29.00	51.4	NH	SST	NH	U	H-ST/GS	1	2030
CHENANGO 02	A	30.10	21.9	RP	SST	NH	E	SWR-T	1	2023
CHENANGO 02	A	30.20	2.4	RP-PH	MST	NH	ZR			
CHENANGO 02	A	30.30	3.0	WP	SST	NH-WP	E	EVR	1	2023
CHENANGO 02	A	31.00	29.8	NH	SST	NH	U	ST/GS	2	2030
CHENANGO 02	A	32.00	26.3	NH	SST	NH	U	ST/GS	2	2030
CHENANGO 02	A	33.00	3.6	NH	PT	NH	E	SW	1	-
CHENANGO 02	A	34.10	23.3	RP-NH	SST	NH	E	IN	1	
CHENANGO 02	A	34.20	1.0	BR	Null	BR	ZW			
CHENANGO 02	A	34.30	1.2	PH	SST	PH	ZW			
CHENANGO 02	A	35.10	1.5	NH	SST	NH-HEM	E	IN	2	-
CHENANGO 02	A	35.20	4.5	NH-HEM	SST	NH-HEM	U	IN	3	-
CHENANGO 02	A	35.30	5.0	NH	SST	NH	ZR			
CHENANGO 02	A	36.10	39.2	NH-HEM	SST	NH-HEM	ZW			
CHENANGO 02	A	36.20	2.2	WET-O	Null	WET-O	ZW			
CHENANGO 02	A	37.00	9.8	WET-O	Null	WET-O	ZW			
CHENANGO 02	A	39.00	51.0	RP-NS	SST	NH	E			-
CHENANGO 02	B	1.00	8.2	RP	SST	NH	E	SWR-T	1	2032
CHENANGO 02	B	2.00	14.5	BR-WP	PT	BR-WP	ZR			

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 02	B	3.00	14.3	NH-HEM	LST	NH-HEM	U	ST/GS	1	2029
CHENANGO 02	B	4.00	2.2	RP	PT	NH	ZA			
CHENANGO 02	B	5.00	3.1	NH	SST	NH	ZA			
CHENANGO 02	B	6.10	14.9	HEM	SST	HEM	ZW			
CHENANGO 02	B	6.20	16.0	HEM	SST	HEM	ZR			
CHENANGO 02	B	7.00	17.1	NH-HEM	SST	NH-HEM	ZA			
CHENANGO 02	B	8.00	11.4	JL	SST	NH	E	SWR-T	1	2033
CHENANGO 02	B	9.10	3.3	JL	SST	NH	E	RT	1	2025
CHENANGO 02	B	9.20	2.1	NH	SST	NH	E	FW	2	2025
CHENANGO 02	B	9.30	3.4	WET-A	Null	WET-A	ZW			
CHENANGO 02	B	9.40	4.0	NH-HEM	SST	NH-HEM	ZR			
CHENANGO 02	B	10.00	1.3	JL	SST	NH	E	SWR-T	2	2025
CHENANGO 02	B	11.00	4.3	RP	PT	NH	E	RT	1	2032
CHENANGO 02	B	12.00	6.2	RP	PT	NH	E	RT	1	2032
CHENANGO 02	B	13.10	6.6	NH	PT	NH	E	FW	1	2024
CHENANGO 02	B	13.20	5.4	PH-BR	S-S	PH-BR	ZW			
CHENANGO 02	B	14.00	9.6	NH	S-S	NH	E	IN	2	2028
CHENANGO 02	B	15.00	9.1	WP	PT	NH-WP	E	RT/TSI	2	-
CHENANGO 02	B	17.00	3.7	WS	PT	PH	ES	SWR-T	2	-
CHENANGO 02	B	18.10	31.9	JL	SST	NH	E	SWR-T	1	2026
CHENANGO 02	B	18.20	13.5	JL	SST	NH	E	SWR-T	1	2026
CHENANGO 02	B	19.00	9.2	NH	PT	NH	U	FW	1	2028
CHENANGO 02	B	20.00	14.1	NH	SST	NH	E	IN	1	2028
CHENANGO 02	B	21.00	4.1	NS-RP	PT	NH	E	RT	1	-
CHENANGO 02	B	22.00	13.8	NH	PT	NH	U	IN/FW	1	-
CHENANGO 02	B	23.10	31.2	NH	PT	NH	E	FW	2	-
CHENANGO 02	B	23.20	5.7	NS-WP	PT	NH-WP	E	TSI	2	-
CHENANGO 02	B	23.30	4.6	PH-BR	PT	PH	ES	CC	3	2031

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 02	B	24.00	9.3	NH	SST	NH	U	GS	1	2031
CHENANGO 02	B	25.00	7.3	HEM-NH	SST	HEM-NH	UL	ST/GS	2	-
CHENANGO 02	B	26.00	15.1	EL	SST	NH	U	VIH	1	2035
CHENANGO 02	B	27.00	28.5	WP-NH	SST	WP-NH	UL	RT	2	2035
CHENANGO 02	B	28.00	9.4	WET-O	Null	WET-O	ZW			
CHENANGO 02	B	29.10	8.0	ALD-WP-BR	Null	WP-BR	ZR			
CHENANGO 02	B	29.20	2.6	RP-WP	SST	NH-WP	ZR			
CHENANGO 02	B	30.00	9.0	HEM-NH	PT	HEM-NH	ZR			
CHENANGO 02	B	31.00	29.4	NH	SST	NH	U	ST/GS	1	2035
CHENANGO 02	B	32.00	8.6	RP	SST	NH	E	SWR-T	1	2024
CHENANGO 02	B	33.10	32.0	JL-WP	SST	NH	E	SWR-T	1	2024
CHENANGO 02	B	33.20	2.0	HEM	PT	HEM	ZW			
CHENANGO 02	B	34.00	1.9	RP-NS	SST	NS-NH	E	SW	1	2031
CHENANGO 02	B	35.00	38.2	NS	SST	NS-NH	E	SWR-T	1	2031
CHENANGO 02	B	36.10	4.5	NH	SST	NH	U	IN	1	2031
CHENANGO 02	B	36.20	1.1	NH	MST	NH	ZH			
CHENANGO 02	B	37.10	24.7	NS	SST	NS-NH	E	SWR-T	1	2031
CHENANGO 02	B	37.20	7.9	NS-NH	SST	NH-NS	E	SWR-T	1	2031
CHENANGO 02	B	37.30	3.3	NH-NS	SST	NH	E	SWR-T	1	2031
CHENANGO 02	C	1.00	6.7	NH	SST	NH	E	FW	3	-
CHENANGO 02	C	2.00	9.7	WP	SST	NH-WP	EVR	SWR-T	2	2016
CHENANGO 02	C	3.00	11.3	RP	PT	NH	E	SWR-T	1	2016
CHENANGO 02	C	4.10	10.5	SP	SST	NH	EVR	SWR-T	2	2016
CHENANGO 02	C	4.20	2.3	OF	Null	NH	E	-		-
CHENANGO 02	C	5.00	13.1	JL	SST	NH	E	RT	1	2016
CHENANGO 02	C	6.00	10.4	RP	SST	NH	E	RT	1	2016
CHENANGO 02	C	7.10	6.1	NH	PT	NH	E		2	-
CHENANGO 02	C	7.20	2.9	WS	SST	NH-PH	ZR			

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 02	C	8.00	10.5	RP	PT	NH	E	RT	1	2023
CHENANGO 02	C	9.00	1.5	GR-RO	S-S	RO-NS	E		1	-
CHENANGO 02	C	10.00	10.7	NS	PT	NS-NH	E	SPT	1	2031
CHENANGO 02	C	11.00	5.3	NH-HEM	SST	NH-HEM	ZS			
CHENANGO 02	C	12.10	10.3	NH-HEM	PT	NH-HEM	ZR			
CHENANGO 02	C	12.20	5.7	NH-HEM	MST	NH-HEM	ZS			
CHENANGO 02	C	13.00	3.7	WS-NH	PT	NH	E	TSI	2	-
CHENANGO 02	C	14.00	9.4	NH	SST	NH	E	IN	2	2032
CHENANGO 02	C	15.00	1.5	RP	PT	NH	E	RT	2	2023
CHENANGO 02	C	16.00	4.0	BR	S-S	BR	E	RA	2	-
CHENANGO 02	C	17.00	5.4	WS	PT	NH-WS	E	SPT	3	-
CHENANGO 02	C	18.00	7.2	WP-NH	SST	NH-WP	EVR	RT	2	-
CHENANGO 02	C	19.00	4.4	NH-WP	SST	NH-WP	EVR	-	3	-
CHENANGO 02	C	20.00	9.4	WP-NH	SST	NH-WP	NA	RT	2	-
CHENANGO 02	C	21.00	3.9	RP	SST	NH-WP	EVR	SWR-T	2	2024
CHENANGO 02	C	22.00	16.9	HEM	SST	HEM	ZW			
CHENANGO 02	C	23.00	16.2	HEM	SST	HEM	NA			
CHENANGO 02	C	24.00	1.2	WET-O	Null	WET-O	ZW			
CHENANGO 02	C	25.00	13.1	NS	MST	NH	E	SWR-T	1	2031
CHENANGO 02	C	26.00	29.3	NH-HEM	SST	NH-HEM	NA			
CHENANGO 02	C	27.00	7.8	NS	MST	NH-NS	E	SPT	3	2031
CHENANGO 02	C	28.00	16.0	WET-O	Null	WET-O	ZW			
CHENANGO 02	C	29.00	9.8	NH-HEM	PT	NH-HEM	NA			
CHENANGO 02	C	30.10	69.6	NH-HEM	SST	NH-HEM	NA			
CHENANGO 02	C	30.20	3.4	NH	SST	NH	E	IN	3	-
CHENANGO 02	C	31.00	4.2	NH	SST	NH	NA			
CHENANGO 02	C	32.00	8.4	NH	PT	NH	ZR			
CHENANGO 02	C	33.00	10.1	RP	SST	NH	E	SWR-T	1	2029

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 02	C	34.00	34.0	NH	PT	NH	E	FW	4	
CHENANGO 02	C	35.00	8.3	NH	PT	NH	E	IN	1	
CHENANGO 02	C	36.10	7.9	RP	SST	NH	E	SW	1	2029
CHENANGO 02	C	36.20	8.3	NH	S-S	NH	E	-		-
CHENANGO 02	C	37.00	2.9	NH	SST	NH	E	ST		-
CHENANGO 02	C	38.00	5.6	RP-NH	PT	NH	E	SW	1	2029
CHENANGO 02	C	39.00	3.0	RP	PT	NH	E	SW	1	2029
CHENANGO 02	C	40.00	5.0	NH	S-S	NH	E	-		-
CHENANGO 02	C	41.00	1.4	NH	S-S	NH	E	-		-
CHENANGO 02	D	1.10	8.9	NS-NH	PT	NH	ZA			
CHENANGO 02	D	1.20	4.2	NH-HEM	SST	NH-HEM	ZR			
CHENANGO 02	D	2.00	10.9	NH-HEM	SST	NH-HEM	NA			
CHENANGO 02	D	3.00	6.6	RP-NS	SST	NH-NS	ZA			
CHENANGO 02	D	4.00	12.5	NH	PT	NH	ZA			
CHENANGO 02	D	5.00	3.5	NS	SST	NH	E	SWR-T	2	2016
CHENANGO 02	D	6.00	10.3	NS	SST	NH	E	SPT	2	2016
CHENANGO 02	D	7.00	4.2	NH	PT	NH	U	ST/GS	2	2016
CHENANGO 02	D	8.00	31.5	NH-HEM	SST	NH-HEM	ZS			
CHENANGO 02	D	9.00	12.6	NH	SST	NH	U	ST/GS	2	2025
CHENANGO 02	D	10.10	48.1	NH	SST	NH	U	H-ST/GS	2	2025
CHENANGO 02	D	10.20	2.4	HEM	SST	HEM	ZW			
CHENANGO 02	D	12.00	9.4	NH	SST	NH	ZR			
CHENANGO 02	D	13.00	4.1	NH-HEM	PT	NH-HEM	ZA			
CHENANGO 02	D	14.00	17.5	NH	PT	NH	U	ST/GS	2	-
CHENANGO 02	D	15.10	51.2	NS	SST	NS-NH	E	SPT	1	2016
CHENANGO 02	D	15.20	2.3	NS	MST	NS-NH	ZR			
CHENANGO 02	D	16.10	18.8	SP-WS	SST	NH	U	SWR-T		-
CHENANGO 02	D	16.20	1.0	NH	SST	NH	ZW			

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 02	D	17.00	4.2	NH	S-S	NH	ZW			
CHENANGO 02	D	18.00	2.5	POND	Null	POND	ZW			
CHENANGO 02	D	19.00	6.4	NH	SST	NH	U	ST/GS	1	2027
CHENANGO 02	D	20.10	44.2	RP-NS	SST	NH	E	SWR-T	1	2032
CHENANGO 02	D	20.20	45.3	NH	S-S	NH	E	-		-
CHENANGO 02	D	20.30	14.2	RP-NS	SST	NH-NS	ZR			
CHENANGO 02	D	21.00	2.0	POND	Null	POND	ZW			
CHENANGO 02	D	22.00	3.9	RP	SST	NH	E	SWR-T	1	2032
CHENANGO 02	D	23.00	19.3	NS	SST	NH-NS	E	SWR-T	1	2016
CHENANGO 02	D	24.00	6.0	NH	SST	NH	U	H-ST/GS	2	2027
CHENANGO 02	D	25.00	12.0	NH	PT	NH	U	H-IN	2	2027
CHENANGO 02	D	26.00	2.1	PH	S-S	PH	E	-		-
CHENANGO 02	D	27.00	23.8	RP-NH	SST	NH	E	SWR	1	2020
CHENANGO 02	D	28.00	7.7	NH	SST	NH	U	H-ST/GS	2	2027
CHENANGO 02	D	29.00	3.6	NH	PT	NH-HEM	U	-		
CHENANGO 02	D	30.00	14.3	HEM-NH	SST	HEM-NH	ZW			
CHENANGO 02	D	31.00	16.9	NH-HEM	SST	NH-HEM	U	ST/GS	2	
CHENANGO 02	D	32.00	4.0	RP	SST	NH	E	SWR-T	1	2020
CHENANGO 02	D	33.00	37.3	NH-RO	SST	RO-NH	U	ST/GS	1	-
CHENANGO 02	D	34.00	9.6	NH	S-S	NH	E	-		-
CHENANGO 02	D	35.00	7.6	RP-NH	SST	NH	E	GS	2	2020
CHENANGO 02	D	36.00	45.4	NH	PT	NH	U	ST/GS	2	-
CHENANGO 02	D	37.00	25.7	HEM	PT	HEM	ZW			
CHENANGO 02	D	38.00	47.1	NH-HEM	SST	NH-HEM	NA	H-ST/GS	3	
CHENANGO 02	D	39.00	6.9	NH-NS	SST	NH-NS	E	SWR-T	2	2023
CHENANGO 02	D	40.00	57.8	NS	SST	NS-NH	E	SWR-T	1	2023
CHENANGO 02	D	41.00	17.6	RP	SST	NH	E	SW	1	2029
CHENANGO 02	D	42.00	6.0	NH	SST	NH	E	ST/GS	1	-

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 02	D	43.00	17.0	NH	SST	NH	E	ST/GS	1	-
CHENANGO 02	D	44.00	14.3	WP-NH	SST	NH-WP	E	RT-FW	2	-
CHENANGO 02	D	45.00	42.8	NH	SST	NH	U	ST/GS	1	-
CHENANGO 02	D	46.10	15.1	NH	SST	NH	U	ST/GS	1	-
CHENANGO 02	D	46.20	1.9	RO-NH	SST	RO-NH	E	FW	1	2028
CHENANGO 02	D	46.30	2.5	NH-WS	PT	NH	ZR			
CHENANGO 02	D	47.10	17.1	WP-NH	SST	NH-WP	UL	VIH	2	2033
CHENANGO 02	D	47.20	12.6	NH-HEM	PT	NH-HEM	ZR			
CHENANGO 02	D	48.00	28.7	NH	SST	NH	NA			
CHENANGO 02	D	49.00	30.7	NH	PT	NH	NA			
CHENANGO 02	D	50.00	6.1	NH-WP	PT	NH-WP	ZR			
CHENANGO 02	D	51.00	13.2	WP-NH	PT	NH-WP	E	RT	2	-
CHENANGO 02	D	52.10	7.1	NH-BR	PT	NH	E	FW	2	-
CHENANGO 02	D	52.20	4.7	WET-A	PT	WET-A	ZW			
CHENANGO 02	D	53.00	27.7	WP-RP	SST	RO-WP	EVR	IN	2	-
CHENANGO 02	D	54.00	16.6	RP	PT	NH	E	SWR	1	2029
CHENANGO 02	D	55.00	6.0	NH	SST	NH	ZR			
CHENANGO 02	D	56.00	4.0	WS	PT	PH	E	CC	2	2029
CHENANGO 02	D	57.00	11.2	WET-A	S-S	WET-A	ZR			
CHENANGO 02	D	58.00	5.2	NS	SST	NS-NH	E	SPT	1	2029
CHENANGO 02	D	59.00	24.7	WP	SST	WP-NH	UVR	VIH	2	2034
CHENANGO 02	D	60.00	14.1	NH	SST	NH	E	IN	1	2032
CHENANGO 02	D	61.00	3.6	NH-RO	S-S	NH-RO	E	FW		-
CHENANGO 02	D	62.00	9.3	NH-RP	PT	NH	E	RT	2	-
CHENANGO 02	D	63.00	16.1	WP-RP-NS	SST	NH-WP-NS	EVR	SWR-T	2	2033
CHENANGO 02	D	64.00	3.5	RP	SST	NH	E	SWR-T	1	2033
CHENANGO 02	D	65.00	1.5	NH-APP	PT	NH-APP	E	-		-
CHENANGO 02	E	1.00	14.0	WS	PT	NH-PH	E	SPT	2	-

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 02	E	2.10	1.8	RP	SST	NH	U	H	2	-
CHENANGO 02	E	2.20	15.8	NH-RP	SST	NH	ZR			
CHENANGO 02	E	3.10	29.1	RP	PT	NH	E	SWR	1	2035
CHENANGO 02	E	3.20	14.6	RP	PT	NH	E	SWR	1	2035
CHENANGO 02	E	3.30	7.5	PH	S-S	PH	ES	CC		-
CHENANGO 02	E	4.00	2.4	PH	S-S	PH	ES	CC		-
CHENANGO 02	E	6.00	8.6	NH	PT	NH	U	FW	3	2028
CHENANGO 02	E	7.10	91.2	NH	SST	NH	U	ST/GS	1	2028
CHENANGO 02	E	7.20	1.7	NH	S-S	NH	ZW			
CHENANGO 02	E	8.00	32.8	NH	SST	NH	E	IN	1	2028
CHENANGO 02	E	9.10	1.2	NS	SST	NH-NS	E	SPT	1	2029
CHENANGO 02	E	9.20	10.9	NH-HEM	PT	NH-HEM	ZR			
CHENANGO 02	E	10.00	23.4	WP-NH	SST	NH-RO-WP	EVR	SWR-T	2	-
CHENANGO 02	E	11.00	21.8	NH	PT	NH	E	IN	1	2032
CHENANGO 02	E	12.00	3.1	NS	SST	NS-NH	E	SPT	2	2029
CHENANGO 02	E	13.00	3.0	NH-HEM	PT	NH-HEM	ZR			
CHENANGO 02	E	14.00	10.1	RP-NH	SST	NH-RO	E	RT	1	2026
CHENANGO 02	E	16.00	31.4	NH	PT	NH	E	IN	1	2032
CHENANGO 02	E	18.00	2.9	RP	SST	NH	E	SW	1	2026
CHENANGO 02	E	19.00	7.1	NS	SST	NS-NH	E	SWR-T	1	2025
CHENANGO 02	E	20.00	6.3	WS	SST	NS-NH	E	SWR-T	1	2025
CHENANGO 02	E	21.00	13.5	WP	PT	NH-WP	EVR	SWR-T	2	2033
CHENANGO 02	E	22.00	6.2	NH-WP	S-S	NH-WP	E	FWD	2	-
CHENANGO 02	E	23.00	13.8	NH	PT	NH	E	FW	2	-
CHENANGO 02	E	24.10	118.9	NS	SST	NS-NH	E	SWR-T	1	2027
CHENANGO 02	E	24.20	4.5	NS-NH	SST	HEM-NH	ZR			
CHENANGO 02	E	25.00	3.4	NH-HEM	SST	NH-HEM	ZW			
CHENANGO 02	E	26.00	4.3	NH-HEM	MST	NH-HEM	U	ST	3	-

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 02	E	27.00	50.1	NH	MST	NH	ZS			
CHENANGO 02	E	28.00	17.9	NH	SST	NH	ZR			
CHENANGO 02	E	29.10	19.0	RP-NH	PT	NH	E	SWR-T	1	2025
CHENANGO 02	E	29.20	9.1	NH	S-S	NH	E			-
CHENANGO 02	E	30.00	11.6	RP	SST	NH	E	SWR-T	1	2025
CHENANGO 02	E	31.00	9.7	NS-RP	PT	NH	E	SPT	1	2025
CHENANGO 02	E	33.00	11.1	BR-PH	S-S	PH	ES			-
CHENANGO 02	E	34.00	3.8	NS-NH	SST	NH-PH	E	SW	1	2027
CHENANGO 02	E	35.00	2.3	NS	SST	NH-NS	E	SWR-T	1	2027
CHENANGO 02	E	36.10	3.9	RP	SST	NH	E	RT	1	2030
CHENANGO 02	E	36.20	9.0	RP-WP	SST	NH-WP	E	RT	1	2030
CHENANGO 02	E	36.30	6.9	RP	SST	NH	E	SWR-T	1	2030
CHENANGO 02	E	36.40	4.3	RP-NH	SST	NH	E	SW	1	2030
CHENANGO 02	E	36.50	2.6	RP-NH	PT	NH	ZR			
CHENANGO 02	E	36.60	5.7	NH	PT	NH	E	IN	1	2030
CHENANGO 02	E	36.70	1.9	PH	S-S	PH	ES			
CHENANGO 02	E	38.00	4.6	NH-PH	PT	PH	E	CC	2	2030
CHENANGO 02	E	39.00	9.3	NH-HEM	SST	NH-HEM	U	ST/GS	3	-
CHENANGO 02	E	40.00	13.8	RP	SST	RP	E	RT	1	2030
CHENANGO 02	E	41.00	0.9	RO	SST	RO	EVR	FW	2	2030
CHENANGO 02	E	42.00	10.7	NS	SST	NS-NH	E	SPT	2	2030
CHENANGO 02	E	43.00	2.8	BR	Null	BR-NH	BR			-
CHENANGO 02	E	44.00	3.2	PH	SST	PH	ES	CC	2	-
CHENANGO 02	E	45.00	3.5	RP	PT	NH	E	RT	1	2030
CHENANGO 02	E	46.00	3.3	RP	SST	NH	E	RT	1	2030
CHENANGO 02	E	47.00	0.9	NH-HEM	MST	NH-HEM	ZW			
CHENANGO 02	E	48.00	29.8	NH-HEM	SST	NH-HEM	U	ST/GS	1	2034
CHENANGO 02	E	49.00	10.2	NH	SST	NH	E	ST/GS	1	2034

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 02	E	50.00	1.6	RP	PT	NH	ZA			
CHENANGO 02	E	51.00	8.2	WP-RP	SST	WP-NH	ZA			
CHENANGO 02	E	53.00	3.3	PH	S-S	PH	ES			-
CHENANGO 02	E	54.00	22.0	RP-EL	SST	NH	U	SWR-T	1	2025
CHENANGO 02	E	55.00	4.7	WET-A	Null	WET-A	ZW			
CHENANGO 02	E	56.00	25.2	RP-EL	SST	NH	E	H	2	-
CHENANGO 02	E	57.00	1.8	NH	S-S	NH	E			-
CHENANGO 02	E	58.00	3.6	PH	S-S	PH	ES			-
CHENANGO 02	E	59.00	2.6	PH	SST	PH	ES	CC	2	2030
CHENANGO 02	E	60.00	2.6	PH	S-S	PH	ES			-
CHENANGO 02	E	61.00	3.0	PH	S-S	PH	ES			-
CHENANGO 02	E	62.00	2.3	PH	S-S	PH	ES			-
CHENANGO 02	F	1.10	68.8	NS	SST	NS-NH	E	SWR-T	1	2035
CHENANGO 02	F	1.20	20.5	NS	SST	NS-NH	E	SWR-T	1	2035
CHENANGO 02	F	1.30	5.6	NS-NH	MST	NS-NH	ZR			
CHENANGO 02	F	2.00	5.5	NH-HEM	MST	NH-HEM	ZR			
CHENANGO 02	F	3.00	5.4	WET-O	Null	WET-O	ZW			
CHENANGO 02	F	4.10	31.4	NH-HEM	SST	NH-HEM	NA			
CHENANGO 02	F	4.20	4.2	NH-HEM	MST	NH-HEM	ZR			
CHENANGO 02	F	5.00	5.4	RP	SST	NH	E	SW	1	-
CHENANGO 02	F	6.00	24.4	RP	SST	NH	E	SW	1	-
CHENANGO 02	F	7.00	20.6	NH-HEM	SST	NH-HEM	ZR			
CHENANGO 02	F	8.00	7.3	NH-HEM	SST	NH-HEM	ZR			
CHENANGO 02	F	9.00	15.7	NH-HEM	SST	NH-HEM	NA			
CHENANGO 02	F	10.00	3.9	NH-HEM	PT	NH-HEM	ZS			
CHENANGO 02	F	11.00	2.4	OF	Null	OF	OF			
CHENANGO 02	F	12.00	8.2	WET-O	PT	WET-O	ZW			
CHENANGO 02	F	13.00	2.5	NS-NH	SST	NS-NH	ZS			

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 02	F	14.00	33.6	NH	MST	NH	U	ST/GS	2	2023
CHENANGO 02	F	16.10	3.6	NH-HEM	SST	NH-HEM	ZR			
CHENANGO 02	F	16.20	1.5	NH-PH	PT	PH	ES	CC	2	-
CHENANGO 02	F	17.00	26.4	NH	PT	NH	E	FW	2	-
CHENANGO 02	F	18.00	22.6	NH-NS	S-S	NH-NS	E			-
CHENANGO 02	F	19.00	2.7	RP	PT	NH	E		3	-
CHENANGO 02	F	21.00	2.4	RP	PT	NH	E		3	-
CHENANGO 02	F	22.00	11.6	NH	SST	NH	U	FW	1	-
CHENANGO 02	F	23.00	7.7	NH	S-S	NH	E			-
CHENANGO 02	F	25.00	16.6	NH-HEM	SST	NH-HEM	ZR			
CHENANGO 02	F	26.00	11.0	NH	PT	NH	U	IN	2	-
CHENANGO 02	F	27.00	6.6	BR-NH	Null	NH	E			
CHENANGO 02	F	28.00	1.5	NS	SST	NS-NH	ZW			
CHENANGO 02	F	29.00	4.2	RP-NH	SST	NH	E	SW	2	-
CHENANGO 02	F	30.00	24.0	NH-HEM-ALD	Null	NH-HEM-ALD	ZR			
CHENANGO 02	F	31.10	64.7	NH-RP	SST	NH	E			-
CHENANGO 02	F	31.20	8.8	RP-NH	SST	NH	ZR			
CHENANGO 02	F	32.00	1.6	NH-WP	SST	NH-WP	ZR			
CHENANGO 02	F	33.00	2.9	NH-PH	PT	NH	ZR			
CHENANGO 02	F	34.00	10.7	NH	SST	NH	U	IN	1	2020
CHENANGO 02	F	35.10	4.6	NH	SST	NH	U	ST/GS	1	2020
CHENANGO 02	F	35.20	4.6	HEM	SST	HEM	ZS			
CHENANGO 02	F	36.00	4.8	NH	S-S	NH	E			-
CHENANGO 02	F	37.00	14.4	RP-NH-BR	SST	NH	E	SW	2	-
CHENANGO 02	F	38.00	3.1	PH	S-S	PH	ES			-
CHENANGO 02	F	39.00	2.2	NH	PT	NH	E			-
CHENANGO 02	F	40.00	5.8	NH-RP	S-S	NH	E	FW	1	2033
CHENANGO 02	F	41.00	2.1	NH-RP	SST	NH	E			-

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 02	F	42.00	1.4	NH	SST	NH	E			-
CHENANGO 02	F	43.00	6.0	RP-NH	PT	NH	E	SWR-T	1	2026
CHENANGO 18	A	1.00	16.6	NH	SST	NH	ZS			
CHENANGO 18	A	2.00	10.4	NH	SST	NH	U	ST/GS	2	-
CHENANGO 18	A	3.10	28.0	RP	SST	NH	E	H/SW	3	-
CHENANGO 18	A	3.20	25.5	NH-RP	SST	NH	E	H/SW	3	-
CHENANGO 18	A	3.30	3.9	RP-NH	SST	NH	ZR			
CHENANGO 18	A	3.40	4.9	RP-NH	SST	NH	U	H-SW	3	-
CHENANGO 18	A	4.00	4.0	NH-HEM	PT	NH-HEM	U	ST	3	-
CHENANGO 18	A	5.00	5.0	NH-HEM	SST	NH-HEM	ZR			
CHENANGO 18	A	6.00	44.0	NH	SST	NH	U	ST/GS	3	-
CHENANGO 18	A	7.00	5.1	NH	SST	NH	E	FW	3	-
CHENANGO 18	A	8.00	16.9	RP	SST	NH	E	SWR	3	-
CHENANGO 18	A	9.10	2.7	NH	SST	NH	E	H-FW	3	-
CHENANGO 18	A	9.20	4.6	RP-NH	SST	NH	E	H	3	-
CHENANGO 18	A	10.00	2.2	NH	SST	NH	U	H	3	-
CHENANGO 18	A	12.00	16.9	NH-HEM-NS	SST	NH-HEM-NS	ZS			
CHENANGO 18	A	13.00	11.0	NH-HEM	SST	NH-HEM	ZR			
CHENANGO 18	A	14.00	8.6	NH-HEM	PT	NH-HEM	U-LCI	ST/GS	3	2033
CHENANGO 18	A	15.00	43.2	NH-HEM	SST	NH-HEM	U-LCI	ST/GS	2	2033
CHENANGO 18	A	16.00	12.8	NS	SST	NS-NH	U	SWR	1	-
CHENANGO 18	A	17.00	8.3	HEM	PT	HEM	ZR			
CHENANGO 18	A	18.10	4.8	NH	PT	NH	U	ST/GS	1	2033
CHENANGO 18	A	18.20	7.6	NH	SST	NH	U	ST/GS	1	2029
CHENANGO 18	A	19.00	15.8	SP-WS	PT	NH	U	SWR-T	1	-
CHENANGO 18	A	20.00	4.5	NH	SST	NH	E	IN	1	2029
CHENANGO 18	A	21.00	28.7	NH	SST	NH	E	ST/GS	1	2029

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 18	A	22.00	1.9	BR	Null	NH	E			-
CHENANGO 18	A	23.00	17.9	NH	SST	NH	U			-
CHENANGO 18	A	24.10	28.7	RP-NS	SST	NH-NS	E	SWR-T	1	2029
CHENANGO 18	A	24.20	11.6	NH	S-S	NH	U			-
CHENANGO 18	A	24.30	10.8	WP-NS	S-S	WP-NH-NS	U			-
CHENANGO 18	A	25.00	10.6	NH-HEM	SST	NH-HEM	U	ST/GS	1	
CHENANGO 18	A	26.00	8.0	NH	SST	NH	U	ST/GS	1	-
CHENANGO 18	A	27.00	3.2	NH	SST	NH	U	ST/GS	1	-
CHENANGO 18	A	28.10	8.3	RP-NS	SST	NS-NH	U	RT	1	2027
CHENANGO 18	A	28.20	1.6	NH	PT	NH	U			-
CHENANGO 18	A	29.00	8.9	NH-RP	SST	NH	U	RT-IN	2	2027
CHENANGO 18	A	30.10	8.4	NH-HEM	SST	NH-HEM	ZR			
CHENANGO 18	A	30.20	12.4	NH	SST	NH	ZR			
CHENANGO 18	A	31.00	15.9	RP	PT	NH	E	SWR	1	2027
CHENANGO 18	A	32.00	2.8	NH	PT	NH	U	ST	1	2027
CHENANGO 18	A	33.00	21.1	RP-NS	SST	NH-NS	E	SWR-T	1	2027
CHENANGO 18	A	34.10	7.5	NH	PT	NH	E	TSI	2	2033
CHENANGO 18	A	34.20	12.6	NH-RP	PT	NH	ZW			
CHENANGO 18	A	36.10	15.9	NH	SST	NH	U	ST/GS	1	2033
CHENANGO 18	A	36.20	2.0	NH	SST	NH	ZW			
CHENANGO 18	A	37.10	18.5	NH	SST	NH	U	ST/GS	1	2033
CHENANGO 18	A	37.20	34.6	NH	SST	NH	ZS			
CHENANGO 18	A	38.00	3.6	NH	PT	NH	ZS			
CHENANGO 18	A	39.10	25.2	NS-LA	PT	NH-NS	E	SPT	1	2020
CHENANGO 18	A	39.20	2.5	NH-LA	SST	NH	ZR			
CHENANGO 18	A	40.00	1.0	BR	Null	BR	BR			-
CHENANGO 18	A	41.00	4.7	NH-HEM	SST	NH-HEM	ZW	ST		
CHENANGO 18	A	42.10	14.6	NH	SST	NH	U	H-ST/GS	2	2033

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 18	A	42.20	15.5	NH	SST	NH	U	ST/GS	1	2033
CHENANGO 18	A	43.00	15.6	NS-NH	PT	NH-NS	E	SPT	1	2020
CHENANGO 18	A	44.00	5.6	NS	PT	NH-NS	E	SPT-FW	1	2028
CHENANGO 18	A	45.00	76.5	NS-LA	SST	NS-NH-LA	E	SPT	1	2028
CHENANGO 18	A	46.00	15.5	NH	SST	NH	U	ST/GS	1	2032
CHENANGO 18	A	47.00	25.2	NS	SST	NS-NH	E	SWR-T	1	2018
CHENANGO 18	A	48.00	13.6	NH	MST	NH	U	GS	1	2033
CHENANGO 18	A	49.00	21.6	NH	PT	NH	U	ST/GS	1	2033
CHENANGO 18	A	50.00	18.9	NH	PT	NH	E			-
CHENANGO 18	A	51.00	8.2	NH	SST	NH	U	H-IN	3	-
CHENANGO 18	A	52.10	2.8	NH-HEM	PT	NH-HEM	U	ST	2	2033
CHENANGO 18	A	52.20	2.7	HEM	SST	HEM	U	ST	3	2029
CHENANGO 18	A	52.30	7.7	HEM	PT	HEM	ZS			
CHENANGO 18	B	1.10	19.2	NH-HEM	SST	NH-HEM	ZS	ST/GS		
CHENANGO 18	B	1.20	5.0	NH-HEM	PT	NH-HEM	U	ST	2	-
CHENANGO 18	B	1.30	5.0	NH-HEM	SST	NH-HEM	ZR			
CHENANGO 18	B	2.00	10.6	SP-NH	SST	NH	E	SWR	2	2029
CHENANGO 18	B	3.00	38.8	NH	SST	NH	U			-
CHENANGO 18	B	4.00	9.9	NH	SST	NH	U	ST/GS	2	2034
CHENANGO 18	B	5.00	11.5	NH-WS	PT	NH	E			-
CHENANGO 18	B	6.00	16.8	NH	PT	NH	U	FW	2	2034
CHENANGO 18	B	7.10	25.1	WS	PT	NH-PH	E		2	-
CHENANGO 18	B	7.20	3.9	NS	PT	NS-NH	E	SWR-T	1	2034
CHENANGO 18	B	8.00	5.4	NH	SST	NH	U	ST/GS	1	2034
CHENANGO 18	B	9.10	33.3	NS	SST	NS-NH	E	SPT	2	2025
CHENANGO 18	B	9.20	5.2	NS	SST	NS-NH	E	SPT	2	2025
CHENANGO 18	B	9.30	2.5	NS	SST	NS-NH	E	SPT	1	2025
CHENANGO 18	B	9.40	2.8	NS	SST	NS-NH	ZR			

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 18	B	9.50	1.9	NS	SST	NS-NH	ZR			
CHENANGO 18	B	10.00	4.5	NH-HEM	SST	NH-HEM	ZR			
CHENANGO 18	B	11.00	45.9	NH	SST	NH	U	ST/GS	1	-
CHENANGO 18	B	12.00	8.2	NH	SST	NH	ZS			
CHENANGO 18	B	13.10	5.7	NS	SST	NS-NH	E	SWR-T	1	2034
CHENANGO 18	B	13.20	9.1	NS-NH	PT	NS-NH	ZR			
CHENANGO 18	B	14.00	1.6	WET-A	Null	WET-A	ZW			
CHENANGO 18	B	15.00	18.0	NH	SST	NH	U	ST/GS	1	-
CHENANGO 18	B	16.00	7.0	WS-NH	PT	NH	E			-
CHENANGO 18	B	17.10	47.6	NS-NH	S-S	NS-NH	E			-
CHENANGO 18	B	17.20	2.3	NS-NH	SST	NS-NH	E			-
CHENANGO 18	B	17.30	2.7	NS	SST	NS-NH	E			-
CHENANGO 18	B	18.00	5.5	NH-NS	PT	NH-NS	E			-
CHENANGO 18	B	19.00	14.2	NS	PT	NS-NH	E	SPT	1	2034
CHENANGO 18	B	20.00	1.6	NH	PT	NH	E	FW	2	-
CHENANGO 18	B	21.00	65.0	NS	PT	NS-NH	E	SPT	1	2017
CHENANGO 18	B	22.00	13.7	NH	SST	NH	E	H-IN	1	2035
CHENANGO 18	B	23.00	10.3	NS-NH	PT	NH	E	SPT	1	2027
CHENANGO 18	B	24.00	6.9	NH	SST	NH	E		1	-
CHENANGO 18	B	25.00	7.8	RP	PT	NH	E	SW	1	2027
CHENANGO 18	B	26.00	0.7	APP-NH	Null	NH-APP	E			-
CHENANGO 18	B	27.00	2.3	RP-NH	SST	NH	ZA			
CHENANGO 18	B	28.10	7.2	NH	PT	NH	E	ST	1	2035
CHENANGO 18	B	28.20	4.7	NH	SST	NH	E	FW	2	2027
CHENANGO 18	B	29.00	30.8	NS	PT	NH-NS	E	SPT	1	2027
CHENANGO 18	B	30.00	14.4	NS	PT	NS-NH	ZA			
CHENANGO 18	B	31.00	4.8	NH-HEM	SST	NH-HEM	U			-
CHENANGO 18	B	32.00	24.9	NH	SST	NH	U	ST/GS	1	2024

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 18	B	33.00	16.7	NS	PT	NH-NS	E	SPT	1	2029
CHENANGO 18	B	34.00	2.7	NH	SST	NH	U	ST	2	-
CHENANGO 18	B	36.00	22.2	NH-HEM	SST	NH-HEM	U	ST/GS	1	2024
CHENANGO 18	B	37.00	8.2	NS	PT	NS-NH	E	SPT	1	2029
CHENANGO 18	B	38.00	16.3	NH-HEM	PT	NH-HEM	ZR			
CHENANGO 18	B	39.00	5.7	LA-NS	SST	NH-NS-LA	E	SPT	2	-
CHENANGO 18	B	40.00	8.8	NH-LA	PT	NH-LA	E	SWR-T	1	2030
CHENANGO 18	B	41.00	2.7	NS	PT	NH-NS	E	SPT	1	-
CHENANGO 18	B	42.00	21.3	NH	S-S	NH	E			-
CHENANGO 18	B	43.00	1.1	PH	S-S	PH	ES			-
CHENANGO 18	B	44.00	1.9	PH	SST	PH	ES			-
CHENANGO 18	C	1.00	7.0	NH	SST	NH	U	ST/GS	1	-
CHENANGO 18	C	2.10	96.2	NS	SST	NS-NH	E	SWR-T	1	2018
CHENANGO 18	C	2.20	1.3	NS	SST	NS-NH	E	SW	1	2018
CHENANGO 18	C	2.30	5.9	NS	SST	NS-NH	ZR			
CHENANGO 18	C	2.40	1.0	NS	SST	NS	E			-
CHENANGO 18	C	2.50	1.6	NS-NH	S-S	NS-NH	E			-
CHENANGO 18	C	3.00	44.8	RP	PT	NH	E	SWR-T	1	2029
CHENANGO 18	C	4.00	4.7	NH	SST	NH	E	SW	2	-
CHENANGO 18	C	5.00	20.1	NH-SP-RP	SST	NH-SP	UVR	SWR-T	1	2030
CHENANGO 18	C	6.00	4.6	NH	SST	NH	U	ST/GS	1	-
CHENANGO 18	C	7.00	12.3	NS-RP	SST	NH-NS	U	SWR-T	1	2030
CHENANGO 18	C	8.00	4.5	WS	PT	NH	E		2	-
CHENANGO 18	C	9.00	4.0	NS	PT	NS-NH	E	SWR-T	1	2034
CHENANGO 18	C	10.00	1.1	RP	S-S	NH	E			-
CHENANGO 18	C	11.00	1.7	RP-NS	SST	NH-NS	UVR	SWR-T	2	2019
CHENANGO 18	C	12.00	5.0	NH	PT	NH	ZS			
CHENANGO 18	C	13.00	5.6	SP-RP	SST	NH-SP	ZR			

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 18	C	14.00	4.0	NH-NS	S-S	NH-NS	E			-
CHENANGO 18	C	15.00	10.8	NS	SST	NS-NH	E	SWR-T	1	2034
CHENANGO 18	C	16.00	27.6	NH	SST	NH	U	H-ST/GS	2	-
CHENANGO 18	C	17.10	15.9	NS	SST	NS-NH	ZA			
CHENANGO 18	C	17.20	5.6	NS	SST	NS-NH	E	SW	1	2019
CHENANGO 18	C	18.00	14.8	NS-NH	SST	NS-NH	ZR			
CHENANGO 18	C	19.10	6.1	NS-NH	S-S	NS-NH	E			-
CHENANGO 18	C	19.20	1.7	NS	MST	NS-NH	E	SWR-T	1	2034
CHENANGO 18	C	19.30	2.2	NS	SST	NS-NH	ZR			
CHENANGO 18	C	20.00	22.6	NS	SST	NS-NH	E	SWR-T	1	2020
CHENANGO 18	C	21.00	18.6	SP-RP	SST	SP-NH	U	SWR-T	2	-
CHENANGO 18	C	22.00	17.3	NH	SST	NH	NA			
CHENANGO 18	C	23.00	5.4	NH-HEM	SST	NH-HEM	ZR			
CHENANGO 18	C	24.00	2.0	NS	SST	NS-NH	E	SWR-T	1	2030
CHENANGO 18	C	25.00	9.6	NS-RP	SST	NH-NS	E	SWR-T	1	-
CHENANGO 18	C	26.10	31.9	NS	SST	NS	E	SWR-T	1	2034
CHENANGO 18	C	26.20	2.2	NS	SST	NS-NH	ZR			
CHENANGO 18	C	26.30	1.5	NS	SST	NS-NH	E	SWR-T	1	2034
CHENANGO 18	C	27.10	39.6	NH	SST	NH	NA			
CHENANGO 18	C	27.20	20.0	NH	SST	NH	ZS			
CHENANGO 18	C	28.00	3.2	NH-NS	SST	NH	ZS			
CHENANGO 18	C	29.10	11.8	NS	SST	NS-NH	ZA			
CHENANGO 18	C	29.20	2.2	NS	SST	NS-NH	E	SPT	2	2030
CHENANGO 18	C	30.10	21.4	NH-HEM	SST	NH-HEM	ZA			
CHENANGO 18	C	30.20	3.6	NS	PT	NH-NS	E	SWR	1	2034
CHENANGO 18	C	30.30	2.1	NH-NS	PT	NH	ZR			
CHENANGO 18	C	31.00	9.8	NH	SST	NH	ZA			
CHENANGO 18	C	32.00	21.1	NH	SST	NH	NA			

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 18	C	33.00	7.6	RP-NH	SST	NH	ZA			
CHENANGO 18	C	34.00	5.7	RP	SST	NH	U	SWR-T	2	2032
CHENANGO 18	C	35.00	7.1	Wet-A	Null	NH	ZR			
CHENANGO 18	C	36.00	10.0	RP	SST	NH	E	SWR	1	2020
CHENANGO 18	C	37.00	15.4	NH	PT	NH	E	ST/GS	2	2032
CHENANGO 18	C	38.00	2.3	NH-RP	S-S	NH	U	RT	2	2032
CHENANGO 18	C	39.00	48.9	RP	PT	NH	U	SWR-T	1	2032
CHENANGO 18	C	40.00	3.6	PH-BR	PT	PH-BR	ZR			
CHENANGO 18	C	41.00	2.7	BR-NH	Null	NH	ZA			
CHENANGO 18	C	42.10	14.5	NH	SST	NH	U	ST/GS	3	2035
CHENANGO 18	C	42.20	8.0	NH-HEM	PT	NH-HEM	ZR			
CHENANGO 18	C	43.00	2.4	NH	PT	NH	ZA			
CHENANGO 18	C	44.10	30.3	NH	SST	NH	U	H-SW	2	2035
CHENANGO 18	C	44.20	29.1	NH	SST	NH	U	ST/GS	1	2035
CHENANGO 18	C	44.30	7.1	NH	SST	NH	U	ST/GS	1	2035
CHENANGO 18	C	44.40	12.5	NH	SST	NH	U	ST/GS	2	2035
CHENANGO 18	C	44.40	4.7	NH	SST	NH	U	H-ST/GS	3	2035
CHENANGO 18	C	44.50	6.1	NH-HEM	SST	NH-HEM	ZA			
CHENANGO 18	C	44.60	4.6	NH-HEM	SST	NH-HEM	ZR			
CHENANGO 18	C	45.00	9.2	RP	PT	NH	E	SWR-T	1	2020
CHENANGO 18	C	46.00	8.1	NH-RP	SST	NH	U	SWR-T	1	2020
CHENANGO 18	C	47.00	1.8	RP	SST	NH	E	SWR-T	1	2020
CHENANGO 18	C	48.00	7.1	NS-NH	S-S	NS-NH	E			-
CHENANGO 18	C	49.00	3.8	NS-PH	S-S	NS-PH	E			-
CHENANGO 18	D	1.10	33.4	NS-RP	SST	NH-NS	E	SWR-T	2	2031
CHENANGO 18	D	1.20	10.6	PH-NS	S-S	PH-NS	E			-
CHENANGO 18	D	1.30	14.2	NS-RP	SST	NH-NS	E	SWR-T	1	2031
CHENANGO 18	D	1.40	9.2	NS-PH	S-S	NS-PH	E			-

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 18	D	1.50	10.7	NS-RP	SST	NS-NH	E	SWR-T	1	2031
CHENANGO 18	D	1.60	5.4	NS-RP	SST	PH-NS	ZR			
CHENANGO 18	D	2.10	3.4	NH	PT	NH	E	TSI/FWD	2	-
CHENANGO 18	D	2.20	4.5	PH	S-S	PH	ES			-
CHENANGO 18	D	2.30	1.1	NH	PT	NH	E	FW	2	-
CHENANGO 18	D	2.40	0.8	HEM-PH	PT	NH-HEM	U		3	-
CHENANGO 18	D	3.10	7.8	RP	PT	NH	E	SWR-T	1	2032
CHENANGO 18	D	3.20	7.1	RP	PT	NH	E	SWR-T	1	2032
CHENANGO 18	D	3.30	4.1	RP-NH	PT	RP-NH	ZR			
CHENANGO 18	D	4.10	3.9	NS	PT	NS-NH	E	SPT	1	2032
CHENANGO 18	D	4.20	4.1	NS	SST	NS-NH	E	SPT	1	2032
CHENANGO 18	D	4.30	2.5	NS	SST	NS-NH	ZR			
CHENANGO 18	D	5.10	37.1	NH-HEM	SST	NH-HEM	U	ST/GS	2	-
CHENANGO 18	D	5.20	3.2	NH-HEM	SST	NH-HEM	ZW			
CHENANGO 18	D	5.20	4.8	NH-HEM	SST	NH-HEM	ZW			
CHENANGO 18	D	6.00	7.7	NH-HEM	PT	NH-HEM	U	ST/GS	2	-
CHENANGO 18	D	7.10	33.1	NS	SST	NS-NH	E	SWR-T	1	2032
CHENANGO 18	D	7.20	2.5	NH	S-S	NH	E			-
CHENANGO 18	D	8.10	4.5	NH	SST	NH	U	ST/GS	1	-
CHENANGO 18	D	8.20	3.8	NH	S-S	NH	E			-
CHENANGO 18	D	9.00	35.5	WS-NH	PT	NH	ZA			
CHENANGO 18	D	10.00	8.4	NS	PT	NS-NH	ZA			
CHENANGO 18	D	11.00	1.9	NH-WS	PT	NH	ZA			
CHENANGO 18	D	12.10	102.0	NS	SST	NS-NH	E	SWR-T	1	2019
CHENANGO 18	D	12.20	1.2	NS	SST	NS-NH	E	SWR-T	1	2019
CHENANGO 18	D	12.30	1.9	NS	SST	NS-NH	ZR			
CHENANGO 18	D	12.40	4.4	NS	SST	NS-NH	ZR			
CHENANGO 18	D	13.00	7.6	NH-HEM	SST	NH-HEM	ZR			

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 18	D	14.10	41.8	NH	MST	NH	U	ST/GS	2	2033
CHENANGO 18	D	14.20	2.7	NH-HEM	PT	NH-HEM	ZW			
CHENANGO 18	D	15.00	27.9	NS	SST	NS-NH	E	SWR	2	-
CHENANGO 18	D	16.00	1.5	NH	SST	NH	ZR			
CHENANGO 18	D	17.00	32.0	WS-NH	PT	NH-PH	E	SWR-T	2	-
CHENANGO 18	D	18.00	12.7	NS-NH	PT	NH	ZS			
CHENANGO 18	D	19.00	10.0	BWL-WS	PT	BWI-NS-PH	ZR			
CHENANGO 18	D	20.10	26.5	NH-HEM	SST	NH-HEM	ZA			
CHENANGO 18	D	20.20	8.9	NH-HEM	SST	NH-HEM	ZA			
CHENANGO 18	D	21.00	7.6	NS	PT	NS-NH	E	SPT	2	-
CHENANGO 18	D	22.10	9.1	WS	PT	NH	E	SPT	2	-
CHENANGO 18	D	22.20	1.6	PH-NH	PT	NH	E	FW	2	-
CHENANGO 18	D	22.30	5.8	NH	PT	NH	ZS			
CHENANGO 18	D	23.10	1.7	NS-RP	SST	NS-RP	ZS			
CHENANGO 18	D	23.20	26.5	RP	SST	NH	E	SWR-T	1	-
CHENANGO 18	D	24.00	0.5	NH	SST	NH	ZH			
CHENANGO 18	D	25.00	3.1	NH-HEM	PT	NH-HEM	ZW			
CHENANGO 18	D	26.10	36.4	NH	SST	NH	U	H-ST/GS	2	-
CHENANGO 18	D	26.20	3.3	NH	SST	NH	ZR			-
CHENANGO 18	D	26.30	31.4	NH	SST	NH	U	H-ST/GS	2	
CHENANGO 18	D	27.10	27.4	NH-NS	S-S	NH-NS	E			
CHENANGO 18	D	27.20	2.1	NH	SST	NH	ZR			
CHENANGO 18	D	28.00	21.9	NS	SST	NS-NH	E	SWR-T	1	2030
CHENANGO 18	D	29.00	1.3	NS	PT	NS-NH	E	SPT	1	2030
CHENANGO 18	D	30.00	12.7	WS	SST	WS	E	H-SWR-T	2	2031
CHENANGO 18	D	31.00	20.2	NS	SST	NS-NH	EVR	SPT	1	2031
CHENANGO 18	D	32.00	14.7	NH	SST	NH	ZS			
CHENANGO 18	D	33.10	3.8	NH	SST	NH	ZR			

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 18	D	33.20	1.7	NS	PT	NS	E			
CHENANGO 18	D	34.00	37.9	NS	SST	NS-NH	EVR	SWR-T	1	-
CHENANGO 18	D	35.00	15.2	NS	SST	NS-NH	ZS			
CHENANGO 18	D	36.00	2.7	NS	LST	NS-NH	ZR			
CHENANGO 18	D	37.00	16.2	NS	SST	NS-NH	EVR	SWR-T	1	2031
CHENANGO 18	D	38.00	4.1	RP-PH	PT	PH	ES	CC	2	-
CHENANGO 18	D	39.10	23.9	RP	SST	NH	E	RT	1	2020
CHENANGO 18	D	39.20	1.0	NH	PT	NH	U			-
CHENANGO 18	D	40.00	9.8	NH	PT	NH	E	FW	1	-
CHENANGO 18	D	41.00	10.0	SP	SST	SP-NH	EVR			-
CHENANGO 18	D	42.00	6.1	RP	SST	NH	E		2	-
CHENANGO 18	D	43.00	28.0	NS	SST	NS-NH	E	SWR-T	1	2019
CHENANGO 18	D	44.00	4.1	NS-NH	PT	NS-NH	E		2	-
CHENANGO 20	A	1.10	20.7	WP	SST	NH-WP	UVR	RT	2	-
CHENANGO 20	A	1.20	5.2	WP	SST	WP-NH	ZR			
CHENANGO 20	A	2.10	48.8	WP	SST	NH-WP	UVR	GS	2	-
CHENANGO 20	A	2.20	12.1	NH-WP	SST	NH-WP	UVR	GS	3	-
CHENANGO 20	A	3.00	21.6	WS	PT	NH	E	SPT	2	-
CHENANGO 20	A	4.00	31.9	WS	PT	NH	E	SPT	2	-
CHENANGO 20	A	5.00	8.5	NH	SST	NH	E			
CHENANGO 20	A	6.00	4.7	APP-NH	S-S	NH-APP	ZR			
CHENANGO 20	A	7.00	4.7	NH	SST	NH	E	IN	1	2026
CHENANGO 20	A	8.00	10.7	NH	SST	NH	U	GS	1	2026
CHENANGO 20	A	9.10	7.2	NH	SST	NH	U	H-IN	3	-
CHENANGO 20	A	9.20	3.9	NH-WP	SST	NH-WP	E	IN	3	-
CHENANGO 20	A	9.30	5.8	NH	PT	NH	ZR			
CHENANGO 20	A	10.10	22.8	NH	SST	NH	U	ST/GS	1	2026

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 20	A	10.20	6.0	NH	SST	NH	U	ST/GS	1	2026
CHENANGO 20	A	11.00	5.0	NH-HEM	SST	NH-HEM	ZW			
CHENANGO 20	A	12.10	7.6	RP-NS	SST	NH	E	RT	3	-
CHENANGO 20	A	12.20	14.1	RP-NS-LA	SST	RP-NS-LA	ZR			
CHENANGO 20	A	13.00	9.6	NH	SST	NH	E	IN	1	2026
CHENANGO 20	A	14.00	7.0	WP-NH	PT	NH-WP	UVR	GS	2	2034
CHENANGO 20	A	15.10	4.9	NH-WP	SST	NH-WP	U	GS	1	2026
CHENANGO 20	A	15.20	4.4	NH-WP	PT	NH-WP	ZW			
CHENANGO 20	A	15.30	5.2	NH	SST	NH-WP	E	ST/GS	1	2026
CHENANGO 20	A	16.10	4.8	WP-NH	SST	NH-WP	UVR	ST/GS	1	2034
CHENANGO 20	A	16.20	4.2	NH-WP	SST	NH-WP	UVR	ST/GS	1	2034
CHENANGO 20	A	17.10	15.3	NS-NH	PT	NS-MH	ZR			
CHENANGO 20	A	17.20	1.4	NH-NS	SST	NH-NS	ZA			
CHENANGO 20	A	17.30	3.0	NH-NS	SST	NS-NH	ZR			
CHENANGO 20	A	18.10	32.1	NS-RP	SST	NH-NS	E	SWR-T	1	2031
CHENANGO 20	A	18.20	24.7	NS-EL-PH	S-S	NS-EL-PH	E			
CHENANGO 20	A	18.30	40.9	NS-LA	SST	NS-NH	E	SWR-T	1	2021
CHENANGO 20	A	19.00	3.4	NS	PT	NS-NH	ZA			
CHENANGO 20	A	20.00	8.1	NH	PT	NH	ZA			
CHENANGO 20	A	21.20	2.6	NH-HEM	PT	NH-HEM	ZR			
CHENANGO 20	A	22.10	13.2	NH	PT	NH	U	GS	2	2025
CHENANGO 20	A	22.20	7.5	NH-HEM	PT	NH-HEM	ZA			
CHENANGO 20	A	23.10	3.1	NH-HEM	SST	NH-HEM	U	ST/GS	2	-
CHENANGO 20	A	23.20	11.2	NH-HEM	SST	NH-HEM	ZS			
CHENANGO 20	A	24.00	7.8	NH	SST	NH	U	GS	1	2025
CHENANGO 20	A	25.00	3.9	PH	S-S	PH	ES			
CHENANGO 20	A	26.00	17.7	NS	PT	NS-NH	ZA			
CHENANGO 20	B	1.10	2.3	NH	SST	NH	E	IN	2	-

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 20	B	1.20	3.2	NH-HEM	SST	NH-HEM	U	GS	3	-
CHENANGO 20	B	2.00	1.0	NH	PT	NH	E			
CHENANGO 20	B	3.10	73.0	RP	SST	NH	E	SWR-T	2	2022
CHENANGO 20	B	3.20	5.2	RP-BR	SST	NH	ZR			
CHENANGO 20	B	4.00	6.0	NH	SST	NH	U	IN	2	2022
CHENANGO 20	B	5.00	6.3	NH-HEM	SST	NH-HEM	ZW			
CHENANGO 20	B	6.00	14.0	NH-HEM	SST	NH-HEM	U	ST/GS	2	-
CHENANGO 20	B	7.00	17.3	NH-HEM	SST	NH-HEM	U	ST/GS	3	-
CHENANGO 20	B	8.10	12.8	NH-HEM	SST	NH-HEM	U	ST/GS	3	-
CHENANGO 20	B	8.20	3.2	NH-HEM	S-S	NH-HEM	ZW			
CHENANGO 20	B	9.10	3.3	WET-A	Null	WET-A	ZW			
CHENANGO 20	B	9.20	6.5	WET-A	SST	WET-A	ZR			
CHENANGO 20	B	10.10	30.8	RP	SST	RP	E	SWR-T	1	2022
CHENANGO 20	B	10.20	2.1	RP-NH	SST	NH	E	SW	1	2022
CHENANGO 20	B	10.30	1.2	NH	PT	NH	E	TSI	1	2022
CHENANGO 20	B	11.00	13.4	NH	SST	NH	U	ST/GS	1	2026
CHENANGO 20	B	12.10	4.2	NH-HEM	SST	NH-HEM	U	ST	2	-
CHENANGO 20	B	12.20	2.7	NH-HEM	PT	NH-HEM	ZW			
CHENANGO 20	B	13.10	26.4	NH	SST	NH	U	H-ST/GS	2	2026
CHENANGO 20	B	13.20	18.4	NH	SST	NH	U	H-ST/GS	2	2026
CHENANGO 20	B	13.30	17.2	NH	SST	NH	ZR			
CHENANGO 20	B	14.00	7.6	NH-HEM	SST	NH-HEM	E	FW	3	-
CHENANGO 20	B	15.10	6.4	NH-WP	SST	NH-WP	E	ST/GS	2	2026
CHENANGO 20	B	15.20	7.0	NH	S-S	NH	E	FW	3	-
CHENANGO 20	B	15.30	8.2	NH	PT	NH	ZS			
CHENANGO 20	B	16.00	32.1	NS	SST	NS-NH	E	SPT	3	-
CHENANGO 20	B	17.00	10.0	RP	SST	NH	E	SWR-T	1	2022
CHENANGO 20	B	18.00	16.3	NH-HEM	SST	NH-HEM	U	ST/GS	1	2026

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 20	B	19.10	60.1	NH-RP	S-S	NH-RP	E			
CHENANGO 20	B	19.20	3.3	NH	SST	NH	E	FW	3	-
CHENANGO 20	B	19.30	0.8	NH	S-S	NH	OF			
CHENANGO 20	B	20.00	7.0	NH	SST	NH	E	ST/GS	2	2026
CHENANGO 20	B	21.00	49.9	NH	SST	NH	ZA			
CHENANGO 20	B	22.00	7.5	NH	SST	NH	U	ST/GS	1	2034
CHENANGO 20	B	23.10	16.5	NH	SST	NH	ZA			
CHENANGO 20	B	23.20	7.7	NH-HEM	SST	NH-HEM	ZA			
CHENANGO 20	B	24.00	13.7	NH	SST	NH	ZR			
CHENANGO 20	B	25.00	7.1	RP-LA	SST	NH	ZA			
CHENANGO 20	B	26.00	70.4	NH	SST	NH	ZA			
CHENANGO 20	B	27.10	41.4	RP-LA	SST	RP-LA	ZA			
CHENANGO 20	B	27.20	4.6	NH	SST	NH	ZA			
CHENANGO 20	B	27.30	0.8	NH	S-S	NH	ZA			
CHENANGO 20	B	28.00	6.7	NH	PT	NH	ZA			
CHENANGO 20	B	29.00	6.8	NH	SST	NH	ZA			
CHENANGO 20	B	30.00	5.7	NH	SST	NH	ZA			
CHENANGO 20	B	31.00	4.3	NH	SST	NH	ZA			
CHENANGO 20	B	32.10	2.6	NS	PT	NH	ZA			
CHENANGO 20	B	32.20	4.7	NS-NH	SST	NH	ZA			
CHENANGO 20	B	32.30	1.6	NH	PT	NH	ZA			
CHENANGO 20	B	33.00	2.4	NH	PT	NH	ZA			
CHENANGO 20	B	34.00	8.8	NH-HEM	PT	NH-HEM	ZS			
CHENANGO 20	B	35.00	14.2	NH-HEM	PT	NH-HEM	ZS			
CHENANGO 20	B	36.00	15.3	RP	SST	NH	ZA			
CHENANGO 20	B	37.00	1.5	NH	PT	NH	ZA			
CHENANGO 20	B	38.00	3.7	RP	SST	NH	ZA			
CHENANGO 20	B	39.00	8.9	HEM	SST	HEM	ZW			

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 20	B	40.00	3.8	RP	SST	NH	ZR			
CHENANGO 20	C	1.10	28.3	NS-LA	SST	NH-NS	E	SWR-T	1	2028
CHENANGO 20	C	1.20	8.3	NH-NS	SST	NH	U	SWR-T	1	2028
CHENANGO 20	C	1.30	2.0	NS-NH	MST	NH-NS	ZR			
CHENANGO 20	C	1.40	187.0	NS-LA	SST	NS-NH	EVR	SWR-T	1	2022
CHENANGO 20	C	1.50	5.9	NS-RP	SST	NS	ZR			
CHENANGO 20	C	2.00	34.2	NH	SST	NH	U	ST/GS	1	2021
CHENANGO 20	C	3.00	5.9	NS	SST	NS-NH	UVR	VIH	2	-
CHENANGO 20	C	4.00	5.9	NS-LA	MST	NS-NH-LA	E	SWR-T	2	2028
CHENANGO 20	C	5.00	8.8	NS-LA	SST	NS-NH	ZR			
CHENANGO 20	C	6.00	2.5	PIT	Null	PIT	PIT			
CHENANGO 20	C	7.10	9.7	NH	S-S	NH	E			
CHENANGO 20	C	7.20	8.7	NH	SST	NH	ZR			
CHENANGO 20	C	8.00	11.8	NH	SST	NH	U	IN	2	-
CHENANGO 20	C	9.10	12.2	NH-HEM	SST	NH-HEM	U	ST/GS	2	-
CHENANGO 20	C	9.20	2.1	WET-O	Null	WET-O	ZW			
CHENANGO 20	C	10.00	14.9	NH-HEM	SST	NH-HEM	U	ST/GS	2	-
CHENANGO 20	C	11.00	28.6	NH	SST	NH	U	ST/GS	1	2021
CHENANGO 20	C	12.00	35.6	NH	SST	NH	U	ST/GS	1	2021
CHENANGO 20	C	13.00	41.5	NH-HEM	SST	NH-HEM	ZS			
CHENANGO 20	C	14.00	40.0	NH	SST	NH	U	ST/GS	1	2021
CHENANGO 20	C	15.00	22.0	NS	SST	NH	NA			
CHENANGO 20	C	16.00	17.4	WS	SST	NH	U	SPT	2	-
CHENANGO 20	C	17.00	7.6	NH-WS	SST	NH	U	IN	2	-
CHENANGO 20	C	18.00	4.5	NS-RP	SST	NH	ZS			
CHENANGO 20	C	19.10	48.0	WS	PT	NH	E	SPT	3	-
CHENANGO 20	C	19.20	8.4	WS	PT	WS-NH	E	VIH	3	-
CHENANGO 20	C	19.30	6.5	WS	PT	NH-PH	E	VIH	2	-

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 20	C	19.40	2.0	BR	Null	BR	ZH	H	2	-
CHENANGO 20	C	19.50	0.9	NS-WP	SST	WP-NH	EVR	SPT	2	-
CHENANGO 20	C	20.00	5.1	NH	SST	NH	UVR	ST/GS	2	2025
CHENANGO 20	C	21.00	12.1	NH-HEM	SST	NH-HEM	U	ST/GS	3	-
CHENANGO 20	C	22.10	22.2	NH-HEM	PT	NH-HEM	NA			
CHENANGO 20	C	22.20	25.4	HEM	SST	HEM	NA			
CHENANGO 20	C	22.30	15.1	HEM	SST	HEM	ZR			
CHENANGO 20	C	23.00	27.0	NH-WS	PT	NH	E	FWD-SPT	3	-
CHENANGO 20	C	24.11	42.3	NH-LA	S-S	NH-LA	E			
CHENANGO 20	C	24.12	16.3	WS	PT	NH-LA-PH	E	CC/PT	3	-
CHENANGO 20	C	24.13	22.2	WS	PT	NH-LA-PH	E	CC/PT	3	-
CHENANGO 20	C	24.14	4.1	NH	PT	NH	E	FW	3	-
CHENANGO 20	C	24.15	51.5	WS-NH	PT	NH	E	SWR-T	3	-
CHENANGO 20	C	24.16	2.7	WS	PT	WS	ZR			
CHENANGO 20	C	24.20	7.9	NH	SST	NH	U	ST/GS	3	-
CHENANGO 20	C	25.00	14.9	NH	SST	NH	U	ST/GS	3	-
CHENANGO 20	C	26.10	10.6	NH	SST	NH	U	IN	1	2025
CHENANGO 20	C	26.20	3.7	NH	SST	NH	U	ST/GS	1	2025
CHENANGO 20	C	27.00	11.2	NS	SST	NH	E	SPT	3	-
CHENANGO 20	C	28.10	13.8	NH	MST	NH	U	ST/GS	1	2025
CHENANGO 20	C	28.20	6.8	NH	MST	NH	U	ST/GS	1	2025
CHENANGO 20	C	29.00	11.2	NH-LA	PT	NH-LA	E			
CHENANGO 20	C	30.00	0.9	WS	SST	NH	ZH			
CHENANGO 20	C	31.00	0.9	OF	Null	NH	ZH			
CHENANGO 21	A	1.00	17.6	NH-HEM	SST	NH-HEM	ZA			
CHENANGO 21	A	2.00	8.2	NH-HEM	SST	NH-HEM	ZS			
CHENANGO 21	A	3.00	14.3	NH	SST	NH	U	ST/GS	1	-

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 21	A	4.00	17.2	NH-HEM	SST	NH-HEM	ZS			
CHENANGO 21	A	5.00	59.5	NH-HEM	SST	NH-HEM	ZS			
CHENANGO 21	A	6.00	5.7	NH	SST	NH	ZS			
CHENANGO 21	A	7.00	39.7	NH	SST	NH	U	H-ST/GS	2	-
CHENANGO 21	A	8.00	1.7	NS	SST	SN	E	SPT	1	-
CHENANGO 21	A	9.00	6.7	RP	SST	NH	E	H-SWR	2	2020
CHENANGO 21	A	10.00	8.3	NH	PT	NH	U	FW	2	-
CHENANGO 21	A	11.00	13.5	NH	PT	NH	U	FW	2	-
CHENANGO 21	A	12.00	15.7	RP	SST	NH	E	SW	1	2020
CHENANGO 21	A	13.00	6.9	NH	PT	NH	E	FW	1	-
CHENANGO 21	A	14.00	3.8	NH	SST	NH	ZH	RS	3	-
CHENANGO 21	A	15.00	5.4	RP	SST	NH	E	SW	1	2020
CHENANGO 21	A	16.00	1.4	BR	Null	BR	BR	M		-
CHENANGO 21	A	17.00	14.2	NS	SST	NS-NH	E	SPT	1	2030
CHENANGO 21	A	18.00	53.5	NS	SST	NS-NH	E	SPT	1	-
CHENANGO 21	A	19.00	5.4	NS	SST	NS-NH	ZR			
CHENANGO 21	A	20.00	10.9	HEM-NH	SST	HEM-NH	ZA		4	
CHENANGO 21	A	21.00	16.5	NH-HEM	SST	HEM-NH	ZV		4	
CHENANGO 21	A	22.10	10.3	NH-HEM	SST	NH-HEM	NA			
CHENANGO 21	A	22.20	5.7	NH-NS	SST	NH-NS	E	SPT	1	-
CHENANGO 21	A	23.00	16.1	NS-NH	SST	NH-NS	E	SPT	1	-
CHENANGO 21	A	24.00	6.2	NH	SST	NH	U	ST/GS	2	-
CHENANGO 21	A	25.00	7.3	NH-HEM	SST	NH-HEM	ZS			
CHENANGO 21	A	26.00	5.5	NH	SST		ZR			
CHENANGO 21	A	27.00	2.7	NS	SST	NS-NH	ZA			
CHENANGO 21	A	28.00	36.5	NH	SST	NH	U	ST/GS	1	-
CHENANGO 21	A	29.00	31.5	JL	SST	NH	E	RT	2	2026
CHENANGO 21	A	30.00	5.9	NH-HEM	SST	NH-HEM	U	FW	2	-

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 21	A	31.00	14.3	NH	SST	NH	U	H-ST/GS	2	-
CHENANGO 21	A	32.00	2.6	RP	SST	NH	U	H-SWR-T	2	2020
CHENANGO 21	A	33.00	3.0	RP-NH	SST	NH	E	H-SWR-T	2	2020
CHENANGO 21	A	34.00	19.2	RP	SST	NH	U	SWR-T	1	2020
CHENANGO 21	A	35.00	5.4	SP-BR	SST	BR	E	RA	2	-
CHENANGO 21	A	36.00	3.8	RP	SST	NH	E	SWR-T	1	2020
CHENANGO 21	A	37.00	34.8	RP	SST	NH	E	SWR-T	1	2020
CHENANGO 21	A	38.00	3.7	WET-O	Null	NH-HEM	ZW			
CHENANGO 21	A	39.00	5.1	NH	SST	NH	E	STS/GS	1	-
CHENANGO 21	A	40.00	7.4	NH-HEM	SST	NH-HEM	U	FW	1	-
CHENANGO 21	A	41.00	33.4	RP-NH	SST	NH	E	SWR-T	1	2020
CHENANGO 21	A	42.00	23.6	NH	SST	NH	ZS			
CHENANGO 21	A	43.00	4.5	RP	SST	NH	E	SW	2	-
CHENANGO 21	A	44.00	43.7	NS	SST	NS-NH	E	SWR-T	2	-
CHENANGO 21	A	45.00	12.7	RP	SST	NH	E	SWR	3	-
CHENANGO 21	A	46.00	5.7	NH	SST	NH	U	ST/GS	1	-
CHENANGO 21	A	47.00	46.8	NH	SST	NH	U	ST/GS	1	2034
CHENANGO 21	A	48.00	36.3	NH	SST	NH	U	H-SW	1	-
CHENANGO 21	A	49.00	2.0	PIT	Null	PIT	PIT			-
CHENANGO 21	A	50.10	42.7	NH-HEM	SST	NH-HEM	ZS			
CHENANGO 21	A	50.20	9.7	NH	MST	NH	U	ST/GS	1	-
CHENANGO 21	A	50.30	6.3	NH	SST	NH	ZA			
CHENANGO 21	A	51.00	4.2	NH	SST	NH	ZA			
CHENANGO 21	A	52.00	6.1	NS-NH	SST	NH	U	SPT	1	-
CHENANGO 21	A	53.00	9.1	NH	SST	NH	U	ST/GS	1	-
CHENANGO 21	A	54.00	6.3	NS	SST	NS-NH	E	SPT	1	2028
CHENANGO 21	A	55.00	3.1	NS	SST	NS-NH	ZR			
CHENANGO 21	A	56.00	14.0	NH-HEM	PT	NH-HEM	U	ST	3	-

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 21	A	57.00	35.5	NS	SST	NS-NH	E	SWR-T	1	2028
CHENANGO 21	A	58.00	14.3	NS	SST	NS-NH	E	SWR-T	1	-
CHENANGO 21	A	59.00	35.6	NS	MST	NS-NH	EVR	SPT-VIH	1	2016
CHENANGO 21	A	60.00	1.5	NH-NS	S-S	NH-NS	E	TSI	2	-
CHENANGO 21	A	61.00	13.2	NH	S-S	NH	E	FW		-
CHENANGO 21	A	62.00	14.8	NH	PT	NH	E	FW		-
CHENANGO 21	A	63.00	19.5	NS	SST	NS-NH	EVR	SPT	2	2030
CHENANGO 21	A	64.00	18.2	NH-HEM	SST	NH-HEM	ZR			
CHENANGO 21	A	65.00	2.5	NS	SST	NS-NH	ZR			
CHENANGO 21	A	66.00	1.9	OF-BR	Null	OF-BR	ZR			
CHENANGO 21	A	67.00	4.6	NS-NH	SST	NS-NH	ZR			
CHENANGO 23	A	1.10	12.0	NH	SST	NH	U	IN	2	
CHENANGO 23	A	1.20	2.3	RP-NH	SST	NH	ZR			
CHENANGO 23	A	2.00	19.2	RP	SST	NH	EVR	H-SWR-T	1	2019
CHENANGO 23	A	3.00	28.9	NH	SST	NH	U	H-ST/GS	2	-
CHENANGO 23	A	4.00	6.6	WP	SST	WP-NH	U	VIH	3	-
CHENANGO 23	A	5.00	32.3	NH	S-S	NH	E			-
CHENANGO 23	A	6.00	23.3	NH	S-S	NH-NS-WP	E			-
CHENANGO 23	A	7.00	6.7	RP-NH	PT	NH	ZR			
CHENANGO 23	A	8.10	2.5	NH	SST	NH	NA	H-ST/GS	3	
CHENANGO 23	A	8.20	4.3	NH	SST	NH	NA	H-ST/GS	3	
CHENANGO 23	A	9.10	15.5	NS-NH	S-S	NS-NH	E			-
CHENANGO 23	A	9.20	31.0	NH-NS-WP	S-S	NH-NS-WP	E			-
CHENANGO 23	A	9.30	10.4	NS	SST	NS-NH	E	SWR-T	1	-
CHENANGO 23	A	10.00	4.1	BR-NS-NH	Null	NH-NS	ZH			
CHENANGO 23	A	11.00	25.7	NH	PT	NH	U	H-ST/GS	2	2023
CHENANGO 23	A	12.10	27.9	RP	SST	NH	E	SWR-T	1	2033

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 23	A	12.20	0.7	NH	S-S	NH	E			-
CHENANGO 23	A	13.00	2.6	NH	PT	NH	ZS			
CHENANGO 23	A	14.00	7.5	NH	SST	NH	ZR			
CHENANGO 23	A	15.00	1.3	NH-RP-RO	PT	NH-RO	E	H-IN	3	-
CHENANGO 23	A	16.10	29.7	RP-NS	SST	NH	E	SWR-T	2	2025
CHENANGO 23	A	16.20	5.3	NS-RP	SST	NH-NS	E	SWR-T	2	2025
CHENANGO 23	A	16.30	4.7	RP-NS	SST	E	E	SWR-T	2	2025
CHENANGO 23	A	16.40	2.8	RP-NS	SST	E	E	SWR-T	2	2025
CHENANGO 23	A	16.50	2.7	NH-NS	SST	NH	ZR			
CHENANGO 23	A	16.60	2.8	NS-RP	SST	NH-NS	E	SWR-T	2	2025
CHENANGO 23	A	17.10	3.7	RP	PT	NH	E	SWR-T	2	-
CHENANGO 23	A	17.20	1.7	RP-NH	SST	NH	E	SWR-T	2	-
CHENANGO 23	A	17.30	1.4	NH	SST	NH	E			-
CHENANGO 23	A	18.10	6.4	NH-RP	PT	NH	E	SWR-T	2	-
CHENANGO 23	A	18.20	5.1	NH	SST	NH	E	SWR		-
CHENANGO 23	A	19.00	15.9	NH	SST	NH	U	H-ST/GS	2	-
CHENANGO 23	A	20.00	4.6	RP	SST	NH	E	SWR-T	1	2025
CHENANGO 23	A	21.00	4.8	NH	SST	NH	E	H-ST/GS	2	-
CHENANGO 23	A	22.00	1.8	NH	SST	NH	U	ST/GS	2	-
CHENANGO 23	A	23.00	22.3	NS	SST	NH-NS	E	SPT	1	2016
CHENANGO 23	A	24.10	13.2	NS	SST	NH-NS	E	SPT	1	2016
CHENANGO 23	A	24.20	1.2	NH	PT	NH	U	FW	3	-
CHENANGO 23	A	25.00	2.4	NH	PT	NH	E			-
CHENANGO 23	A	26.00	15.2	NH	SST	NH	U	ST/GS	1	2023
CHENANGO 23	A	27.10	18.3	RP	PT	NH	E	SWR-T	1	2019
CHENANGO 23	A	27.20	1.2	RP	SST	NH	ZV			
CHENANGO 23	A	27.30	3.3	RP-NH	PT	NH	ZR			
CHENANGO 23	A	28.00	39.4	NH	SST	NH	U	ST/GS	1	2029

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 23	A	30.00	1.3	RP-NH	PT	NH	E			-
CHENANGO 23	A	31.00	4.6	NH-RP	SST	NH	ZR			
CHENANGO 23	A	32.10	9.8	NH	SST	NH	U	ST/GS	1	2023
CHENANGO 23	A	32.20	8.0	NH-RP	SST	NH	ZR			
CHENANGO 23	A	33.00	7.0	RO-NH	SST	RO-NH	E	SWR	2	-
CHENANGO 23	A	34.10	25.8	RP	PT	NH	E	H-RT	3	-
CHENANGO 23	A	34.20	1.4	RP	PT	NH	E			-
CHENANGO 23	A	35.10	20.1	NH	SST	NH	U	ST	2	-
CHENANGO 23	A	35.20	8.5	NH	SST	NH	U	ST/GS	2	2029
CHENANGO 23	A	35.30	5.8	NH	PT	NH	ZR			
CHENANGO 23	A	36.00	7.0	NH	SST	NH	E	H-ST/GS	3	-
CHENANGO 23	A	37.10	7.6	NH-RP	SST	NH	E	H-IN	3	-
CHENANGO 23	A	37.20	3.9	NH	PT	NH	E	H-IN	3	-
CHENANGO 23	A	38.00	22.1	RP	PT	NH	E	SWR	1	2019
CHENANGO 23	A	39.00	1.4	RO-NH	SST	RO-NH	E			-
CHENANGO 23	A	40.00	4.9	NH	SST	NH	E	H-ST/GS	2	2029
CHENANGO 23	A	41.00	6.4	NH	S-S	NH	E	FW	1	-
CHENANGO 23	A	42.00	24.9	NH	S-S	NH	E	FW	1	-
CHENANGO 23	A	43.00	1.1	NS	SST	NH	E	SPT	1	2025
CHENANGO 23	B	1.10	11.0	NH	SST	NH	U	ST/GS	1	2033
CHENANGO 23	B	1.20	4.6	NH	SST	NH	ZR			
CHENANGO 23	B	1.30	7.1	NH	SST	NH	U	H-ST/GS	2	2033
CHENANGO 23	B	2.00	2.1	NS	SST	NS	E	SPT	1	2018
CHENANGO 23	B	3.00	4.4	NH	SST	NH	ZS			
CHENANGO 23	B	4.10	4.4	NH-NS	SST	NH	E	SWR-T	2	2018
CHENANGO 23	B	4.20	3.9	NS	SST	NS-NH	E	SPT	1	2018
CHENANGO 23	B	4.30	1.8	NS	SST	NS-NH	E	SW	1	2018
CHENANGO 23	B	4.40	5.1	NH-NS	PT	NH-NS	ZR			

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 23	B	5.00	18.5	NH	SST	NH	E	H-SW	3	2024
CHENANGO 23	B	6.00	45.6	NS	SST	NS-NH	E	SPT	2	2018
CHENANGO 23	B	7.00	2.5	NH	SST	NH	NA	SW	2	-
CHENANGO 23	B	8.10	45.7	NS	SST	NS-NH	E	SWR-T	1	2018
CHENANGO 23	B	8.20	0.9	NS-NH	PT	NS-NH	ZW			
CHENANGO 23	B	9.00	5.0	NH	SST	NH	U	ST/GS	1	2033
CHENANGO 23	B	10.00	6.7	NH	S-S	NH	E	FW	1	2032
CHENANGO 23	B	11.10	30.9	NH	SST	NH	U	IN	3	-
CHENANGO 23	B	11.20	3.2	NH	PT	NH	ZR			
CHENANGO 23	B	12.00	23.8	NS	SST	NS-NH	E	SPT	1	2017
CHENANGO 23	B	13.00	1.5	NH	SST	NH	ZS			
CHENANGO 23	B	14.00	13.2	NS	SST	NS-NH	E	SPT	1	2017
CHENANGO 23	B	15.00	39.9	NH	PT	NH	U	H-ST	3	-
CHENANGO 23	B	16.00	40.2	NS-NH	SST	NH-NS	U	SWR-T	2	2017
CHENANGO 23	B	17.00	6.8	EL	SST	NH	EVR	RT	1	2033
CHENANGO 23	B	18.00	20.9	NS	SST	NS-NH	ZR			
CHENANGO 23	B	19.00	130.9	NS	SST	NS-NH	EVR	SPT	1	2017
CHENANGO 23	B	20.00	32.1	NH	SST	NH	U	H-ST/GS	3	-
CHENANGO 23	B	21.10	7.0	NS	SST	NS-NH	E	SPT	2	2017
CHENANGO 23	B	21.20	2.5	NS	PT	NS-NH	E	SPT	2	2017
CHENANGO 23	B	21.30	4.3	NS	SST	NS-NH	ZR			
CHENANGO 23	B	22.00	3.2	RP	PT	NH	ZA			
CHENANGO 23	B	23.00	1.5	NS	PT	NS-NH	ZR			
CHENANGO 23	B	24.00	9.0	NS-NH	SST	NS-NH	ZR			
CHENANGO 23	B	25.00	4.4	BR-PH	PT	PH	E			-
CHENANGO 23	B	26.00	34.4	RP	PT	NH-PH	E	SWR-T	4	
CHENANGO 23	B	27.00	7.0	NH	SST	NH	U	H-ST/GS	4	
CHENANGO 23	B	28.00	15.3	NH	PT	NH	U	H-ST/GS	4	

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 23	B	29.00	2.6	NH-HEM	SST	NH-HEM	ZW			
CHENANGO 25	A	1.10	15.9	NH	SST	NH	EVR	SW	1	-
CHENANGO 25	A	1.20	3.8	NH	SST	NH	E			-
CHENANGO 25	A	1.30	4.3	NH	S-S	NH	E			-
CHENANGO 25	A	1.40	1.6	WET-A	Null	WET-A	ZW			
CHENANGO 25	A	1.50	3.4	WS-RP	PT	PH	ZR			
CHENANGO 25	A	2.00	11.5	WS	PT	NH	ZV			
CHENANGO 25	A	3.00	4.9	NH	LST	NH	UVR	ST/GS	1	2023
CHENANGO 25	A	4.10	7.8	WS	PT	PH	ZW			
CHENANGO 25	A	4.20	3.3	WS	PT	PH	ZW			
CHENANGO 25	A	5.00	4.2	NH	SST	NH	E	FW	1	2016
CHENANGO 25	A	6.00	26.0	RP	PT	NH	E	RT	1	2021
CHENANGO 25	A	7.00	27.2	NH-RP	S-S	NH-RP	E			-
CHENANGO 25	A	8.10	55.0	RP-NS	SST	NH	E	SWR-T	1	2026
CHENANGO 25	A	8.20	3.3	NH	S-S	NH	E			-
CHENANGO 25	A	8.30	4.2	NH	SST	NH	ZR			
CHENANGO 25	A	8.40	2.7	NH	S-S	NH	E			
CHENANGO 25	A	8.50	2.3	RP	SST	NH	E	SW	1	2021
CHENANGO 25	A	8.60	8.0	NH	S-S	NH	E			
CHENANGO 25	A	9.00	2.0	NH	SST	NH	UVR	H-ST	1	2023
CHENANGO 25	A	10.00	7.2	WS	SST	NH	E	SWR-T	1	2021
CHENANGO 25	A	11.00	23.4	RP-WS	SST	NH	E	SWR-T	1	2021
CHENANGO 25	A	12.00	4.7	NH	PT	NH	UVR	ST/GS	1	2023
CHENANGO 25	A	13.10	5.5	NH-HEM	PT	NH-HEM	ZS			
CHENANGO 25	A	13.20	4.4	NH	PT	NH	E	FW	1	-
CHENANGO 25	A	14.10	31.4	RP-WS	SST	NH	E	H-SWR-T	1	2032
CHENANGO 25	A	14.20	22.5	NH	S-S	NH	E			

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 25	A	14.30	6.6	RP-NH	SST	NH	ZR			
CHENANGO 25	A	15.10	40.4	RP	SST	NH	E	SWR-T	1	2031
CHENANGO 25	A	15.20	20.1	RP-NS	SST	NH	E	SWR-T	1	2031
CHENANGO 25	A	15.30	12.2	NH	S-S	NH	E			
CHENANGO 25	A	15.40	12.7	NH	S-S	NH	E			
CHENANGO 25	A	15.50	7.7	NH	SST	NH	ZH			
CHENANGO 25	A	16.10	28.8	NH	SST	NH	U	ST/GS	1	2020
CHENANGO 25	A	16.20	6.8	NH-HEM	PT	NH-HEM	U	ST/GS	1	2022
CHENANGO 25	A	17.10	3.0	NS	MST	NS-NH	EVR	SWR-T	1	2031
CHENANGO 25	A	17.20	2.5	NH	SST	NH	ZH			
CHENANGO 25	A	17.30	1.0	NS	SST	NH	EVR	SWR	1	2023
CHENANGO 25	A	17.40	9.6	NH-NS	SST	NH	ZR			
CHENANGO 25	A	18.10	7.6	NH	SST	NH	NA			
CHENANGO 25	A	18.20	5.7	NH	SST	NH	U	GS	1	2024
CHENANGO 25	A	19.10	19.8	NH	S-S	NH	E			
CHENANGO 25	A	19.20	0.7	NH	S-S	NH	E			
CHENANGO 25	A	20.10	26.8	RP	SST	NH	E	H-SWR-T	2	2018
CHENANGO 25	A	20.20	2.0	NH	SST	NH	U	IN	1	2022
CHENANGO 25	A	21.10	44.3	RP-NH	SST	NH	U	SWR-T	2	2018
CHENANGO 25	A	21.20	8.7	RP-NH	SST	NH	ZW			
CHENANGO 25	A	21.30	1.7	RP	SST	NH	E	SWR-T	2	2023
CHENANGO 25	A	22.00	2.1	NH-PH	S-S	NH	E			
CHENANGO 25	B	1.10	10.0	RP-WS	SST	NH	E			
CHENANGO 25	B	1.20	2.2	RP	SST	NH	E	SWR-T	1	2021
CHENANGO 25	B	2.10	8.2	RP-NH	PT	NH	E	H-RA	2	-
CHENANGO 25	B	2.20	3.5	NH	PT	NH	E	IN	1	2024
CHENANGO 25	B	2.30	2.1	NH	SST	NH	E	IN	1	2024
CHENANGO 25	B	3.10	24.3	RP	PT	NH	E	SWR-T	1	2021

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 25	B	3.20	1.9	WS-RP	SST	NH	U	SPT	2	2021
CHENANGO 25	B	4.10	13.0	WS	PT	NH	E			
CHENANGO 25	B	4.20	2.0	NH	PT	NH	E			
CHENANGO 25	B	5.10	11.1	NH-RP	PT	NH	E			
CHENANGO 25	B	5.20	3.9	NH-WP	SST	NH-WP	U			
CHENANGO 25	B	6.10	121.3	NH	PT	NH	U	H-ST/GS	2	2024
CHENANGO 25	B	6.20	20.8	NH	PT	NH	U	H-ST/GS	2	2024
CHENANGO 25	B	6.30	2.9	NH-HEM	PT	NH-HEM	U			
CHENANGO 25	B	6.40	3.0	NS-NH	SST	NH	E	SPT	2	2034
CHENANGO 25	B	6.50	4.6	WET-A	Null	WET-A	ZW			
CHENANGO 25	B	7.00	25.9	NS	SST	NS-NH	E	SPT	2	-
CHENANGO 25	B	8.00	6.7	NH-HEM	SST	NH-HEM	NA			
CHENANGO 25	B	9.10	17.4	NH	PT	NH	U	ST/GS	1	2024
CHENANGO 25	B	9.20	3.2	NH	SST	NH	U	ST/GS	1	2024
CHENANGO 25	B	9.30	3.2	NH	MST	NH	U		3	-
CHENANGO 25	B	10.10	32.5	NS-RP	SST	NH-NS	E	SWR-T	1	2023
CHENANGO 25	B	10.20	8.0	NH-NS	PT	NH	E			
CHENANGO 25	B	10.30	12.2	RP	SST	NH	E	SWR-T	2	2023
CHENANGO 25	B	10.40	4.6	NH	S-S	NH	E			
CHENANGO 25	B	10.50	10.9	RP-NS	SST	NH-NS	E	SWR-T	1	2023
CHENANGO 25	B	10.60	2.1	NH	S-S	NH	E			
CHENANGO 25	B	10.70	2.6	RP-NS	SST	NS-NH	ZR			
CHENANGO 25	B	11.00	4.9	NS	SST	NH-NS	E	SWR-T	1	2023
CHENANGO 25	B	12.10	6.2	NH	S-S	NH	E			
CHENANGO 25	B	12.20	16.8	RP	SST	NH	E	SWR-T	2	-
CHENANGO 25	B	13.00	21.4	NH-NS	PT	NH	ZR			
CHENANGO 25	B	14.00	40.1	NS-RP	SST	NS-NH	E	SWR-T	1	2016
CHENANGO 25	B	15.10	73.6	NS	SST	NS-NH	E	SWR-T	1	2034

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 25	B	15.20	14.5	NS-RP	SST	NS-NH	E	SWR-T	1	2034
CHENANGO 25	B	15.30	2.3	NH	PT	NH	U	ST	1	2034
CHENANGO 25	B	15.40	0.6	NH	PT	NS-NH	ZR			
CHENANGO 25	B	16.10	25.8	NS	SST	NS-NH	E	SWR-T	1	2034
CHENANGO 25	B	16.20	5.8	NS	MST	NS-NH	E	H-SWR-T	1	2034
CHENANGO 25	B	17.10	10.9	NH	SST	NH	U	ST-GS	1	2034
CHENANGO 25	B	17.20	2.1	NH-RP	SST	NH	ZR			
CHENANGO 25	B	18.10	7.0	NS-NH	SST	NS-NH	ZR			
CHENANGO 25	B	18.20	2.6	NH	SST	NH	ZH			
CHENANGO 25	B	19.00	7.6	NH	PT	NH	U	ST/GS	1	2024
CHENANGO 25	B	20.00	10.5	NH	SST	NH	U	ST/GS	1	2024
CHENANGO 25	C	1.10	17.9	NS-JL	SST	NH-NS	E	SWR-T	1	2027
CHENANGO 25	C	1.20	7.1	NS-RP	SST	NH	E	H-SWR-T	2	2027
CHENANGO 25	C	1.30	1.4	OF	Null	OF	OF			
CHENANGO 25	C	2.00	10.7	NH-HEM	SST	NH-HEM	U	ST/GS	2	-
CHENANGO 25	C	3.10	7.4	NS-RP	SST	NS	ZW			
CHENANGO 25	C	3.20	1.1	RP-NS	SST	NS-RP	ZR			
CHENANGO 25	C	4.00	19.9	NS-NH	SST	NH-NS	UVR			
CHENANGO 25	C	5.10	19.9	NS	SST	NS-RP	E	SWR-T	1	2027
CHENANGO 25	C	5.20	8.5	NH	S-S	NH	E			
CHENANGO 25	C	5.30	1.7	NH	SST	NH	E	FW	3	-
CHENANGO 25	C	6.10	7.1	NH-HEM	PT	NH-HEM	ZA			
CHENANGO 25	C	6.20	7.4	NH-HEM	PT	NH-HEM	ZR			
CHENANGO 25	C	7.10	60.5	NH	PT	NH	NA			
CHENANGO 25	C	7.20	1.9	NS	PT	NS	ZA			
CHENANGO 25	C	8.10	25.5	SP-RP	SST	NH	E	SWR-T	2	-
CHENANGO 25	C	8.20	7.1	NH-SP	SST	NH	E	SWR-T	2	-
CHENANGO 25	C	9.00	24.6	RP	SST	NH	E	SWR-T	1	2031

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 25	C	10.10	11.1	NH	S-S	NH	E			
CHENANGO 25	C	10.20	1.1	NH	MST	NH	U	STS	1	2024
CHENANGO 25	C	11.00	3.4	NH	PT	NH	E			
CHENANGO 25	C	12.00	20.2	NH	SST	NH	U	ST/GS	1	2034
CHENANGO 25	C	13.00	5.9	NH	S-S	NH	E			
CHENANGO 25	C	14.10	25.0	SP-NH	SST	NH	U	SWR-T	2	-
CHENANGO 25	C	14.20	1.8	NH	PT	NH	U	ST/GS	1	2034
CHENANGO 25	C	15.10	12.9	NS-NH	MST	NS-NH	U	SPT	1	2030
CHENANGO 25	C	15.20	10.9	RP-NS	SST	NH-NS	E	SWR-T	1	2030
CHENANGO 25	C	15.30	3.9	SP-NH	SST	NH	ZR			
CHENANGO 25	C	16.00	1.6	WET-O	Null	WET-O	ZW			
CHENANGO 25	C	17.00	9.0	WS	PT	NH	ZR			
CHENANGO 25	C	18.00	24.0	NS-RP	SST	NS-NH	E	SWR-T	1	2030
CHENANGO 25	C	19.10	9.7	NH	PT	NH	U	ST	1	2034
CHENANGO 25	C	19.20	8.0	NH-PH	PT	NH	E	GS	1	2034
CHENANGO 25	C	19.30	3.6	NH	PT	NH	ZR			
CHENANGO 25	C	19.40	2.0	PH	S-S	PH	ES			
CHENANGO 25	C	20.00	11.2	HEM	SST	HEM	ZR			
CHENANGO 25	C	21.00	1.5	NH-APP	PT	NH-APP	ZH			
MADISON 02	A	1.00	12.8	NH-HEM	SST	NH-HEM	ZW			
MADISON 02	A	2.10	16.7	NH-HEM	SST	NH-HEM	ZS			
MADISON 02	A	2.20	8.5	NH	SST	NH	U	ST	3	-
MADISON 02	A	3.10	11.7	RP-NH	SST	NH-RP	EVR	SWR	3	2025
MADISON 02	A	3.20	7.4	NH-PH	PT	NH-PH	ZR			
MADISON 02	A	3.30	10.0	RP	SST	NH	E	RT	1	2025
MADISON 02	A	3.40	17.0	RP	SST	NH-NS	E	H-SWR-T	2	2025
MADISON 02	A	4.10	17.7	RP-NS	SST	NS-NH	E	SWR-T	1	2025

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
MADISON 02	A	4.20	2.0	BR	Null	BR	ZH			
MADISON 02	A	4.30	3.4	NS	SST	NS-NH	E	SPT	1	2018
MADISON 02	A	5.10	2.1	NH	PT	NH	E	FW	3	-
MADISON 02	A	5.20	25.5	NH	SST	NH	U	GS	1	2021
MADISON 02	A	6.10	0.8	WS	PT	NH	E			
MADISON 02	A	6.20	5.4	NH	SST	NH	E			
MADISON 02	A	7.00	18.2	NH-HEM	SST	NH-HEM	U	ST/FW	2	2021
MADISON 02	A	8.10	6.4	NH	PT	NH	E	SW	2	
MADISON 02	A	8.20	26.0	NH	SST	NH	E	FW	2	
MADISON 02	A	9.00	16.9	NS	MST	NS-NH	E	SWR-T	1	2018
MADISON 02	A	10.00	10.3	WET-A	Null	WET-A	ZW			
MADISON 02	A	11.00	12.4	NS	MST	NS-NH	EVR	SWR-T	1	2018
MADISON 02	A	12.10	10.2	NH	S-S	NH	E			
MADISON 02	A	12.20	1.7	NH	PT	NH	E	FW	2	2017
MADISON 02	A	12.30	2.0	RP	SST	NH	E	CT	2	2025
MADISON 02	A	13.00	3.7	POND	Null	PD	PD			
MADISON 02	A	14.10	4.6	NH-HEM	PT	NH-HEM	ZR			
MADISON 02	A	14.20	10.2	NH-HEM	PT	NH-HEM	U	GS	2	2021
MADISON 02	A	14.30	22.8	NH-HEM	SST	NH-HEM	U	GS	2	2021
MADISON 02	A	14.40	7.7	NH-HEM	SST	NH-HEM	U	GS	2	2021
MADISON 02	A	15.00	6.8	NS	SST	NS-NH	E	SWR-T	2	2018
MADISON 02	A	16.00	11.7	NS	SST	NS-NH	E	SPT	1	2018
MADISON 02	A	17.00	1.8	POND	Null	PD	PD			
MADISON 02	A	18.00	7.0	NH-HEM	PT	NH-HEM	ZR			
MADISON 02	A	19.10	1.9	NH	SST	NH	E			
MADISON 02	A	19.20	5.2	NH	PT	NH-NS	E			
MADISON 02	A	19.30	16.6	NH	S-S	NH-NS	E			
MADISON 02	A	20.10	8.7	NS	SST	NS-NH	E	SWR	2	2033

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
MADISON 02	A	20.20	3.6	NH	PT	NH	ZR			
MADISON 02	A	20.30	48.1	NS	SST	NS-NH	E	SWR-T	1	2023
MADISON 02	A	21.00	13.4	NH	PT	NH	E	CT	4	-
MADISON 02	A	22.00	8.1	NS-NH	SST	NS-NH	ZR			
MADISON 02	A	23.00	17.7	RP	SST	NS-NH	E	H-CC-PT	4	-
MADISON 02	A	24.00	2.4	NS	SST	NS-NH	E	H-SWR-T	3	-
MADISON 02	A	25.00	9.5	NH-NS	PT	NH-NS	E	H-FW	3	-
MADISON 02	A	26.00	17.0	NS	SST	NS-NH	E	SWR-T	1	2033
MADISON 02	A	27.00	6.2	NS	MST	NH-NS	E	SPT	1	2033
MADISON 02	A	28.00	0.6	NS-NH	LST	NS-NH	ZR			
MADISON 02	A	29.00	7.8	RP	SST	NH-NS	E	SWR-T	1	2033
MADISON 02	A	30.00	6.0	NH	PT	NH-NS	E	FW	1	-
MADISON 02	A	31.20	2.2	RP	PT	RP	E	--		
MADISON 02	A	32.00	23.6	NH	SST	NH	U	GS	1	2027
MADISON 02	A	33.00	3.5	SP	SST	NH	E	SWR	2	2025
MADISON 02	A	34.00	10.5	RP	SST	NH	U	SWR-T	1	2025
MADISON 02	A	35.10	0.8	NH-RP	LST	NH	ZR			
MADISON 02	A	35.20	7.8	NS	MST	NS	EVR	SPT	3	-
MADISON 02	A	36.00	5.9	LA-NH	S-S	NH-LA	E			
MADISON 02	A	37.10	1.2	WET-A	Null	WET-A	ZW			
MADISON 02	A	37.20	0.6	POND	Null	PD	PD			
MADISON 02	A	38.10	4.8	NH-HEM	SST	NH-HEM	ZS			
MADISON 02	A	38.20	3.2	NH-HEM	SST	NH-HEM	ZW			
MADISON 02	A	38.30	23.8	NH	SST	NH	U	GS	1	2027
MADISON 02	A	46.00	46.5	NS	MST	NS-NH	E	SWR-T	1	2023
MADISON 07	A	1.00	22.1	NH	SST	NH	E	H-ST/GS	2	-
MADISON 07	A	2.10	38.2	RP-NS	SST	NS-NH	E	SWR-T	1	2025

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
MADISON 07	A	2.20	5.8	NS	MST	NS-NH	ZR			
MADISON 07	A	2.30	19.8	NS	LST	NS-NH	E	SWR-T	1	2025
MADISON 07	A	2.40	1.1	NS	Old Field	NS-OF	ZH			
MADISON 07	A	2.50	5.8	NH-PH	S-S	NH-PH	E			
MADISON 07	A	2.60	3.2	NH-PH	S-S	NH-PH	E			-
MADISON 07	A	2.70	17.2	NS	MST	NS-NH	E	SWR-T	1	2025
MADISON 07	A	2.80	4.1	NH	S-S	NH	E			
MADISON 07	A	2.90	28.5	NS	MST	NS-NH	E	SWR-T	1	2025
MADISON 07	A	3.00	4.4	WET-A	Null	PH	ZW			
MADISON 07	A	4.00	9.0	NH-HEM	SST	NH-HEM	U	FW	1	2020
MADISON 07	A	5.10	0.9	NH-HEM	PT	NH-HEM	ZS			
MADISON 07	A	5.20	3.1	NH-HEM	MST	NH-HEM	U	ST	2	-
MADISON 07	A	5.30	1.7	NH	SST	NH	ZS			
MADISON 07	A	5.40	88.2	NH	SST	NH	E	H-ST/GS	2	2020
MADISON 07	A	6.00	9.0	NH	S-S	NH	E			-
MADISON 07	A	7.11	9.0	NS-RP	SST	NS-NH	ZR			
MADISON 07	A	7.12	1.0	NH-PH	S-S	NH-PH	E			
MADISON 07	A	7.20	3.3	PH-NH	SST	PH-NH	ZR			
MADISON 07	A	7.30	2.8	NS-RP	SST	NH	E	SW	1	2020
MADISON 07	A	7.40	0.8	WET-A	Null	WET-A	ZW			
MADISON 07	A	7.51	2.5	WS	SST	NH	E	SPT	2	2020
MADISON 07	A	7.52	3.8	RP	SST	NH	E	RT	1	2020
MADISON 07	A	7.53	3.0	NH	S-S	NH	E			-
MADISON 07	A	7.60	13.8	NH	SST	NH	ZR			
MADISON 07	A	7.71	6.9	NS	PT	NS-NH	E	SPT	3	-
MADISON 07	A	7.72	3.3	NH	SST	NH	E			-
MADISON 07	A	7.73	1.2	NS	SST	NS-NH	E	SPT	3	-
MADISON 07	A	8.10	0.6	OF	Null	LA	E	PT	1	

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
MADISON 07	A	8.20	136.0	NS	MST	NS-NH	E	H-SWR-T	2	2019
MADISON 07	A	9.00	2.1	APP	Null	BR	ZH			
MADISON 07	A	10.00	3.9	NH	PT	NH	ZR			
MADISON 07	A	11.10	2.8	NH	SST	NH	E	FW	1	2024
MADISON 07	A	11.20	2.5	NH	SST	NH	E	IN	1	2024
MADISON 07	A	12.10	3.6	NH-HEM	SST	NH-HEM	U	ST/GS	2	-
MADISON 07	A	12.20	0.8	NH-HEM	LST	NH-HEM	ZS			
MADISON 07	A	12.30	1.5	NH	MST	NH	ZS			
MADISON 07	A	12.40	21.6	NH	SST	NH	U	ST/GS	2	2024
MADISON 07	A	13.10	4.2	NH-HEM	SST	NH-HEM	ZR			
MADISON 07	A	13.20	18.6	NH	SST	NH	U	IN/GS	1	2024
MADISON 07	A	14.00	0.5	NH	SST	NH	E	IN	1	2024
MADISON 07	A	15.00	16.1	NH	S-S	NH	U			-
MADISON 07	A	16.00	15.2	NH	SST	NH	E	SW	1	2022
MADISON 07	A	17.00	29.8	NH	SST	NH	U	ST/GS	1	2022
MADISON 07	A	18.10	13.7	NH-HEM	SST	NH-HEM	ZA			
MADISON 07	A	18.20	11.2	NH-HEM	SST	NH-HEM	ZR			
MADISON 07	A	19.00	7.4	NH	MST	NH	ZS			
MADISON 07	A	20.10	10.0	NH-HEM	SST	NH-HEM	U	ST/GS	2	2028
MADISON 07	A	20.20	4.3	NH-PH	SST	PH	E	FW/CC	2	-
MADISON 07	A	20.30	2.0	NH-HEM	MST	NH-HEM	ZR			
MADISON 07	A	20.40	6.3	NH	SST	NH	ZR			
MADISON 07	A	20.50	25.5	NH	SST	NH	U	ST/GS	2	2028
MADISON 07	A	20.60	7.2	NH-HEM	SST	NH-HEM	U	ST/GS	2	-
MADISON 07	A	20.70	19.2	NH-PH	SST	NH	E	IN	2	-
MADISON 07	A	20.80	34.7	NH	SST	NH	U	SW/GS	1	2028
MADISON 07	A	21.10	1.0	NH-NS	MST	NH-NS	ZH			
MADISON 07	A	21.20	5.7	RP	SST	NH	E	SWR-T	1	2020

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
MADISON 07	A	22.00	17.0	NH	SST	NH	E	H-IN	3	-
MADISON 07	A	23.10	9.0	RP	SST	NH	E	SWR-T	1	2020
MADISON 07	A	23.20	23.3	RP	SST	NH	E	SWR-T	2	2020
MADISON 08	A	1.00	30.6	NH	SST	NH	E	FW	2	2030
MADISON 08	A	2.00	4.1	NH-SP	SST	NH	U	ST/GS	2	2026
MADISON 08	A	3.00	0.8	NH-SP	PT	NH	E			-
MADISON 08	A	4.00	4.5	NH-HEM	PT	NH-HEM	ZW			
MADISON 08	A	5.00	19.9	NH-PH	S-S	NH	E			-
MADISON 08	A	6.00	65.7	NH	SST	NH	U	ST/GS	1	2018
MADISON 08	A	7.00	25.9	NH-HEM	PT	NH-HEM	ZW			
MADISON 08	A	8.00	11.3	RP-NS	SST	NH-NS	E	SW	1	2026
MADISON 08	A	9.00	48.8	RP-NS	PT	NH-NS	E	SWR	1	-
MADISON 08	A	10.00	13.7	NH-HEM	PT	NH-HEM	ZR			
MADISON 08	A	11.00	32.2	NH	PT	NH	E	FW/CC	1	2026
MADISON 08	A	12.00	3.4	OF-APP-PH	Null	OF-APP	OF	RA	1	-
MADISON 08	A	13.00	13.9	NH	PT	NH	U	ST/GS/CC	2	2030
MADISON 08	A	14.00	17.5	NH	PT	NH	U	ST/GS	3	2030
MADISON 08	A	15.00	1.6	RP-NS	SST	NH	E	SW	3	2017
MADISON 08	A	16.00	5.8	NH-BL	MST	NH	U	IN	2	-
MADISON 08	A	17.00	7.7	NH	SST	NH	U	IN	2	2026
MADISON 08	A	18.00	15.1	RP-NS	MST	NH-NS	E	SWR	1	2017
MADISON 08	A	19.00	9.1	NH-NS	S-S	NH-NS	EVR			-
MADISON 08	A	20.00	4.0	BR	S-S	NH	E			-
MADISON 08	A	21.00	5.6	POND	Null	PD	ZW			
MADISON 08	A	22.00	8.8	NH	SST	NH	U	IN	2	2031
MADISON 08	A	23.00	16.0	NH-NS	SST	NH-NS	E	IN	2	2031
MADISON 08	A	24.00	5.1	NS-RP	SST	NH-NS	E	SPT/RT	2	2017

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
MADISON 08	A	25.00	16.6	NH	SST	NH	U	ST/GS	2	2031
MADISON 08	A	26.00	20.2	NH-HEM	SST	NH-HEM	U	H-ST/GS	3	-
MADISON 08	A	27.10	7.2	NS	PT	NS-NH	E	SPT	3	-
MADISON 08	A	27.20	1.8	NH-NS	S-S	NH-NS	E			-
MADISON 08	A	28.10	12.2	NS	SST	NS-NH	E	SWR-T	3	-
MADISON 08	A	28.20	11.8	NH	S-S	NH	E			-
MADISON 08	A	29.00	13.3	NH	SST	NH	U	ST/GS	3	-
MADISON 08	A	30.00	2.3	RP	SST	NH	E	H-SWR-T	4	-
MADISON 08	A	31.00	13.2	RP	SST	NH	E	H-SWR-T	4	-
MADISON 08	A	32.10	69.7	NH	PT	NH	U	ST/GS	1	2018
MADISON 08	A	32.20	5.1	NH	PT	NH	ZR			
MADISON 08	A	33.00	8.4	SP-WP	SST	NH-WP	EVR	RT	2	2026
MADISON 08	A	34.00	7.8	NH-PH	S-S	PH	ZW			
MADISON 08	A	35.00	13.2	NH	S-S	NH	E			-
MADISON 08	A	36.00	1.6	NH	SST	NH	E	FW	1	2026
MADISON 08	A	37.00	2.0	NH-NS	MST	NH-NS	E			-
MADISON 08	A	38.00	22.7	NH-HEM	SST	NH-HEM	ZR			
MADISON 08	A	39.00	4.2	NH-NS	PT	NH-NS	ZR			
MADISON 08	A	40.00	6.3	NH	PT	NH	ZR			
MADISON 08	A	41.00	1.4	NH	PT	NH	E	FW	3	-
MADISON 08	A	42.00	3.5	NS-RP	SST	NS-NH	E	RT	2	2017
MADISON 08	A	43.00	7.0	NH	S-S	NH	E			-
MADISON 08	A	44.00	21.8	NS-RP	SST	NH	E		1	-
MADISON 08	A	45.00	14.3	NH-HEM	SST	NH-HEM	U	GS	1	2031
MADISON 08	A	46.00	5.6	NS-RP	SST	NH-NS	E	SPT/RT	2	2017
MADISON 08	A	47.00	3.8	RP-NS	PT	NS-NH	ZR			
MADISON 08	A	48.00	10.9	NS-PH	SST	NS-PH	ZR			
MADISON 08	A	49.00	6.5	NH-BL	PT	NH	E	FW	2	-

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
MADISON 08	A	50.00	1.4	RP	PT	NH	E	SW	2	-
MADISON 08	A	51.00	2.8	OF	Null	RP	E			-
MADISON 08	A	52.00	2.2	NH-HEM	SST	NH-HEM	ZW			
MADISON 08	A	53.00	5.4	NS-RP	SST	NH	E	SW	3	-

Table of Schedule of Stand Treatments

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 02	A	4.10	7.5	WP	SST	WP-NH	U	RT/FW	3	2016
CHENANGO 21	A	59.00	35.6	NS	MST	NS-NH	EVR	SPT-VIH	1	2016
CHENANGO 23	A	23.00	22.3	NS	SST	NH-NS	E	SPT	1	2016
CHENANGO 23	A	24.10	13.2	NS	SST	NH-NS	E	SPT	1	2016
CHENANGO 25	A	5.00	4.2	NH	SST	NH	E	FW	1	2016
CHENANGO 25	B	14.00	40.1	NS-RP	SST	NS-NH	E	SWR-T	1	2016
CHENANGO 02	C	2.00	9.7	WP	SST	NH-WP	EVR	SWR-T	2	2016
CHENANGO 02	C	3.00	11.3	RP	PT	NH	E	SWR-T	1	2016
CHENANGO 02	C	4.10	10.5	SP	SST	NH	EVR	SWR-T	2	2016
CHENANGO 02	C	5.00	13.1	JL	SST	NH	E	RT	1	2016
CHENANGO 02	C	6.00	10.4	RP	SST	NH	E	RT	1	2016
CHENANGO 02	D	5.00	3.5	NS	SST	NH	E	SWR-T	2	2016
CHENANGO 02	D	6.00	10.3	NS	SST	NH	E	SPT	2	2016
CHENANGO 02	D	7.00	4.2	NH	PT	NH	U	ST/GS	2	2016
CHENANGO 02	D	15.10	51.2	NS	SST	NS-NH	E	SPT	1	2016
CHENANGO 02	D	23.00	19.3	NS	SST	NH-NS	E	SWR-T	1	2016
CHENANGO 18	B	21.00	65.0	NS	PT	NS-NH	E	SPT	1	2017
CHENANGO 23	B	12.00	23.8	NS	SST	NS-NH	E	SPT	1	2017

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 23	B	14.00	13.2	NS	SST	NS-NH	E	SPT	1	2017
CHENANGO 23	B	16.00	40.2	NS-NH	SST	NH-NS	U	SWR-T	2	2017
CHENANGO 23	B	19.00	130.9	NS	SST	NS-NH	EVR	SPT	1	2017
CHENANGO 23	B	21.10	7.0	NS	SST	NS-NH	E	SPT	2	2017
CHENANGO 23	B	21.20	2.5	NS	PT	NS-NH	E	SPT	2	2017
MADISON 02	A	12.20	1.7	NH	PT	NH	E	FW	2	2017
MADISON 08	A	15.00	1.6	RP-NS	SST	NH	E	SW	3	2017
MADISON 08	A	18.00	15.1	RP-NS	MST	NH-NS	E	SWR	1	2017
MADISON 08	A	24.00	5.1	NS-RP	SST	NH-NS	E	SPT/RT	2	2017
MADISON 08	A	42.00	3.5	NS-RP	SST	NS-NH	E	RT	2	2017
MADISON 08	A	46.00	5.6	NS-RP	SST	NH-NS	E	SPT/RT	2	2017
CHENANGO 18	A	47.00	25.2	NS	SST	NS-NH	E	SWR-T	1	2018
CHENANGO 18	C	2.10	96.2	NS	SST	NS-NH	E	SWR-T	1	2018
CHENANGO 18	C	2.20	1.3	NS	SST	NS-NH	E	SW	1	2018
CHENANGO 23	B	2.00	2.1	NS	SST	NS	E	SPT	1	2018
CHENANGO 23	B	4.10	4.4	NH-NS	SST	NH	E	SWR-T	2	2018
CHENANGO 23	B	4.20	3.9	NS	SST	NS-NH	E	SPT	1	2018
CHENANGO 23	B	4.30	1.8	NS	SST	NS-NH	E	SW	1	2018
CHENANGO 23	B	6.00	45.6	NS	SST	NS-NH	E	SPT	2	2018
CHENANGO 23	B	8.10	45.7	NS	SST	NS-NH	E	SWR-T	1	2018
CHENANGO 25	A	20.10	26.8	RP	SST	NH	E	H-SWR-T	2	2018
CHENANGO 25	A	21.10	44.3	RP-NH	SST	NH	U	SWR-T	2	2018
MADISON 02	A	4.30	3.4	NS	SST	NS-NH	E	SPT	1	2018
MADISON 02	A	9.00	16.9	NS	MST	NS-NH	E	SWR-T	1	2018
MADISON 02	A	11.00	12.4	NS	MST	NS-NH	EVR	SWR-T	1	2018
MADISON 02	A	15.00	6.8	NS	SST	NS-NH	E	SWR-T	2	2018
MADISON 02	A	16.00	11.7	NS	SST	NS-NH	E	SPT	1	2018

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
MADISON 08	A	6.00	65.7	NH	SST	NH	U	ST/GS	1	2018
MADISON 08	A	32.10	69.7	NH	PT	NH	U	ST/GS	1	2018
CHENANGO 18	C	11.00	1.7	RP-NS	SST	NH-NS	UVR	SWR-T	2	2019
CHENANGO 18	C	17.20	5.6	NS	SST	NS-NH	E	SW	1	2019
CHENANGO 18	D	12.10	102.0	NS	SST	NS-NH	E	SWR-T	1	2019
CHENANGO 18	D	12.20	1.2	NS	SST	NS-NH	E	SWR-T	1	2019
CHENANGO 18	D	43.00	28.0	NS	SST	NS-NH	E	SWR-T	1	2019
CHENANGO 23	A	2.00	19.2	RP	SST	NH	EVR	H-SWR-T	1	2019
CHENANGO 23	A	27.10	18.3	RP	PT	NH	E	SWR-T	1	2019
CHENANGO 23	A	38.00	22.1	RP	PT	NH	E	SWR	1	2019
MADISON 07	A	8.20	136.0	NS	MST	NS-NH	E	H-SWR-T	2	2019
CHENANGO 02	D	27.00	23.8	RP-NH	SST	NH	E	SWR	1	2020
CHENANGO 02	D	32.00	4.0	RP	SST	NH	E	SWR-T	1	2020
CHENANGO 02	D	35.00	7.6	RP-NH	SST	NH	E	GS	2	2020
CHENANGO 02	F	34.00	10.7	NH	SST	NH	U	IN	1	2020
CHENANGO 02	F	35.10	4.6	NH	SST	NH	U	ST/GS	1	2020
CHENANGO 18	A	39.10	25.2	NS-LA	PT	NH-NS	E	SPT	1	2020
CHENANGO 18	A	43.00	15.6	NS-NH	PT	NH-NS	E	SPT	1	2020
CHENANGO 18	C	20.00	22.6	NS	SST	NS-NH	E	SWR-T	1	2020
CHENANGO 18	C	36.00	10.0	RP	SST	NH	E	SWR	1	2020
CHENANGO 18	C	45.00	9.2	RP	PT	NH	E	SWR-T	1	2020
CHENANGO 18	C	46.00	8.1	NH-RP	SST	NH	U	SWR-T	1	2020
CHENANGO 18	C	47.00	1.8	RP	SST	NH	E	SWR-T	1	2020
CHENANGO 18	D	39.10	23.9	RP	SST	NH	E	RT	1	2020
CHENANGO 21	A	9.00	6.7	RP	SST	NH	E	H-SWR	2	2020
CHENANGO 21	A	12.00	15.7	RP	SST	NH	E	SW	1	2020

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 21	A	15.00	5.4	RP	SST	NH	E	SW	1	2020
CHENANGO 21	A	32.00	2.6	RP	SST	NH	U	H-SWR-T	2	2020
CHENANGO 21	A	33.00	3.0	RP-NH	SST	NH	E	H-SWR-T	2	2020
CHENANGO 21	A	34.00	19.2	RP	SST	NH	U	SWR-T	1	2020
CHENANGO 21	A	36.00	3.8	RP	SST	NH	E	SWR-T	1	2020
CHENANGO 21	A	37.00	34.8	RP	SST	NH	E	SWR-T	1	2020
CHENANGO 21	A	41.00	33.4	RP-NH	SST	NH	E	SWR-T	1	2020
CHENANGO 25	A	16.10	28.8	NH	SST	NH	U	ST/GS	1	2020
MADISON 07	A	4.00	9.0	NH-HEM	SST	NH-HEM	U	FW	1	2020
MADISON 07	A	5.40	88.2	NH	SST	NH	E	H-ST/GS	2	2020
MADISON 07	A	7.30	2.8	NS-RP	SST	NH	E	SW	1	2020
MADISON 07	A	7.51	2.5	WS	SST	NH	E	SPT	2	2020
MADISON 07	A	7.52	3.8	RP	SST	NH	E	RT	1	2020
MADISON 07	A	21.20	5.7	RP	SST	NH	E	SWR-T	1	2020
MADISON 07	A	23.10	9.0	RP	SST	NH	E	SWR-T	1	2020
MADISON 07	A	23.20	23.3	RP	SST	NH	E	SWR-T	2	2020
CHENANGO 02	A	28.00	4.2	NH	SST	NH	U	FW	1	2021
CHENANGO 20	A	18.30	40.9	NS-LA	SST	NS-NH	E	SWR-T	1	2021
CHENANGO 20	C	2.00	34.2	NH	SST	NH	U	ST/GS	1	2021
CHENANGO 20	C	11.00	28.6	NH	SST	NH	U	ST/GS	1	2021
CHENANGO 20	C	12.00	35.6	NH	SST	NH	U	ST/GS	1	2021
CHENANGO 20	C	14.00	40.0	NH	SST	NH	U	ST/GS	1	2021
CHENANGO 25	A	6.00	26.0	RP	PT	NH	E	RT	1	2021
CHENANGO 25	A	8.50	2.3	RP	SST	NH	E	SW	1	2021
CHENANGO 25	A	10.00	7.2	WS	SST	NH	E	SWR-T	1	2021
CHENANGO 25	A	11.00	23.4	RP-WS	SST	NH	E	SWR-T	1	2021
CHENANGO 25	B	1.20	2.2	RP	SST	NH	E	SWR-T	1	2021

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 25	B	3.10	24.3	RP	PT	NH	E	SWR-T	1	2021
CHENANGO 25	B	3.20	1.9	WS-RP	SST	NH	U	SPT	2	2021
MADISON 02	A	5.20	25.5	NH	SST	NH	U	GS	1	2021
MADISON 02	A	7.00	18.2	NH-HEM	SST	NH-HEM	U	ST/FW	2	2021
MADISON 02	A	14.20	10.2	NH-HEM	PT	NH-HEM	U	GS	2	2021
MADISON 02	A	14.30	22.8	NH-HEM	SST	NH-HEM	U	GS	2	2021
MADISON 02	A	14.40	7.7	NH-HEM	SST	NH-HEM	U	GS	2	2021
CHENANGO 20	B	3.10	73.0	RP	SST	NH	E	SWR-T	2	2022
CHENANGO 20	B	4.00	6.0	NH	SST	NH	U	IN	2	2022
CHENANGO 20	B	10.10	30.8	RP	SST	RP	E	SWR-T	1	2022
CHENANGO 20	B	10.20	2.1	RP-NH	SST	NH	E	SW	1	2022
CHENANGO 20	B	10.30	1.2	NH	PT	NH	E	TSI	1	2022
CHENANGO 20	B	17.00	10.0	RP	SST	NH	E	SWR-T	1	2022
CHENANGO 20	C	1.40	187.0	NS-LA	SST	NS-NH	EVR	SWR-T	1	2022
CHENANGO 25	A	16.20	6.8	NH-HEM	PT	NH-HEM	U	ST/GS	1	2022
CHENANGO 25	A	20.20	2.0	NH	SST	NH	U	IN	1	2022
MADISON 07	A	16.00	15.2	NH	SST	NH	E	SW	1	2022
MADISON 07	A	17.00	29.8	NH	SST	NH	U	ST/GS	1	2022
CHENANGO 02	A	5.00	7.8	NH-WP	SST	NH-WP	UVR	H-ST	2	2023
CHENANGO 02	A	25.00	3.0	RP	SST	NH	E	SW	1	2023
CHENANGO 02	A	27.00	64.0	RP	SST	NH	E	SWR-T	1	2023
CHENANGO 02	A	30.10	21.9	RP	SST	NH	E	SWR-T	1	2023
CHENANGO 02	A	30.30	3.0	WP	SST	NH-WP	E	EVR	1	2023
CHENANGO 02	C	8.00	10.5	RP	PT	NH	E	RT	1	2023
CHENANGO 02	C	15.00	1.5	RP	PT	NH	E	RT	2	2023
CHENANGO 02	D	39.00	6.9	NH-NS	SST	NH-NS	E	SWR-T	2	2023

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 02	D	40.00	57.8	NS	SST	NS-NH	E	SWR-T	1	2023
CHENANGO 02	F	14.00	33.6	NH	MST	NH	U	ST/GS	2	2023
CHENANGO 23	A	11.00	25.7	NH	PT	NH	U	H-ST/GS	2	2023
CHENANGO 23	A	26.00	15.2	NH	SST	NH	U	ST/GS	1	2023
CHENANGO 23	A	32.10	9.8	NH	SST	NH	U	ST/GS	1	2023
CHENANGO 25	A	3.00	4.9	NH	LST	NH	UVR	ST/GS	1	2023
CHENANGO 25	A	9.00	2.0	NH	SST	NH	UVR	H-ST	1	2023
CHENANGO 25	A	12.00	4.7	NH	PT	NH	UVR	ST/GS	1	2023
CHENANGO 25	A	17.30	1.0	NS	SST	NH	EVR	SWR	1	2023
CHENANGO 25	A	21.30	1.7	RP	SST	NH	E	SWR-T	2	2023
CHENANGO 25	B	10.10	32.5	NS-RP	SST	NH-NS	E	SWR-T	1	2023
CHENANGO 25	B	10.30	12.2	RP	SST	NH	E	SWR-T	2	2023
CHENANGO 25	B	10.50	10.9	RP-NS	SST	NH-NS	E	SWR-T	1	2023
CHENANGO 25	B	11.00	4.9	NS	SST	NH-NS	E	SWR-T	1	2023
MADISON 02	A	20.30	48.1	NS	SST	NS-NH	E	SWR-T	1	2023
MADISON 02	A	46.00	46.5	NS	MST	NS-NH	E	SWR-T	1	2023
CHENANGO 02	B	13.10	6.6	NH	PT	NH	E	FW	1	2024
CHENANGO 02	B	32.00	8.6	RP	SST	NH	E	SWR-T	1	2024
CHENANGO 02	B	33.10	32.0	JL-WP	SST	NH	E	SWR-T	1	2024
CHENANGO 02	C	21.00	3.9	RP	SST	NH-WP	EVR	SWR-T	2	2024
CHENANGO 18	B	32.00	24.9	NH	SST	NH	U	ST/GS	1	2024
CHENANGO 18	B	36.00	22.2	NH-HEM	SST	NH-HEM	U	ST/GS	1	2024
CHENANGO 23	B	5.00	18.5	NH	SST	NH	E	H-SW	3	2024
CHENANGO 25	A	18.20	5.7	NH	SST	NH	U	GS	1	2024
CHENANGO 25	B	2.20	3.5	NH	PT	NH	E	IN	1	2024
CHENANGO 25	B	2.30	2.1	NH	SST	NH	E	IN	1	2024
CHENANGO 25	B	6.10	121.3	NH	PT	NH	U	H-ST/GS	2	2024

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 25	B	6.20	20.8	NH	PT	NH	U	H-ST/GS	2	2024
CHENANGO 25	B	9.10	17.4	NH	PT	NH	U	ST/GS	1	2024
CHENANGO 25	B	9.20	3.2	NH	SST	NH	U	ST/GS	1	2024
CHENANGO 25	B	19.00	7.6	NH	PT	NH	U	ST/GS	1	2024
CHENANGO 25	B	20.00	10.5	NH	SST	NH	U	ST/GS	1	2024
CHENANGO 25	C	10.20	1.1	NH	MST	NH	U	STS	1	2024
MADISON 07	A	11.10	2.8	NH	SST	NH	E	FW	1	2024
MADISON 07	A	11.20	2.5	NH	SST	NH	E	IN	1	2024
MADISON 07	A	12.40	21.6	NH	SST	NH	U	ST/GS	2	2024
MADISON 07	A	13.20	18.6	NH	SST	NH	U	IN/GS	1	2024
MADISON 07	A	14.00	0.5	NH	SST	NH	E	IN	1	2024
CHENANGO 02	A	12.00	22.6	JL	PT	NH	E	SWR-T	1	2025
CHENANGO 02	B	9.10	3.3	JL	SST	NH	E	RT	1	2025
CHENANGO 02	B	9.20	2.1	NH	SST	NH	E	FW	2	2025
CHENANGO 02	B	10.00	1.3	JL	SST	NH	E	SWR-T	2	2025
CHENANGO 02	D	9.00	12.6	NH	SST	NH	U	ST/GS	2	2025
CHENANGO 02	D	10.10	48.1	NH	SST	NH	U	H-ST/GS	2	2025
CHENANGO 02	E	19.00	7.1	NS	SST	NS-NH	E	SWR-T	1	2025
CHENANGO 02	E	20.00	6.3	WS	SST	NS-NH	E	SWR-T	1	2025
CHENANGO 02	E	29.10	19.0	RP-NH	PT	NH	E	SWR-T	1	2025
CHENANGO 02	E	30.00	11.6	RP	SST	NH	E	SWR-T	1	2025
CHENANGO 02	E	31.00	9.7	NS-RP	PT	NH	E	SPT	1	2025
CHENANGO 02	E	54.00	22.0	RP-EL	SST	NH	U	SWR-T	1	2025
CHENANGO 18	B	9.10	33.3	NS	SST	NS-NH	E	SPT	2	2025
CHENANGO 18	B	9.20	5.2	NS	SST	NS-NH	E	SPT	2	2025
CHENANGO 18	B	9.30	2.5	NS	SST	NS-NH	E	SPT	1	2025
CHENANGO 20	A	22.10	13.2	NH	PT	NH	U	GS	2	2025

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 20	A	24.00	7.8	NH	SST	NH	U	GS	1	2025
CHENANGO 20	C	20.00	5.1	NH	SST	NH	UVR	ST/GS	2	2025
CHENANGO 20	C	26.10	10.6	NH	SST	NH	U	IN	1	2025
CHENANGO 20	C	26.20	3.7	NH	SST	NH	U	ST/GS	1	2025
CHENANGO 20	C	28.10	13.8	NH	MST	NH	U	ST/GS	1	2025
CHENANGO 20	C	28.20	6.8	NH	MST	NH	U	ST/GS	1	2025
CHENANGO 23	A	16.10	29.7	RP-NS	SST	NH	E	SWR-T	2	2025
CHENANGO 23	A	16.20	5.3	NS-RP	SST	NH-NS	E	SWR-T	2	2025
CHENANGO 23	A	16.30	4.7	RP-NS	SST	E	E	SWR-T	2	2025
CHENANGO 23	A	16.40	2.8	RP-NS	SST	E	E	SWR-T	2	2025
CHENANGO 23	A	16.60	2.8	NS-RP	SST	NH-NS	E	SWR-T	2	2025
CHENANGO 23	A	20.00	4.6	RP	SST	NH	E	SWR-T	1	2025
CHENANGO 23	A	43.00	1.1	NS	SST	NH	E	SPT	1	2025
MADISON 02	A	3.10	11.7	RP-NH	SST	NH-RP	EVR	SWR	3	2025
MADISON 02	A	3.30	10.0	RP	SST	NH	E	RT	1	2025
MADISON 02	A	3.40	17.0	RP	SST	NH-NS	E	H-SWR-T	2	2025
MADISON 02	A	4.10	17.7	RP-NS	SST	NS-NH	E	SWR-T	1	2025
MADISON 02	A	12.30	2.0	RP	SST	NH	E	CT	2	2025
MADISON 02	A	33.00	3.5	SP	SST	NH	E	SWR	2	2025
MADISON 02	A	34.00	10.5	RP	SST	NH	U	SWR-T	1	2025
MADISON 07	A	2.10	38.2	RP-NS	SST	NS-NH	E	SWR-T	1	2025
MADISON 07	A	2.30	19.8	NS	LST	NS-NH	E	SWR-T	1	2025
MADISON 07	A	2.70	17.2	NS	MST	NS-NH	E	SWR-T	1	2025
MADISON 07	A	2.90	28.5	NS	MST	NS-NH	E	SWR-T	1	2025
CHENANGO 02	B	18.10	31.9	JL	SST	NH	E	SWR-T	1	2026
CHENANGO 02	B	18.20	13.5	JL	SST	NH	E	SWR-T	1	2026
CHENANGO 02	E	14.00	10.1	RP-NH	SST	NH-RO	E	RT	1	2026

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 02	E	18.00	2.9	RP	SST	NH	E	SW	1	2026
CHENANGO 02	F	43.00	6.0	RP-NH	PT	NH	E	SWR-T	1	2026
CHENANGO 20	A	7.00	4.7	NH	SST	NH	E	IN	1	2026
CHENANGO 20	A	8.00	10.7	NH	SST	NH	U	GS	1	2026
CHENANGO 20	A	10.10	22.8	NH	SST	NH	U	ST/GS	1	2026
CHENANGO 20	A	10.20	6.0	NH	SST	NH	U	ST/GS	1	2026
CHENANGO 20	A	13.00	9.6	NH	SST	NH	E	IN	1	2026
CHENANGO 20	A	15.10	4.9	NH-WP	SST	NH-WP	U	GS	1	2026
CHENANGO 20	A	15.30	5.2	NH	SST	NH-WP	E	ST/GS	1	2026
CHENANGO 20	B	11.00	13.4	NH	SST	NH	U	ST/GS	1	2026
CHENANGO 20	B	13.10	26.4	NH	SST	NH	U	H-ST/GS	2	2026
CHENANGO 20	B	13.20	18.4	NH	SST	NH	U	H-ST/GS	2	2026
CHENANGO 20	B	15.10	6.4	NH-WP	SST	NH-WP	E	ST/GS	2	2026
CHENANGO 20	B	18.00	16.3	NH-HEM	SST	NH-HEM	U	ST/GS	1	2026
CHENANGO 20	B	20.00	7.0	NH	SST	NH	E	ST/GS	2	2026
CHENANGO 21	A	29.00	31.5	JL	SST	NH	E	RT	2	2026
CHENANGO 25	A	8.10	55.0	RP-NS	SST	NH	E	SWR-T	1	2026
MADISON 08	A	2.00	4.1	NH-SP	SST	NH	U	ST/GS	2	2026
MADISON 08	A	8.00	11.3	RP-NS	SST	NH-NS	E	SW	1	2026
MADISON 08	A	11.00	32.2	NH	PT	NH	E	FW/CC	1	2026
MADISON 08	A	17.00	7.7	NH	SST	NH	U	IN	2	2026
MADISON 08	A	33.00	8.4	SP-WP	SST	NH-WP	EVR	RT	2	2026
MADISON 08	A	36.00	1.6	NH	SST	NH	E	FW	1	2026
CHENANGO 02	D	19.00	6.4	NH	SST	NH	U	ST/GS	1	2027
CHENANGO 02	D	24.00	6.0	NH	SST	NH	U	H-ST/GS	2	2027
CHENANGO 02	D	25.00	12.0	NH	PT	NH	U	H-IN	2	2027
CHENANGO 02	D	28.00	7.7	NH	SST	NH	U	H-ST/GS	2	2027

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 02	E	24.10	118.9	NS	SST	NS-NH	E	SWR-T	1	2027
CHENANGO 02	E	34.00	3.8	NS-NH	SST	NH-PH	E	SW	1	2027
CHENANGO 02	E	35.00	2.3	NS	SST	NH-NS	E	SWR-T	1	2027
CHENANGO 18	A	28.10	8.3	RP-NS	SST	NS-NH	U	RT	1	2027
CHENANGO 18	A	29.00	8.9	NH-RP	SST	NH	U	RT-IN	2	2027
CHENANGO 18	A	31.00	15.9	RP	PT	NH	E	SWR	1	2027
CHENANGO 18	A	32.00	2.8	NH	PT	NH	U	ST	1	2027
CHENANGO 18	A	33.00	21.1	RP-NS	SST	NH-NS	E	SWR-T	1	2027
CHENANGO 18	B	23.00	10.3	NS-NH	PT	NH	E	SPT	1	2027
CHENANGO 18	B	25.00	7.8	RP	PT	NH	E	SW	1	2027
CHENANGO 18	B	28.20	4.7	NH	SST	NH	E	FW	2	2027
CHENANGO 18	B	29.00	30.8	NS	PT	NH-NS	E	SPT	1	2027
CHENANGO 25	C	1.10	17.9	NS-JL	SST	NH-NS	E	SWR-T	1	2027
CHENANGO 25	C	1.20	7.1	NS-RP	SST	NH	E	H-SWR-T	2	2027
CHENANGO 25	C	5.10	19.9	NS	SST	NS-RP	E	SWR-T	1	2027
MADISON 02	A	32.00	23.6	NH	SST	NH	U	GS	1	2027
MADISON 02	A	38.30	23.8	NH	SST	NH	U	GS	1	2027
CHENANGO 02	B	14.00	9.6	NH	S-S	NH	E	IN	2	2028
CHENANGO 02	B	19.00	9.2	NH	PT	NH	U	FW	1	2028
CHENANGO 02	B	20.00	14.1	NH	SST	NH	E	IN	1	2028
CHENANGO 02	D	46.20	1.9	RO-NH	SST	RO-NH	E	FW	1	2028
CHENANGO 02	E	6.00	8.6	NH	PT	NH	U	FW	3	2028
CHENANGO 02	E	7.10	91.2	NH	SST	NH	U	ST/GS	1	2028
CHENANGO 02	E	8.00	32.8	NH	SST	NH	E	IN	1	2028
CHENANGO 18	A	44.00	5.6	NS	PT	NH-NS	E	SPT-FW	1	2028
CHENANGO 18	A	45.00	76.5	NS-LA	SST	NS-NH-LA	E	SPT	1	2028
CHENANGO 20	C	1.10	28.3	NS-LA	SST	NH-NS	E	SWR-T	1	2028

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 20	C	1.20	8.3	NH-NS	SST	NH	U	SWR-T	1	2028
CHENANGO 20	C	4.00	5.9	NS-LA	MST	NS-NH-LA	E	SWR-T	2	2028
CHENANGO 21	A	54.00	6.3	NS	SST	NS-NH	E	SPT	1	2028
CHENANGO 21	A	57.00	35.5	NS	SST	NS-NH	E	SWR-T	1	2028
MADISON 07	A	20.10	10.0	NH-HEM	SST	NH-HEM	U	ST/GS	2	2028
MADISON 07	A	20.50	25.5	NH	SST	NH	U	ST/GS	2	2028
MADISON 07	A	20.80	34.7	NH	SST	NH	U	SW/GS	1	2028
CHENANGO 02	A	8.00	40.2	RP	PT	NH	E	SWR-T	1	2029
CHENANGO 02	A	10.00	4.3	RP-WP	PT	NH-WP	EVR	SWR	1	2029
CHENANGO 02	A	11.00	11.4	NH	SST	NH	E	IN	1	2029
CHENANGO 02	B	3.00	14.3	NH-HEM	LST	NH-HEM	U	ST/GS	1	2029
CHENANGO 02	C	33.00	10.1	RP	SST	NH	E	SWR-T	1	2029
CHENANGO 02	C	36.10	7.9	RP	SST	NH	E	SW	1	2029
CHENANGO 02	C	38.00	5.6	RP-NH	PT	NH	E	SW	1	2029
CHENANGO 02	C	39.00	3.0	RP	PT	NH	E	SW	1	2029
CHENANGO 02	D	41.00	17.6	RP	SST	NH	E	SW	1	2029
CHENANGO 02	D	54.00	16.6	RP	PT	NH	E	SWR	1	2029
CHENANGO 02	D	56.00	4.0	WS	PT	PH	E	CC	2	2029
CHENANGO 02	D	58.00	5.2	NS	SST	NS-NH	E	SPT	1	2029
CHENANGO 02	E	9.10	1.2	NS	SST	NH-NS	E	SPT	1	2029
CHENANGO 02	E	12.00	3.1	NS	SST	NS-NH	E	SPT	2	2029
CHENANGO 18	A	18.20	7.6	NH	SST	NH	U	ST/GS	1	2029
CHENANGO 18	A	20.00	4.5	NH	SST	NH	E	IN	1	2029
CHENANGO 18	A	21.00	28.7	NH	SST	NH	E	ST/GS	1	2029
CHENANGO 18	A	24.10	28.7	RP-NS	SST	NH-NS	E	SWR-T	1	2029
CHENANGO 18	A	52.20	2.7	HEM	SST	HEM	U	ST	3	2029
CHENANGO 18	B	2.00	10.6	SP-NH	SST	NH	E	SWR	2	2029

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 18	B	33.00	16.7	NS	PT	NH-NS	E	SPT	1	2029
CHENANGO 18	B	37.00	8.2	NS	PT	NS-NH	E	SPT	1	2029
CHENANGO 18	C	3.00	44.8	RP	PT	NH	E	SWR-T	1	2029
CHENANGO 23	A	28.00	39.4	NH	SST	NH	U	ST/GS	1	2029
CHENANGO 23	A	35.20	8.5	NH	SST	NH	U	ST/GS	2	2029
CHENANGO 23	A	40.00	4.9	NH	SST	NH	E	H-ST/GS	2	2029
CHENANGO 02	A	29.00	51.4	NH	SST	NH	U	H-ST/GS	1	2030
CHENANGO 02	A	31.00	29.8	NH	SST	NH	U	ST/GS	2	2030
CHENANGO 02	A	32.00	26.3	NH	SST	NH	U	ST/GS	2	2030
CHENANGO 02	E	36.10	3.9	RP	SST	NH	E	RT	1	2030
CHENANGO 02	E	36.20	9.0	RP-WP	SST	NH-WP	E	RT	1	2030
CHENANGO 02	E	36.30	6.9	RP	SST	NH	E	SWR-T	1	2030
CHENANGO 02	E	36.40	4.3	RP-NH	SST	NH	E	SW	1	2030
CHENANGO 02	E	36.60	5.7	NH	PT	NH	E	IN	1	2030
CHENANGO 02	E	38.00	4.6	NH-PH	PT	PH	E	CC	2	2030
CHENANGO 02	E	40.00	13.8	RP	SST	RP	E	RT	1	2030
CHENANGO 02	E	41.00	0.9	RO	SST	RO	EVR	FW	2	2030
CHENANGO 02	E	42.00	10.7	NS	SST	NS-NH	E	SPT	2	2030
CHENANGO 02	E	45.00	3.5	RP	PT	NH	E	RT	1	2030
CHENANGO 02	E	46.00	3.3	RP	SST	NH	E	RT	1	2030
CHENANGO 02	E	59.00	2.6	PH	SST	PH	ES	CC	2	2030
CHENANGO 18	B	40.00	8.8	NH-LA	PT	NH-LA	E	SWR-T	1	2030
CHENANGO 18	C	5.00	20.1	NH-SP-RP	SST	NH-SP	UVR	SWR-T	1	2030
CHENANGO 18	C	7.00	12.3	NS-RP	SST	NH-NS	U	SWR-T	1	2030
CHENANGO 18	C	24.00	2.0	NS	SST	NS-NH	E	SWR-T	1	2030
CHENANGO 18	C	29.20	2.2	NS	SST	NS-NH	E	SPT	2	2030
CHENANGO 18	D	28.00	21.9	NS	SST	NS-NH	E	SWR-T	1	2030

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 18	D	29.00	1.3	NS	PT	NS-NH	E	SPT	1	2030
CHENANGO 21	A	17.00	14.2	NS	SST	NS-NH	E	SPT	1	2030
CHENANGO 21	A	63.00	19.5	NS	SST	NS-NH	EVR	SPT	2	2030
CHENANGO 25	C	15.10	12.9	NS-NH	MST	NS-NH	U	SPT	1	2030
CHENANGO 25	C	15.20	10.9	RP-NS	SST	NH-NS	E	SWR-T	1	2030
CHENANGO 25	C	18.00	24.0	NS-RP	SST	NS-NH	E	SWR-T	1	2030
MADISON 08	A	1.00	30.6	NH	SST	NH	E	FW	2	2030
MADISON 08	A	13.00	13.9	NH	PT	NH	U	ST/GS/CC	2	2030
MADISON 08	A	14.00	17.5	NH	PT	NH	U	ST/GS	3	2030
CHENANGO 02	B	23.30	4.6	PH-BR	PT	PH	ES	CC	3	2031
CHENANGO 02	B	24.00	9.3	NH	SST	NH	U	GS	1	2031
CHENANGO 02	B	34.00	1.9	RP-NS	SST	NS-NH	E	SW	1	2031
CHENANGO 02	B	35.00	38.2	NS	SST	NS-NH	E	SWR-T	1	2031
CHENANGO 02	B	36.10	4.5	NH	SST	NH	U	IN	1	2031
CHENANGO 02	B	37.10	24.7	NS	SST	NS-NH	E	SWR-T	1	2031
CHENANGO 02	B	37.20	7.9	NS-NH	SST	NH-NS	E	SWR-T	1	2031
CHENANGO 02	B	37.30	3.3	NH-NS	SST	NH	E	SWR-T	1	2031
CHENANGO 02	C	10.00	10.7	NS	PT	NS-NH	E	SPT	1	2031
CHENANGO 02	C	25.00	13.1	NS	MST	NH	E	SWR-T	1	2031
CHENANGO 02	C	27.00	7.8	NS	MST	NH-NS	E	SPT	3	2031
CHENANGO 18	D	1.10	33.4	NS-RP	SST	NH-NS	E	SWR-T	2	2031
CHENANGO 18	D	1.30	14.2	NS-RP	SST	NH-NS	E	SWR-T	1	2031
CHENANGO 18	D	1.50	10.7	NS-RP	SST	NS-NH	E	SWR-T	1	2031
CHENANGO 18	D	30.00	12.7	WS	SST	WS	E	H-SWR-T	2	2031
CHENANGO 18	D	31.00	20.2	NS	SST	NS-NH	EVR	SPT	1	2031
CHENANGO 18	D	37.00	16.2	NS	SST	NS-NH	EVR	SWR-T	1	2031
CHENANGO 20	A	18.10	32.1	NS-RP	SST	NH-NS	E	SWR-T	1	2031

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 25	A	15.10	40.4	RP	SST	NH	E	SWR-T	1	2031
CHENANGO 25	A	15.20	20.1	RP-NS	SST	NH	E	SWR-T	1	2031
CHENANGO 25	A	17.10	3.0	NS	MST	NS-NH	EVR	SWR-T	1	2031
CHENANGO 25	C	9.00	24.6	RP	SST	NH	E	SWR-T	1	2031
MADISON 08	A	22.00	8.8	NH	SST	NH	U	IN	2	2031
MADISON 08	A	23.00	16.0	NH-NS	SST	NH-NS	E	IN	2	2031
MADISON 08	A	25.00	16.6	NH	SST	NH	U	ST/GS	2	2031
MADISON 08	A	45.00	14.3	NH-HEM	SST	NH-HEM	U	GS	1	2031
CHENANGO 02	C	14.00	9.4	NH	SST	NH	E	IN	2	2032
CHENANGO 02	A	4.20	2.5	RP	SST	NH	E	H-SW	1	2032
CHENANGO 02	A	6.00	15.8	RP	PT	NH	E	SWR-T	1	2032
CHENANGO 02	B	1.00	8.2	RP	SST	NH	E	SWR-T	1	2032
CHENANGO 02	B	11.00	4.3	RP	PT	NH	E	RT	1	2032
CHENANGO 02	B	12.00	6.2	RP	PT	NH	E	RT	1	2032
CHENANGO 02	D	20.10	44.2	RP-NS	SST	NH	E	SWR-T	1	2032
CHENANGO 02	D	22.00	3.9	RP	SST	NH	E	SWR-T	1	2032
CHENANGO 02	D	60.00	14.1	NH	SST	NH	E	IN	1	2032
CHENANGO 02	E	11.00	21.8	NH	PT	NH	E	IN	1	2032
CHENANGO 02	E	16.00	31.4	NH	PT	NH	E	IN	1	2032
CHENANGO 18	A	46.00	15.5	NH	SST	NH	U	ST/GS	1	2032
CHENANGO 18	C	34.00	5.7	RP	SST	NH	U	SWR-T	2	2032
CHENANGO 18	C	37.00	15.4	NH	PT	NH	E	ST/GS	2	2032
CHENANGO 18	C	38.00	2.3	NH-RP	S-S	NH	U	RT	2	2032
CHENANGO 18	C	39.00	48.9	RP	PT	NH	U	SWR-T	1	2032
CHENANGO 18	D	3.10	7.8	RP	PT	NH	E	SWR-T	1	2032
CHENANGO 18	D	3.20	7.1	RP	PT	NH	E	SWR-T	1	2032
CHENANGO 18	D	4.10	3.9	NS	PT	NS-NH	E	SPT	1	2032

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 18	D	4.20	4.1	NS	SST	NS-NH	E	SPT	1	2032
CHENANGO 18	D	7.10	33.1	NS	SST	NS-NH	E	SWR-T	1	2032
CHENANGO 23	B	10.00	6.7	NH	S-S	NH	E	FW	1	2032
CHENANGO 25	A	14.10	31.4	RP-WS	SST	NH	E	H-SWR-T	1	2032
CHENANGO 02	B	8.00	11.4	JL	SST	NH	E	SWR-T	1	2033
CHENANGO 02	D	47.10	17.1	WP-NH	SST	NH-WP	UL	VIH	2	2033
CHENANGO 02	D	63.00	16.1	WP-RP-NS	SST	NH-WP-NS	EVR	SWR-T	2	2033
CHENANGO 02	D	64.00	3.5	RP	SST	NH	E	SWR-T	1	2033
CHENANGO 02	E	21.00	13.5	WP	PT	NH-WP	EVR	SWR-T	2	2033
CHENANGO 02	F	40.00	5.8	NH-RP	S-S	NH	E	FW	1	2033
CHENANGO 18	A	14.00	8.6	NH-HEM	PT	NH-HEM	U-LCI	ST/GS	3	2033
CHENANGO 18	A	15.00	43.2	NH-HEM	SST	NH-HEM	U-LCI	ST/GS	2	2033
CHENANGO 18	A	18.10	4.8	NH	PT	NH	U	ST/GS	1	2033
CHENANGO 18	A	34.10	7.5	NH	PT	NH	E	TSI	2	2033
CHENANGO 18	A	36.10	15.9	NH	SST	NH	U	ST/GS	1	2033
CHENANGO 18	A	37.10	18.5	NH	SST	NH	U	ST/GS	1	2033
CHENANGO 18	A	42.10	14.6	NH	SST	NH	U	H-ST/GS	2	2033
CHENANGO 18	A	42.20	15.5	NH	SST	NH	U	ST/GS	1	2033
CHENANGO 18	A	48.00	13.6	NH	MST	NH	U	GS	1	2033
CHENANGO 18	A	49.00	21.6	NH	PT	NH	U	ST/GS	1	2033
CHENANGO 18	A	52.10	2.8	NH-HEM	PT	NH-HEM	U	ST	2	2033
CHENANGO 18	D	14.10	41.8	NH	MST	NH	U	ST/GS	2	2033
CHENANGO 23	A	12.10	27.9	RP	SST	NH	E	SWR-T	1	2033
CHENANGO 23	B	1.10	11.0	NH	SST	NH	U	ST/GS	1	2033
CHENANGO 23	B	1.30	7.1	NH	SST	NH	U	H-ST/GS	2	2033
CHENANGO 23	B	9.00	5.0	NH	SST	NH	U	ST/GS	1	2033
CHENANGO 23	B	17.00	6.8	EL	SST	NH	EVR	RT	1	2033

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
MADISON 02	A	20.10	8.7	NS	SST	NS-NH	E	SWR	2	2033
MADISON 02	A	26.00	17.0	NS	SST	NS-NH	E	SWR-T	1	2033
MADISON 02	A	27.00	6.2	NS	MST	NH-NS	E	SPT	1	2033
MADISON 02	A	29.00	7.8	RP	SST	NH-NS	E	SWR-T	1	2033
CHENANGO 02	D	59.00	24.7	WP	SST	WP-NH	UVR	VIH	2	2034
CHENANGO 02	E	48.00	29.8	NH-HEM	SST	NH-HEM	U	ST/GS	1	2034
CHENANGO 02	E	49.00	10.2	NH	SST	NH	E	ST/GS	1	2034
CHENANGO 18	B	4.00	9.9	NH	SST	NH	U	ST/GS	2	2034
CHENANGO 18	B	6.00	16.8	NH	PT	NH	U	FW	2	2034
CHENANGO 18	B	7.20	3.9	NS	PT	NS-NH	E	SWR-T	1	2034
CHENANGO 18	B	8.00	5.4	NH	SST	NH	U	ST/GS	1	2034
CHENANGO 18	B	13.10	5.7	NS	SST	NS-NH	E	SWR-T	1	2034
CHENANGO 18	B	19.00	14.2	NS	PT	NS-NH	E	SPT	1	2034
CHENANGO 18	C	9.00	4.0	NS	PT	NS-NH	E	SWR-T	1	2034
CHENANGO 18	C	15.00	10.8	NS	SST	NS-NH	E	SWR-T	1	2034
CHENANGO 18	C	19.20	1.7	NS	MST	NS-NH	E	SPT	1	2034
CHENANGO 18	C	26.10	31.9	NS	SST	NS	E	SWR-T	1	2034
CHENANGO 18	C	26.30	1.5	NS	SST	NS-NH	E	SWR-T	1	2034
CHENANGO 18	C	30.20	3.6	NS	PT	NH-NS	E	SWR	1	2034
CHENANGO 20	A	14.00	7.0	WP-NH	PT	NH-WP	UVR	GS	2	2034
CHENANGO 20	A	16.10	4.8	WP-NH	SST	NH-WP	UVR	ST/GS	1	2034
CHENANGO 20	A	16.20	4.2	NH-WP	SST	NH-WP	UVR	ST/GS	1	2034
CHENANGO 20	B	22.00	7.5	NH	SST	NH	U	ST/GS	1	2034
CHENANGO 21	A	47.00	46.8	NH	SST	NH	U	ST/GS	1	2034
CHENANGO 25	B	6.40	3.0	NS-NH	SST	NH	E	SPT	2	2034
CHENANGO 25	B	15.10	73.6	NS	SST	NS-NH	E	SWR-T	1	2034
CHENANGO 25	B	15.20	14.5	NS-RP	SST	NS-NH	E	SWR-T	1	2034

FOREST	COMP	STAND	ACRES	FOREST TYPE	SIZE CLASS	OBJECTIVE TYPE	MGT DIR	TREATMENT	PRIORITY	YEAR
CHENANGO 25	B	15.30	2.3	NH	PT	NH	U	ST	1	2034
CHENANGO 25	B	16.10	25.8	NS	SST	NS-NH	E	SWR-T	1	2034
CHENANGO 25	B	16.20	5.8	NS	MST	NS-NH	E	H-SWR-T	1	2034
CHENANGO 25	B	17.10	10.9	NH	SST	NH	U	ST-GS	1	2034
CHENANGO 25	C	12.00	20.2	NH	SST	NH	U	ST/GS	1	2034
CHENANGO 25	C	14.20	1.8	NH	PT	NH	U	ST/GS	1	2034
CHENANGO 25	C	19.10	9.7	NH	PT	NH	U	ST	1	2034
CHENANGO 25	C	19.20	8.0	NH-PH	PT	NH	E	GS	1	2034
CHENANGO 02	B	26.00	15.1	EL	SST	NH	U	VIH	1	2035
CHENANGO 02	B	27.00	28.5	WP-NH	SST	WP-NH	UL	RT	2	2035
CHENANGO 02	B	31.00	29.4	NH	SST	NH	U	ST/GS	1	2035
CHENANGO 02	E	3.10	29.1	RP	PT	NH	E	SWR	1	2035
CHENANGO 02	E	3.20	14.6	RP	PT	NH	E	SWR	1	2035
CHENANGO 02	F	1.10	68.8	NS	SST	NS-NH	E	SWR-T	1	2035
CHENANGO 02	F	1.20	20.5	NS	SST	NS-NH	E	SWR-T	1	2035
CHENANGO 18	B	22.00	13.7	NH	SST	NH	E	H-IN	1	2035
CHENANGO 18	B	28.10	7.2	NH	PT	NH	E	ST	1	2035
CHENANGO 18	C	42.10	14.5	NH	SST	NH	U	ST/GS	3	2035
CHENANGO 18	C	44.10	30.3	NH	SST	NH	U	H-SW	2	2035
CHENANGO 18	C	44.20	29.1	NH	SST	NH	U	ST/GS	1	2035
CHENANGO 18	C	44.30	7.1	NH	SST	NH	U	ST/GS	1	2035
CHENANGO 18	C	44.40	12.5	NH	SST	NH	U	ST/GS	2	2035
CHENANGO 18	C	44.40	4.7	NH	SST	NH	U	H-ST/GS	3	2035

4. Annual Summary of Stand Treatment Schedule

Year	Pine	Spruce	Hardwood Sawtimber	Firewood	TSI	Other	Total
2016	62	196	4	4	-	-	266
2017	5	268	40	2	-	-	315
2018	76	273	135	-	-	-	484
2019	61	273	-	-	-	-	334
2020	247	69	140	9	-	-	465
2021	78	50	223	4		-	-
2022	116	187	60	-	1	-	364
2023	136	191	104	-	-	-	431
2024	44	-	302	9	-	-	355
2025	232	139	122	-	-	-	493
2026	171	-	164	34	-	-	369
2027	62	207	86	5	-	-	360
2028	-	166	218	20	-	-	404
2029	182	38	122	-	-	-	342
2030	60	121	169	32	-	7	389
2031	90	245	70	-	-	5	410
2032	188	41	108	7	-	-	344
2033	104	32	224	6	7	-	373
2034	25	200	178	17	-	-	420
2035	87	89	148	-	-	-	324
Total	2,026	2,785	2,617	149	8	12	7,597
Average	101	139	131	7	<1	<1	380

The Pine column includes acres of stands harvested in which the primary species are red pine, scotch pine, white pine, or larch. The Spruce column includes acres of stands scheduled for harvest in which the primary species are Norway spruce or white spruce. Hardwood Sawtimber includes acres of northern hardwood stands scheduled for harvest of sawtimber. These stands also include varying amounts of firewood. The Firewood column includes the acres of stands scheduled for harvest in which firewood is the primary product. The TSI column lists acres designated for pre-commercial thinning. The Other column includes acres of noncommercial stand treatments for activities such as clearcuts for grouse habitat and cutting trees to release apple trees or improve wildlife habitat.

An additional 3,211 acres of stands are designated for treatment in the Table of Forest Stand Management Actions but are not scheduled due to limited staffing. These stands may be treated if staffing resources improve in the future.

B. Management Actions for Facilities and Information

1. Scheduled Actions

Year	Action	Description
2017	Action 3.1.6	Install gate on Chenango RA #20, Ridge Road, entrance to the shale pit.
2018	Action 3.1.6	Install gate on Chenango RA #2 to restrict illegal off-road vehicle use of snowmobile trail from the New Road.
2016	Action 3.3.1	Install kiosk on Chenango RA #20 on Ridge Road.
2017	Action 3.3.1	Install kiosk on Chenango RA #21 at intersection of the Truck Trail and Warner Road.
2017	Action 3.3.1	Install kiosk for Lincklaen State Forest on Chenango RA #18 near the intersection of Hyer Roads and Upham Roads.

2. Annual, Ongoing Management Actions and Those Performed as Needed

Action	Description
Action 2.2.2	Perform maintenance on 5.4 miles of Public Forest Access Roads including annual mowing and periodic grading, resurfacing and culvert replacement.
Action 3.1.4	Maintain recreational facilities to provide a safe user experience by periodically closing trails impacted by timber harvests or extreme weather events.
Action 3.2.1	Maintain one ATV Access Route for people with qualifying disabilities on Chenango RA #2, south of Bliven Road.
Action 3.3.3	Maintain all signs and kiosks communicating information to the public on the Unit.

VIII. Glossary

Access trails - may be permanent, unpaved and do not provide all-weather access with the Unit. These trails are originally designed for wood product removal and may be used to meet other management objectives such as recreational trails. These trails are constructed according to Best Management Practices.

Age class - trees of a similar size originating from a single natural event or regeneration activity. *see* cohort.

Basal area - the cross sectional area, measured in square feet, of a single stem, including the bark, measured at breast height (4.5 ft above the ground).

Beech bark disease - an insect and disease pathogen complex involving a scale insect (*Cryptococcus fagi*) and a nectria fungus (*Nectria coccinea* var. *faginata*). The insect pierces the bark to feed, allowing a place for the fungus to enter the tree. Fungal activity interrupts the tree's normal physiological processes and a severely infected tree will most likely die.

Best management practices - a practice or a combination of practices that are designed for the protection of water bodies and riparian areas, and determined to be the most effective and practicable means of controlling point and non-point source water pollutants.

Biological diversity (Biodiversity) - the variety, abundance, and interactions of life forms found in areas ranging in size from local through regional to global. Biodiversity considers both the ecological and evolutionary processes, functions, and structures of plants, animals and other living organisms, as well as the variety and abundance of species, communities, gene pools, and ecosystems.

Biological legacy - an organism, living or dead, inherited from a previous ecosystem - *note* biological legacies often include large trees, snags, and downed logs left after timber harvesting.

Browse - portions of woody plants including twigs, shoots, and leaves consumed by animals such as deer.

Buffer zone / Buffer strip - a vegetation strip or management zone of varying size, shape, and character maintained along a stream, lake, road, recreation site, or different vegetative zone to

mitigate the impacts of actions on adjacent lands, to enhance aesthetic values, or as a best management practice.

Cavity tree / Den tree - a tree containing an excavation sufficiently large for nesting, dens or shelter; tree may be alive or dead.

Clear cut - a harvesting and regeneration technique that removes all the trees, regardless of size, on an area in one operation. This practice is done in preparation of the re-establishment of a new forest through reforestation, stump sprouting, or changing habitats, i.e., from forest to brush or grass cover.

Climax forest - an ecological community that represents the culminating stage of a natural forest succession for its locality / environment.

Coarse Woody Material (CWM) - any piece(s) of large dead woody material on the ground in forest stands or in streams.

Conifer - a cone-bearing tree, also referred to as softwood; *note* the term often refers to gymnosperms in general.

Conversion - a change from one silvicultural system to another or from one tree species to each other.

Coppice - an even-aged silvicultural practice designed to stimulate the production of new stems from the cut stumps of the parent vegetation.

Corridor - a linear strip of land identified for the present or future location of a designed use within its boundaries. *Examples:* recreational trails, transportation or utility rights-of-way. When referring to wildlife, a corridor may be a defined tract of land connecting two or more areas of similar management or habitat type through which a species can travel from one area to another to fulfill any variety of life-sustaining needs.

Cover type - the plant species forming a majority of composition across a given area.

Crop tree - any tree selected to become a component of a future commercial timber harvest.

Crown - the part of a tree or woody plant bearing live branches and foliage.

Cultural resources - significant historical or archaeological assets on sites as a result of past human activity which are distinguishable from natural resources.

Cutting cycle - the number of years between harvest or regeneration cuts in a stand.

Cutting interval - the number of years between treatments in a stand.

Deciduous - tree and shrub species that lose their leaves in autumn.

Defoliation - the partial or complete loss of leaves, usually caused by an insect, disease, or drought.

Designated recreational trail - a Department authorized recreational trail that is signed and/or mapped.

Diameter (at) breast height (DBH) - the diameter of the stem of a tree (outside bark) measured at breast height (4.5 ft) from the ground.

Disturbance - a natural or human-induced environmental change that alters one or more of the floral, faunal, and microbial communities within an ecosystem. Timber harvesting is the most common human disturbance. Windstorms and fire are examples of natural disturbance.

Ecological Community - an assemblage of plants and animals interacting with one another, occupying a habitat, and often modifying the habitat; a variable assemblage of plant and animal populations sharing a common environment and occurring repeatedly in the landscape.

Ecosystem - a spatially explicit, relatively homogeneous unit of the earth that includes all interacting organisms and components of the abiotic environment within its boundaries - *note* an ecosystem can be of any size, e.g., a log, pond, field, forest or the earth's biosphere.

Ecosystem management - the appropriate integration of ecological, economic, and Esocial 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.

Edge - the more or less well-defined boundary between two or more environmental features, e.g. a field adjacent to a woodland or the boundary of different silvicultural treatments.

Endangered species - any species of plant or animal defined through the Endangered Species Act of 1976 as being in danger of extinction throughout all or a significant portion of its range and published in the Federal Register.

Even-aged - a class of forest or stand composed of trees of about the same age. The maximum age difference is generally 10-20 years.

Even-aged system - a program of forest management directed to the establishment and maintenance of stands of trees having relatively little (10-20 yrs) variation in ages. The guidelines

to be applied in using this system at all stages of tree development are uniquely different from the uneven-aged system.

Exotic - a plant or species introduced from another country or geographic region outside its natural range.

Eyas - A nestling (unfledged) hawk or falcon, especially one to be trained for falconry.

Fine Woody Material (FWM) - any piece(s) of small dead woody material on the ground in forest stands or in streams.

Forest - an assemblage of trees and associate organisms on sites capable of maintaining at least 60% crown closure at maturity.

Forest Stewardship Council - A non-profit organization devoted to encouraging the responsible management of the world's forests.

Forestry - the profession embracing the science, art, and practice of creating, managing, using, and conserving forests and associated resources for human benefit and in a sustainable manner to meet desired goals, needs, and values.

Forest type - a category of forest usually defined by its vegetation, particularly its dominant vegetation as based on percentage cover of trees.

Forested wetland - an area characterized by woody vegetation where soil is periodically saturated with or covered by water.

Fragmentation - the process by which a landscape is broken into small islands of forest within a mosaic of other forms of land use or ownership - islands of a particular age class that remain in areas of younger-aged forest - fragmentation is a concern because of the effect of noncontiguous forest cover on connectivity and the movement and dispersal of animals in the landscape.

Grassland - land on which the vegetation is dominated by grasses, grass-like plants, or forbs.

Group selection - an uneven-aged silvicultural practice where mature trees are removed in small groups (typically the diameter of the grouping is twice the average tree height) for the purpose of establishing a new age class of trees within the stand.

Habitat - the geographically defined area where environmental conditions (e.g., climate, topography, etc.) meet the life needs (e.g., food, shelter, etc.) of an organism, population, or community.

Hardwoods - broad-leafed, deciduous trees belonging to the botanical group Angiospermae.

Haul roads - permanent, unpaved roads, not designed for all-weather travel, but are constructed primarily for the removal of wood 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.

Herbicide - a chemical used for killing or controlling the growth of plants.

High-grading - the removal of the most commercially valuable trees (high-grade trees), often leaving a residual stand composed of trees of poor condition or species composition.

Hydrofracking – The hydraulic fracturing process used to release natural gas from limited porosity formations. Fluids are injected into the formation under pressure.

Invasive species - a species that is non-native to the ecosystem under consideration; and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.

Late Successional Forest – Those areas where there is a significant component of trees greater than 140 years old. Forests in this age are beginning to develop old-growth characteristics such as large size, large snags, large cavities, rough bark and large dead trees and fallen logs.

Mast - all fruits of trees and shrubs used as food for wildlife. Hard mast includes nut-like fruits such as acorns, beechnuts, and chestnuts. Soft mast includes the fleshy fruits of black cherry, dogwood and serviceberry.

Mesic - of sites or habitats characterized by intermediate moisture conditions, i.e., neither decidedly wet nor dry.

Multiple use - a strategy of land management fulfilling two or more objectives, e.g. forest products removal and recreation.

Native species - an indigenous species that is normally found as part of a particular ecosystem.

Natural area - an ecological community where physical and biological processes are allowed to operate without direct human intervention. (Helms, 1998)

Natural regeneration - the establishment of a forest stand from natural seeding, sprouting, suckering or layering.

Northern hardwood forest - a forest type usually made up of sugar and red maple, American beech, yellow birch, and to a lesser extent black cherry and white ash. This type represents about 70 percent of all forests in New York State.

Old growth -
1.) forests that approximate the structure, composition, and functions of native forest prior to European settlement. They vary by forest type, but generally include more large trees, canopy layers, standing snags, native species, and dead organic matter than do young or intensively managed forests.
2.) the definition of "Old Growth Forest" involves a convergence of many different, yet interrelated criteria. Each of these criteria can occur individually in an area that is not old growth; however, it is the presence of all of these factors that combine to differentiate "Old Growth Forest" from other forested ecosystems. These factors include: An abundance of late successional tree species, at least 180 - 200 years of age in a contiguous forested landscape that has evolved and reproduced itself naturally, with the capacity for self perpetuation, arranged in a stratified forest structure consisting of multiple growth layers throughout the canopy and forest floor, featuring (1) canopy gaps formed by natural disturbances creating an uneven canopy, and (2) a conspicuous absence of multiple stemmed trees and coppices. Old growth forest sites typically (1) are characterized by an irregular forest floor containing an abundance of coarse woody materials which are often covered by mosses and lichens; (2) show limited signs of human disturbance since European settlement; and (3) have distinct soil horizons that include definite organic, mineral, illuvial accumulation, and unconsolidated layers. The understory displays well developed and diverse surface herbaceous layers.

Overstory - that portion of the trees in a forest forming the upper or uppermost canopy layer.

Pioneer - a plant capable of invading bare sites (newly exposed soil) and persisting there or colonizing them until supplanted by successional species.

Pit and mound topography - an example of microsite topography that is the result of tree uprooting where the depression or pit is formed at the former location of the root structure and the mound is formed from the up-thrown roots and soil mass; creates heterogeneous soil and microclimatic conditions in ecosystems predisposed to tree uprooting.

Plantation - a stand composed primarily of trees established by planting or artificial seeding - a plantation may have tree or understory components that have resulted from natural regeneration.

Public forest access roads - permanent, unpaved roads marked for motor vehicle use. They may be designed for all-weather use depending on their location and surfacing. These roads provide primary access within the Unit. The standards for these roads are those of the Class A and Class B access roads.

Pulpwood - low grade or small diameter logs used to make paper products, wood chips, etc.

Recruitment (legacy) tree - A live tree permanently retained to eventually develop into a cavity tree, snag, or downed woody material (CWD and FWM) within the stand or to retain a unique feature on the landscape.

Reforestation - the re-establishment of forest cover by natural or artificial means.

Regeneration - naturally or artificially established seedlings or saplings existing in a forest stand.

Release -
1.) a treatment designed to free trees from undesirable, usually overtopping, competing vegetation.
2.) a treatment designed to free young trees not past the sapling stage from undesirable competing vegetation that overtops or closely surrounds them.

Residual stand - a stand composed of trees remaining after any type of intermediate harvest.

Riparian zone - an area adjoining a body of water, normally having soils and vegetation characteristic of floodplains or areas transitional to upland zones. These areas help protect the water by removing or buffering the effects of excessive nutrients, sediments, organic matter, pesticides, or pollutants.

Rotation - the period of years required to establish and grow timber crops to a specified maturity. Rotation being the predetermined time frame between successive harvest/ regeneration cuts in a given stand under even-aged management.

Sapling - a small tree, usually defined as being between 1 and 5 inches diameter at breast height.

Sawtimber - trees that are generally 12 inches and larger diameter at breast height.

Seedling - a young tree originating from seed that is less than 4 feet tall.

Seedling/sapling - trees less than 6 inches diameter at breast height.

Seed tree cut/method - the removal of the mature timber in one cutting, except for a small number of trees left singly, or in small groups, as a source of seed for natural regeneration.

Selective cut - a type of exploitation cutting that removes only certain species (a) above a certain size, (b) of high value; known silvicultural requirements and/or sustained yields being wholly or largely ignored or found impossible to fulfill. (Ford-Robertson, F. C. 1971)

Selection system - 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. 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.

Shade tolerance - the ability of a tree species to germinate and grow at various levels of shade.
Shade tolerant: having the capacity to compete for survival under shaded conditions.
Shade intolerant: having the capacity to compete for survival only under direct sunlight conditions; light demanding species.

Shelterwood cut/method - a regeneration action designed to stimulate reproduction by implementing a series of cuts over several years that will gradually remove the overstory trees. Gradual reduction of stand density protects understory trees and provides a seed source for stand regeneration.

Silviculture - the art and science of controlling the establishment, growth, composition, health, and quality of forests and woodlands to meet the diverse needs and values of landowners and society on a sustainable basis.

Snags - standing, dead trees, with or without cavities; function as perches, foraging sites and/or a source of cavities for dens, roosting and/or nesting for wildlife.

Softwoods - generally refers to needle and/or cone bearing trees (conifers) belonging to the botanical group Gymnospermae.

Species - the main category of taxonomic classification into which genera are subdivided, comprising a group of similar interbreeding individuals sharing a common morphology, physiology, and reproductive process.

Stand - a contiguous group of trees sufficiently uniform in age-class distribution, composition, and structure, and growing on a site of sufficiently uniform quality, to be a distinguishable unit.

Stand structure - the horizontal and vertical distribution of components of a forest stand including the height, diameter, crown layers, and stems of trees, shrubs, herbaceous understory, snags, and downed woody debris.

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).

Stumpage - The value of timber as it stands uncut.

Succession - the natural series of replacements of one plant community (and the associated fauna) by another over time and in the absence of disturbance.

Sustainable forest management - management that maintains and enhances the long-term health of forest ecosystems for the benefit of all living things, while providing environmental, economic, social and cultural opportunities for present and future generations.

Temporary Revocable Permit (TRP) - a Department permit which authorizes the use of State land for a specific purpose for a prescribed length of time.

Thinning - a silvicultural treatment made to reduce stand density of trees primarily to improve growth of remaining trees, enhance forest health, or recover potential mortality.

Threatened species - a species likely to become endangered in the foreseeable future, throughout all or a significant portion of its range, unless protected.

Timber stand improvement (TSI) - pre-commercial silvicultural treatments, intended to regulate stand density and species composition while improving wood product quality and fostering individual tree health and vigor, through the removal of undesirable trees.

Understory - the smaller vegetation (shrubs, seedlings, saplings, small trees) within a forest stand, occupying the vertical zone between the overstory and the herbaceous plants of the forest floor.

Uneven-aged system - a planned sequence of treatments designed to regenerate a stand with three or more age classes.

Uneven-aged stand/forest - a stand with trees of three or more distinct age classes, either intimately mixed or in small group

Variable retention - an approach to harvesting based on the retention of structural elements or biological legacies (trees, snags, logs, etc.) in the harvested stand to achieve various ecological objectives (i.e. structural complexity, riparian protection, habitat improvement). The structural elements may be retained singly or in patches.

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Watershed - a region or area defined by a network of stream drainage. A watershed includes all the land from which a particular stream or river is supplied.

Wetland - a transitional area between aquatic and terrestrial ecosystems that is inundated or saturated for periods long enough to produce hydric soils and support hydrophytic vegetation.

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X. APPENDICES

APPENDIX I Wetlands

Classified Freshwater Wetlands on the Unit

Forest	Description	Wetland ID	Legal Class	Acres on the Unit*
Chenango 2	Hemlock, white pine wetland, with bog	OT-1	2	18.5
Chenango 2	Open wetland	OT-2	2	14.4

*Wetlands often extend across boundary lines onto adjacent private lands. Only the area on the Unit is listed.

Unclassified Freshwater Wetlands on the Unit

FOREST	COMPARTMENT	STAND	ACRES	FOREST TYPE
CHENANGO 2	A	3.00	13	HEM
CHENANGO 2	A	13.00	1	BR
CHENANGO 2	A	14.10	7	HEM
CHENANGO 2	A	17.00	4	WET-OPEN
CHENANGO 2	A	18.20	1	WET-ALDER
CHENANGO 2	A	19.20	2	WET-ALDER
CHENANGO 2	A	26.10	6	NH-HEM
CHENANGO 2	A	34.20	1	BR
CHENANGO 2	A	34.30	1	PH
CHENANGO 2	A	36.10	39	NH-HEM
CHENANGO 2	A	36.20	2	WET-OPEN
CHENANGO 2	A	37.00	10	WET-OPEN
CHENANGO 2	B	6.10	15	HEM
CHENANGO 2	B	9.30	3	WET-ALDER
CHENANGO 2	B	28.00	9	WET-OPEN
CHENANGO 2	B	33.20	2	HEM
CHENANGO 2	D	10.20	2	HEM
CHENANGO 2	D	16.20	1	NH
CHENANGO 2	D	17.00	4	NH
CHENANGO 2	D	30.00	14	HEM-NH
CHENANGO 2	D	37.00	26	HEM
CHENANGO 2	D	52.20	5	WET-ALDER

FOREST	COMPARTMENT	STAND	ACRES	FOREST TYPE
CHENANGO 2	E	7.20	2	NH
CHENANGO 2	E	25.00	3	NH-HEM
CHENANGO 2	E	47.00	1	NH-HEM
CHENANGO 2	E	55.00	5	WET-ALDER
CHENANGO 2	F	3.00	5	WET-OPEN
CHENANGO 2	F	12.00	8	WET-OPEN
CHENANGO 2	F	28.00	2	NS
CHENANGO 18	A	34.20	13	NH-RP
CHENANGO 18	A	36.20	2	NH
CHENANGO 18	B	14.00	2	WET-ALDER
CHENANGO 18	D	5.20	3	NH-HEM
CHENANGO 18	D	5.20	5	NH-HEM
CHENANGO 18	D	14.20	3	NH-HEM
CHENANGO 18	D	25.00	3	NH-HEM
CHENANGO 20	A	11.00	5	NH-HEM
CHENANGO 20	A	15.20	4	NH-WP
CHENANGO 20	B	5.00	6	NH-HEM
CHENANGO 20	B	8.20	3	NH-HEM
CHENANGO 20	B	9.10	3	WET-ALDER
CHENANGO 20	B	12.20	3	NH-HEM
CHENANGO 20	B	39.00	9	HEM
CHENANGO 20	C	9.20	2	WET-OPEN
CHENANGO 21	A	38.00	4	WET-OPEN
CHENANGO 23	B	8.20	1	NS-NH
CHENANGO 23	B	29.00	3	NH-HEM
CHENANGO 25	A	1.40	2	WET-ALDER
CHENANGO 25	A	4.10	8	WS
CHENANGO 25	A	4.20	3	WS
CHENANGO 25	A	21.20	9	RP-NH
CHENANGO 25	B	6.50	5	WET-ALDER
CHENANGO 25	C	3.10	7	NS-RP
CHENANGO 25	C	16.00	2	WET-OPEN
MADISON 2	A	1.00	13	NH-HEM

FOREST	COMPARTMENT	STAND	ACRES	FOREST TYPE
MADISON 2	A	10.00	10	WET-ALDER
MADISON 2	A	37.10	1	WET-ALDER
MADISON 2	A	38.20	3	NH-HEM
MADISON 7	A	3.00	4	WET-ALDER
MADISON 8	A	4.00	5	NH-HEM
MADISON 8	A	7.00	26	NH-HEM
MADISON 8	A	21.00	6	POND
MADISON 8	A	52.00	2	NH-HEM

APPENDIX II Code Definitions

Code Definitions for Protective Status of Wildlife on the Brookfield Management Unit

The protective status of species listed in Appendices III, IV, and V is based on Federal and State regulations. Following column entries for common and scientific names, a "protective status" category appears. The following definitions are adopted for the terms as used in The Checklist of Amphibians, Reptiles, Birds, and Mammals of New York State, Including their Protective Status.

Code	Federal Definitions
E	*Endangered Species* are determined by the U. S. Department of the Interior to be in danger of extinction throughout all or a significant portion of their range. All such species are fully protected, including their habitat.
T	*Threatened Species* are determined by the U. S. Department of the Interior as likely to become endangered within the foreseeable future throughout all or a significant portion of their range. All such species are fully protected.
UN	*"Unprotected"* under Federal Law.
Code	**State Definitions**
P	*Protected* wildlife means "wild game, protected wild birds, and endangered species of wildlife" as defined in the Environmental Conservation Law.
E	*Endangered Species* are determined by the DEC to be in imminent danger of extinction or extirpation in New York State, or are federally listed as endangered. All such species are fully protected under New York State Environmental Conservation Law.

T	*Threatened Species* are determined by the DEC as likely to become endangered within the foreseeable future in New York State, or are Federally listed as threatened. All such species are fully protected under the New York State Environmental Conservation Law.
SC	*Special Concern Species* are those native species that 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 exists within DEC rules and regulations, but such designation does not in itself provide any additional protection. However, Special Concern species may be protected under other laws.
GS	*Game species* are defined as "big game", "small game", or "game bird" 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.
UN	*Unprotected* means that the species may be taken at any time without limit. However, a license to take may be required.

APPENDIX III Birds

Species of Birds On or In the Vicinity of the Northern Chenango Unit. 2000-2004 New York State Breeding Bird Atlas Data.

Confirmed Species of Breeding Birds On or Within the Vicinity of the Unit

Common Name	Scientific Name	Breeding status	NY Legal Status
Alder Flycatcher	*Empidonax alnorum*	CO	Protected
American Bittern	*Botaurus lentiginosus*	CO	Protected-SC
American Black Duck	*Anas rubripes*	CO	Game Species
American Crow	*Corvus brachyrhynchos*	CO	Game Species
American Goldfinch	*Spinus tristis*	CO	Protected
American Kestrel	*Falco sparverius*	CO	Protected
American Redstart	*Setophaga ruticilla*	CO	Protected
American Robin	*Turdus migratorius*	CO	Protected
American Woodcock	*Scolopax minor*	CO	Game Species
Baltimore Oriole	*Icterus galbula*	CO	Protected
Bank Swallow	*Riparia riparia*	CO	Protected
Barn Swallow	*Hirundo rustica*	CO	Protected
Belted Kingfisher	*Megaceryle alcyon*	CO	Protected

Common Name	Scientific Name	Breeding status	NY Legal Status
Black-billed Cuckoo	*Coccyzus erythropthalmus*	CO	Protected
Black-capped Chickadee	*Poecile atricapillus*	CO	Protected
Black-throated Blue Warbler	*Dendroica caerulescens*	CO	Protected
Black-throated Green Warbler	*Dendroica virens*	CO	Protected
Blue Jay	*Cyanocitta cristata*	CO	Protected
Blue-headed Vireo	*Vireo solitarius*	CO	Protected
Blue-winged Warbler	*Vermivora pinus*	CO	Protected
Bobolink	*Dolichonyx oryzivorus*	CO	Protected
Broad-winged Hawk	*Buteo platypterus*	CO	Protected
Brown Creeper	*Certhia americana*	CO	Protected
Brown Thrasher	*Toxostoma rufum*	CO	Protected
Brown-headed Cowbird	*Molothrus ater*	CO	Protected
Canada Goose	*Branta canadensis*	CO	Game Species
Canada Warbler	*Wilsonia canadensis*	CO	Protected
Cedar Waxwing	*Bombycilla cedrorum*	CO	Protected
Chestnut-sided Warbler	*Dendroica pensylvanica*	CO	Protected
Chimney Swift	*Chaetura pelagica*	CO	Protected
Chipping Sparrow	*Spizella passerina*	CO	Protected
Cliff Swallow	*Petrochelidon pyrrhonota*	CO	Protected
Common Grackle	*Quiscalus quiscula*	CO	Protected
Common Merganser	*Mergus merganser*	CO	Game Species
Common Raven	*Corvus corax*	CO	Protected
Common Yellowthroat	*Geothlypis trichas*	CO	Protected
Dark-eyed Junco	*Junco hyemalis*	CO	Protected
Downy Woodpecker	*Picoides pubescens*	CO	Protected
Eastern Bluebird	*Sialia sialis*	CO	Protected
Eastern Kingbird	*Tyrannus tyrannus*	CO	Protected
Eastern Meadowlark	*Sturnella magna*	CO	Protected
Eastern Phoebe	*Sayornis phoebe*	CO	Protected
Eastern Screech-Owl	*Megascops asio*	CO	Protected
Eastern Towhee	*Pipilo erythrophthalmus*	CO	Protected
Eastern Wood-Pewee	*Contopus virens*	CO	Protected
European Starling	*Sturnus vulgaris*	CO	Unprotected
Field Sparrow	*Spizella pusilla*	CO	Protected
Golden-crowned Kinglet	*Regulus satrapa*	CO	Protected
Gray Catbird	*Dumetella carolinensis*	CO	Protected
Great Blue Heron	*Ardea herodias*	CO	Protected
Great Crested Flycatcher	*Myiarchus crinitus*	CO	Protected

Common Name	Scientific Name	Breeding status	NY Legal Status
Great Horned Owl	*Bubo virginianus*	CO	Protected
Green Heron	*Butorides virescens*	CO	Protected
Hooded Merganser	*Lophodytes cucullatus*	CO	Game Species
House Finch	*Carpodacus mexicanus*	CO	Protected
House Sparrow	*Passer domesticus*	CO	Unprotected
House Wren	*Troglodytes aedon*	CO	Protected
Indigo Bunting	*Passerina cyanea*	CO	Protected
Killdeer	*Charadrius vociferus*	CO	Protected
Least Flycatcher	*Empidonax minimus*	CO	Protected
Louisiana Waterthrush	*Seiurus motacilla*	CO	Protected
Magnolia Warbler	*Dendroica magnolia*	CO	Protected
Mallard	*Anas platyrhynchos*	CO	Game Species
Mourning Dove	*Zenaida macroura*	CO	Protected
Northern Cardinal	*Cardinalis cardinalis*	CO	Protected
Northern Flicker	*Colaptes auratus*	CO	Protected
Northern Goshawk	*Accipiter gentilis*	CO	Protected-SC
Northern Mockingbird	*Mimus polyglottos*	CO	Protected
Northern Waterthrush	*Seiurus noveboracensis*	CO	Protected
Ovenbird	*Seiurus aurocapilla*	CO	Protected
Pileated Woodpecker	*Dryocopus pileatus*	CO	Protected
Pine Siskin	*Spinus pinus*	CO	Protected
Pine Warbler	*Dendroica pinus*	CO	Protected
Purple Finch	*Carpodacus purpureus*	CO	Protected
Purple Martin	*Progne subis*	CO	Protected
Red-bellied Woodpecker	*Melanerpes carolinus*	CO	Protected
Red-breasted Nuthatch	*Sitta canadensis*	CO	Protected
Red-eyed Vireo	*Vireo olivaceus*	CO	Protected
Red-shouldered Hawk	*Buteo lineatus*	CO	Protected-SC
Red-tailed Hawk	*Buteo jamaicensis*	CO	Protected
Red-winged Blackbird	*Agelaius phoeniceus*	CO	Protected
Rock Pigeon	*Columba livia*	CO	Unprotected
Rose-breasted Grosbeak	*Pheucticus ludovicianus*	CO	Protected
Ruby-throated Hummingbird	*Archilochus colubris*	CO	Protected
Ruffed Grouse	*Bonasa umbellus*	CO	Game Species
Savannah Sparrow	*Passerculus sandwichensis*	CO	Protected
Song Sparrow	*Melospiza melodia*	CO	Protected
Spotted Sandpiper	*Actitis macularius*	CO	Protected
Swamp Sparrow	*Melospiza georgiana*	CO	Protected

Common Name	Scientific Name	Breeding status	NY Legal Status
Tree Swallow	*Tachycineta bicolor*	CO	Protected
Turkey Vulture	*Cathartes aura*	CO	Protected
Veery	*Catharus fuscescens*	CO	Protected
Warbling Vireo	*Vireo gilvus*	CO	Protected
White-breasted Nuthatch	*Sitta carolinensis*	CO	Protected
White-throated Sparrow	*Zonotrichia albicollis*	CO	Protected
Wild Turkey	*Meleagris gallopavo*	CO	Game Species
Winter Wren	*Troglodytes troglodytes*	CO	Protected
Wood Duck	*Aix sponsa*	CO	Game Species
Wood Thrush	*Hylocichla mustelina*	CO	Protected
Yellow Warbler	*Dendroica petechia*	CO	Protected
Yellow-bellied Sapsucker	*Sphyrapicus varius*	CO	Protected
Yellow-rumped Warbler	*Dendroica coronata*	CO	Protected
Yellow-throated Vireo	*Vireo flavifrons*	CO	Protected

Probable Species of Breeding Birds On or Within the Vicinity of the Unit

Common Name	Scientific Name	Breeding status	NY Legal Status
American Coot	*Fulica americana*	PR	Game Species
Barred Owl	*Strix varia*	PR	Protected
Black-and-white Warbler	*Mniotilta varia*	PR	Protected
Blackburnian Warbler	*Dendroica fusca*	PR	Protected
Brewster's Warbler	*Vermivora pinus x V. chrysoptera*	PR	Protected
Carolina Wren	*Thryothorus ludovicianus*	PR	Protected
Cooper's Hawk	*Accipiter cooperii*	PR	Protected-SC
Hermit Thrush	*Catharus guttatus*	PR	Protected
Hooded Warbler	*Wilsonia citrina*	PR	Protected
Horned Lark	*Eremophila alpestris*	PR	Protected-SC
Mourning Warbler	*Oporornis philadelphia*	PR	Protected
Nashville Warbler	*Vermivora ruficapilla*	PR	Protected
Northern Rough-winged Swallow	*Stelgidopteryx serripennis*	PR	Protected
Orchard Oriole	*Icterus spurius*	PR	Protected
Red Crossbill	*Loxia curvirostra*	PR	Protected
Red-headed Woodpecker	*Melanerpes erythrocephalus*	PR	Protected-SC
Ring-necked Pheasant	*Phasianus colchicus*	PR	Game Species

Common Name	Scientific Name	Breeding status	NY Legal Status
Scarlet Tanager	*Piranga olivacea*	PR	Protected
Sharp-shinned Hawk	*Accipiter striatus*	PR	Protected-SC
Swainson's Thrush	*Catharus ustulatus*	PR	Protected
Tufted Titmouse	*Baeolophus bicolor*	PR	Protected
Willow Flycatcher	*Empidonax traillii*	PR	Protected
Wilson's Snipe	*Gallinago delicata*	PR	Game Species
Yellow-billed Cuckoo	*Coccyzus americanus*	PR	Protected

Possible Species of Breeding Birds On or Within the Vicinity of the Unit

Common Name	Scientific Name	Breeding status	NY Legal Status
Northern Parula	*Parula americana*	PO	Protected
Osprey	*Pandion haliaetus*	PO	Protected-SC
Whip-poor-will	*Caprimulgus vociferus*	PO	Protected-SC
White-winged Crossbill	*Loxia leucoptera*	PO	Protected

APPENDIX IV Reptiles & Amphibians

Reptiles and Amphibians on or In the Vicinity of the Unit. Data from NYS Reptiles and Amphibians Atlas from 1990-1999

Common Name	Scientific Name	NY Legal Status
Jefferson Salamander	*Ambystoma jeffersonianum*	Game Species - No Season, SC*
Blue-Spotted Salamander	*Abystoma laterale*	Game Species - No Season, SC*
Spotted Salamander	*Ambystoma maculatum*	Game Species – No Season
Red-Spotted Newt	*Notophthalmus viridescens*	Game Species – No Season
Northern Dusky Salamander	*Desmognathus fuscus*	Game Species – No Season
Allegheny Dusky Salamander	*Desmognathus ochrophaeus*	Game Species – No Season
Northern Redbacked Salamander	*Plethodon cinereus*	Game Species – No Season
Northern Slimy Salamander	*Plethodon glutinosis*	Game Species – No Season
Northern Spring Salamander	*Gyrinophilus porphyriticus*	Game Species – No Season
Northern Two-Lined Salamander	*Eurycea bislineata*	Game Species – No Season
Eastern American Toad	*Bufo americanus*	Game Species
Gray Treefrog	*Hyla versicolor*	Game Species
Northern Spring Peeper	*Pseudocris crucifer*	Game Species

Common Name	Scientific Name	NY Legal Status
Bullfrog	*Rana catesbeiana*	Game Species
Green Frog	*Rana clamitans*	Game Species
Wood Frog	*Rana sylvatica*	Game Species
Northern Leopard Frog	*Rana pipiens*	Game Species – No Season
Pickerel Frog	*Rana palustris*	Game Species – No Season
Common Snapping Turtle	*Chelydra serpentine*	Game Species
Wood Turtle	*Glyptemys insculpta*	Game Species - No Season, SC*
Painted Turtle	*Chrysemys picta*	Game Species – No Season
Northern Water Snake	*Nerodia sipedon*	Game Species – No Season
Northern Brown Snake	*Storeria dekayi*	Game Species – No Season
Northern Redbelly Snake	*Storeria occiptomaculata*	Game Species – No Season
Eastern Garter Snake	*Thamnophis sirtalis*	Game Species – No Season
Eastern Ribbon Snake	*Thamnophis sauritus*	Game Species – No Season
Northern Ringneck Snake	*Diadophis punctatus*	Game Species – No Season
Smooth Green Snake	*Opheodrys vernalis*	Game Species – No Season
Eastern Milk Snake	*Lampropeltis triangulum*	Game Species – No Season

APPENDIX V Mammals on or in the Vicinity of the Northern Chenango Unit

Common Name	Scientific Name	Confirmed/ Predicted	Protective Status	
			Federal	State
American Beaver	*Castor canadensis*	C	UN	GS
Big Brown Bat	*Eptesicus fuscus*	C	UN	UN
Black Bear	*Ursus americanus*	P	UN	GS
Bobcat	*Lynx rufus*	C	UN	GS
Common Muskrat	*Ondatra zibethicus*	C	UN	GS
Common Raccoon	*Procyon lotor*	P	UN	GS
Coyote	*Canis latrans*	C	UN	GS
Deer Mouse	*Peromyscus maniculatus*	C	UN	UN
E. small-footed Myotis	*Myotis leibii*	P	UN	UN
Eastern Chipmunk	*Tamias striatus*	C	UN	UN
Eastern Cottontail	*Sylvilagus floridanus*	P	UN	GS
Eastern Gray Squirrel	*Sciurus carolinensis*	C	UN	GS
Eastern Pipistrelle	*Pipistrellus subflavus*	P	UN	UN

Common Name	Scientific Name	Confirmed/ Predicted	Protective Status	
			Federal	State
Eastern Red Bat	*Lasiurus borealis*	P	UN	UN
Fisher	*Martes pennanti*	P	UN	GS
Gray Fox	*Urocyon cinereoargentus*	C	UN	GS
Hairy-tailed Mole	*Parascalops breweri*	C	UN	UN
Hoary Bat	*Lasiurus cinereus*	C	UN	UN
House Mouse	*Mus musculus*	C	UN	UN
Indiana Myotis	*Myotis sodalis*	P	E	E
Least Shrew	*Cryptotis parva*	P	UN	UN
Little Brown Myotis	*Myotis lucifugus*	C	UN	UN
Long-tailed Weasel	*Mustela frenata*	P	UN	GS
Masked Shrew	*Sorex cinereus*	C	UN	UN
Meadow Jumping Mouse	*Zapus hudsonius*	C	UN	UN
Meadow Vole	*Microtus pennsylvanicus*	C	UN	UN
Mink	*Mustela vison*	P	UN	GS
N. Short-tailed Shrew	*Blarina brevicauda*	C	UN	UN
Northern Flying Squirrel	*Glaucomys sabrinus*	C	UN	UN
Northern Long-eared Bat	*Myotis septentrionalis*	C	TH	TH
Norway Rat	*Rattus norvegicus*	P	UN	UN
Porcupine	*Erethizon dorsatum*	P	UN	UN
Pygmy Shrew	*Sorex hoyi*	C	UN	UN
Red Fox	*Vulpes vulpes*	C	UN	GS
Red Squirrel	*Tamiasciurus hudsonicus*	P	UN	UN
River Otter	*Lutra canadensis*	C	UN	GS
Short-tailed Weasel (Ermine)	*Mustela erminea*	C	UN	UN
Silver-haired Bat	*Lasionycteris noctivagans*	P	UN	UN
Smoky Shrew	*Sorex fumeus*	C	UN	UN
Snowshoe Hare	*Lepus americanus*	P	UN	GS
Southern Bog Lemming	*Synaptomys cooperi*	C	UN	UN
Southern Flying Squirrel	*Glaucomys volans*	C	UN	UN
Southern Red-backed Vole	*Clethrionomys gapperi*	C	UN	UN
Star-nosed Mole	*Condylura cristata*	C	UN	UN
Striped Skunk	*Mephitis mephitis*	P	UN	GS
Virginia Opossum	*Didelphis virginiana*	P	UN	GS
White-footed Mouse	*Peromyscus leucopus*	C	UN	UN
White-tailed Deer	*Odocoileus virginianus*	C	UN	GS
Woodchuck	*Marmota monax*	P	UN	UN
Woodland Jumping Mouse	*Napaeozapus insignis*	C	UN	UN
Woodland Vole	*Microtus pinetorum*	C	UN	UN

Source: Adapted from The New York Gap Program, U.S. EPA EMAP Hexagons 384 and 381.

APPENDIX VI Fish

Resident Fish Species On The Unit

Otselic River - Surveyed 1935, '63, '64, '66, '67, '70, '72, '88, '93, 2004, '11, '12, '13

Brown trout	*Salmo trutta*
Brook trout	*Salvelinus fontinalis*
Rainbow trout	*Salmo gairdnerii*
Northern pike	*Esox lucius*
Chain pickerel	*Esox niger*
Tiger muskellunge	*Esox lucius X E. masquinongy*
Central stoneroller	*Campostoma anomalum*
Goldfish	*Carassius auratus*
Common Carp	*Cyprinus carpio*
Golden shiner	*Notemigonus crysoleucas*
Comely shiner	*Notropis amoenus*
Satinfin shiner	*Notropis analostanus*
Emerald shiner	*Notropis atherinoides*
Bridle shiner	*Notropis bifrenatus*
Common shiner	*Notropis cornutus*
Sand shiner	*Notropis stramineus*
Spottail shiner	*Notropis hudsonius*
Swallowtail shiner	*Notropis procne*
Spotfin shiner	*Notropis spilopterus*
Cutlips minnow	*Exoglossum maxillingua*
Bluntnose minnow	*Pimephales notatus*
Blacknose dace	*Rhinichthys altratulus*
Longnose dace	*Rhinichthys caractae*
Redside dace	*Clinostomus elongates*
Rosyface shiner	*Notropis rubellus*
Pearl dace	*Semotilus margarita margarita*
Creek chub	*Semotilus atronawlatus*
River chub	*Nocomis micropogon*
Fallfish	*Semotilus corporalis*
Quillback	*Carpiodes cyprinus*
White sucker	*Catostomus commersonnii*
Creek chubsucker	*Erimyzon oblongus*
Northern hog sucker	*Hypentelium nigricans*
Brown bullhead	*Ictalurus nebulosus*
Stonecat	*Noturus flavus*
Margined madtom	*Noturus insignis*

Burbot	*Lota lota*
Banded killfish	*Fundulus diaphanus*
Rock bass	*Amblophlites rupestris*
Redbreast sunfish	*Lepomis auritus*
Pumpkinseed	*Lepomis gibbosus*
Bluegill	*Lepomis macrochirus*
Smallmouth bass	*Micropterus dolomieui*
Largemouth bass	*Micropterus salmoides*
Black crappie	*Pomoxis nigromaculatus*
White crappie	*Pomoxis annularis*
Yellow perch	*Perca flavescens*
Walleye	*Sander vitreus*
Johnny darter	*Etheostoma nigrum*
Tessellated darter	*Etheostoma olmstedi*
Shield darter	*Percina peltata*
Mottled sculpin	*Cottus bairdi*
Slimy sculpin	*Cottus cognatus*
Sea lamprey	*Petromyzon marinus*
American eel	*Anguilla rostrata*

Ashbell Brook - Surveyed 1954

Sculpin	*Cottus sp*.
Brown trout	*Salmo trutta*
Brook trout	*Salvelinus fontinalis*
Central stoneroller	*Campostoma anomalum*
Cutlips minnow	*Exoglossum maxillingua*
Blacknose dace	*Rhinichthys atratulus*
Longnose dace	*Rhinichthys cataractae*
Creek chub	*Semotilus artromaculatus*
Brown bullhead	*Ictalurus nebulosus*

Middletown Brook - Surveyed 1935

Brook trout	*Salvelinus fontinalis*
Brown trout	*Salmo trutta*
Redside dace	*Clinostomus elongatus*
Blacknose dace	*Rhinichthys atratulus*
Longnose dace	*Rhinichthys cataractae*
Creek chub	*Semotilus atromaculatus*
White sucker	*Catostomus commersonnii*
Margined madtom	*Noturos insignis*
Mottled sculpin	*Cottus bairdi*

Tributary to the East Branch of the Canasawacta Creek flowing south through Chenango #2 (SR-44-54-5-11) - Surveyed 1976

Brook trout	*Salvelinus fontinalis*
Cutlips minnow	*Exoglossum maxillingua*
Blacknose dace	*Rhinichthys altratulus*
Longnose dace	*Rhinichthys cataractae*
Creek chub	*Semotilus atromauulatus*
White sucker	*Catostomus commersonnii*
Northern hog sucker	*Hypentelium nigricans*
Stonecat	*Noturus flavus*
Mottled sculpin	*Cottus bairdi*

Tributary to East branch of the Canasawacta Creek flowing south from Chenango #25, (SR-44-54-5-9) - Surveyed 1976

Common shiner	*Nortropis cornutus*
Blacknose dace	*Rhinichthys atratulus*
Creek chub	*Semotilus atromaculatus*
Northern hog sucker	*Hypentelium nigricans*
Pumpkinseed	*Lepomis gibbosus*
Johnny darter	*Etheostoma nigrum*

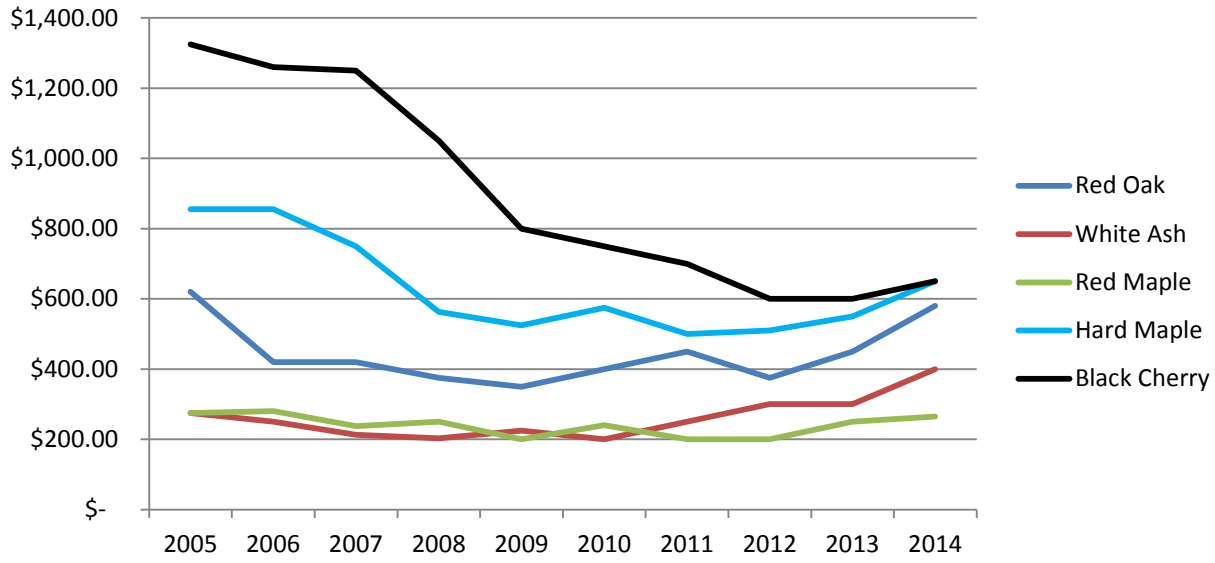
Stone Mill Brook - surveyed July 1958

Brown trout	*Salmo trutta*
Blacknose dace	*Rhinichthys atratulus*
Longnose dace	*Rhinichthys cataractae*
Creek chub	*Semotilus atromaculatus*
Margined madtom	*Notropis insignus*
Common shiner	*Notropis cornutus*
Sculpins	*Cottus sp*
Pumpkinseed	*Lepomis gibbosus*
Burbot	*Lota lota*
Common stoneroller	*Campostoma anomalum*
White sucker	*Catostomus commersoni*

Pleasant Brook - surveyed August 1973, 2011

Brook trout	*Salvelinus fontinalis*
Brown bullhead	*Ictalurus nebulosus*
Common shiner	*Notropis cornutus*
White sucker	*Catostomus commersoni*
Creek chub	*Semotilus atromaculatus*
Longnose dace	*Rhinichthys cataractae*
Blacknose dace	*Rhinichthys atratulus*
Brown trout	*Salmo trutta*

Appendix VII Ten Year Stumpage Price Trends



Source: NYS DEC Stumpage Price Reports

APPENDIX VIII Property Taxes

2012 Local Taxes Paid of the Unit

Towns	State Forest	Acres	Assessment ($)	Town Tax($)	School Tax ($)	Fire District Tax ($)	Total Tax ($)
Lebanon	M2	632	1,081,800	4,667	17,388	959	23,014
Lebanon	M7	779	1,052,700	4,541	18,188	2,082	24,811
Lebanon	M8	206	269,400	1,162	4,837	631	6,630
Georgetown	M8	498	642,400	4,759	1,1525	1,620	17,904
Smyrna	Ch 2	2,308	1,815,904	14,039	44,903	1,820	60,762
Smyrna	Ch 25	1,583	1,415,110	10,940	37,549	1,418	49,907
Otselic	Ch 2	1,403	1,025,280	11,371	38,040	3,791	73,832
Otselic	Ch 20	2,178	1,244,688	13,805	46,559	4,603	90,011
Otselic	Ch 21	1,043	1,130,016	12,533	42,270	4,179	81,719
Lincklaen	Ch 18	3,267	3,561,185	60,795	100,074	4,572	165,441
Lincklaen	Ch 23	513	598,512	10,218	16,796	786	27,800
Pitcher	Ch 23	759	733,200	8,518	26,301	1,828	36,647
Totals		15,169	14,570,195	157,348	404,430	28,289	658,478

Source: NYS Dept. of Taxation and Finance

APPENDIX IX Department Laws, Rules, Regulations and Policies

A. Environmental Conservation Laws

ECL Article 8	Environmental Quality Review
ECL Article 9	Lands and Forests
ECL Article 11	Fish and Wildlife
ECL Article 15	Water Resources
ECL Article 23	Mineral Resources
ECL Article 24	Freshwater Wetlands
ECL Article 33	Pesticides
ECL Article 51	Implementation of Environmental Quality Bond Act/1972
ECL Article 52	Implementation of Environmental Quality Bond Act/1972
ECL Article 71	Enforcement

B. Rules & Regulations Pertaining to New York State Public Lands

Title 6 of *the New York Code of Rules and Regulations* - Part 190 - Use of State Forests

Section 190.1 - Fire - no fires permitted except for cooking, warmth, or smudge. Also specifies depositing matches, etc. and using live trees for fuel prohibited.

Section 190.2 - Signs and structures - no person shall deface, mutilate or destroy, etc. This section also includes the prohibition of placing trash, garbage, etc.

Section 190.3 - Camping sites - sites must be kept neat, 150 feet from trail, road, stream, pond, spring, etc. and includes emergency closure times and elevation restrictions.

Section 190.4 - Camping permits - camping at one site for four nights or more without a permit is prohibited, length of stay specified, camping restricted to posted areas, group size specified and age of permittee.

Section 190.5 - Permissible structures - no permanent structures allowed, no transfer of existing structures, listing of reasons for cancellation of existing permits for lean-to (open camps).

Section 190.6 - Open camps - specifies number of days a lean-to may be occupied, what constitutes an enclosure, etc.

Section 190.7 - Public campgrounds - Lists of additional public use requirements when a public campground exists on state land.

Section 190.8 - General - a long list of prohibitions for the public use of State lands including gambling, use of snowmobiles, toboggans and sleds on ski trails, sale of alcohol, speed limit on truck trails, deface, remove, destroy vegetation without a permit, etc. This section allows the use of horses except on intensively developed facilities (listed). This section was updated in 2009 with many new provisions pertaining to recreational trails, use of motor boats, harvesting of berries, etc.

Section 190.9 - Use of pesticides on State lands - none allowed except by written permission.

Section 190.10 - Unique Areas - special regulations listed by area.

Section 190.11 - Environmentally sensitive lands - lists the sections above that apply to people using sensitive lands (Sections 190.0 - 190.9) seems redundant.

Section 190.12 - Conservation Easements - Applies to all easement lands that the public has a right to access. Goes on to list general prohibitions on use, then lists areas under easements.

Section 190.13 - 190.22 - Repealed or not in use.

Section 190.23 - Specific Areas - List of Ski Centers: Belleayre, Gore and Whiteface.

Section 190.24 - Boat launch sites - specific rules of public use of launch sites.

Section 190.25 - 190.33 - Regulations for specific areas such as Zoar Valley, Lake George, the Olympic Area, etc.

C. State Forest Camping Regulations

1. Campsites must be kept clean. These are “carry-in -carry-out” areas.
2. Camping is prohibited within 150' of any road, trail, stream, or body of water, except where sites have been designated by the Department.
3. Camping is allowed for up to 3 nights without a permit. Campers occupying a site for more than 3 nights are required to obtain a written permit from the Sherburne DEC office. There is currently no fee for the permit.
4. Permits will be issued for a maximum of 10 days. A permit will not be renewed to the same person for the same site during the same calendar year.
5. Groups of 10 or more persons are required to obtain a camping permit for any length of stay.
6. Camping is prohibited in any area that is posted against camping.
7. All camping equipment and supplies must be removed from State land when the users have completed their stay.
8. No permits will be issued to persons under 18 years of age.
9. Campers are required to obtain a permit for any length of stay in a Wildlife Management Area. These permits are available from the Cortland DEC office.
10. Campers may use tents or trailers, but no permanent structures, such as tent platforms or lean-tos, may be constructed for camping.
11. Lean-tos that are provided by the DEC may not be occupied for more than 3 successive nights or for more than 10 nights in any one calendar year, if others wish to use the site.
12. Only dead and down wood may be used for campfires. Fires must be extinguished when the site if not occupied.
13. There is no fee for camping on State Forests.

D. Department Policies

Unit Management Planning	Prescribed Fire	Pesticides
Motor Vehicle use	Inventory	Recreational Use
Timber Management	Acquisition	Public Use

Temporary Revocable Permits	Road Construction	State Forest Master Plan
Plantation Management	Retention	Clearcutting

APPENDIX X SEQR Considerations

This Plan and the activities it recommends will be in compliance with State Environmental Quality Review (SEQR), 6NYCRR Part 617. The State Environmental Quality Review Act (SEQRA) requires the consideration of environmental factors early in the planning stages of any proposed action(s) that are undertaken, funded or approved by a local, regional or state agency. The Strategic Plan for State Forest Management (SPSFM) serves as the Generic Environmental Impact Statement (GEIS), regarding management activity on State Forests. To address potential impacts, the SPSFM establishes SEQR analysis thresholds for each category of management activity.

STATE ENVIRONMENTAL QUALITY REVIEW ACT

This Unit Management Plan (UMP) does not propose pesticide applications of more than 40 acres, any clearcuts of 40 acres or larger, or prescribed burns in excess of 100 acres. Therefore the actions in the plan do not exceed the thresholds set forth in the Strategic Plan/Generic Environmental Impact Statement for State Forest Management**.**

This Unit Management Plan also does not include any of the following:

1. Forest management activities occurring on acreage occupied by protected species ranked S1, S2, G1, G2 or G3
2. Pesticide applications adjacent to plants ranked S1, S2, G1, G2 or G3
3. Aerial pesticide spraying by airplane or helicopter
4. Any development of facilities with potable water supplies, septic system supported restrooms, camping areas with more than 10 sites or development in excess of other limits established in this plan.
5. Well drilling plans
6. Well pad densities of greater than one well pad in 320 acres or which does not comply with the limitations identified through a tract assessment
7. Carbon injection and storage or waste water disposal

Therefore the actions proposed in this UMP will be carried out in conformance with the conditions and thresholds established for such actions in the Strategic Plan/Generic Environmental Impact Statement , and do not require any separate site specific environmental review (see 6 NYCRR 617.10[d]).

Actions not covered by the Strategic Plan/Generic Environmental Impact Statement.

Any action taken by the Department on this unit that is not addressed in this Unit Management Plan and is not addressed in the Strategic Plan/Generic Environmental Impact Statement may need a separate site specific environmental review.

APPENDIX XI Maps of the Northern Chenango Unit

Soil Series & Drainage Classes
Roads and Topography
Management Direction
Landscape Conditions Within 3 Miles of the Northern Chenango Unit
Water Resources
Current Cover Types
Recreation Facilities and Infrastructure
State Forest Stands Mosaic