



Department of
Environmental
Conservation

Treaty Line

UNIT MANAGEMENT PLAN

DRAFT

Towns of Deposit, Hancock, Masonville, Tompkins,
Afton, and Sanford

Counties of Delaware, Chenango, and Broome

May 2019

DIVISION OF LANDS AND FORESTS

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Treaty Line Unit Management Plan

A planning unit consisting of the Artic China, Barbour Brook, Beals Pond, Columbia Lake, Kerryville, Melondy Hill, Michigan Hill, Pine Hill and Steam Mill State Forests, in Delaware, Chenango, and Broome Counties.

May 2019

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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)

Vision Statement

State forests on the Treaty Line 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.

Table of Contents

| | |
|---|----|
| TREATY LINE | 1 |
| <i>Counties of Delaware, Chenango, and Broome</i> | 1 |
| DEC'S MISSION | 2 |
| VISION STATEMENT | 2 |
| TABLE OF CONTENTS | 3 |
| PREFACE | 6 |
| STATE FOREST OVERVIEW..... | 6 |
| <i>Legal Considerations</i> | 6 |
| MANAGEMENT PLANNING OVERVIEW..... | 6 |
| <i>Public Participation</i> | 6 |
| <i>Strategic Plan for State Forest Management</i> | 7 |
| DEC'S MANAGEMENT APPROACH AND GOALS | 7 |
| <i>Forest Certification of State Forests</i> | 7 |
| <i>Ecosystem Management Approach</i> | 8 |
| <i>Ecosystem Management Strategies</i> | 8 |
| <i>State Forest Management Goals</i> | 9 |
| LOCATION MAP | 11 |
| | 11 |
| INFORMATION ON THE TREATY LINE UNIT | 12 |
| STATE LANDS IN THE UNIT | 12 |
| <i>Facilities Not Included in this UMP</i> | 12 |
| HIGH CONSERVATION VALUE FORESTS..... | 13 |
| SOILS | 13 |
| WATER RESOURCES | 15 |
| BIODIVERSITY | 17 |
| <i>Common Species</i> | 17 |
| <i>Habitat</i> | 18 |
| <i>At-Risk Species</i> | 20 |
| VISUAL RESOURCES..... | 24 |
| HISTORIC AND CULTURAL RESOURCES..... | 24 |
| <i>State Forest History</i> | 24 |
| <i>History on the Unit</i> | 24 |
| <i>Inventory of Resources</i> | 26 |
| <i>Historic and Archaeological Site Protection</i> | 27 |
| <i>Archaeological Research</i> | 28 |
| REAL PROPERTY | 28 |
| <i>Boundary Lines</i> | 28 |
| <i>Exceptions and Deeded Restrictions</i> | 29 |
| <i>Encroachments</i> | 31 |
| <i>Land Acquisition</i> | 32 |
| INFRASTRUCTURE..... | 32 |
| <i>Roads and Trails</i> | 32 |
| <i>Signs / Kiosks</i> | 34 |
| <i>Boating and Fishing Facilities</i> | 34 |
| <i>Designated Campsites and Lean-tos</i> | 34 |
| <i>Utility Transmission and Collection Facilities</i> | 34 |
| <i>Correction or Youth Camps</i> | 35 |
| <i>Non-recreational Uses</i> | 35 |
| FORMAL AND INFORMAL PARTNERSHIPS AND AGREEMENTS | 35 |
| RECREATION..... | 35 |

Table of Contents

| | |
|--|-----------|
| <i>Wildlife-related Recreation</i> | 36 |
| <i>Hunting</i> | 36 |
| <i>Deer Management Assistance Program (DMAP)</i> | 36 |
| <i>Fishing</i> | 36 |
| <i>Trapping</i> | 37 |
| <i>Water-based Recreation</i> | 37 |
| <i>Trail-based Recreation</i> | 38 |
| <i>Other Trail-based Activities</i> | 38 |
| <i>Other Recreational Activities</i> | 39 |
| <i>Camping</i> | 39 |
| <i>Overall Assessment of the Level of Recreational Development</i> | 39 |
| UNIVERSAL ACCESS | 39 |
| <i>Application of the Americans with Disabilities Act (ADA)</i> | 40 |
| MINERAL RESOURCES | 40 |
| <i>Oil, Gas and Solution Exploration and Development</i> | 40 |
| <i>Pipelines</i> | 41 |
| <i>Mining</i> | 41 |
| SUPPORTING LOCAL COMMUNITIES | 42 |
| <i>Tourism</i> | 42 |
| <i>Taxes Paid</i> | 43 |
| FOREST PRODUCTS..... | 43 |
| <i>Timber</i> | 43 |
| <i>Non-Timber Forest Products</i> | 46 |
| FOREST HEALTH..... | 46 |
| <i>Invasive Species</i> | 46 |
| <i>Insects</i> | 48 |
| <i>Diseases</i> | 51 |
| <i>Animals</i> | 52 |
| <i>Managing Deer Impacts</i> | 52 |
| SUMMARY OF ECO-REGION ASSESSMENTS | 53 |
| ECO-REGION SUMMARY..... | 53 |
| ECO-REGION ASSESSMENT | 54 |
| LOCAL LANDSCAPE CONDITIONS | 54 |
| HABITAT RELATED DEMANDS..... | 55 |
| MANAGEMENT OBJECTIVES AND ACTIONS | 56 |
| OBJECTIVES..... | 56 |
| <i>Ecosystem Management</i> | 56 |
| <i>Resource Protection</i> | 57 |
| <i>Infrastructure and Real Property</i> | 58 |
| <i>Public/Permitted Use</i> | 59 |
| <i>Forest Management and Health</i> | 63 |
| TEN-YEAR LIST OF MANAGEMENT ACTIONS..... | 66 |
| <i>Unit-wide Actions</i> | 66 |
| <i>State Forest Actions</i> | 66 |
| <i>Kerryville State Forest (Delaware R.A. #1) Actions</i> | 66 |
| <i>Steam Mill State Forest (Delaware R.A. #2) Actions</i> | 66 |
| <i>Columbia Lake State Forest (Delaware R.A. #3) Actions</i> | 66 |
| <i>Arctic-China State Forest (Delaware R.A. #4 and #5) Actions</i> | 66 |
| <i>Barbour Brook State Forest (Delaware R.A. #6) Actions</i> | 67 |
| <i>Pine Hill State Forest (Delaware R.A. #7) Actions</i> | 67 |
| <i>Michigan Hill State Forest (Delaware R.A. #8) Actions</i> | 67 |
| <i>Beal's Pond State Forest (Delaware R.A. #9) Actions</i> | 67 |
| <i>Melondy Hill State Forest (Chenango R.A. #9) Actions</i> | 67 |
| <i>Melondy Hill State Forest (Broome R.A. #2) Actions</i> | 67 |

| | |
|--|------------|
| FOREST TYPE CODES | 68 |
| MANAGEMENT DIRECTION CODES | 68 |
| SIZE CLASS CODES..... | 68 |
| TREATMENT TYPE CODES..... | 68 |
| LAND MANAGEMENT ACTION SCHEDULES | 69 |
| BIBLIOGRAPHY | 106 |
| GLOSSARY | 107 |
| APPENDICES & FIGURES | 113 |
| APPENDIX A - SUMMARY OF COMMENTS DURING PUBLIC SCOPING SESSIONS | 113 |
| APPENDIX B - RESPONSIVENESS SUMMARY TO PUBLIC COMMENTS | 114 |
| APPENDIX C - STATE ENVIRONMENTAL QUALITY REVIEW (SEQR) | 115 |
| FIGURE 1. – SOILS MAPS | 116 |
| FIGURE 2 – WATER RESOURCES, SPECIAL MANAGEMENT ZONES AND TOPOGRAPHY MAPS | 120 |
| FIGURE 3. – INFRASTRUCTURE AND RECREATION MAPS..... | 130 |
| FIGURE 4. – CURRENT FOREST TYPE AND FOREST STAND IDENTIFICATION NUMBER MAPS | 141 |
| FOREST TYPE AND FOREST STAND IDENTIFICATION NUMBER MAP FOR ARCTIC CHINA STATE FOREST (SOUTH SECTION)..... | 141 |
| FOREST TYPE AND FOREST STAND IDENTIFICATION NUMBER MAP FOR ARCTIC CHINA STATE FOREST (NORTH SECTION) | 142 |
| FIGURE 5. – MANAGEMENT DIRECTION AND FOREST TYPE MAPS | 154 |
| MANAGEMENT DIRECTION MAPS FOR ARCTIC CHINA STATE FOREST (SOUTH SECTION)..... | 154 |

Preface

STATE FOREST OVERVIEW

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), pages 33 and 317 at <http://www.dec.ny.gov/lands/64567.html>.

Management Planning Overview

The Treaty Line Unit Management Plan (UMP) is based on a long-range vision for the management of the Artic China, Barbour Brook, Beals Pond, Columbia Lake, Kerryville, Melondy Hill, Michigan Hill, Pine Hill, and Steam Mill 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, staff limitations, wood product markets, and forest health problems may necessitate deviations from the scheduled management activities.

Public Participation

One of the most valuable and influential aspects of UMP development is public participation. Public meetings are held to solicit input and written and verbal comments are encouraged while management plans are in draft form. Mass mailings, press releases and other methods for soliciting input are often also used to obtain input from adjoining landowners, interest groups and the general public.

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 Bureau's 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 Department's 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.

Preface

DEC'S MANAGEMENT APPROACH AND GOALS



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Ecosystem Management Approach

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 habitat 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>.

Multiple-use Management

DEC will seek to simultaneously provide many resource values on the unit such as, fish and wildlife, wood products, recreation, aesthetics, minerals, watershed protection, and historic or scientific values.

Landscape Ecology

The guiding principle of multiple use management on the unit will be to provide a wide diversity of habitats that naturally occur within New York, while ensuring the protection of rare, endangered and threatened species and perpetuation of highly ranked unique natural communities. The actions included in this plan have been developed following an analysis of habitat needs and overall landscape conditions within the planning unit (i.e. the geographical area surrounding and including the state forests) the larger ecoregion and New York State.

Ecosystem Management Strategies

The following strategies are the tools at DEC's disposal, which will be carefully employed to practice landscape ecology and multiple-use management on the unit. The management strategy will affect species composition and habitat in both the short and long term. For more information on these management strategies, please see SPSFM page 81 at <http://www.dec.ny.gov/lands/64567.html>.

Passive Management

DEC foresters will employ passive management strategies through the designation of natural and protection areas, and buffers around those areas, such as along streams, ponds and other wetlands, where activity is limited.

Silviculture (Active Management)

DEC foresters will practice silviculture; the art and science of controlling the establishment, growth, composition, health, and quality of forests and woodlands, in an effort to promote biodiversity and produce sustainable forest products. There are two fundamental silvicultural systems which can mimic the tree canopy openings and disturbances that occur naturally in all forests; even-aged management and uneven aged management. Each system favors a different set of tree species. In general, even-aged management includes creating wide openings for large groups of trees that require full sunlight to regenerate and grow together as a cohort, while uneven-aged management includes creating smaller patch openings for individual trees or small groups of trees that develop in the shade but need extra room to grow to their full potential.

State Forest Management Goals

Goal 1 – Provide Healthy and Biologically Diverse Ecosystems

Ecosystem health is measured in numerous ways. One is by the degree to which natural processes are able to take place. Another is by the amount of naturally occurring species that are present, and the absence of non-native species. No single measure can reveal the overall health of an ecosystem, but each is an important part of the larger picture. The Department will manage state forests so that they demonstrate a high degree of health as measured by multiple criteria, including the biodiversity that they support.



Landscape ecology seeks to improve landscape conditions, taking into account the existing habitats and land cover throughout the planning unit, including private lands

Goal 2 – Maintain Man-made State Forest Assets

Man-made assets on state forests include structures, boundary lines, trails, roads and any other object or infrastructure that exists because it was put there by people. Many of these items need no more than a periodic check to make sure they are still in working order. Others need regular maintenance to counteract the wear of regular use. It is the Department's intent to ensure that all necessary man-made items on state forests are adequately maintained to safely perform their intended function.

Goal 3 – Provide Recreational Opportunities for People of all Ages and Abilities

State forests are suitable for a wide variety of outdoor recreational pursuits. Some of these activities are entirely compatible with one another, while others are best kept apart from each other. Equally varied are the people who undertake these activities, as well as their abilities, and their desire to challenge themselves. While not all people will be able to have the experience they desire on the same state forest, the Department will endeavor to provide recreational opportunities to all those who wish to experience the outdoors in a relatively undeveloped setting.

Preface

DEC'S MANAGEMENT APPROACH AND GOALS

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

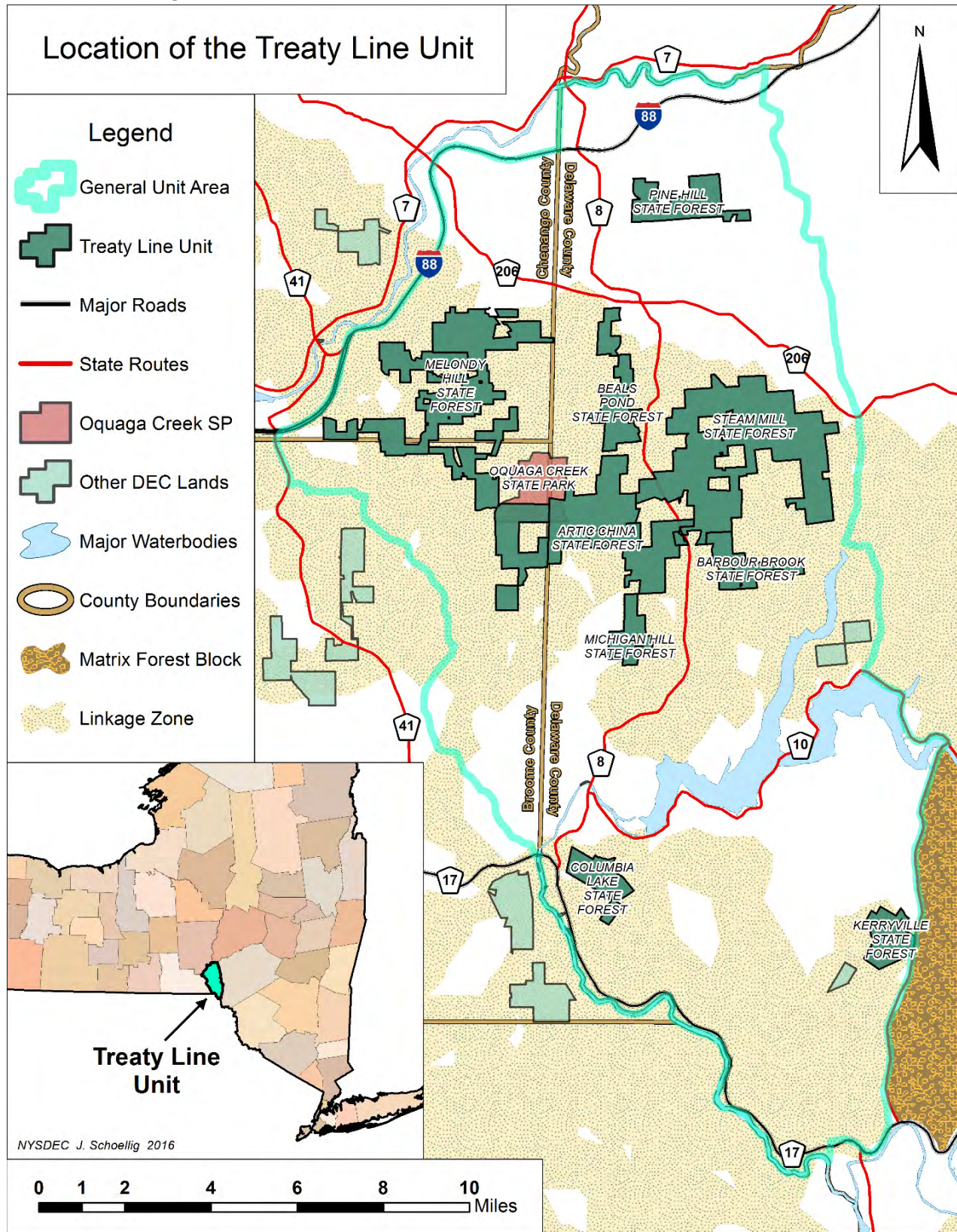
ECL §1-0101(1) provides in relevant part that “It is hereby declared to be the policy of the State of New York to conserve, improve and protect its natural resources and environment and to prevent, abate and control water, land and air pollution, in order to enhance the health, safety and welfare of the people of the state and their overall **economic** and social well-being.”

(Emphasis added) In considering all proposed actions, the Department will attempt to balance environmental protection with realizing potential economic benefit.

Goal 5 – Provide a Legal Framework for Forest Conservation and Sustainable Management of State Forests

Staff must have clear and sound guidance to direct their decisions and actions. Likewise, the public must have clear information regarding what they are and are not allowed to do on state forests. Both of these are provided by well-written laws, regulations and policies. The Department will work to improve existing legal guidance that has proved to be inadequate, and create new guidance that is needed but does not yet exist.

Location Map



INFORMATION ON THE TREATY LINE UNIT

STATE LANDS IN THE UNIT

Information on the Treaty Line Unit

State Lands in the Unit

Table I.A. contains the names of the state land facilities that make up this unit. The Treaty Line Unit has 9 State Forests with a total of 19,186 acres. A web page has been developed for each of the state forests. Each web page features an updated map of the state forest with recreational information and natural features.

| <i>Table I.A. – State Lands in the Unit</i> | |
|--|-------------------|
| Facility Name and Webpage | Acreage |
| Artic China – http://www.dec.ny.gov/lands/102151.html | 2,948 ac. |
| Barbour Brook – http://www.dec.ny.gov/lands/102186.html | 775 ac. |
| Beals Pond – http://www.dec.ny.gov/lands/102347.html | 1,117 ac. |
| Columbia Lake – http://www.dec.ny.gov/lands/102348.html | 694 ac. |
| Kerryville – http://www.dec.ny.gov/lands/102353.html | 698 ac. |
| Melondy Hill – http://www.dec.ny.gov/lands/8162.html | 5,660 ac. |
| Michigan Hill – http://www.dec.ny.gov/lands/102358.html | 594 ac. |
| Pine Hill – http://www.dec.ny.gov/lands/102363.html | 1,091 ac. |
| Steam Mill – http://www.dec.ny.gov/lands/102368.html | 5,609 ac. |
| Total Acreage | 19,186 ac. |

Facilities Not Included in this UMP

Oquaga Creek State Park is located adjacent to both the Arctic China and Melondy Hill State Forests. This facility is operated by the Office of Parks, Recreation and Historic Preservation (OPRHP). Under a 1972 permit, OPRHP was authorized to construct and operate a State Park on approximately 390 acres of State Forest lands. DEC retains the authority to manage the permitted lands for forest management purposes. DEC must also approve all road or recreation development within the park, while OPRHP is responsible for operating the park along with survey and maintenance of park boundaries.

HIGH CONSERVATION VALUE FORESTS

In general, State Parks have considerably more developed recreational opportunities than those on state forest lands. Oquaga Creek State Park offers swimming, fishing, and boat rentals on its 55-acre Arctic Lake. Six miles of recreation trails are available, along with shower/bathroom facilities, and an array of camping options. Additional information can be obtained through NYS Parks at <http://www.parks.ny.gov/parks/27/details.aspx>.

High Conservation Value Forests

High Conservation Value Forests (HCVF) are those portions of state forests which have known high conservation values that the Department feels should take precedent over all other land use and management decisions. HCVFs may not be identified on every unit and state forests that have an HCVF designated will not necessarily have multiple classifications. Areas that are identified as having exceptional values may be managed for timber, wildlife and/or recreation, however management activities must maintain or enhance the high conservation values present. Currently, HCVFs are assigned to one or more of five land classifications, four of which may be found on state forests:

1. Rare Community - Forest areas that are in or contain rare, threatened or endangered ecosystems.
2. Special Treatment - Forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, and refugia).
3. Cultural Heritage – Forest areas fundamental to meeting basic needs of local communities (e.g. subsistence, health) and are critical to their traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).
4. Watershed - Forest areas that provide safe drinking water to local municipalities.
5. Forest Preserve* - Forest areas containing globally, regionally or nationally significant large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance.

**Forest Preserve lands inside both the Adirondack and Catskills Park Blue line. Although Forest Preserve is not considered State Forest, they offer a significant high conservation value for lands managed by the Department.*

Portions of the Treaty Line Unit have been identified as having high conservation value. Acreage totals for designated HCVFs located within the unit can be found in the appropriate sections below. For more information on HCVFs please go to <http://www.dec.ny.gov/lands/42947.html>.

Soils

Soils provide the foundation, both figuratively and literally, of forested ecosystems. They support an immense number of microorganisms, fungi, mosses, insects, herpetofauna, and small mammals which form the base of the food chain. They filter and store water and also provide and recycle nutrients essential for all plant life. For information on DEC's policies for the

INFORMATION ON THE TREATY LINE UNIT

SOILS

protection of forest soils, as well as water resources please see SPSFM page 108 at <http://www.dec.ny.gov/lands/64567.html>.

The dominant soil type on the unit is a Halcott/Mongaup/Vly complex. Other predominant soil types are Willdin, Mardin, Mongaup, Volusia, and Lewbeach/Lewbath and Lackawanna/Bath complexes. The major soil types under the Delaware County portion of the unit track closely with those listed for the unit overall. In contrast, Lordstown, Mardin, Volusia, and Oquaga soils underlie most of the Chenango and Broome County forest areas. A majority of the Chenango and Broome soils are classified as channery silt loams and described as erodible. Soils in the Delaware portion of the unit are more variable, but generally described as highly erodible and very rocky. Drainage conditions vary substantially over the unit, though poor and very poor drainage conditions are common.

Table I.B. - Soils (see Figure 1 for maps)

| Facility Name | Predominant Soil Type(s) |
|--|--|
| Kerryville State Forest Delaware 1 | Halcott/Mongaup/Vly complex, and Willdin |
| Steam Mill State Forest Delaware 2 | Halcott/Mongaup/Vly complex, Mardin, Willdin, Bath, Volusia, Lewbath, and Mongaup |
| Columbia Lake State Forest Delaware 3 | Oquaga/Lordstown/Arnot, Lackawanna/Bath, and Wellsboro/Mardin complexes |
| Arctic China State Forest Delaware 4 | Halcott/Mongaup/Vly complex, Willdin, Bath, Mardin, and Volusia |
| Arctic China State Forest Delaware 5 | Halcott/Mongaup/Vly and Lackawanna/Bath complexes, Willdin, and Mardin |
| Barbour Brook State Forest Delaware 6 | Halcott/Mongaup/Vly and Willowemoc/Willdin complexes |
| Pine Hill State Forest Delaware 7 | Mardin, Mongaup, Volusia, Willdin, and Bath |
| Michigan Hill State Forest Delaware 8 | Halcott/Mongaup/Vly complex, and Mardin |
| Beals Pond State Forest Delaware 9 | Willdin, Mardin, Mongaup, Middlebrook/Mongaup, and Bath |
| Melondy Hill State Forest Broome 2 | Mardin, Volusia, Lordstown, and Morris |
| Melondy Hill State Forest Chenango 9 | Lordstown, Mardin, Oquaga, and Volusia |
| Melondy Hill State Forest Chenango 15 | Lordstown, Mardin, and Oquaga |

Water Resources

The Department maintains an inventory of wetlands, vernal pools, spring seeps, intermittent streams, perennial streams, rivers and water bodies within a Geographic Information System (GIS) database. This data is used to establish special management zones and plan appropriate stream crossings for the protection of water resources. Table I.C. contains a summary of water resources data on the unit.

Two main watersheds drain the unit, the Delaware and the Susquehanna. The vast majority of the surface waters flow south into the West Branch of the Delaware River and eventually on into the main Delaware River. The remaining northern third of the unit flows north and westward into the Susquehanna River watershed. With the exception of a few moderate sized streams and smaller warm water ponds, waters on the unit and in particular the State Forest lands, are small headwater streams. The assortment of high-quality headwaters is very important to the health of each respective ecosystem on a watershed scale.

| <i>Table I.C. – Water Resources (see Figure 2 for maps)</i> | | |
|---|---------|---|
| Watersheds | | Sub-Watersheds |
| Hydrologic unit(s) within the Susquehanna River Watershed | | Carrs Creek, Cornell Creek, Bennettsville Creek, Martin Brook, and Yaleville Brook |
| Hydrologic unit(s) within the Delaware River Watershed | | Big Hollow, Cadosia Creek, Cannonsville Reservoir, East Branch Cold Spring Creek, Sands Creek, Sherman Creek, Upper Oquaga Creek, and Upper Trout Creek |
| Watershed HCVF | | 208 ac. |
| Wetlands | | |
| All Wetlands | | 233 ac. |
| Streams/Rivers* | | |
| Perennial streams/rivers ** | AA or A | 5.06 mi. |
| | B | 0 mi. |
| | C | 30.02 mi. |
| | D | 0 mi. |

INFORMATION ON THE TREATY LINE UNIT

WATER RESOURCES

| | | |
|---|----------------------------------|-----------|
| Trout streams/ivers | AA (T), A (T), B (T) or C (T) | 25.43 mi. |
| Water Bodies | | |
| Water bodies (open-water ponds and lakes) | | 39 ac. |

*For information regarding stream classifications please refer to <http://www.dec.ny.gov/permits/6042.html>.

**For purposes of this table all perennial streams/ivers were counted regardless of (T) classification.

Aquatic Habitat

Water quality within the headwaters of the unit is considered to be of a high quality due to the steady source of relatively clean and cold groundwater and a lack of anthropogenic wastes associated with more urbanized areas. The over 25 miles of Classified trout waters on the unit are further indicative of high-quality aquatic habitat, due to the high standard in habitat and environmental requirements of the trout which inhabit them.

The Waterbody Inventory/Priority Waterbodies List (WI/PWL) contains base assessments of water quality. It is a compilation of water quality information for all individual waterbodies (lakes, rivers, streams, estuaries and coastlines) in the state. The WI/PWL includes waterbody Fact Sheets outlining the most recent assessment of use support, identification of water quality problems & sources, and a summary of activities to restore & protect each individual waterbody. Additional information is available at <http://www.dec.ny.gov/chemical/36730.html>.

Aside from a small number of past fisheries surveys on the larger waters, water quality has not been monitored regularly on the State Forest lands of the unit. However, the Department has newly implemented the Water Assessments by Volunteer Evaluators (WAVE) project. Under the project, trained citizen monitors visit stream sites once per year, anytime between July and September, and collect riparian macro invertebrates (insects and other small stream organisms) from the rocks and rubble on the stream bottom. Based on the WAVE assessments, waters are flagged for possible investigation by professionals. The DEC Stream Biomonitoring Unit then is able to better direct and target their own water quality assessments. In this way, citizen monitors provide valuable information to assist in identifying healthy stream sites and those with potential water quality concerns. The data is included in federal and state water quality reports and helps to target professional assessments and local restoration or conservation efforts where they are most needed. WAVE training sessions are rotated throughout the major drainage basins within the state on a five-year schedule, targeting those basins that will be sampled by the DEC Stream Biomonitoring Unit in the following year. See the professional monitoring schedule at <http://www.dec.ny.gov/chemical/29576.html>. To register for a training session or for more information, contact the DEC WAVE Coordinator at wave@dec.ny.gov.

All projects located within protected riparian corridors or wetlands must be reviewed by the Department in accordance with the Regional Permits office and meet state and/or federal standards to protect valuable and vulnerable aquatic resources. In particular, projects associated with waters classified as Trout streams are required to maintain and/or improve aquatic habitats that may be disturbed. Disturbances must be limited in an effort to promote the survival, growth, and reproduction of trout, and in turn other resident aquatic organisms are protected.

Flowing Waters

As water level fluctuates by season, many headwater streams may only be fishable part of the year. Typically, these upper reaches receive little angling pressure but may offer fine wild trout action for adventurous anglers. Except where fish barriers prevent upstream migration or streams dry up and go subterranean, some trout (mostly brook trout) are usually present in these headwaters. Farther downstream in the larger waters like Cold Spring Creek & East Branch Cold Spring Brook, Brown Trout & Rainbow Trout are present. Both Brook and Brown Trout migrate upstream each fall to spawn and thus repopulate any optimal stream reaches they can ascend. It is very common to see wild Brown Trout in stream reaches or tributaries where they were not stocked. Rainbow Trout can also naturalize in some streams where they are able to successfully spawn and reproduce.

A 5-year evaluation conducted from 2007 to 2011 of small flowing waters determined that Brook, Brown, and Rainbow Trout were found in tributaries flowing into the West Branch of the Delaware River, and Brook and Brown Trout were found in tributaries flowing into Masonville Creek. Past evaluations have shown Brook Trout to be found in both Steam Mill Branch and Bundy Hollow. The East Branch of Cold Spring Creek and Sherruck Brook hold both Brook and Brown Trout, while Big Brook and Oquaga Creek contained all three species.

Ponded Waters

There are eleven ponds on the unit totaling around 38 surface acres. The three named ponds on the unit are Beals Pond, Clarks Pond, and Greco Pond. These ponds range from 2.2 to 11.5 acres in size and are open to angling. The eight unnamed ponds on State Forest lands range from about 0.6 to 4.8 acres, but little is known about these waters. The larger ponds on the unit can offer access for quiet paddling or the chance to catch warm-water fish species known to be present such as Largemouth Bass, Pumpkinseed, and Brown Bullhead.

Biodiversity

Information regarding biodiversity has been gathered to support the following goals:

- “Keep Common Species Common” by maintaining landscape-level habitat diversity and a wide variety of naturally occurring forest-based habitat as well as managing plantations according to DEC natural resources policy.
- Protect and in some cases manage known occurrences and areas with potential to harbor endangered plants, wildlife and natural communities.
- Consider other “at-risk species” whose population levels may presently be adequate but are at risk of becoming imperiled due to new incidences of disease or other stressors.

Common Species

The following information sources indicate which common species (among other species) are present over time:

- NYS Breeding Bird Atlas Block Numbers: 4668C, 4668D, 4567B, 4567A, 4667B, 4567C, 4567D, 4667C, 4667D, 4767C, 4566B, 4666A, 4666B, 4767A, 4666C, 4665A, 4665C, and 4765C.

INFORMATION ON THE TREATY LINE UNIT

BIODIVERSITY

Information including species listings, breeding status, and state and global rankings for individual Breeding Bird Atlas blocks is available at

<http://www.dec.ny.gov/cfm/xtapps/bba/>.

- Herp (Herpetofauna) Atlas Block Names: Afton, Cannonsville Reservoir, Deposit, North Sanford, Sidney, Trout Creek, and Unadilla.

Block names and the area covered by each corresponds directly to the USGS 7.5' topographic quadrangles of the same name. Herp Atlas information on amphibians, toads, frogs, turtles, lizards and snakes can be found at

<http://www.dec.ny.gov/animals/7140.html>.

- Game Species Harvest Levels WMU Numbers: 4O and 4W.

Current and historical harvest information (deer take, bear take, turkey harvest, etc.) is available at <http://www.dec.ny.gov/outdoor/hunting.html>.

Habitat

The following information provides several representations of the habitat types on the unit.

Vegetative Types and Stages

| <i>Table I.D. - Vegetative Types and Stages within the Unit (see Figure 4 for maps)</i> | | | | | | |
|---|---------------------|-----------|--------|-------|-------------|------------|
| Vegetative Type | Acres by Size Class | | | | Total Acres | % of Total |
| | 0 -5 in | 6 - 11 in | 12+ in | Other | | |
| Natural Forest Hardwood | 866 | 3,425 | 7,990 | 3 | 12,284 | 64.0 |
| Natural Forest Conifer | | 420 | 750 | | 1170 | 6.1 |
| Plantation Softwoods | 702 | 945 | 3,486 | | 5,133 | 26.8 |
| Plantation Hardwoods | | 13 | | | 13 | 0.1 |
| Wetland | 189 | 40 | 83 | | 312 | 1.6 |
| Ponds | 29 | | | | 29 | 0.2 |
| Open/Brush | 33 | | | | 33 | 0.2 |
| Other (Roads, Parking lots, etc.) | | | | 212 | 212 | 1.1 |
| Total (Acres) | 1,823 | 4,850 | 12,317 | 215 | 19,186 | 100% |

Resource Protection Areas

In the course of practicing active forest management, it is important to identify areas on the landscape that are either reserved from management activity or where activity is conducted in such a manner as to provide direct protection and enhancement of habitat and ecosystem functions. For more information on these protective measures, see SPSFM page 85 at

<http://www.dec.ny.gov/lands/64567.html>.

Special Management Zones (SMZs) provide continuous over-story shading of riparian areas and adjacent waters, by retaining sufficient tree cover to maintain acceptable aquatic habitat and protect riparian areas from soil compaction and other impacts. DEC's buffer guidelines also maintain corridors for movement and migration of all wildlife species, both terrestrial and aquatic. Buffers are required within SMZs extending from wetland boundaries, high-water marks on perennial and intermittent streams, vernal pool depression, spring seeps, ponds and lakes, recreational trails, campsites and other land features requiring special consideration. A map of the SMZs as applied on the unit is included at the end of the UMP. For more information regarding Special Management Zones please see www.dec.ny.gov/sfsmzbuffers.pdf.

The identification of large, un-fragmented forested areas, also called matrix forest blocks, is an important component of biodiversity conservation and forest ecosystem protection. In addition, securing connections between major forested landscapes and their imbedded matrix forest blocks is important for the maintenance of viable populations of species, especially wide-ranging and highly mobile species, and ecological processes such as dispersal and pollination over the long term.

Although no matrix forest blocks are specifically located on the unit, several wide sections of linkage zone are. These linkage zones provide the pathways of connection to matrix forest blocks for the movement of species. Nearly all the of the State Forest lands on the unit, as shown on the Location Map at the beginning of the plan, are included as part of these linkage zones. Designation as a linkage zone means that these forests will be managed to encourage biodiversity, develop wildlife habitat, and maintain use as connectivity corridors for a wide variety of plant and animal species. The area designated as linkage zones is listed under the forest landscape connectivity corridor heading below.

Maintaining or enhancing matrix forest blocks and connectivity corridors must be balanced against the entire array of goals, objectives and demands that are placed on a particular state forest. Where matrix forest block maintenance and enhancement is chosen as a priority for a given property, management actions and decisions should emphasize closed canopy and interior forest conditions. The following areas have been identified to meet demands at the landscape level:

| | |
|--|------------------|
| • Matrix Forest Block | None on the Unit |
| • Forest Landscape Connectivity Corridor | 18,050 acres |
| • Important Bird Area | 16,390 acres |

Melondy Hill State Forest contains one High Conservation Value Forest (HCVF). This HCVF is a designated water shed protection area managed for water quality. There are no other HCVF's located on the Treaty Line Unit at this time. Stands and Forests will be evaluated for potential HCVF designation on a regular basis.

More information regarding Matrix Forest blocks, connectivity corridors and associated management considerations can be found in the SPSFM, page 85 at <http://www.dec.ny.gov/lands/64567.html>. Important Bird Area designations are developed by

INFORMATION ON THE TREATY LINE UNIT

BIODIVERSITY

Audubon New York. They portray a network of area that is significant to the conservation of birds in New York State.

At-Risk Species

The presence of at-risk species and communities on the Treaty Line Unit and in the surrounding landscape has been investigated to inform appropriate management actions and protections. This investigation was conducted in development of this UMP and the associated inventory of state forest resources. A more focused assessment will be conducted before undertaking specific management activities in sensitive sites. Appropriate protections may include reserving areas from management activity altogether or mitigating impacts of a specific activity. For more information on protection of at-risk species, please see SPSFM page 115 at <http://www.dec.ny.gov/lands/64567.html>.

Investigation included the following:

- A formal plant survey was conducted on this unit in the spring of 2005 by the New York Natural Heritage Program.
- Element Occurrence Records for the New York Natural Heritage Program's Biological and Conservation Data System were consulted for information.
- Consultation of New York Natural Heritage Program species guides.
- Consultation of the NYS Comprehensive Wildlife Conservation Strategy

No endangered or threatened species of wildlife or plant are known to exist within the state forests of the unit at this time. However, predicted suitable habitat exists on the unit for four species. At the larger landscape level, the presence of several at-risk species has been recorded. Table I.F. lists the species, their protective status in New York State and required habitats. The table divides species into two groups, those predicted on the State Forests of the unit, and those existent or predicted on the surrounding landscape.

Many species of forest raptor, such as the Northern Goshawk, Red-Shouldered Hawk, Cooper's Hawk and Sharp-shinned Hawk, are listed as Species of Special Concern and have been reported as nesting on state forests within the unit. Research is being conducted on the presence and behavior of nesting birds and the effect management practices have upon fledgling survival on state forests across the unit.

Table I.E. - At-Risk Species*

| Species Name | NYNHP Rank | Habitat | Record Source | NYS Status |
|---|------------|--|---------------|------------|
| <i>Confirmed or Predicted within the Unit</i> | | | | |
| Appalachian Tiger Beetle (<i>Cicindela ancocisconensis</i>) | S2 | Edges along small forested river and stream corridors, dry sandy openings and fine gravel bars which are often | (PRED) | SGCN |

INFORMATION ON THE TREATY LINE UNIT

BIODIVERSITY

| | | | | |
|---|---------------|--|----------------|--------|
| | | shaded, sandy interior forest soils are utilized for adult burrows. | | |
| Bald Eagle (<i>Haliaeetus leucocephalus</i>) | S2S3B, S2N | Lakes, riverine corridors, and other large water bodies supporting healthy fish and waterfowl prey populations, larger upper canopy trees preferred for perching and nesting. | (PRED) | Threat |
| Extra-striped Snaketail (<i>Ophiogomphus anomalus</i>) | S2 | Clear, cold, swiftly flowing rivers with high dissolved oxygen content and water quality, prefer to perch along areas with riffles. | (PRED) | PSC |
| Mingan Moonwort (<i>Botrychium minganense</i>) | S1 | Short grass open fields or mountain meadows with underlying calcareous bedrock, sandy or gravel stream banks, often in association with cedar or other moonwort species. | (PRED) | End |
| Confirmed or Predicted on the Landscape and May Be Affected by State Forest Management | | | | |
| Bald Eagle (<i>Haliaeetus leucocephalus</i>) | S2S3B, S2N | Susquehanna River, Cannonsville Reservoir, and other large water bodies that support healthy fish and waterfowl prey populations, larger upper canopy and super canopy trees are preferred for perching and nesting. | SHU (CONF) | Threat |
| Barn Owl (<i>Tyto alba</i>) | S1S2 | Grasslands, marsh, open and/or agricultural lands interspersed with mixed wooded or partially wooded landscapes, often around human habitation, large cavity nester, preferentially use man-made structures, winter roosts are within dense conifer cover. | BBA (CONF) | PSC |
| Hellbender (<i>Cryptobranchus alleganiensis</i>) | S2 | Cold, moderate to fast-flowing sections of the Susquehanna and Unadilla Rivers, shallow sand and gravel bottoms with an abundance of large jumbled flat rock slabs for dens. | ESU (CONF) | PSC |
| Green Floater (<i>Lasmigona subviridis</i>) | S1S2 | Slow moving to standing backwaters of the Susquehanna River, in fine sand, silt, or muddy substrates, thrives in nutrient rich environments, array of host fish species. | SFMS (CONF) | Threat |
| Timber Rattlesnake (<i>Crotalus horridus</i>) | S3 | Sloped rocky hillsides in deciduous or mixed deciduous-coniferous forests for foraging, rock slides, outcrops, rock | ESU (CONF) | Threat |

INFORMATION ON THE TREATY LINE UNIT

| | | | | |
|--|----|---|-------------|------|
| | | cuts, steep sandstone ledges and other rocky ledges utilized for basking, shedding, breeding, and reproduction. | | |
| Yellow Lampmussel (<i>Lampsilis cariosa</i>) | S3 | Small to large rivers including the Susquehanna, especially on sandy substrates within areas of riffles. | SFMS (CONF) | SGCN |

*Defined as NYNHP rank S1, S2, S2-3, G1, G2 G2-3, or identified as an SGCN.

Key to Codes

New York Natural Heritage Program (NYNHP) Rank

S1 - Critically Imperiled in New York: Especially vulnerable to disappearing from New York due to extreme rarity or other factors; typically 5 or fewer populations or locations in New York, very few individuals, very restricted range, very few remaining acres (or miles of stream), and/or very steep declines.

S2 - Imperiled in New York: Very vulnerable to disappearing from New York due to rarity or other factors; typically 6 to 20 populations or locations in New York, very few individuals, very restricted range, few remaining acres (or miles of stream), and/or steep declines.

S3 - Vulnerable in New York: Vulnerable to disappearing from New York due to rarity or other factors (but not currently imperiled); typically 21 to 80 populations or locations in New York, few individuals, restricted range, few remaining acres (or miles of stream), and/or recent and widespread declines.

S1S2 - Critically Imperiled or Imperiled in New York: Especially vulnerable or very vulnerable to disappearing from New York due to rarity or other factors; typically 20 or fewer populations or locations in New York, very few individuals, very restricted range, few remaining acres (or miles of stream), and/or steep declines. More information is needed to assign either S1 or S2.

S2S3B, S2N - Breeding populations Imperiled or Vulnerable in New York: A migratory animal very vulnerable, vulnerable, to disappearing as a breeder from New York, due to rarity or other factors; typically 6 to 80 breeding populations or locations in New York, few individuals, restricted range, few remaining acres (or miles of stream), and/or recent and widespread declines. More information is needed to assign either S2 or S3 for breeding populations. Nonbreeding (wintering) populations are imperiled in New York.

Record Source

(CONF) - Confirmed Species

(PRED) - Predicted Species

BBA - Breeding Bird Atlas

SHU - Significant Habitat Unit

ESU - Endangered Species Unit

SFMS - Susquehanna Freshwater Mussel Survey

End - Endangered Species (New York)

Threat - Threatened Species (New York)

PSC - Protected, Special Concern Species (New York)

SGCN - Species of Greatest Conservation Need

VISUAL RESOURCES

Visual Resources

The aesthetic quality of state forests is considered in management activity across the unit. However, some areas have greater potential to preserve or create unique opportunities for public enjoyment. These especially scenic areas are inventoried below. For information on the protection of visual resources, please see SPSFM page 81 at <http://www.dec.ny.gov/lands/64567.html>.

An attractive gorge area is located a few hundred yards west of Oxbow Road on the Melondy Hill State Forest. An unnamed tributary of Cornell Creek flows through the bottom of this small picturesque and steeply banked gorge. A mixture of large mature hardwood and hemlock trees shade and darken the small cascading pools formed as the stream flows over its rocky shale bottom.

Historic and Cultural Resources

State Forest History

A history of the State Forest Program is available at <http://www.dec.ny.gov/lands/4982.html>.

History on the Unit

The Treaty Line unit lies within parts of two prominent watersheds; the Susquehanna which flows into Chesapeake Bay and the Delaware which empties into its own bay. These waterways were used as corridors of travel long before European colonists arrived. At the time of European settlement these watersheds were inhabited by two important Indian nations, the Delaware and the Iroquois.

The Delaware Nation held the southern and eastern areas of the unit, as far north as the area of what is today Deposit. They called themselves Lenni Lanape which means real or original Indian or man. Meanwhile the Iroquois formed a powerful confederacy to the north and west. The Iroquois were known as the Haudenosaunee and famous for the cultivation of the three sisters; corn, beans and squash. The confederacy consisted of five related and allied tribes, the Seneca, Cayuga, Onondaga, Oneida and Mohawk. The latter two of which occupied the northern and western portions of this unit.

The exact impacts of native tribes on the flora, fauna, and lands are difficult to determine, though natives utilized a combination of hunting, fishing, and gathering along with forms of cultivation. Clearings were created by native peoples primarily through burning, to allow for the cultivation of seasonal agricultural foods, as well as permanent orchards. Today however, the effects of these tribes are nearly undetectable.

No native villages are known to have existed on the state forest lands of the unit, though important sites do exist in the area. The most significant and perhaps oldest was Onaquaga which was originally an Oneida village. It later became a mingled village as the Mohawk were pushed west, the Tuscaroras joined the confederacy, and other tribes became fractured. Onaquaga was located about one and a half miles north of present-day Windsor. It was an important location that later became a base of operations for the British and Indian forces on the frontier, supporting raids, incursions, and battles throughout the area and the central Mohawk Valley region to the north.

The native peoples used the future state forest lands mostly as rotational hunting grounds. While state forest lands are located primarily on hilltops and the upper hillsides, native

settlements existed largely within the fertile river valleys. Native settlement locations were relocated after a period of years, sometimes to previously used locations, to allow depleted soils and game to recover.

The first European people to inhabit the area were primarily transient Dutch fur traders and trappers. In time their travel would diminish as furs became scarce and the natives were pushed out, partially by various colonial and revolutionary armies, and partially by settlers.

One of the first known Europeans to inhabit the area in more than passing was Peter Hynback, also known as Hinepaw, who made a settlement on the banks of the Delaware River near Deposit. This site was named Cookooze by the natives and known as Big Cookhouse. From Cookooze there existed a well-traveled foot trail to Onaquaga. This was the shortest travel way linking the Delaware and Susquehanna River basins. Deposit would later be founded near this location and become one of the most important settlements for trade and commerce. Hynback would not stay at Cookooze, he would also follow the movement of the local tribes out of the area as more settlers moved in and beaver and other furbearers became depleted. European settlement continued to push out the Delaware as inhabitants, driving them north up the Delaware basin and westward from the Hudson. The Minisinks, a notable tribe of the Delaware Nation, made great effort to fight the advance, but its push was inexorable.

The current villages of Sidney, Afton, and Bainbridge are located along the Susquehanna River while Hancock and Deposit are found on the Delaware side. Each were important sites of trade and commerce for both the natives and later European immigrants.

In 1768, the Treaty of Fort Stanwix was signed, a portion of that boundary divides the Treaty Line unit, hence the Treaty Line unit name. The Treaty Line still exists today as both the western boundaries of Delaware and Otsego counties and as the eastern boundaries of Broome and Chenango counties. The purpose of the treaty was to adjust the boundary line between Indian lands and British colonial settlements. In return for payment, the Iroquois ceded some of their own little-used lands, along with what were traditional lands belonging to the Delaware, in order to deflect English settlement away from their own more valuable homelands. Although representatives of the Delaware Indians were present they were not signatories to the treaty. The British government hoped this new boundary line might bring an end to the rampant frontier violence which had become costly and troublesome, while Indians hoped a new, permanent line would hold back colonial expansion.

After the revolutionary war ended much of the land acquired by treaty was divided as land grants awarded to revolutionary war veterans or surveyed and sold to land developers. This would lead to significant and long-lasting environmental impacts resulting from the vast land clearing, agriculture, and growth of the timber industry.

In 1764, Daniel (or possibly David) Skinner rafted from Delaware County to Philadelphia six eighty-foot-long ship spars. This was the beginning of the river trade, which announced both the available timber resources of the region and an efficient means of transport. The industry grew primarily to supply settlement construction, but demand for ship timbers greatly intensified during the War of 1812. By 1838, the river trade was flourishing with sawmills located at near regular mile intervals along the West Branch of the Delaware River. At its peak in 1875, over 3,000 rafts were floated down the river in a single year. Hillsides were often completely cleared or high graded for the oak and White Pine used in ship building.

INFORMATION ON THE TREATY LINE UNIT

HISTORIC AND CULTURAL RESOURCES

In the late 1800's a prominent shift toward the dairy industry occurred. It became the principal industry as lands became cultivated for agriculture or pastured for grazing. Stonewall fences are an abundant reminder found across many state forests still today. Other artifacts include abandoned home and farm site foundations, cemeteries, scattered quarry sites, and portions of abandoned road systems which all serve as visible remnants of the past land use.

Timber harvesting continued throughout this time as tanneries and acid factories generated solid demand for wood products. In particular, acid factories flourished producing chemicals used in several processes for the production of woolen cloth.

Road systems began to improve, railroads were opened, and the industrial age took hold. Local farms began to struggle with periods of bad weather, competition from more productive Midwest farmland entering cultivation, and a general westward shift of population.

In the 1920's synthetic chemicals were developed in Germany which caused the local chemical industry to falter. The resulting poor economic times were then severely compounded by The Great Depression in 1929. Many upland farm properties, being on the poorest soils, were driven into bankruptcy. Some of these vacant farmlands were brought into state ownership with the advent of the Hewitt Amendment. Public ownership was seen as a way to curtail erosion for watershed protection, restore nutrients to depleted soils, promote the production of timber for future utilization, and allow recreation and other kindred purposes on otherwise unproductive former farm lands.

To quickly stabilize soils plantations of spruce, pine, and larch were established. These plantations, along with areas of natural regeneration, replaced a once mature forest dominated by beech, hemlock, oak, and white pine. The result was a new forest with characteristics quite different from those of precolonial times. In addition to the changed soils and altered forest types, state forests are experiencing relatively new threats including over abundant deer populations, introduced and invasive species, and plantations that are nearing their natural life expectancy. Each presents a challenge for current and future management.

The names of the state forests have generally been derived either from local geographic locations or from the names of historic residents. The Artic China State Forest takes its name from a combination of the alike named Artic hilltop summit, nearby hamlet, and road which provides access to the forest. Barbour Brook State Forest holds and protects the headwaters of its namesake brook. Beals Pond State Forest borders Beals Pond so named for the European settler, A. Beals. Columbia Lake State Forest gets its name from the nearby water body and town road which also gives access to the forest. Kerryville State Forest is from the Kerry Siding and adjacent Kerryville place names. Melondy Hill State Forest is named for the Melondy family (Melendie & Melendy were early spellings used) that resided on several parts of the forest. Both the Michigan Hill and Pine Hill State Forests are located on their respective hills. Steam Mill State Forest derives its name from the local steam sawmill once located near the intersection of Steam Mill Road and Mormon Hollow Cross Road.

Inventory of Resources

The term cultural resources encompass a number of categories of human created resources including structures, archaeological sites and related resources. The Department is required by the New York State Historic Preservation Act (SHPA) (PRHPL Article 14) and SEQRA (ECL Article 8) as well as Article 9 of Environmental Conservation Law, 6NYCRR Section 190.8 (g) and Section 233 of Education Law to include such resources in the range of environmental

values that are managed on public lands. For more information on protection of historic and cultural resources, please see SPSFM page 139 at <http://www.dec.ny.gov/lands/64567.html>.

As a part of the inventory effort associated with the development of this plan the Department arranged for the archaeological site inventories maintained by the New York State Museum and the Office of Parks, Recreation and Historic Preservation to be searched in order to identify known archaeological resources that might be located within or near the unit. The two inventories overlap to an extent but do not entirely duplicate one another. The purpose of this effort was to identify any known sites that might be affected by actions proposed within the unit and to assist in understanding and characterizing past human use and occupation of the unit.

On lands managed by the Division of Lands and Forests, the number of standing structures is general, limited due to the nature of land use. Often those that remain are structures that relate to the Department's land management activities such as fire towers, "ranger" cabins and related resources. Fire towers as a class of resources, have been the subject of considerable public interest over the last decade. The majority of surviving fire towers have been found eligible for inclusion in the State and National Registers of Historic Places and a number of towers were formally listed in the Registers in 2001. For state agencies, Register listing or eligibility are effectively the same; obligating the Department to treat these resources appropriately and requiring that special procedures be followed should it be necessary to remove or otherwise affect these resources.

Archaeological sites are, simply put, any location where materials (artifacts, eco-facts) or modifications to the landscape reveal evidence of past human activity. This includes a wide range of resources ranging from pre-contact Native American camps and villages to Euro-American homesteads, cemeteries and graves as well as mills and other and industrial sites. Such sites can be entirely subsurface or can contain above ground remains such as foundation walls or earthwork features. There are five known cemeteries on the unit that date to the early 1800's. The burial site of a Civil War veteran is located on the Melondy Hill State Forest within the Melondy Cemetery.

The quality of the site inventory information varies a great deal in all respects. Very little systematic archaeological survey has been undertaken in New York State, especially on public lands. Therefore, all current inventories must be considered incomplete. Even fewer sites have been investigated to any degree that would permit their significance to be evaluated. Many reported site locations result from 19th century antiquarian information, artifact collector reports that have not been field verified. Often very little is known about the age, function or size of these sites. This means that reported site locations can be unreliable or be polygons that encompass a large area. Should systematic archaeological inventory be undertaken at some point in the future it is very likely that additional resources will be identified.

Historic and Archaeological Site Protection

The historic and archaeological sites located within the unit as well as additional unrecorded sites that may exist on the property are protected by the provisions of the New York State Historic Preservation Act (SHPA - Article 14 PRHPL), Article 9 of Environmental Conservation Law, 6NYCRR Section 190.8 (g) and Section 233 of Education Law. No actions that would impact known resources are proposed in this Unit Management Plan. Should any such actions be proposed in the future they will be reviewed in accordance with the requirements of SHPA. Unauthorized excavation and removal of materials from any of these sites is prohibited by

INFORMATION ON THE TREATY LINE UNIT

REAL PROPERTY

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).

Archaeological Research

The archaeological sites located on this land unit as well as additional unrecorded sites that may exist on the property may be made available for appropriate research. Any future archaeological research to be conducted on the property will be accomplished under the auspices of all appropriate permits. Research permits will be issued only after consultation with the New York State Museum and the Office of Parks, Recreation and Historic Preservation. Extensive excavations are not contemplated as part of any research program in order to assure that the sites are available to future researchers who are likely to have more advanced tools and techniques as well as more fully developed research questions.

Real Property

DEC's Bureau of Real Property GIS system contains maps and some deeds for State Forest properties. Original deeds were also consulted to complete the information below.

Boundary Lines

| <i>Table I.F. – Status of Boundary Lines</i> | | | |
|--|---------------------------------|-----------------------------|------------------------------|
| Facility Name | Length of Boundary (mi.) | Maintenance Schedule | Length Needing Survey |
| Artic China - Delaware 4 | 7.7 | 2018 | 0 |
| Artic China - Delaware 5 | 7.1 | 2018 | 0 |
| Barbour Brook - Delaware 6 | 7.5 | 2019 | 0 |
| Beals Pond - Delaware 9 | 11.6 | 2017 | 0 |
| Columbia Lake - Delaware 3 | 6.0 | 2020 | 0 |
| Kerryville - Delaware 1 | 5.2 | 2020 | 0.3 |
| Melondy Hill - Broome 2 | 21.5 | 2021 | 0 |
| Melondy Hill - Chenango 9 | 24.9 | 2020 | 0 |
| Melondy Hill - Chenango 15 | 10.1 | 2020 | 0 |
| Michigan Hill - Delaware 8 | 6.0 | 2021 | 0 |
| Pine Hill - Delaware 7 | 9.6 | 2021 | 0 |
| Steam Mill - Delaware 2 | 31.6 | 2017 | 0.34 |

For more information on boundary line maintenance, please see SPSFM page 153 at <http://www.dec.ny.gov/lands/64567.html>.

Exceptions and Deeded Restrictions

Table I.G. – Exceptions and Deeded Restrictions

| Facility Name | Description* |
|---|---|
| Artic China - Delaware 4 | Deeded right-of-way for a power line owned by New York State Electric and Gas (NYSEG) through Proposal D. |
| Artic China - Delaware 5 & Melondy Hill - Broome 2 | Permit granted to the office of Parks, Recreation and Historic Preservation (OPRHP) to construct and operate a State Park (Oquaga Creek State Park) on all that portion of Broome Reforestation Area 2, Proposal A, north of the lands of the Blowers Farm northerly line extended westerly to the western bounds of Proposal A, and Delaware Reforestation Area 5, Proposal G, west of Beech Hill Road and north of the northerly line of Blowers Farm extended easterly to Beech Hill Road. The acreage under this permit is approximately 270 acres on Broome Reforestation Area 2 and approximately 120 acres on Delaware Reforestation Area 5. The Department of Environmental Conservation retains the authority to manage said lands under this permit for forest management purposes, and must approve all road locations and recreational development. OPRHP shall survey and mark the bounds of the State Park. |
| Barbour Brook - Delaware 6 | Property reservation to continue any oil & gas lease agreement in existence at the time of execution of the deed on Proposal A. |
| | Permit issued to New York State Electric & Gas (NYSEG) for a power line through Proposal F. |
| Beals Pond - Delaware 9 | Deeded right-of-way for the purpose of cutting, loading, and removing ice through Proposal A. Approximately 12 rods in length from Beals Road to Beals Pond, to terminate upon the death of Clifford Howland (1887 - unknown). |
| | Spring and water right reservation on Proposal C. |
| Columbia Lake - Delaware 3 | None. |
| Kerryville - Delaware 1 | None. |
| Melondy Hill - Broome 2 | Spring and waterline reservation on Proposal H. |
| | Temporary Revocable Permit issued to New York State Electric & Gas (NYSEG) along Hunt Road. |
| | Letter allowing New York State Electric & Gas (NYSEG) power lines along Melondy Hill and North Sanford Road. |
| Melondy Hill - Chenango 9 | Deeded right-of-way to access the 33-acre parcel to the north of Proposal K "where the road now runs" (as of 1890) through Proposal K. |

INFORMATION ON THE TREATY LINE UNIT

REAL PROPERTY

Table I.G. – Exceptions and Deeded Restrictions

| Facility Name | Description* |
|----------------------------|---|
| | Deeded right-of-way to access the parcel adjacent and west of Proposal M from Ives Hill Road across the northwest corner of Proposal M. Since abandoned in favor of direct access constructed off of State Land. |
| | Mineral rights reservation of “one-half” on that portion of Proposal C that lies in Lot 98. |
| | Cemetery reservation of 0.39 acres of the Melondy Hill Cemetery located tree or four chains east of Melondy Hill Road. |
| | Spring and waterline reservation within Proposal D, to the spring about 10 chains southeasterly of the south line of the 2.28-acre exception parcel on the east side of Preacher Road (abandoned section). |
| | Spring and waterline reservation in Proposal G, to the buildings on the 4 acres exception parcel, providing the 4 acres is not sufficient to include the spring. |
| | Water reservation in Proposal H, for the use of the water reservoir and pipeline to the buildings on the 10.6-acre exception parcel. |
| | Spring and waterline reservation within Proposal O, to the spring located S 12° 36' W, 6.08 chains from the southeast corner of the 4.55-acre exception parcel, with the waterline running westerly to the 7.61-acre exception parcel. |
| | Spring and waterline reservation within Proposal P, to the spring located 140 rods east of the southwest corner of Proposal P and about 1 rod north of the south line of Proposal P, with the waterline running westerly to the exception parcel at the southwest corner of Proposal P. |
| Melondy Hill - Chenango 15 | Permit issued to New York State Electric & Gas (NYSEG) for a power line through Proposals A and H. |
| | Permit issued to Chenango and Unadilla Telephone Company for a telephone cable through Proposal H. |
| Michigan Hill - Delaware 8 | None. |
| Pine Hill - Delaware 7 | Deeded right-of-way four rods long by two rods wide, from Pecks Road to a spring within Proposal I. |
| | Spring and waterline reservation within Proposal C. |
| Steam Mill - Delaware 2 | Deeded right-of-way two rods wide, from a mill site through Proposal CC to Steam Mill Road. |
| | Deeded easement to Delaware County for drainage purposes within Proposal G. |

Table I.G. – Exceptions and Deeded Restrictions

| Facility Name | Description* |
|---------------|--|
| | Deeded right-of-way from NYS Route 8 to access the private cemetery within Proposal R. |
| | Deeded right-of-way to a quarry through Proposal T. |
| | Deeded right-of-way from Steam Mill road to a private cemetery through Proposal U. |
| | Property reservation for a School House of 0.1 acres within Proposal A. |
| | Spring and waterline reservation on Proposal CC. |
| | Property reservation to maintain a dam, ditch, and 10 feet on each side, to a sawmill site on Proposal G. |
| | Cemetery reservation of 0.24 acres within Proposal R. |
| | Property reservation of 1.95 acres for a stone quarry within Proposal T. |
| | Cemetery reservation of 0.06 acres within Proposal U. |
| | Permits issued to New York State Electric & Gas (NYSEG) for power lines through Proposals AA, G, R, and Z. |

*The Proposal letter name identifies the surveyor's reference used for parcel acquisition. It corresponds to the order parcels on each State Forest were brought under State ownership.

Encroachments

Encroachment is the use of one party's property by another party without any legal basis. Readily identifiable and well-marked boundary lines reduce unintentional trespass. On occasion, use of indeterminate legal origin occurs on state forest lands, most often relating to the historic installation of utility lines. There are multiple instances of questionable installations of both power and phone utility lines on the unit.

The placement of utility poles within a road right-of-way by a letter granting such approval was an acceptable practice for a period of time in the 1940's and 1950's. No such letters were found for the following occurrences, however, it is possible their installations were done under such pretense.

- TDS Telecom has existing lines on state forest lands along each of Blowers, Hunt, Ives Hill, Melondy Hill, Oxbow, and Preacher Roads on the Melondy Hill State Forests.
- New York State Electric & Gas has existing lines on state forest lands along the East Afton, Ives Hill, and Preacher Roads on the Melondy Hill State Forests.
- Citizens Telecom has an existing buried cable along the East Afton Road on the Melondy Hill State Forest.
- Continental Telephone (ConTel) has an existing buried cable along Parker Hollow Road on the Pine Hill State Forest.

INFORMATION ON THE TREATY LINE UNIT

INFRASTRUCTURE

Informational note relating to the historic use of a spring on the unit.

- A spring developed within Proposal A on Broome Reforestation Area 2 of the Melondy Hill State Forest apparently once served the School House to the northwest of North Sanford Road. Its once use and subsequent abandonment appears to predate State ownership.

Land Acquisition

Acquisition of property from willing sellers on the landscape surrounding the unit may be considered in the following priority areas:

- in-holdings and adjoining properties that would reduce management costs and benefit resource protection and public access goals
- the mineral estate wherever it is split from a state forest tract
- properties within identified matrix forest blocks and connectivity corridors
- forested lands in underserved areas of the state
- forested lands in areas that are in need of watershed protection

For more information on land acquisition, please see the SPSFM page 147 at <http://www.dec.ny.gov/lands/64567.html>.

Infrastructure

State forests are managed with a minimal amount of improvements to accommodate rustic, forest based recreational opportunities while providing for resource protection; public health and safety; and access for individuals of all ability levels. For more information on infrastructure policies, please see SPSFM page 157 at <http://www.dec.ny.gov/lands/64567.html>.

Roads and Trails

DEC's GIS data contains an inventory of public forest access roads, haul roads and multiple-use-trails on the unit, including a representation of the allowable uses along each road or trail segment. Table I.J. contains a summary of roads, trails and related infrastructure on the unit.

ADDITIONAL INFORMATION

State Lands Interactive Mapper (SLIM) – The interactive online mapper can be used to create custom maps of recreational trails on this unit to help people plan outdoor activities. The State Lands Interactive Mapper is located at <http://www.dec.ny.gov/outdoor/45478.html>.

Google Earth Virtual Globe Data - Some of DEC's map data, including accessible recreation destinations, boat launches, lands coverage, roads and trails on this unit can be viewed in Google Maps or Google Earth. DEC's Mapping Gateway is at <http://www.dec.ny.gov/pubs/212.html>.

Table I.H. – Existing Access and Parking (see Figure 3 for maps)

| Road or Trail Category | Total Amount | Needing Improvement |
|----------------------------|--------------|---------------------|
| Public Forest Access Roads | 16.0 mi. | 0.0 mi. |
| Haul Roads | 19.7 mi. | 0.0 mi. |
| Trails | 14.3 mi. | 0.5 mi. |
| Stream Crossings | | |
| Bridges | 3 | 0 |
| Culverts | 33 | 20 |
| Parking Areas / Trailheads | 17 | 1 |
| Gates / Barriers | 26 | 0 |

Use and Demand on Roads, Haul Roads and Parking Areas

The roads and informal parking areas across the unit are used throughout the year. In the summer months, persons hiking, birding or viewing use the roads to access areas of interest. In the fall, roads provide avenues for the viewing of fall foliage and parking at overlooks to take in the colors. Hunters use the roads and haul roads to access hunting areas and utilize informal parking areas to hunt for game. During the winter months, many of the public forest access roads are groomed for snowmobile use as part of the statewide designated snowmobile trail system. In the spring, roads and informal parking areas allow access to miles of streams for angling.

Use and demand on multiple use trails is discussed under Recreation.

Table I.I. – Status of Unmaintained and Retired Public Roads on State Forests

| State Forest Unit | Road Name | Status* | Length |
|--------------------------------------|---------------|---------------------|---------|
| Artic China - Delaware 4 | Dunbar | Abandoned | 1.2 mi. |
| Barbour Brook - Delaware 6 | Barbour Brook | Unmaintained | 1.3 mi. |
| Beals Pond - Delaware 9 | Getter Hill | Abandoned | 1.5 mi. |
| Melondy Hill - Broome 2 | Blowers | Qualified Abandoned | 0.8 mi. |
| Melondy Hill - Broome 2 & Chenango 9 | Lingee | Qualified Abandoned | 0.8 mi. |
| Melondy Hill - Chenango 9 | Preacher | Qualified Abandoned | 0.8 mi. |
| Melondy Hill - Chenango 9 | Lord | Discontinued | 0.5 mi. |

INFORMATION ON THE TREATY LINE UNIT

INFRASTRUCTURE

Table I.I. – Status of Unmaintained and Retired Public Roads on State Forests

| State Forest Unit | Road Name | Status* | Length |
|---------------------------|-----------|---------------------|---------|
| Melondy Hill - Chenango 9 | Old Tie | Unimproved | 0.4 mi. |
| Pine Hill - Delaware 7 | Pecks | Qualified Abandoned | 1.0 mi. |
| Pine Hill - Delaware 7 | Reservoir | Qualified Abandoned | 0.4 mi. |
| Steam Mill - Delaware 2 | Zion Hill | Abandoned | 1.4 mi. |

*Abandoned -relinquishment of the public easement. Qualified Abandoned -the resolution of abandonment shall provide that even though the responsibility of maintenance of the road by the town shall cease, there shall remain a public easement over such road in perpetuity. Discontinued -withdrawn for the location of a reservoir.

Signs / Kiosks

There are a total of 20 state forest Identification signs, 2 kiosk informational signs, and 1 additional other type sign on the unit.

Boating and Fishing Facilities

Boating and fishing facilities as well as their use and demand are discussed under Recreation.

Designated Campsites and Lean-tos

There are three designated campsites on the unit. All three sites are lean-tos associated with the Finger Lakes Trail System. Additional information is available at

<http://www.fltconference.org/trail/>.

Developed camping facilities are available within the immediate area of the unit at Oquaga Creek State Park. Additional information is available at

<http://www.parks.ny.gov/parks/27/details.aspx>.

Camping facilities, as well as their use and demand, are discussed under Recreation.

Utility Transmission and Collection Facilities

Utility transmission lines such as power and telephone on the unit are generally restricted to small roadside lines. For more information see the Exceptions & Deeded Restrictions and Encroachments sections.

There are two proposed regional natural gas pipeline projects in the area. The Tennessee Pipeline proposed route would cross the unit in two locations as it attempts to connect natural gas production in northern Pennsylvania to distribution in western Massachusetts. The project is still in the developmental stages and requires multiple Federal and State regulatory approvals and permits prior to any construction. A similar pipeline project, the Constitution Pipeline, though further in development was denied a Water Quality Certification permit in April of 2016. Denial of the permit may cause the project to be cancelled and indicates a possible similar outcome for the Tennessee proposal.

For more information see the Mineral Resources section, which starts on page 40.

Correction or Youth Camps

Camp Brace Residential Center occupies 7 acres of Steam Mill State Forest. The facility was operated under an agreement with the New York State Office of Children and Family Services. Camp Brace has been unoccupied since early 2009. No plans for the facility have been finalized at the writing of this plan, but several options are being explored.

Non-recreational Uses

Off-Highway and All-Terrain Vehicle Use

For a comprehensive discussion of DEC's policy regarding ATV use on state forests, please refer to page 213 of the SPSFM at www.dec.ny.gov/lands/64567.html.

Formal and Informal Partnerships and Agreements

Conservation and stewardship partnerships are increasingly important, especially for public land management agencies. Considering the fact that resources will always be limited, collaboration across political, social, organizational and professional boundaries is necessary for long-term success and sustainability. Encouraging the development of cooperative and collaborative relationships is and can be done through a Volunteer Stewardship Agreement (VSA) with the department. The Finger Lakes Trail Conference, the Delaware Otsego Chenango Snowriders (DOCS), the D&D Snowdiggers, and the Tiddeo Family maintain and groom designated trails on the unit through Volunteer Service Agreements. For more information on these and other partnerships, please see SPSFM page 181 at <http://www.dec.ny.gov/lands/64567.html>.

Recreation

Recreation is a major component of planning for the sustainable use of state forests on this unit. DEC accommodates diverse pursuits such as snowmobiling, horseback riding, hunting, trapping, fishing, picnicking, cross-country skiing, snowshoeing, bird watching, geocaching, mountain biking, and hiking. Outdoor recreation opportunities are an important factor in quality of life. We often learn to appreciate and understand nature by participating in these activities. However, repeated use of the land for recreational purposes can have significant impacts.

General user fees are not charged on State Forest lands for recreational activities. However, a Temporary Revocable Permit (TRP) may be required for some group activities and events. A permit application fee may apply based on the type of activity as explained in the TRP policy, available at <http://www.dec.ny.gov/regulations/51387.html>. Also, see the SPSFM page 187 for a further discussion of recreational issues and policies at <http://www.dec.ny.gov/lands/64567.html>.

The following section includes an inventory of recreational opportunities available on this unit as well as a description of use and demand for each activity. Recreational maps and geographic data are available at DEC's Mapping Gateway at <http://www.dec.ny.gov/pubs/212.html> in Google format, or in the State Lands Interactive Mapper at <http://www.dec.ny.gov/outdoor/45478.html>.

RECREATION

Wildlife-related Recreation

Hunting

Hunting is allowed on all state forest lands in the unit. Big game and small game hunting occur in their respective seasons, mostly in the fall and winter but also includes turkey hunting in the month of May. Species management via hunting occurs within Wildlife Management Units (WMU's) that are distributed throughout the state. The State Forest on the Unit fall within WMUs 4O and 4W are subject to season dates and bag limits within that management unit. Of note is an antler restriction regulation in WMU 4O that requires antlered deer to have at least 3, one-inch long points on one side of its rack to be taken legally. Common species that are hunted other than deer include black bear, ruffed grouse, cottontail rabbit, snowshoe hare, woodcock, wild turkey and grey squirrel.

While hunting has been on a slow decline since the mid-80's, some periods still see considerable activity including early spring turkey season and opening week of regular deer season. Public land use by hunters with the exception of these days would be considered low to moderate.

Deer Management Assistance Program (DMAP)

DMAP provides antlerless deer tags to landowners for use during the open deer seasons to allow for site specific reductions in the deer herd. This program primarily assists agricultural landowners but is also used on forested lands where deer overabundance results in poor sapling recruitment. The program allows a landowner to incorporate adjacent landowners on their permit to increase the amount of land, and thus the number of tags on the permit, in order to increase effectiveness. A DMAP was applied for and received by NYS DEC Lands & Forests staff for the State Forest lands on the unit within Delaware County in 2014 and 2015. Approximately 100 cooperating, adjacent landowners were identified and issued two tags apiece in 2014. Under the program 68 antlerless deer were harvested. In 2015, due to recorded winter mortality from the winter of 2014-15, the tag allocation was reduced to 140 which was in line with the 30% reduction in Deer Management Permits for Wildlife Management Unit (WMU) 4O. The cooperating landowners were given 1 tag each and 40 additional tags were reserved for the general public and issued from the Stamford DEC office.

The deer harvest numbers for 2017 have not been calculated as of this writing. It will need to be determined how to proceed with DMAP for 2018 as harvest numbers will provide insight into current levels of deer following the declines from winter 2014-15. Deer Impact Plots have been established on the 4 State Forests within Delaware County, to study the impact deer are having on the tree regeneration. Expansion of the DMAP program to include the remaining State Forest lands within the unit is also being considered.

Fishing

DEC regulates angler harvest of fishes by region to best support productive sport fisheries. The vast majority of streams on the unit support cold-water fish communities characterized by trout. Statewide regulations allow angling for trout from April 1 to Oct 15, unless special regulations prevail. Always check the annual DEC freshwater fishing regulations before you fish or call your local Regional Fisheries Office with concerns. The *NYSDEC New York Freshwater Fishing Guide* is available online at <http://www.dec.ny.gov/outdoor/7917.html>.

Where warranted, the DEC and other parties often supplement sport-fish populations with certified disease-free hatchery reared fishes by permit only. This is usually done for specific waters once approved by the region. DEC operates 12 fish hatcheries statewide raising fish (mostly trout) to be stocked annually in public waters of NYS. See the DEC website for information on what fish are stocked where.

Management is an ongoing process of communicating with various stakeholders about issues and demands that arise. Fisheries surveys are an important management tool that helps us gather data to answer questions and concerns in support of DEC policies.

Fish surveys are often limited to gathering a specific dataset such as the status of a fish species or fish communities. We also monitor the following:

- Fitness concerns for various fishes or fish communities
- Levels of toxins or presence of diseases in wild fish
- Current status of any rare, declining, or invasive fishes of concern
- Fish or community changes related to habitat restoration or environmental disturbance
- Status of other aquatic organisms

All official fish surveys are entered into a statewide database. Abstract or summary reports are often made available to local colleges and sports groups. Thereafter, a more intensive report may be written by the survey authority as part of managing that particular fishery.

Waters on State Lands are public, and waters bordering DEC lands are generally considered public and typically open for fishing. General state forest rules apply along with statewide fishing regulations. Contact a local DEC Regional Office to discuss any issues regarding the use of public lands and waters in NYS. Additional information of fisheries management and reports is available at <http://www.dec.ny.gov/outdoor/7730.html>.

Trapping

Recreational trapping is allowed on all state forest lands in the UMP. Trapping seasons occur in the fall and winter months. Species management via trapping is done by Wildlife Management Unit (WMU) which are distributed throughout the state. State Forest lands on the unit fall within WMU's 4O & 4W and are subject to season dates and bag limits within those individual units. Of note is an experimental season for fisher which begins in 2016 and includes WMU 4O (4W already has a regular open season). Common species that are trapped include coyote, bobcat, beaver, muskrat, fox, mink and raccoon.

Trapping in general has been on the decline for decades. Use of public lands for trapping would be considered low at this time.

Water-based Recreation

There is little demand or opportunity for water-based recreation on the unit. Prospects are limited to the few larger ponds on the unit on which a canoe could be used. There is also no realistic opportunity for the development of additional water-based recreation on the unit.

INFORMATION ON THE TREATY LINE UNIT

RECREATION

There are several large-scale opportunities for water-based recreation surrounding the unit. Adjacent to the Melondy Hill State Forests, Oquaga Creek State Park offers swimming, fishing, and boating on its 55-acre Arctic Lake. Both the Susquehanna and Delaware rivers and their major tributaries provide miles of available boating, canoeing, and kayaking. The 4,703 acre Cannonsville Reservoir is located on the west branch of the Delaware River. On the reservoir, the use of non-motorized boats is allowed by permit through the New York City Department of Environmental Protection, which administers the reservoir as part of the city water supply. There are numerous boat launches available, additionally a majority of the shoreline is accessible through lands administered by the NYC DEP.

Trail-based Recreation

| <i>Table I.J. – Multiple Use Trails* (see Figure 3 for maps)</i> | |
|--|---------------|
| Use | Length |
| Foot Trail Use | 12.9 mi. |
| Snowmobile | 15.2 mi. |

* Length available for each use includes use on Public Forest Access Roads (PFAR); does not include municipal roads.

Foot Trail Use

The Finger Lakes Trail (FLT) is a 950 miles long foot trail, stretching from the New York-Pennsylvania border in Allegany County to the Long Path Trail in Ulster County. Over 12 miles of the FLT pass through the unit. The trail is built and maintained mainly by volunteers. The FLT trail is used by local day hikers and by individuals hiking the full length of the trail. Use is limited to foot traffic only. More information can be found on the Finger Lakes Trail Conference website at <http://www.fltconference.org/trail>.

Currently, there is a Universally Accessible Route to an Observation Deck with a nearby campsite on the shore of Beal's Pond on Beal's Ponds State Forest in the Town of Masonville. Other universally accessible routes and sites will be explored, considered and developed as terrain allows.

Snowmobiling

Snowmobiling is a seasonal demand on the unit. During the winter months, Public Forest Access Roads and other designated trail sections are used for snowmobiling. There are currently over 15 miles of trail that interconnect with the statewide snowmobile trail system. Two snowmobiling clubs, the Delaware Otsego Chenango Snowriders and the D&D Snowdiggers, maintain and groom all designated snowmobiling trails on the unit through Volunteer Stewardship Agreements. Also, these clubs work with DEC to improve and develop new opportunities where appropriate.

Other Trail-based Activities

Horseback riding is allowed on the unit, except on designated foot trails or snow-covered ski and snowmobile trails. Both skiing and biking are also allowed on the unit. No trails on the unit

are designated specifically for these activities. Use and demand for these activities is also very low with most use occurring upon existing forest roads.

Other Recreational Activities

Viewing Natural Resources

There are over 12 miles of hiking trails and over 15 miles of public forest access roads on the unit which allow for the general enjoyment and viewing of natural resources. There are small woodland ponds and beaver dams, cascading cold water streams, cool stands of conifers and scenic vistas throughout the unit. There are many opportunities to view and enjoy natural resources across the unit.

Camping

Camping is allowed on the unit throughout the year. Although, there is only 1 designated campsite on the unit, those interested in camping have abundant opportunities to camp at informal sites of their choosing on the unit. Large groups of 10 or more people and/or persons planning to stay more than 3 consecutive nights are required to acquire a camping permit.

- Kerryville State Forest has one primitive campsite at the end of Dufton Hollow Rd. This campsite overlooks a wooded hemlock ravine. Parking is available at the campsite, just off of the road.

Camping is not of high demand through most of the year. However, prior to and during the big game hunting season numerous temporary camps are erected on old log landings and parking or pull-off areas.

Target Shooting

No areas or locations on the unit have been designated for target shooting, though it has traditionally occurred within several of the shale pits on the unit. Target shooting is generally allowed on the unit, except where signed and prohibited by regulation or law, including under Title 6 Part 190 of the New York Codes, Rules and Regulations, which pertains to the Use of State Lands, available at <http://www.dec.ny.gov/regs/2493.html>.

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.

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>.

The Motorized Access Program for Persons With Disabilities (MAPPWD) provides motor vehicle access on certain designated trails for qualified individuals with disabilities. Trail use is provided by obtaining a specialized permit with doctor certification. There are two designated MAPPWD routes on the unit, both are on the Pine Hill State Forest. The trailhead on Pine Hill

MINERAL RESOURCES

Road allows for parking and unloading of equipment and vehicles. Both of the routes pass through a variety of forest types along the length of the trails and grant the user an enjoyable outdoor experience. Additional information on the MAPPWD program or to obtain a permit is at <http://www.dec.ny.gov/outdoor/2574.html>.

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 by email at UniversalAccessProgram@dec.ny.gov

Mineral Resources

Oil, Gas and Solution Mining Exploration and Development

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 page 225 at <http://www.dec.ny.gov/lands/64567.html>.

Pipelines

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

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

Pipeline development on state land will not be permitted if the Department determines that it creates a significant long-term conflict with any management activities or public use of the state forests, or with other management objectives in this plan. All pipelines will be gated to restrict motorized access, and if necessary hardened crossings or bridges will be installed, to allow heavy equipment access across pipelines. These requirements will be satisfied by the Lessee.

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

Although the proposed Constitution and Tennessee pipeline projects will not be transporting mineral resources that were extracted from State lands, these pipelines may be located on State lands pursuant to easements that are proposed to be granted by the New York State Office of General Services. In 2014, the Federal Energy Regulatory Commission (FERC) issued an order granting a Certificate of Public Convenience and Necessity for the Constitution Pipeline project. The Tennessee project has not yet been granted a similar order. If either project receives all necessary approvals, New York State, with oversight from the Office of General Services, would enter into an agreement to convey easements to the Constitution and/or Tennessee pipelines to route through State Forest land in the unit. The routes through State Forest land were preferred, because the other viable alternatives would impact either a wetland complex or smaller private parcels.

Mining

There are no mining contracts, permits or commercial operations located on state lands included in the Treaty Line Unit. Under Article 7 of the New York consolidated Laws/Public Lands, any citizen of the United States may apply for permission to explore and /or extract any

INFORMATION ON THE TREATY LINE UNIT

SUPPORTING LOCAL COMMUNITIES

mineral on state lands. However, current NYS DEC policy is to decline any commercial mining application(s) associated with state lands.

Gravel/shale pits and other surface mines

- Arctic China State Forest (Delaware 5), stand A-50 (shale)
- Arctic China State Forest (Delaware 5), stand A-63 (shale)
- Steam Mill State Forest (Delaware 2), stand A-35 (shale)

These shale pits are occasionally used when projects such as road repairs or landing installations are in the immediate area. Each mine is operated under the regulatory threshold, as less than 750 cubic yards or 1,000 tons of material is removed within any 12-successive calendar months. Therefore, the sites are not subject to jurisdiction under the Mined Land Reclamation Law and there is no requirement for a New York State mining permit. Columbia Lake State Forest has numerous abandoned mines on the western portion of the forest which have mostly grown back into forest.

Although there are no commercial mines within the state lands comprising the Treaty Line Unit, privately owned mining operations do exist within one-half mile to two miles of state lands in the Unit. Surficial deposits surrounding these state lands are generally glacial till deposits that would not yield substantial amounts of sand and gravel. Most of the mines in the area are small and are permitted by the local municipalities or local construction companies. There are a few mine sites near state lands in the Unit that are no longer in operation and have undergone reclamation, returning the land to a productive use.

A unique feature of this part of New York State is the abundance of bluestone quarries located on hill tops of private lands around the Unit. Most of these quarries are small operations, less than five acres in size. There is a concentration of bluestone quarries in the Towns of Masonville and Deposit. Approximately fourteen (14) bluestone mines are within two miles of Pine Hill, Beals Pond and Columbia Lake State Forests. The sites vary in size with life of mines that range between one (1) and twenty-nine (29) acres. Additional bluestone quarries are located throughout the Town of Sanford and in southern part of the Town of Tompkins.

There are four active sand and gravel operations near the Unit ranging in size from one to thirty-seven acres. The closest sand and gravel operations to any of the forests are a thirty acre mine located one-half mile northeast of Melondy Hill State Forest and a twenty-four-acre mine located one mile north of Columbia Lake State Forest.

Supporting Local Communities

Tourism

State forests can be an economic asset to the local communities that surround them. It is estimated that more than three out of every four Americans participate in active outdoor recreation of some sort each year. When they do, they spend money, generate jobs, and support local communities. For more information, please see SPSFM page 245 at <http://www.dec.ny.gov/lands/64567.html>.

Taxes Paid

The New York State Real Property Tax Law provides that all reforestation areas are subject to taxation for school and town purposes. Some reforestation areas are also subject to taxation for county purposes. Most unique areas and multiple use areas are exempt from taxation. All of these taxable lands are assessed as if privately owned.

Updated detailed tax information can be obtained by contacting the Real Property Tax Service departments within each county directly at

- Broome County Tax Services at <http://www.gobroomecounty.com/realprop/>.
- Chenango County Tax Services at <http://www.co.chenango.ny.us/real-property-tax/>.
- Delaware County Tax Services <http://www.co.delaware.ny.us/departments/tax/tax.htm>.

The following table provides projected taxes on state forest lands within the unit for the 2014 tax year. Respective town listings include all state forest lands for that township, therefore the townships of Afton and Sanford include a small portion of state forest lands not within this unit. The total of the taxes paid for all townships covered by the unit for the 2014 tax year was \$587,781.

| <i>Table I. K. – State Forest Taxes by Township</i> | | | | | | |
|---|------------|-------|------------|--------------|------------------|-------------|
| County | Town | Acres | Town Taxes | School Taxes | Special District | Total Taxes |
| Broome | Sanford | 3,665 | 16,871 | 63,612 | 1,464 | 81,947 |
| Chenango | Afton | 3,849 | 12,783 | 74,051 | 2,879 | 89,713 |
| Delaware | Deposit | 3,248 | 13,119 | 42,968 | 1,013 | 57,100 |
| Delaware | Hancock | 696 | 3,938 | 6,491 | 626 | 1,105 |
| Delaware | Masonville | 6,302 | 77,256 | 215,817 | 13,539 | 306,612 |
| Delaware | Tompkins | 3,090 | 13,662 | 35,934 | 1,708 | 51,304 |

Forest Products

Timber

Timber management provides a renewable supply of sustainably-harvested forest products and can also enhance biodiversity. The products harvested may include furniture quality hardwoods, softwoods for log cabins, fiber for paper making, firewood, animal bedding, wood pellets, biofuel, and chips for electricity production. For more information, please see SPSFM page 251 at <http://www.dec.ny.gov/lands/64567.html>.

Information on upcoming timber expected to be produced from timber management activities on the unit is contained in the land management action schedules in Part III of this plan.

The authority to sell forest products from NYSDEC administered lands is provided by the Environmental Conservation Law. To perpetuate the growth, health and quality of the forest

INFORMATION ON THE TREATY LINE UNIT

FOREST PRODUCTS

resources, the Department has implemented a sustained yield timber management program for State Forest lands.

Forest areas being considered for timber harvesting are prioritized based on the following criteria:

- 1) Adequate access;
- 2) Wildlife considerations;
- 3) Present and future forest health concerns (including invasive plants and pests);
- 4) Current distribution of vegetative stages within the unit management land area and surrounding landscape, including the eco-regional habitat gaps as per the Strategic Plan for State Forest Management and the desired 10% young forest on Wildlife Management Areas as –per the Strategic Plan for Implementing the Young Forest Initiative;
- 5) Ability to regenerate stands (if a regeneration harvest);
- 6) Existing timber and vegetation management needs from other unit management plans;
- 7) Market conditions;
- 8) Potential growth response of stands to treatment

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

The Environmental Conservation Law requires that different procedures are employed based on the appraised value of a timber sale. Sales that are appraised greater than \$10,000 are called revenue sales and sales that are appraised at less than \$10,000 are known as local sales. Revenue sales contracts must be approved by DEC's Central Office staff, and revenue sale contracts valued at \$25,000 or more must be approved by the Office of the State Comptroller. The Regional Forester has the authority to execute local sale contracts. All sales valued at more than \$500 (and those less than \$500 which are thought to have substantial public interest) are publicly advertised and competitively bid.

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

The demand for timber on the Unit is part of the larger regional timber market which is part of the global market for wood products. For example: hardwood trees grown and cut on the Unit's State forests are often purchased by local loggers or sawmills, sawn into lumber at a mill within

the region, which 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), Standard 2005 – 2009 and the Forest Stewardship Council (FSC), US Forest Management Standard. 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.

See more information about the SFI *Standard* at www.sfiprogram.org/sustainable_forestry_initiative_standard.php.

See more information about the FSC *US Forest Management Standard* at http://fscus.org/standards_criteria/forest_management.php.

There is good demand for hardwood sawtimber from regional sawmills. The market for spruce is almost exclusively for sawlogs. There are no spruce sawmills scale in New York State, so nearly all spruce logs are sold and trucked north to Canadian sawmills which process them into lumber. These Canadian mills also purchase a portion of the regions red pine. The Canadian demand for spruce and pine 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 housing market since spruce lumber is primarily used for wood framing construction.

There has been a steady demand for red pine from regional industries which manufacture it into various landscaping materials, for residential fencing, and utility poles. Because of the abundance of pine plantations on State Forest lands and their scarcity on private lands, State Forest lands are the primary source for the regional industries that use red pine.

At the local scale, there is a somewhat different demand for wood products. While many local loggers supply larger mills with hardwood logs, because of transportation costs lower valued products such as larch, hemlock, and firewood can only be profitably cut and sold within local markets. Individually, the demand for larch appears to be growing as lumber use for decking, flooring, and molding increases. Hemlock and larch are often sawn by small local mills for use in barn construction. A relatively recent development is the use of small diameter larch poles by the hop industry. Firewood is cut by individuals for their own use or for resale to home owners.

The rise in hardwood values 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 with reduced potential for growing high quality sawtimber in the future. If this trend continues, the future demand for high quality timber from State Forest lands will rise.

FOREST HEALTH

Non-Timber Forest Products

Tapping for maple syrup production is practiced within the region. Although some small demand for maple tapping on State Forests has been expressed in other areas of the state, no such requests have been received for this unit. An evaluation of the potential for maple tapping on the unit found no suitable stands. The factors used to determine suitability were road access, general stand access, appropriate direction of slope for collection, understory conditions, suitable species composition, and of a sufficient density, existing stem quality and resultant timber degradation, pest or disease mortality issues, and interference with designated trails or public access sites.

Forest Health

Forest health is pursued with the goal of maintaining biodiversity. Any agent that decreases biodiversity can have a deleterious effect on the forest as a whole and its ability to withstand stress. Forest health in general should favor the retention of native species and natural communities or species that can thrive in site conditions without interrupting biodiversity. For more information on forest health, please see SPSFM page 277 at <http://www.dec.ny.gov/lands/64567.html>.

Invasive Species

As global trade and travel have increased, so has the introduction of non-native species. While non-native species do not always 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.

Table I. L. – Invasive Species, Pests and Pathogens

| Plants | Status on the Unit | Webpages |
|---|--|---|
| Japanese Barberry (<i>Berberis thunbergii</i>) | Uncommon, but occasional individuals or small patches exist, most often near old foundation sites. | http://www.dec.ny.gov/docs/lands_forests_pdf/is_prohibitedplants2.pdf |
| Common Buckthorn (<i>Rhamnus cathartica</i>) | Rather uncommon, but occasional individuals or small groups. | http://www.dec.ny.gov/docs/lands_forests_pdf/is_prohibitedplants2.pdf |
| Garlic Mustard (<i>Alliaria petiolata</i>) | Present, but generally uncommon. | http://www.dec.ny.gov/docs/lands_forests_pdf/is_prohibitedplants2.pdf |
| Honeysuckle (<i>Lonicera japonica</i>) | Less common, though on the unit, mostly as widely scattered individuals or occasionally in small groups. | http://www.dec.ny.gov/docs/lands_forests_pdf/is_prohibitedplants2.pdf |

Table I. L. – Invasive Species, Pests and Pathogens

| Japanese Knotweed (<i>Fallopia japonica</i>) | Current known infestations are restricted to several small roadside patches. Herbicide control has been attempted in a few areas, limiting spread, but has thus far been ineffective in eradication. Indications are that utilizing other chemicals may be more effective for full control. | http://www.dec.ny.gov/docs/lands_forests_pdf/is_prohibitedplants2.pdf |
|---|---|---|
| Multiflora Rose (<i>Rosa multiflora</i>) | Uncommon with only widely scattered individuals or occasional small patches. Seeds are easily spread by wildlife. | http://www.dec.ny.gov/docs/lands_forests_pdf/is_prohibitedplants2.pdf |
| Insects | Status on the Unit | Webpages |
| Eastern Tent Caterpillar (<i>Malacosoma americanum</i>) | Generally present at low levels causing only relatively minor damage. | http://www.dec.ny.gov/animals/7250.html |
| Elm Spanworm (<i>Ennomos subsignaria</i>) | This and other spanworms are prone to periodic outbreaks. | http://www.dec.ny.gov/docs/lands_forests_pdf/e_spanworm.pdf |
| Emerald Ash Borer (<i>Agrilus planipennis Fairmaire</i>) | Confirmed on Pine Hill State Forest. Other portions of the unit are within EAB's seasonal flight range. | http://www.dec.ny.gov/animals/7253.html |
| European Pine Shoot Beetle (<i>Tomicus piniperda</i>) | Likely on the unit. No major infestations have been located. | http://www.dec.ny.gov/animals/7114.html |
| Forest Tent Caterpillar (<i>Malacosoma disstria</i>) | Prone to outbreak, areas of hard maple often severely impacted and killed. Impacted areas from past attacks exist on the unit. | http://www.dec.ny.gov/animals/7250.html |
| Gypsy Moth (<i>Lymantria dispar</i>) | Present, but current cycle levels are at low to very low populations. Significant quantities of oak species exist on the unit and have been impacted during past outbreaks. | http://www.dec.ny.gov/animals/83118.html |
| Hemlock Woolly Adelgid (<i>Adelges tsugae</i>) | Unconfirmed on the unit, although threat of infestation is high. Identified within 3 townships of the unit and several surrounding. | http://www.dec.ny.gov/animals/7250.html |
| Peach Bark Beetle (<i>Phloeotribus liminaris</i>) | Occasionally found on the unit. | http://www.dec.ny.gov/docs/lands_forests_pdf/peachbb.pdf |

INFORMATION ON THE TREATY LINE UNIT

FOREST HEALTH

Table I. L. – Invasive Species, Pests and Pathogens

| Pear Thrips (<i>Taeniothrips inconsequens</i>) | Found on the unit, current levels are generally low, though outbreaks may occur. | http://www.dec.ny.gov/docs/lands_forests_pdf/thrips.pdf |
|--|--|---|
| Sirex Woodwasp (<i>Sirex noctilio</i>) | Suspected on the unit, no effects have been confirmed. | http://www.dec.ny.gov/animals/7248.html |
| Viburnum Leaf Beetle (<i>Pyrrhalta viburni</i>) | Known on the unit, effects have been negligible to this point. | http://www.dec.ny.gov/animals/7112.html |
| Diseases | Status on the Unit | |
| Beech Bark Disease | Common in hardwood stands containing beech. Nearly all beech eventually become infected and decline. | |
| Chestnut Blight | Present on the unit and across the US. Some root systems are able to persist by continuously re-sprouting, though repeated reinfection periodically results in top and stem dieback. Stems rarely develop to any significant size or produce mast. | |
| Dutch Elm Disease | Present on the unit and across the northeast. Remaining elm numbers are limited, though occasional mature elms may still be found on the unit. | |
| Sirococcus Shoot Blight | An emerging threat in the region, has been identified on the unit, and can infect most conifers, but seems primarily problematic for spruce in this area. | |
| Animals | Status on the Unit | |
| Common Earthworm (<i>Lumbricus terrestris</i>) | Common and widespread on the unit. Naturalized throughout North America. | |

Insects

Asian Long-horned Beetle - This black & white beetle with long antennae, is a native of Asia. Though not currently found on the unit, impacts from this invasive insect are potentially devastating since it attacks a wide range of hardwood species. It prefers maple species in particular, which are major components of the northeastern forest and also important to the wood products 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. 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 2015, 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.

Eastern Tent Caterpillar - This is the most common 'tent maker' in New York State. Tent caterpillars produce webs in the crotches of tree branches for protection. These nests are formed in late April or early May each year. Tent caterpillars leave the nest periodically to feed on the leaves of host trees. Cherry and apples trees are ideal, with most feeding occurring at dusk and on into the evening hours.

Elm Spanworm (and other 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. 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.

Emerald Ash Borer - This metallic green beetle native to Asia poses an imminent risk to the forests on the unit. It was first discovered in Michigan in 2002. Since that time, it has killed tens of millions of ash trees in Michigan alone, with hundreds of millions more lost across the central US, the northeastern US, and on into Canada. Larva feed on the inner bark of any size ash tree, affecting all ash species. The borer usually kills the host tree within 3 years of infestation. EAB was first discovered in New York State in 2009 in Cattaraugus County. EAB will likely become established throughout the state within 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. Quarantine zones have been established along with general restrictions on the movement of firewood to limit the transportation and spread of infected wood.

European Pine Shoot Beetle - This beetle, native to Europe and Asia, attacks the new shoots of pine trees stunting the growth of the tree. It has a strong preference for Scots pine though many species of pine are hosts. The USDA's Animal and Plant Health Inspection Service (APHIS) has issued regulations resulting in quarantines within infested counties of New York State, and other states, to prevent the spread of this insect. In general, the regulations restrict the transportation of pine logs from a quarantined area to a non-quarantined area. All three counties in the unit (Broome, Chenango, and Delaware) and nearly all of New York State are all within the Federal quarantine area.

Forest Tent Caterpillar - Unlike other 'tent caterpillars', the forest tent caterpillar does not construct a tent on tree branches. This insect can be a serious defoliator of sugar maple, however, most healthy hardwoods can withstand a single defoliation from this insect. During the summer seasons of 2007 through 2010 moderate to heavy infestations of the forest tent caterpillar occurred on portions of the unit. Large patches of forest canopy were defoliated with some areas being defoliated twice in a single season as trees attempter to re-leaf after an initial defoliation. Many of these trees, especially sugar maples, did not survive the repeated defoliation.

Gypsy Moth - This exotic moth from Eurasia was introduced into the United States in 1868. Populations of the insect can periodically build to outbreak levels resulting in widespread forest defoliation. Gypsy moths will defoliate many species of tree in the northeast, but they greatly favor oak species. High populations of gypsy moths do not typically persist more than three years before collapse. The Nuclear Polyhedrosis Virus has traditionally caused this rapid decline in Gypsy Moth populations. In recent years the fungus (*Entomophaga maimaiga*) has

FOREST HEALTH

also proven effective in reducing moth populations. This fungus was introduced to the U.S. from Japan in 1910 and again in 1985. Its presence and therefore effectiveness had been dismissed until it was confirmed in seven states in 1989. Due to the limiting presence of both the virus and the fungus, future Gypsy Moth outbreaks may be less frequent and reduced in severity.

Hemlock Woolly Adelgid - An exotic insect from Asia which poses a significant threat to the health of eastern hemlock on the unit and across its natural range. Adelgid readily attacks and kills all hemlock. Infestations cause rapid defoliation, which can result in complete mortality of all hemlock in an affected stand within four years. Since it was first identified in New York State in the 1980's, infestations have grown to encompass more than 30 counties in the state. Eastern hemlock is one of only a few native conifers found on the unit and the most abundant. It is considered a keystone species, playing a central role in maintaining the structure of its ecological community, as it helps to determine the types and abundance of various other species in the community. Hemlock stabilizes soils on slopes and in moist areas. It provides thermal cover for deer and other wildlife during winter and cools riparian areas in the heat of summer. Many wildlife species such as the deer mouse, black-throated green warblers, and black-capped chickadees are strongly associated with hemlock. Adelgid has been the focus of many studies in an attempt to develop methods of control. Current efforts focus on the release of a beetle native to western North America where it preys on the hemlock woolly adelgid and other native adelgid species. Several other predatory beetles are also being tested for control.

Peach Bark Beetle - 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 which can significantly reduce the value of the timber and cause a general decline in tree health. Peach Bark Beetle populations build up in tree top material following storm damage or the harvest of timber. The beetle then readily attacks the remaining residual healthy cherry trees. So far cultural practices (e.g. reducing quantities of slash and seasonal cutting) attempted to minimize the negative impacts of peach bark beetle have not been successful.

Pear Thrips - Introduced from Europe to the United States in 1904. Besides pear tree species, pear thrips attack a variety of orchard and forest trees. Several population explosions occurred in the northeast during the late 1980s. The outbreak of 1988 damaged or defoliated more than 1.5 million acres of sugar maple tree. Pear thrips primarily cause leaf damage, they may also be capable of transmitting a fungal disease, maple anthracnose. This disease often coincides with pear thrip infestations as a secondary agent. Maple anthracnose decreases the photosynthetic ability of leaves, which can then kill the trees.

Sirex Woodwasp - This exotic pest was first discovered in New York State in 2004 in Oswego County. The Sirex woodwasp is native to Europe, Asia and Northern Africa. Sirex 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. Females tend to target already stressed trees. The fungus can kill the host trees in just a few weeks. It is predicted that this woodwasp will adapt to most U.S. climates. Sirex has been confirmed in most counties of central New York including those of this unit. 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. Thus far the effects of the insect and the associated fungus have been negligible to initial predictions.

Viburnum Leaf Beetle - 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 the larvae and adults feed on viburnum shrubs. This insect has had a significant impact on native stands of arrowwood (*Viburnum dentatum*), through the effects on the unit have been negligible.

Diseases

Beech Bark Disease - This disease has caused the widespread decline in the health of American beech, limiting the active life span of these trees. Beech trees are infected when the non-native beech scale insect (*Cryptococcus fagisuga*) punctures the tree bark, allowing the spores of two possible fungi (*Nectria faginata* or *Neonectria ditissima*) to enter the tree. Although the insect that provides the vector for infection is non-native, interestingly each of the fungi that it may carry are actually native species. This illustrates how non-native species can have unexpected effects within the environment, and at the same time how a small environmental change can cause a once non-threatening species to enter into pest status. Although American beech saplings are still abundant in the understory of the northeastern forests, mature beech trees are becoming less common. Since the mature trees are disproportionately affected, fruit production is greatly reduced, limiting a once important hard mast food source for many wildlife species.

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 (*Ceratocystis ulmi*) which is spread by elm bark beetles. Although the disease has killed most elms, a few isolated individuals have survived, and it is still possible to find mature elm trees within the area.

Chestnut Blight - This is one of the most famous plant diseases in North America. It has resulted in the near extinction of the American chestnut tree throughout its natural range. The blight is caused by a fungus (*Cryphonectria parasitica*) which enters through wounds in the bark. After infection trees may be wholly killed or occasionally remain as active root systems. These surviving root systems repeatedly re-sprout and may grow for a period of years only to become re-infected and repetitively die back. American chestnut was historically present in abundance on the unit. Still today, residual root systems endure in small numbers within several of the forests on the unit. A few of these scattered individuals have been observed to produce fruit, though ultimate reproductive success is unlikely.

Sirococcus - A shoot blight, caused by the fungus *Sirococcus strobilinus* Preuss. It affects many conifers in temperate regions, where it infects the new shoots of trees. Cool, shady, and moist conditions favor the diseases spread. In this region, it is currently beginning to affect Norway spruce. As the tips on upper portions of a tree are infected, spores are easily spread onto lower branches and the forest floor causing needle-cast as the disease spreads into the tree's other living tissue. This decline can spread quickly and may result in single stem or entire stand mortality. Once present on a site, there is a perpetual source of infection to the remaining trees, making successful reforestation of affected species difficult.

FOREST HEALTH

Animals

Common Earthworm (and other exotic earthworms) - Invasive species of earthworm, specifically from the suborder *Lumbricina*, have spread throughout North America. Their introduction from Europe and Asia have had drastic effects on the multiple nutrient cycles, forest reproduction, herbaceous understory plants, and diversity in temperate forests. Northeastern forests evolved in concert with thick layers of duff (decaying organic matter) which provides nutrition for growth and aids in the retention of soil moisture. Exotic earthworms create large pores in the soil as they break up these layers of organic matter and mix them into the soil. This opening and mixing of the soil layers leads to both leaching and increased nutrient cycling rates. Overall, a decrease in the thickness of the organic layer, increases in bulk density, spreading of the organic matter and humus, mineralization, and increased rates of decomposition occur. These alterations result in drier, brighter, and nutrient deficient environmental conditions. The reduction in available nutrients and moisture is most harmful to understory herbaceous plants and young tree seedlings because of their small shallow root systems. Exotic earthworm introductions have also been shown to decrease beneficial mycorrhizae associations with plant roots, further reducing potentially available nutrients. As a result, the few desirable tree seedlings and herbaceous plants which persist are quickly consumed by wildlife, reducing diversity. This decrease in plant diversity in turn affects other organisms in the environment further reducing diversity. The new environmental conditions created by exotic earthworms often allow increased invasion by other exotic species that can survive in nutrient diminished environments better than natives. Specifically, forest herbs like aralia, viola, and botrychium suffer greatly in these altered habitats, as well as many trees including the various birches and maples. Exotic earthworms have induced an overall decline of temperate forest.

Managing Deer Impacts

The ability to manage deer impacts using silvicultural systems is limited. The most effective method of keeping deer impacts in line with management objectives is to monitor impacts while working with the Division of Fish, Wildlife and Marine Resources to observe and manage the herd. On properties where deer are suspected of impacting values and objectives associated with biodiversity and timber management, such impacts must be inventoried and assessed.

For more information on managing deer impacts, please see SPSFM page 291 at <http://www.dec.ny.gov/lands/64567.html>.

For general information on deer management see the Management Plan for White-tailed Deer in New York State 2012-2016 at http://www.dec.ny.gov/docs/wildlife_pdf/deerplan2012.pdf.

The Department manages deer populations in Wildlife Management Units (WMUs). The majority of this unit falls within WMU 4O, though the southern tip lies in WMU 4W. 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 in each unit. Deer populations are then 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 as deer 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, and impacts the future forest composition and structure.

For many years Department staff have suspected that deer were having significant impacts by restricting the regeneration of desirable species in the forest understory. The Department conducted a regeneration study in 2006 on State Forests within Region 7 which confirmed the regeneration of desirable species often failed to fully develop. The study further revealed that 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 the Beaver Meadow State Forests in Chenango County. In response to these surveys and other studies, the Department began issuing special harvest tags in 2010 for the harvest of additional antlerless deer from the Beaver Meadow State Forest. In 2014 a similar program to control deer populations was instituted on the majority of the State Forests in this unit (see the Hunting section of this plan under Wildlife-related Activities for more detailed information). These projects are ongoing to determine if increased deer harvest combined with timber harvesting activities can improve the quality of deer habitat and the forest understory species composition.

Summary of Eco-Region Assessments

To practice ecosystem management, foresters, must assess the natural landscape in and around the management unit. State forest managers utilized The Nature Conservancy Eco-Region Assessments to evaluate the landscape for this management unit. The Treaty Line unit lies within the High Allegheny Plateau Eco-Region.

Eco-Region Summary

The High Allegheny Plateau (HAP) Ecoregion is located along the southern tier of New York, the northern tier of Pennsylvania, and a small portion of New Jersey. Well known features in HAP include the Catskills, the Shawangunks, the Kittatinny Ridge, the Poconos, Allegany State Park, Allegheny National Forest, and a large mass of lands owned by the state of Pennsylvania.

The HAP ecoregion is defined by high elevation features at the northern end of the Appalachian Plateau. Most of the ecoregion is above 1200 feet. The general land form of the area is mid-elevation hills separated by numerous narrow stream-cut valleys.

One of the main features of the ecoregion is an abundance of rivers and streams. The Delaware, Susquehanna, and Allegheny Rivers and their many tributaries cover the entire ecoregion. The Delaware River drains into Delaware Bay; the Susquehanna flows into the Chesapeake Bay; the Allegheny flows into the Ohio and eventually into the Mississippi. These three different drainages contribute to the high overall aquatic diversity in the ecoregion.

The northern and eastern portions of the ecoregion were glaciated; the southwest portion was not. Many northern species and communities reach their southern limit in HAP, while many southern species extend into the ecoregion but not beyond. Species and communities

SUMMARY OF ECO-REGION ASSESSMENTS

ECO-REGION ASSESSMENT

associated with glaciated landforms occur in the north and east; biodiversity associated with older substrate and deeper erosional soils occurs in the southwest.

Another prominent feature of the ecoregion is its currently low population density, although major population centers are nearby. There are 1.7 million people living in the 16.9 million acres of HAP (2000 census data). The largest city is Binghamton, New York at 47,000. Only 250,000 people in HAP live in cities over 10,000. The overall population trend in HAP indicates that people are moving out of the ecoregion with the notable exception of the areas within reach of New York City by major highways.

There are large and significant managed areas in HAP, including three large intact forested areas: the Catskills, the Allegheny National Forest/Alleghany State Park complex, and the Pennsylvania state game lands in central PA.

Eco-Region Assessment

Table II.A. Land Use and Land Cover for Landscape Surrounding the Treaty Line

| Land Use and Land Cover | Approximate Acreage | Percent of Landscape |
|---|---------------------|----------------------|
| Mixed Forest | 22,169 | 15.6 |
| Deciduous Forest | 73,021 | 51.3 |
| Conifer Forest | 10,546 | 7.4 |
| Shrub and Brush Range Land (includes seedling/sapling type) | 2,626 | 1.8 |
| Residential | 6,203 | 4.4 |
| Commercial & Services | 136 | 0.1 |
| Strip Mines, Quarries & Gravel Pits | 2,126 | 1.5 |
| Open Water | 2,832 | 2.0 |
| Forested Wetland | 1,696 | 1.2 |
| Emergent Herbaceous Wetlands | 255 | 0.2 |
| Pasture/Hay | 15,581 | 10.9 |
| Cultivated Crops | 3,873 | 2.7 |
| Other Grassland | 1,401 | 0.9 |
| Total | 142,465 | 100 |

Local Landscape Conditions

The landscape covering this unit is largely a collection of small private land holdings. Roughly three quarters of surrounding parcels are under 10 acres in size. Parcels ranging from 10 to 49 acres make up about another 10%, as do parcels in the 50 to 200-acre range. Less than 5% of the unit consists of parcels over 200 acres with many of the largest being watershed lands owned by the City of New York and clustered around the Cannonsville Reservoir.

The vast majority of parcels within about 2 miles of State Forest lands are in the 5 to 200-acre range, conversely most of the smallest parcels are located in and around the population centers towards the outer edges of the unit. However, parcelization frequently occurs immediately adjacent to State Forest lands as these areas are considered highly desirable for their proximity and ready access to the nearby public lands. Paradoxically, the security of the nearby State Forest lands remaining as large contiguous undeveloped tracts is a driving factor for the continued division of private lands.

Unit wide sub-division and parcelization continues to occur due to three main factors: a high demand for vacation, second home, and retirement properties, especially from the urban population centers of New Jersey and lower New York, increasing cost of maintaining existing land holdings by traditional long-time residents, and the continued decline of the agricultural industry, particularly that of the dairy industry. As sub-division and land parcelization continue State Forest lands are ever more important in providing large continuous tracts of forest cover.

Habitat Related Demands

Early successional habitat conditions have been identified as deficient on the landscape. Early successional cover types are on the decline as once cultivated farm lands are abandoned and grow into mature forest cover. As forests mature they lose their ability to support early successional associated species. Forest management can periodically provide a supplement to early successional habitat through the implementation of even-aged forest regeneration practices. The vast bulk of private non-industrial forest lands of the region are typically treated with partial harvests that fail to reset the successional clock leaving roughly similar residual stand structures of mid-aged forests after the harvest. Though the early successional conditions created by even-aged management are transitory they can be used to augment the supply of early successional habitat on the landscape.

Late successional forests have also been cited as lacking on the landscape. Late successional forests are those areas where there is a significant component of trees greater than 140 years old. Forests beyond this age develop old-growth characteristics such as: many trees of a large size, rough bark, an abundance of cavities, along with good numbers of persistent dead trees and fallen logs. While no wildlife species on the unit are exclusively dependent upon these late successional forest conditions to survive, these habitats are still important because they often provide superior quality habitat for certain species even though those species might still exist under other types of forested conditions. State Forest lands have the opportunity to provide late successional forest conditions within the landscape because of their long-term continuity of ownership. In contrast, private lands often 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 later stages of development. These privately-owned forests are also usually harvested before they reach the late successional stage of development. On a statewide basis, late successional forests are adequately provided for by the Adirondack and Catskill Forest Preserve lands, however, there is very little of this type on the landscape within the unit.

MANAGEMENT OBJECTIVES AND ACTIONS

OBJECTIVES

Management Objectives and Actions

Objectives

Ecosystem Management

Table III.A. –Ecosystem Management Objectives and Actions

| Objective | Actions |
|--|---|
| Active Forest Management | |
| AFM I – Apply sound silvicultural practices | Utilize stand data and current assessments to make active forest management decisions about ecosystem, timber harvesting, and integrated pest management. |
| AFM II – Use harvesting plans to enhance diversity of species, habitats & structure | Progressively convert plantations with natural regeneration into a mix of softwood and hardwood species under both even and uneven-age management regimes. |
| AFM III – Fill eco-regional gaps to maintain and enhance landscape level biodiversity | Buffer established natural and man-made wetlands and identify stands to be removed from treatment. Establish and enhance conifer stands through natural regeneration. |
| AFM IV – Enhance matrix forest blocks and connectivity corridors where applicable | Retain large natural conifer stands where possible, especially along riparian corridors. Identify and convert appropriate stands with suitable species compositions to uneven-aged management. |
| AFM V – Practice forest and tree retention on stands managed for timber | Retain existing snag, cavity, and legacy trees to the extent possible. Maintain retention trees for development into any deficient categories. Maintain fine woody material and coarse woody debris to required levels in managed stands. Apply harvesting restrictions or utilize timber harvesting practices that increase levels within deficient stands. |
| HCVF - Identify and maintain HCVFs | Work with Natural Heritage to identify and maintain High Conservation Value Forests (HCVF). |

Resource Protection

Table III.B. –Resource Protection Objectives and Actions (898 Acres)

| Objective | Actions |
|--|--|
| Soil and Water Protection | |
| SW I – Prevent erosion, compaction and nutrient depletion | Utilize Best Management Practices while planning timber harvests to minimize the number of skid trails and compaction to residual stand. During periods of inactivity and upon completion of timber sales ensure that proper water control devices are installed to prevent erosion and sedimentation of soils into nearby water bodies. Institute seasonal, utilization, and other necessary harvesting restrictions within timber harvesting contracts when appropriate. |
| SW II – Identify and map SMZ's and adapt management for highly-erodible soils | Use soils mapping in conjunction with on the ground survey to identify and map Special Management Zones (SMZ). Identify stands to be removed from treatment. Adjust management actions according to SMZ type to protect areas of highly-erodible soils and related resources. |
| At-Risk Species and Natural Communities | |
| ARS I – Protect ARS&C ranked S1, S2, S2-3, G1, G2 or G2-3 where present | Consult with Natural Heritage and wildlife biologists about location and habitat needs for listed species when encountered to protect at-risk species and natural communities. |
| ARS II – Conduct habitat restoration and promote recovery of declining species | <p>Buffer natural and man-made wetlands from treatment by following SMZ guidelines.</p> <p>Maintain cover for species in and around breeding and wintering areas.</p> <p>Utilize timber harvests to enhance habitat for declining species where possible and include special harvesting restriction when necessary.</p> |
| ARS III – Consider protection and management of Species of Greatest Conservation Need | Coordinate with wildlife biologists, ecologists and managers to protect and manage for Species of Greatest Conservation Need. |
| Visual Resources and Aesthetics | |

MANAGEMENT OBJECTIVES AND ACTIONS

OBJECTIVES

| <i>Table III.B. –Resource Protection Objectives and Actions (898 Acres)</i> | |
|--|--|
| Objective | Actions |
| VR I – Maintain or improve overall quality of visual resources | <p>Improve natural viewing areas and overlooks in the Cannonsville watershed.</p> <p>Provide visual buffers of harvest areas and log decks where needed. Stage conversions of roadside or other visually important areas to mitigate visual impacts.</p> |
| VR II – Use natural materials where feasible | When constructing infrastructure, natural materials will be used where feasible. |
| VR III – Lay out any new roads/trails to highlight vistas and unique natural features | One snowmobile trail overlooking the Cannonsville Reservoir will be redeveloped and opened. |
| VR IV – Develop kiosks to provide education and reduce sign pollution | <p>There are two bulletin board style signs on the unit, these will be replaced by kiosks.</p> <p>Kiosks will also be installed at Beal's Pond State Forest and Steam Mill State Forests as part of New York Works projects.</p> |
| Historic and Cultural Resources | |
| HC I – Preserve and protect historic and cultural resources wherever they occur | Cemeteries, foundations and other historic and cultural resources will be protected from timber harvesting activities wherever they occur. Stone wall crossings will be minimized or utilize pre-existing crossings when possible. |
| HC II – Inventory resources in GIS and with OPRHP | Gather GPS data and inventory cemeteries, foundations and other historic and cultural resources. Maintain information regarding cultural resources found on the unit with the assistance of OPRHP. |

Infrastructure and Real Property

| <i>Table III.C. –Infrastructure and Real Property Objectives and Actions</i> | |
|--|--|
| Objective | Actions |
| Boundary Line Maintenance | |
| BL I – Maintain boundary lines | <p>Boundary lines will be delineated and are scheduled to be remarked every 7 years.</p> <p>Boundary lines adjacent to timber sales will be checked for visibility and remarked as needed.</p> |

| <i>Table III.C. –Infrastructure and Real Property Objectives and Actions</i> | |
|--|---|
| Objective | Actions |
| BL II – Address encroachments and other real property problems | Encroachments and real property problems will be assessed and resolved as they occur. |
| Infrastructure | |
| INF I – Provide and maintain public forest access roads, access trails, haul roads, parking areas, and associated appurtenances | Public Forest Access Roads, access trails, parking areas and associated appurtenances will be established and maintained on a regular basis to insure public and administrative access to state forest lands. Gates/barricades will be maintained and replaced where they are necessary. |
| INF II – Upgrade, replace or relocate infrastructure out of riparian areas where feasible | Infrastructure will be upgraded and replaced as needed and when feasible. Infrastructure will be relocated out of riparian areas when feasible and necessary. |
| INF III – Resolve issues of uncertain legal status or jurisdiction | There are two boundary line delineation issues on the unit. These will be surveyed, with the correct location of the property line delineated on the ground and mapped. Determine the legal status of the Camp Brace Facility. |
| INF IV – Prevent over-development | Development of infrastructure on the unit will be kept to a minimum, except where deemed necessary. |
| INF V – Future Acquisitions | Coordinate with willing sellers for future acquisitions to increase accessibility to state forests and for public use. |

Public/Permitted Use

| <i>Table III.D –Public / Permitted Use Objectives and Actions</i> | |
|---|---|
| Objective | Actions |
| Universal Access | |
| UA I – Designate and improve an existing site for universal access to the Melondy family cemetery site | Upgrade an existing point of access to ADA standards and designate as a parking area. Upgrade approximately 250' of trail for ADA access. |

MANAGEMENT OBJECTIVES AND ACTIONS

OBJECTIVES

| <i>Table III.D –Public / Permitted Use Objectives and Actions</i> | |
|---|--|
| Objective | Actions |
| UA II – Use minimum tool approach to provide additional universal access to programs | Explore the possibility to re-open abandoned or closed CP-3 trails. Other opportunities to develop CP-3 trails and develop other ADA access will be explored and investigated. Identify potential project areas to have in queue for work when opportunity arises. |
| Formal and Informal Partnerships and Agreements | |
| PRT I – Collaborate with local organizations and governments to reach mutual goals | Work with the local towns and recreation groups to reach mutual goals on resource and road usage. |
| PRT II – Consider full range of impacts associated with VSAs and recurring TRPs | Evaluate on an annual basis the effect VSAs and recurring TRPs have on the forest landscape. Meet with permit applicants before, during and after permitted use or work to determine the level of associated impact. |
| Recreation | |
| REC I – Accommodate public use while preventing illegal activity, reducing impacts and enhancing public safety | Coordinate with law enforcement to assure the safe and enjoyable use of resources on state forests. |
| REC II – Provide public recreation information | Two signs along the Finger Lakes Trail will be updated with kiosks and website links to the DEC State Forest web page, where public recreation information is maintained and updated. The kiosks will be updated with recreation information when feasible. |

Table III.D –Public / Permitted Use Objectives and Actions

| Objective | Actions |
|--|---|
| REC III – Inventory recreational amenities and schedule recreation management actions | <p>Coordinate with recreational user groups to inventory and map recreation uses.</p> <p>Establish recreation trail routes which minimize the necessity for seasonal re-route for forest management activities while increasing the recreational enjoyment of the user.</p> <p>Establish accessible trails where conditions allow for ease of access and a desirable destination.</p> <p>Work with recreational user groups and the Department's Operations Division to schedule maintenance and management activities.</p> |
| REC IV – Enhance fish & game species habitat | <p>Riparian areas and open water will be buffered from treatment to maintain water quality, provide shaded cover for fish, and protect the habitat of riparian dependent species.</p> <p>Buffered areas will be designated as Protection Stands around riparian areas and open water, to be protect the resource.</p> <p>Forest management actions will seek to create game species cover and habitat by producing a variety of forest and habitat conditions while regenerating and maintaining forest stands.</p> |
| REC V – Support Hunting and Fishing on State Lands | <p>Increase accessibility to state lands by providing informal parking areas and increasing the number of informal and formal camp sites.</p> <p>Develop ADA access to Beals Pond with ADA camp sites and observation platform over the water on Beals Pond State Forest (Delaware 9).</p> <p>Construction of an access road to Aikens Marsh on Steam Mill State Forest (Delaware 2)</p> |

MANAGEMENT OBJECTIVES AND ACTIONS

OBJECTIVES

| <i>Table III.D –Public / Permitted Use Objectives and Actions</i> | |
|---|--|
| Objective | Actions |
| Off-Highway and All-Terrain Vehicle Use | |
| ATV I – Enhance recreational access by people with disabilities under the MAPPWD program | Expansion of a CP-3 trail on Pine Hill State Forest (Delaware 7). Re-open the CP-3 trail on Pine Hill State Forest (Delaware 7). |
| ATV II – Consider requests for ATV connector routes across the unit | Limit ATV use on State Forest as per NYS Strategic Plan for State Forest Management. |
| Mineral Resources | |
| MR I – Provide for mineral exploration and development while protecting natural resources and recreation | Natural gas extraction, exploration or development activities, if they occur on the unit, will follow procedures described in the Generic Environmental Impact Statement (GEIS) on Oil, Gas and Solution Mining Regulatory Program and the NYS Strategic Plan for State Forest Management (SPSFM), Chapter 5, pages 225-238. |
| Supporting Local Communities | |
| LC I – Provide revenue to New York State and economic stimulus for local communities | Provide economic benefits to the People of the State through the variety of goods and services produced on State Forest lands as well as the tax revenue they provide to local communities. |
| LC II – Improve local economies through forest-based tourism | Develop partnerships with organizations, individuals, or communities to sustain and/or enhance forest based tourism activities that are consistent with this plan and State Forest rules and regulations. The Volunteer Stewardship Agreement program will be used to formalize such partnerships. |
| LC III – Protect rural character and provide ecosystem services 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 a range of wildlife habitat, buffering of downstream communities from floods, pollination of crops, 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. |

Forest Management and Health

Table III.E. –Forest Management and Health Objectives and Actions

| Objective | Actions |
|--|---|
| Forest Products | |
| FP I – Sustainably manage for forest products. | Treat an average of around 300 acres per year across the State Forests on the unit. |
| FP II – Educate the public about the benefits of silviculture | Post signage with information about forest management activities adjacent to active timber harvests. Attend or deliver group presentations, provide county fair and other public outreach displays. Interact with persons, anglers, campers, hikers, hunters, and other forest users while performing fieldwork activities. |
| Forest Management | |
| FMT I – Manage forest for a variety of ages classes | Treat 10,785 acres with Even-aged management and 4,727 acres with Uneven-aged management. Region 4: Treat 6,593 acres Even-aged; 4,290 acres Uneven-aged Region 7: Treat 4,192 acres Even-aged; 437 acres Uneven-aged |
| FMT II – Manage for diverse cover types | Treat the treatable acreage to obtain 15% of the acreage in conifer, 60% in hardwoods and 25% in Hardwood/conifer mix. Retain and manage unique ecological specimens and communities during management. |
| FMT III – Snag and Cavity Retention | Retain an average of at least four snags per acre with a goal of two between 11”-17” dbh and two 18” dbh or larger. Retain an average of at least four cavity trees per acre with a goal of three between 11”-17” dbh and one ≥18” dbh or larger. |
| FMT IV – Coarse Woody Debris Retention | Retain at least three logs ≥10” in diameter at the small end and 16’ in length or an equivalent volume in longer or shorter lengths per acre. |

MANAGEMENT OBJECTIVES AND ACTIONS

OBJECTIVES

| <i>Table III.E. –Forest Management and Health Objectives and Actions</i> | |
|--|--|
| Objective | Actions |
| Plantation Management | |
| PM I – Convert plantation stands to natural forest conditions where appropriate | Convert conifer plantation stands to natural stands when adequate regeneration conditions allow. |
| PM II – Artificially regenerate plantations where appropriate | Where regeneration is not adequate and the plantation must to be removed, artificial regeneration will be utilized when appropriate. |
| PM III -- Manage plantations for a variety of ages classes | Over the next ten years, improve growing conditions and establish naturalized regeneration on 17% of plantations; intermediate thinning of 74%; overstory removal of 6%, and 3% other treatments. |
| Forest Health | |
| FH I – Use timber sales to improve forest health and the diversity of species | Timber sales will be utilized to remove poorer quality growing stock in order to grant better growing conditions to residual trees. Species diversity, tree quality, and health will be considered in selecting trees to retain after harvest, when possible. Timber sales may be utilized to in part to control undesirable interfering vegetation & invasive species to improve the diversity and abundance of native species. |
| FH II – Protect the unit and surrounding lands from introduced diseases and invasive plant and animal species | Coordinate with the Department of Agriculture & Markets, Cooperative Extension, and other state and federal government agencies to develop and implement plans to control the spread of introduces diseases and invasive species. |
| Managing Deer Impacts | |
| DM I – Monitor impacts of deer browsing on forest health and regeneration | Coordinate with the Division of Fish & Wildlife to monitor deer impacts. Work with volunteers to assess deer populations and their impacts on State Forest lands. |
| DM II – Address issues of over-browsing | Administer DMAP where necessary on the State Forest lands to help maintain deer populations within their ecological carrying capacities on the unit. |
| Fire Management | |

| <i>Table III.E. –Forest Management and Health Objectives and Actions</i> | |
|--|---|
| Objective | Actions |
| FM I – Support Forest Rangers in controlling the ignition and spread of wildfires | Manage State Forest lands to limit fuel load and ignition sources of wildfires and to maintain access to interior forest stands to allow access for controlling the spread of wildfires. |
| FM II – Maintain naturally occurring fire-dependent communities | Due to inadequate funding and staffing levels we are not able to acquire the permits required to properly maintain naturally occurring fire-dependent communities on State Forest lands at this time. |
| Carbon Sequestration | |
| CS I – Keep forests as forests, where appropriate | Maintain a range of managed and unmanaged forests across the unit. Regenerate and maintain forest stand cover according to the Schedule of Land Management Actions. |
| CS II – Enhance carbon storage in existing stands | Improve the growth potential of trees within forest stands by maintaining the relative density of the stand at an acceptable level to encourage tree growth and result in increased carbon storage within residual trees. |
| CS III – Keep forests vigorous and improve forest growth rates | Employ silviculture and harvest treatments to keep the forest stands vigorous and improve tree growth rates. |
| CS IV – Sequester carbon in forest products | Within managed stands, encourage the establishment, growth, and development of forest cover which can provide viable forest products from the State Forest lands of the unit. |

MANAGEMENT OBJECTIVES AND ACTIONS

TEN-YEAR LIST OF MANAGEMENT ACTIONS

Ten-Year List of Management Actions

Unit-wide Actions

Action 1

Develop and subsequently adopt this UMP with future amendments as needed and periodic updates at least every ten years.

Action 2

Create/update the web page for each state forest in this unit, including an electronic, printable map showing the location of recreational amenities.

Action 3

Land acquisition of inholdings and adjacent properties in protect biodiversity and water resources of the region.

Action 4

Identify areas proposed for protection management, including:

- Watershed protection
- SMZs
- Old Growth Forests

Action 5

Improve access to for recreational use across the unit

State Forest Actions

Kerryville State Forest (Delaware R.A. #1) Actions

Control interfering and invasive vegetation

Boundary line survey, 0.35 miles

Identify and protect Timber rattlesnake habitat

Steam Mill State Forest (Delaware R.A. #2) Actions

Control interfering and invasive vegetation

Boundary line survey, 0.34 miles

Re-open recreational spur trail to vista overlooking Cannonsville Reservoir

Explore and create CP-3 trail opportunities

Columbia Lake State Forest (Delaware R.A. #3) Actions

Control interfering and invasive vegetation

Arctic-China State Forest (Delaware R.A. #4 and #5) Actions

Control interfering and invasive vegetation

Re-route 0.1 miles of Finger Lakes Trail

Barbour Brook State Forest (Delaware R.A. #6) Actions

Control interfering and invasive vegetation

Re-route 1.2 miles of Finger Lakes Trail

Pine Hill State Forest (Delaware R.A. #7) Actions

Control interfering and invasive vegetation

Re-open 0.9 miles of CP-3 recreation trail

Michigan Hill State Forest (Delaware R.A. #8) Actions

Control interfering and invasive vegetation

Gain access to northern portion of Michigan Hill State Forest

Beal's Pond State Forest (Delaware R.A. #9) Actions

Control interfering and invasive vegetation

Establish two (2) campsites in the vicinity of Beal's Pond

Repair 0.2 miles of unnamed access road east of Beal's Pond Rd.

Extend Forest Access Trail west of Getter Hill Rd. 0.4 miles south

Widen and improve Forest Access Trail west of Getter Hill Rd.

Melondy Hill State Forest (Chenango R.A. #9) Actions

Control interfering and invasive vegetation

Repair 0.6 miles of the abandoned section of Lingee Rd.

Designate and upgrade parking area and 0.1 miles of trail for ADA access

Melondy Hill State Forest (Broome R.A. #2) Actions

Repair 1.5 miles of the abandoned section of Blowers Rd.

MANAGEMENT OBJECTIVES AND ACTIONS

FOREST TYPE CODES

Forest Type Codes

NH - Northern Hardwood
NH/WP - Northern Hardwood/White Pine
NH/Hem - Northern Hardwood/Hemlock
NH/S - Northern Hardwood/Spruce
NH/P - Northern Hardwood/Pine
NH/Oak - Northern Hardwood/Oak
Oak
Oak/WP - Oak/White Pine
Oak/Hem - Oak/Hemlock
Hem - Hemlock
SH - Swamp Hardwood
PH - Pioneer Hardwood
WP - White Pine
WP/S - White Pine/Spruce
NS - Norway Spruce
NS/RP - Norway Spruce/Red Pine
RP - Red Pine
RP/NH - Red Pine/Northern Hardwood
RP/WP - Red Pine/White Pine
SP - Scots Pine
Larch
Larch/S - Larch/Spruce
RP/Larch - Red Pine/Larch
RS/H/WP - Red Spruce/Hemlock/White Pine
WS - White Spruce
WC - White Cedar
Brush
Other

Management Direction Codes

Protection

ZA - Protection Access
ZH - Protection Historical
ZR - Protection Riparian
ZS - Protection Slope
ZW - Protection Wet

Forest Management

EA - Even Age
UA - Uneven Age

Non-Management

NM - Non-Management

Size Class Codes

S/S - Seedling/Sapling
PT - Pole Timber
SST - Small Saw Timber
MST - Medium Saw Timber

Treatment Type Codes

IT - Intermediate Thinning
SH - Sawtimber Harvest
EH - Even Aged Harvest
ER - Even Aged Regeneration Release with Residuals
GC - Grouse Cut
FW - Firewood/Timber Stand Improvement
NA – No Forest Management Scheduled

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

Land Management Action Schedules

| Table III.F. -Land Management Action Schedule 1st 5 years (by State Forest Region 4) | | | | | | | |
|--|--------|-------|------------|-------------|--------|----------------------|----------------|
| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
| | | | | Current | Future | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Steam Mill State Forest | | | | | | | |
| DEL 2 | A-15 | 21.25 | SST | NS | NS | E | IT |
| DEL 2 | A-17 | 76.96 | SST | NH/Hem | NH/Hem | U | SH |
| DEL 2 | A-18 | 14.49 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 2 | A-20 | 10.51 | SST | NH | NH | U | SH |
| DEL 2 | A-24 | 4.58 | SST | NH | NH | E | IT |
| DEL 2 | A-27 | 5.66 | SST | NH | NH | U | SH |
| DEL 2 | A-30 | 36.83 | PT | NH | NH | U | SH |
| DEL 2 | A-32 | 9.21 | SST | NH/Hem | NH/Hem | U | SH |
| DEL 2 | A-33 | 24.62 | SST | NH | NH | U | SH |
| DEL 2 | A-36 | 3.82 | PT | NH | NH | U | SH |
| DEL 2 | A-38 | 10.55 | SST | NH/Hem | NH/Hem | U | SH |
| DEL 2 | A-41 | 2.01 | PT | NH | NH | U | SH |
| DEL 2 | B-2 | 2 | PT | WS | NH | E | IT |
| DEL 2 | B-8 | 36.48 | SST | NH | NH | U | SH |
| DEL 2 | B-9 | 8.23 | SST | NS | NS | E | IT |
| DEL 2 | B-41 | 20.63 | PT | NS | NH/S | E | IT |
| DEL 2 | B-42 | 2 | SST | NS | NS | E | IT |
| DEL 2 | B-47 | 2 | SST | NS | NH/S | E | IT |
| DEL 2 | B-48 | 11.31 | SST | NS | NS | E | ER |
| DEL 2 | B-49 | 13.45 | SST | NH/Hem | NH/Hem | U | SH |
| DEL 2 | B-50 | 3.3 | SST | NS | NS | E | ER |
| DEL 2 | B-52 | 52.2 | SST | NS | NH/S | E | ER |
| DEL 2 | B-55.1 | 10.1 | SST | NS | NS | E | ER |
| DEL 2 | C-25 | 18.69 | PT | RP | NH | E | IT |
| DEL 2 | C-29 | 23.89 | SST | RP | NH | E | IT |
| DEL 2 | C-33.2 | 10.72 | PT | RP | NH | E | IT |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| Table III.F. -Land Management Action Schedule 1st 5 years (by State Forest Region 4) | | | | | | | |
|--|-------|--------|------------|-------------|--------|----------------------|----------------|
| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
| | | | | Current | Future | | |
| DEL 2 | D-4 | 13.44 | SST | NH | NH | U | SH |
| DEL 2 | D-8 | 8.11 | PT | NH | NH | U | SH |
| DEL 2 | D-10 | 4.81 | PT | WP | WP | E | IT |
| DEL 2 | D-17 | 26.96 | SST | RP | NS | E | RC |
| DEL 2 | E-20 | 2 | PT | NH | NH | E | IT |
| DEL 2 | E-26 | 122.73 | SST | NH | NH | U | SH |
| DEL 2 | E-27 | 8.8 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 2 | E-29 | 3.39 | PT | NH | NH | U | SH |
| DEL 2 | E-30 | 8.61 | SST | NH/S | NH/S | U | SH |
| DEL 2 | F-1 | 3.85 | PT | NH | NH | E | IT |
| DEL 2 | F-2 | 6.72 | PT | WP | NH/WP | E | IT |
| DEL 2 | F-3.1 | 23.91 | SST | RP | NH | E | RC |
| DEL 2 | F-5 | 2.21 | SST | NS | NS | E | IT |
| DEL 2 | F-6 | 2.31 | PT | NH | NH | E | IT |
| DEL 2 | F-11 | 13.99 | PT | NH/Hem | NH/Hem | E | IT |
| DEL 2 | F-12 | 6.21 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 2 | F-13 | 72.14 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 2 | F-17 | 66.51 | PT | NH/Oak | NH/Oak | U | SH |
| DEL 2 | F-21 | 73.2 | SST | NH | NH | E | IT |
| DEL 2 | F-22 | 15.17 | SST | NH | NH | U | SH |
| DEL 2 | F-24 | 3.23 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 2 | F-30 | 18.77 | SST | NH | NH | U | SH |
| DEL 2 | F-31 | 24.59 | PT | NH | NH | E | IT |
| DEL 2 | G-2 | 4.47 | SST | WP | WP | E | IT |
| DEL 2 | G-4 | 11.09 | PT | NS | NS | E | IT |
| DEL 2 | G-9 | 23.53 | PT | NH/Hem | NH/Hem | U | SH |
| Columbia Lake State Forest | | | | | | | |
| DEL 3 | A-15 | 76.92 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 3 | A-19 | 21.01 | PT | NH/Oak | NH/Oak | U | SH |
| DEL 3 | A-22 | 4 | PT | NH/Oak | NH/Oak | U | SH |
| DEL 3 | A-23 | 77.81 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 3 | A-24 | 5 | PT | NH/Oak | NH/Oak | E | IT |
| Arctic China State Forest | | | | | | | |
| DEL 4 | A-13 | 43.56 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 4 | A-21 | 34.7 | SST | Larch | NH | E | IT |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| Table III.F. -Land Management Action Schedule 1st 5 years (by State Forest Region 4) | | | | | | | |
|--|--------|-------|------------|-------------|--------|----------------------|----------------|
| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
| | | | | Current | Future | | |
| DEL 4 | A-22 | 25.28 | SST | NH | NH | U | SH |
| DEL 4 | A-23 | 42.92 | SST | NH | NH | U | SH |
| DEL 4 | A-31 | 9 | PT | NH | NH | E | IT |
| DEL 4 | A-32 | 26.35 | SST | NH | NH | U | SH |
| DEL 4 | A-35 | 10.78 | PT | NH/Oak | NH/Oak | E | IT |
| DEL 4 | A-38 | 13.61 | SST | NH | NH | U | SH |
| DEL 4 | A-40 | 33.21 | SST | NH | NH | U | SH |
| DEL 4 | A-45 | 4.72 | SST | NS | NS | E | ER |
| DEL 4 | B-1 | 20.07 | PT | NH/Oak | NH/Oak | E | IT |
| DEL 4 | B-2 | 2.7 | SST | NS | NS | E | ER |
| DEL 4 | B-3 | 9.28 | SST | NH | NH | U | SH |
| DEL 4 | B-5 | 5.89 | SST | NH | NH | U | SH |
| DEL 4 | B-6 | 18.38 | SST | NH | NH | U | SH |
| DEL 4 | B-7 | 2 | SST | NS | NS | E | ER |
| DEL 4 | B-8 | 6.86 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 4 | B-9 | 2.17 | SST | NS | NS | E | ER |
| DEL 4 | B-10 | 30.93 | PT | NH | NH | U | SH |
| DEL 4 | B-12 | 38.2 | SST | NS | NS | E | ER |
| DEL 4 | B-15 | 17.85 | PT | NH/Oak | NH/Oak | U | SH |
| DEL 4 | B-16 | 8.7 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 4 | B-17 | 19.65 | SST | NH/Oak | NH/Oak | E | IT |
| DEL 4 | B-19 | 7.36 | SST | NS | NS | E | IT |
| DEL 4 | B-22.2 | 17.6 | SST | NH/Hem | NH/Hem | E | IT |
| DEL 4 | B-29 | 41.32 | SST | NH | NH | U | SH |
| DEL 4 | B-30 | 13.67 | SST | NH | NH | U | SH |
| Arctic China State Forest (cont) | | | | | | | |
| DEL 5 | A-1 | 5.89 | PT | NH/Oak | NH/Oak | E | IT |
| DEL 5 | A-2 | 14.98 | SST | NS/RP | NS | E | IT |
| DEL 5 | A-3 | 11.4 | SST | RP | NH | E | IT |
| DEL 5 | A-4 | 3.69 | PT | NH | NH | E | IT |
| DEL 5 | A-23 | 7.35 | SST | NH/Oak | NH/Oak | E | IT |
| DEL 5 | A-24 | 4.29 | PT | NH | NH | U | SH |
| DEL 5 | A-31 | 6.26 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 5 | A-33.1 | 9.2 | SST | NH | NH | U | SH |
| DEL 5 | A-36 | 15.45 | PT | NH | NH | E | IT |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| Table III.F. -Land Management Action Schedule 1st 5 years (by State Forest Region 4) | | | | | | | |
|--|-------|-------|------------|-------------|--------|----------------------|----------------|
| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
| | | | | Current | Future | | |
| DEL 5 | A-38 | 28.79 | SST | NH | NH | E | IT |
| DEL 5 | B-30 | 2 | SST | NH | NH | E | IT |
| DEL 5 | B-31 | 18.79 | SST | NH | NH | U | SH |
| DEL 5 | B-32 | 9.72 | PT | NH/Oak | NH/Oak | E | IT |
| DEL 5 | B-33 | 7.3 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 5 | B-43 | 2.7 | SST | NS | NS | E | ER |
| Barbour Brook State Forest | | | | | | | |
| DEL 6 | A-5 | 23 | SST | NH | NH | E | IT |
| DEL 6 | A-20 | 13 | SST | NS | NS | E | ER |
| DEL 6 | A-26 | 11.09 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 6 | A-29 | 13.55 | SST | NH | NH | U | SH |
| DEL 6 | A-30 | 33.76 | SST | NH/Hem | NH/Hem | U | SH |
| DEL 6 | A-33 | 7.71 | SST | NH | NH | E | IT |
| DEL 6 | A-47 | 12.44 | PT | NH/Oak | NH/Oak | E | IT |
| DEL 6 | A-50 | 3.21 | SST | RP | NH | E | ER |
| Pine Hill State Forest | | | | | | | |
| DEL 7 | A-2 | 15.51 | PT | NH/Oak | NH/Oak | U | SH |
| DEL 7 | A-3 | 15.05 | PT | OAK | OAK | U | SH |
| DEL 7 | A-10 | 13.01 | PT | NS | NS | E | IT |
| DEL 7 | A-11 | 18.18 | PT | NH/WP | NH/WP | E | IT |
| DEL 7 | A-12 | 10.5 | SST | NH/WP | NH/WP | U | SH |
| DEL 7 | A-14 | 2 | SST | NH | NH | U | SH |
| DEL 7 | A-22 | 11.25 | SST | OAK | OAK | U | SH |
| DEL 7 | A-24 | 7.71 | PT | NH/WP | NH/WP | U | SH |
| DEL 7 | A-25 | 40.99 | PT | NH/WP | NH/WP | E | IT |
| DEL 7 | A-32 | 11.61 | SST | NH/WP | NH/WP | E | IT |
| DEL 7 | A-40 | 29 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 7 | A-46 | 3.07 | SST | NH/Hem | NH/Hem | U | SH |
| DEL 7 | A-48 | 9.46 | PT | NH/WP | NH/WP | U | SH |
| Michigan Hill State Forest | | | | | | | |
| DEL 8 | A-1 | 32.11 | SST | NH | NH | U | SH |
| DEL 8 | A-2 | 18.04 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 8 | A-3 | 58.65 | PT | NH | NH | U | SH |
| DEL 8 | A-14 | 3.03 | PT | NH/WP | NH/WP | E | IT |
| DEL 8 | A-17 | 21.02 | PT | NH/Hem | NH/Hem | U | SH |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| Table III.F. -Land Management Action Schedule 1st 5 years (by State Forest Region 4) | | | | | | | |
|--|-------|-------|------------|-------------|--------|----------------------|----------------|
| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
| | | | | Current | Future | | |
| DEL 8 | A-25 | 19.92 | PT | NH/Hem | NH/Hem | E | IT |
| DEL 8 | A-26 | 5.96 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 8 | A-27 | 69.46 | SST | NH | NH | U | SH |
| DEL 8 | A-28 | 2 | PT | NH | NH | E | IT |
| DEL 8 | A-30 | 2.61 | PT | NH | NH | E | IT |
| Beals Pond State Forest | | | | | | | |
| DEL 9 | A-1 | 6.01 | SST | NH | NH | U | SH |
| DEL 9 | A-2 | 18.26 | PT | NH | NH | U | SH |
| DEL 9 | A-4 | 7.98 | SST | NH/Oak | NH/Oak | E | IT |
| DEL 9 | A-5 | 18.88 | SST | NH/Hem | NH/Hem | U | SH |
| DEL 9 | A-8 | 45.03 | SST | NH/Hem | NH/Hem | U | SH |
| DEL 9 | A-23 | 4.98 | SST | NH | NH | U | SH |
| DEL 9 | A-25 | 11.27 | SST | NH | NH | U | SH |
| DEL 9 | A-31 | 3.57 | SST | NH | NH | E | IT |
| DEL 9 | A-32 | 12.49 | PT | NH | NH | E | IT |
| DEL 9 | A-36 | 11.06 | SST | NH | NH | U | SH |
| DEL 9 | A-38 | 10.48 | SST | NH | NH | E | IT |
| DEL 9 | A-40 | 29.4 | SST | NH | NH | U | SH |
| DEL 9 | A-41 | 2.94 | SST | NH/S | NH/S | E | IT |
| DEL 9 | A-45 | 4.8 | SST | NH/WP | NH/WP | U | SH |
| DEL 9 | A-47 | 2 | SST | NH | NH | E | IT |
| DEL 9 | A-48 | 40.62 | SST | NH | NH | U | SH |
| DEL 9 | A-49 | 6.79 | SST | NH | NH | U | SH |
| DEL 9 | A-50 | 32.27 | SST | NH | NH | U | SH |
| DEL 9 | A-52 | 21.5 | SST | NH | NH | U | SH |
| DEL 9 | A-54 | 6.97 | SST | NH/WP | NH/WP | E | IT |
| DEL 9 | B-1 | 26.46 | SST | NH | NH | U | SH |

| Table III.G. -Land Management Action Schedule 2 nd 5 years (by State Forest Region 4) | | | | | | | |
|--|-------|-------|------------|-------------|--------|----------------------|----------------|
| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
| | | | | Current | Future | | |
| Kerryville State Forest | | | | | | | |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| Table III.G. -Land Management Action Schedule 2nd 5 years (by State Forest Region 4) | | | | | | | |
|--|--------|--------|------------|-------------|--------|----------------------|----------------|
| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
| | | | | Current | Future | | |
| DEL 1 | A-7 | 7.4 | SST | NS | NH/S | E | IT |
| DEL 1 | A- 10 | 6.2 | SST | NS | NH/S | E | ER |
| DEL 1 | A-12 | 9.38 | PT | WC | NH/WC | E | IT |
| DEL 1 | A-13 | 13.27 | SST | NS | NH/S | E | IT |
| DEL 1 | A-15 | 6.73 | PT | NH | NH | U | SH |
| DEL 1 | A-16 | 9.17 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 1 | A-19 | 145.5 | PT | NH | NH | U | SH |
| DEL 1 | A-24 | 52.18 | SST | NH | NH | U | SH |
| Steam Mill State Forest | | | | | | | |
| DEL 2 | A-21 | 11.35 | PT | NH/WP | NH/WP | E | IT |
| DEL 2 | A-23.1 | 5.35 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 2 | A-28 | 22.97 | SST | NS | NS | E | IT |
| DEL 2 | A-31 | 2.96 | PT | WP | WP | E | IT |
| DEL 2 | B-5 | 10.43 | SST | NH | NH | E | IT |
| DEL 2 | B-6 | 11.26 | SST | NH | NH | E | IT |
| DEL 2 | B-20 | 4.25 | SST | NH | NH | U | SH |
| DEL 2 | B-26 | 53.08 | PT | NH | NH | E | IT |
| DEL 2 | B-30 | 18.67 | PT | NH | NH | U | SH |
| DEL 2 | B-33 | 5.93 | PT | Oak | Oak | U | SH |
| DEL 2 | B-38 | 3.66 | PT | NH | NH | E | IT |
| DEL 2 | B-45 | 10.76 | PT | NS | NH/S | E | IT |
| DEL 2 | B-46 | 5.2 | SST | NH/Hem | NH/Hem | U | SH |
| DEL 2 | B-53 | 124.8 | SST | NH | NH | U | SH |
| DEL 2 | B-56 | 28.55 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 2 | C-2.1 | 8.1 | SST | RP | NH | E | IT |
| DEL 2 | C-7 | 6.8 | SST | WP | NH/WP | E | IT |
| DEL 2 | C-8 | 5.53 | SST | WS | NH | E | IT |
| DEL 2 | C-9 | 6.66 | SST | NS | NH/S | E | ER |
| DEL 2 | C-10.1 | 75.7 | SST | RP | NH | E | IT |
| DEL 2 | C-12 | 13.08 | SST | NH | NH | U | SH |
| DEL 2 | C-15 | 62.02 | SST | NH | NH | U | SH |
| DEL 2 | C-16 | 116.64 | SST | NH | NH | U | SH |
| DEL 2 | C-17 | 2 | PT | NH/Oak | NH/Oak | E | IT |
| DEL 2 | C-19 | 3.19 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 2 | C-22 | 10.35 | SST | WS | NH | E | IT |
| DEL 2 | C-30 | 34.48 | SST | NH | NH | U | SH |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| Table III.G. -Land Management Action Schedule 2nd 5 years (by State Forest Region 4) | | | | | | | |
|--|-------|--------|------------|-------------|--------|----------------------|----------------|
| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
| | | | | Current | Future | | |
| DEL 2 | C-31 | 18.47 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 2 | C-40 | 10.89 | PT | NH | NH | E | IT |
| DEL 2 | C-41 | 32.04 | SST | NH | NH | U | SH |
| DEL 2 | C-44 | 17.85 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 2 | C-45 | 4.98 | PT | NS | NS | E | IT |
| DEL 2 | C-46 | 17.03 | SST | WP | NH/WP | E | IT |
| DEL 2 | E-2 | 6.42 | SST | WP | NH/WP | E | ER |
| DEL 2 | E-4 | 22.96 | SST | WS | NH | E | ER |
| DEL 2 | E-6 | 139.98 | SST | NH | NH | E | IT |
| DEL 2 | E-11 | 9.59 | SST | NS | NS | E | IT |
| DEL 2 | E-12 | 10.01 | SST | RP | NH/Oak | E | ER |
| DEL 2 | E-15 | 2.43 | SST | NS | NS | E | ER |
| DEL 2 | E-16 | 6.52 | SST | NS | NH/S | E | IT |
| DEL 2 | E-17 | 19.31 | SST | NS | NH/S | E | IT |
| DEL 2 | E-18 | 6.64 | SST | WS | NH | E | ER |
| DEL 2 | E-24 | 13.88 | SST | NS | NH/S | E | IT |
| DEL 2 | E-28 | 3.18 | SST | NS | NH/S | E | IT |
| DEL 2 | F-14 | 55.25 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 2 | F-15 | 9.26 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 2 | F-16 | 51.03 | SST | Oak | Oak | U | SH |
| DEL 2 | F-20 | 3.04 | PT | NH/Oak | NH/Oak | E | IT |
| DEL 2 | G-5 | 7.78 | SST | NH | NH | U | SH |
| DEL 2 | G-7 | 51.26 | SST | NH | NH | U | SH |
| DEL 2 | G-8 | 29.99 | SST | NH | NH | U | SH |
| DEL 2 | H-1 | 11.9 | SST | NH | NH | U | SH |
| DEL 2 | H-3 | 9.62 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 2 | H-4 | 11.38 | SST | NH | NH | U | SH |
| DEL 2 | H-5 | 24.05 | SST | NH/Hem | NH/Hem | U | SH |
| DEL 2 | H-6 | 7.92 | SST | NH/Hem | NH/Hem | U | SH |
| DEL 2 | H-7 | 19.43 | SST | NH | NH | U | SH |
| Columbia Lake State Forest | | | | | | | |
| DEL 3 | A-9 | 14 | SST | NS | NH/S | E | IT |
| DEL 3 | A-17 | 27 | SST | NS | NS | E | IT |
| DEL 3 | A-26 | 25.76 | PT | NH/Oak | NH/Oak | E | IT |
| DEL 3 | A-27 | 30.1 | PT | NH/Oak | NH/Oak | E | IT |
| DEL 3 | A-28 | 46.51 | SST | NH/Oak | NH/Oak | U | SH |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| Table III.G. -Land Management Action Schedule 2nd 5 years (by State Forest Region 4) | | | | | | | |
|--|-------|-------|------------|-------------|--------|----------------------|----------------|
| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
| | | | | Current | Future | | |
| DEL 3 | A-29 | 23.78 | SST | NH/WP | NH/WP | U | SH |
| Arctic China State Forest | | | | | | | |
| DEL 4 | A-24 | 42.92 | SST | NH | NH | U | SH |
| DEL 4 | A-25 | 6.14 | PT | NH | NH | U | SH |
| DEL 4 | A-30 | 17.09 | SST | NH/Oak | NH/Oak | E | IT |
| DEL 4 | A-33 | 36.55 | SST | NH | NH | U | SH |
| DEL 4 | A-34 | 2.02 | PT | NS | NS | E | IT |
| DEL 4 | A-36 | 14 | SST | NS | NS | E | ER |
| DEL 4 | A-37 | 47.82 | SST | NH | NH | U | SH |
| DEL 4 | A-42 | 8.64 | SST | WP | WP | E | IT |
| Arctic China State Forest (cont) | | | | | | | |
| DEL 5 | A-1 | 5.89 | PT | NH/Oak | NH/Oak | E | IT |
| DEL 5 | A-2 | 14.98 | SST | NS | NS | E | IT |
| DEL 5 | A-3 | 11.4 | SST | RP | NH | E | IT |
| DEL 5 | A-42 | 3.69 | PT | NH | NH | E | IT |
| DEL 5 | A-10 | 14.5 | SST | RP | PH | E | GC |
| DEL 5 | A-22 | 10.83 | SST | Larch | Larch | E | IT |
| DEL 5 | A-28 | 14.56 | SST | RP | NH | E | ER |
| DEL 5 | A-34 | 40.6 | SST | NS | NS | E | ER |
| DEL 5 | A-39 | 4.68 | SST | NS | NS | E | ER |
| DEL 5 | A-41 | 2.48 | SST | NS | Oak | E | ER |
| DEL 5 | A-55 | 20.71 | SST | NS | NS | E | ER |
| DEL 5 | C-6 | 12.22 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 5 | C-8 | 14.69 | PT | NH/Oak | NH/Oak | E | IT |
| DEL 5 | C-9 | 37 | PT | NH | NH | E | IT |
| Barbour Brook State Forest | | | | | | | |
| DEL 6 | A-1 | 7 | PT | NH | NH | E | IT |
| DEL 6 | A-9 | 9 | SST | NH | NH | E | IT |
| DEL 6 | A-18 | 8 | PT | RP | NH | E | IT |
| DEL 6 | A-21 | 60 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 6 | A-42 | 5 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 6 | A-44 | 11 | SST | NH | NH | U | SH |
| DEL 6 | A-49 | 12 | PT | NH | NH | E | IT |
| DEL 6 | A-52 | 26 | SST | NH/Hem | NH/Hem | U | SH |
| DEL 6 | A-53 | 12.48 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 6 | A-58 | 7 | SST | NH | NH | E | IT |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

Table III.G. -Land Management Action Schedule 2nd 5 years (by State Forest Region 4)

| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
|----------------------------|--------|-------|------------|-------------|--------|----------------------|----------------|
| | | | | Current | Future | | |
| Pine Hill State Forest | | | | | | | |
| DEL 7 | A-5 | 53.69 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 7 | A-7 | 32.74 | SST | NH/WP | NH/WP | U | SH |
| DEL 7 | A-13 | 33.72 | SST | NH/WP | NH/WP | U | SH |
| DEL 7 | A-16 | 58.16 | PT | NH/Oak | NH/Oak | U | SH |
| DEL 7 | A-18 | 42.19 | SST | NS | NS | E | ER |
| DEL 7 | A-23 | 7.17 | SST | NH/WP | NH/WP | U | SH |
| DEL 7 | A-28 | 12.21 | SST | NS | NS | E | IT |
| DEL 7 | A-30 | 8.67 | PT | NH/WP | NH/WP | E | IT |
| DEL 7 | A-33 | 5.41 | SST | NS | NH/S | E | IT |
| DEL 7 | A-38 | 10.79 | SST | NH/WP | NH/WP | U | SH |
| DEL 7 | A-44 | 13.3 | SST | NS | NH/S | E | IT |
| Michigan Hill State Forest | | | | | | | |
| DEL 8 | A-18 | 58 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 8 | A-19 | 8.75 | SST | NH/Hem | NH/Hem | U | SH |
| DEL 8 | B-1 | 86.1 | PT | NH/Hem | NH/Hem | U | SH |
| Beals Pond State Forest | | | | | | | |
| DEL 9 | A-7 | 10.11 | PT | NS | NH/Oak | E | IT |
| DEL 9 | A-11 | 80.96 | SST | NH/Hem | NH/Hem | U | SH |
| DEL 9 | A-12 | 18.96 | SST | WP | WP | E | IT |
| DEL 9 | A-13 | 15.98 | SST | NH | NH | U | SH |
| DEL 9 | A-14 | 8.15 | PT | NH | NH | E | IT |
| DEL 9 | A-15 | 23.34 | PT | NS | NH/S | E | IT |
| DEL 9 | A-20 | 19.45 | SST | WP | NH/WP | E | IT |
| DEL 9 | A-21.1 | 7.5 | SST | WP | NH/WP | E | IT |
| DEL 9 | A-24 | 5.73 | SST | NH | NH | E | IT |
| DEL 9 | A-26.2 | 14.08 | SST | NS | NS | E | IT |
| DEL 9 | A-29 | 2.53 | SST | NS-WP | WP/NS | E | IT |
| DEL 9 | A-39 | 4.66 | PT | WP | NH/WP | E | IT |
| DEL 9 | A-42 | 38.72 | SST | RP | NH | E | ER |
| DEL 9 | A-58 | 18.02 | PT | RP | NH | E | IT |
| DEL 9 | A-60 | 29.42 | PT | NH | NH | U | SH |
| DEL 9 | A-61 | 3.23 | PT | WP | NH/WP | E | IT |
| DEL 9 | B-2 | 38.55 | PT | NS | NS | E | IT |
| DEL 9 | B-3 | 9.88 | PT | NH | NH | E | IT |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

Table III.G. -Land Management Action Schedule 2nd 5 years (by State Forest Region 4)

| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
|---------------|-------|-------|------------|-------------|--------|----------------------|----------------|
| | | | | Current | Future | | |
| DEL 9 | B-7 | 45.89 | SST | NH | NH | E | IT |
| DEL 9 | B-8 | 19.43 | SST | NH | NH | U | SH |

Table III.H. -No Land Management Action Scheduled within 10 years (by State Forest Region 4)

| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
|-------------------------|-------|--------|------------|-------------|--------|----------------------|----------------|
| | | | | Current | Future | | |
| Kerryville State Forest | | | | | | | |
| DEL 1 | A-1 | 26.67 | PT | NH | NH | E | IT |
| DEL 1 | A-3 | 11.82 | S/S | NH | NH | E | - |
| DEL 1 | A-4 | 3.87 | S/S | Larch | Larch | E | - |
| DEL 1 | A-5 | 5.57 | S/S | NH | NH | E | - |
| DEL 1 | A-6 | 8.07 | SST | NH | NH | E | IT |
| DEL 1 | A-8 | 4.86 | PT | NH | NH | E | IT |
| DEL 1 | A-9 | 10.17 | S/S | Larch | Larch | E | - |
| DEL 1 | A-11 | 2 | SST | NH | NH | E | ER |
| DEL 1 | A-14 | 35.04 | SST | NS | NH/S | E | IT |
| DEL 1 | A-17 | 28.85 | PT | WP | NH/WP | E | IT |
| DEL 1 | A-18 | 11.99 | PT | NH | NH | U | SH |
| DEL 1 | A-20 | 5.94 | PT | RP | NH | E | IT |
| DEL 1 | A-21 | 76.86 | PT | NH | NH | E | IT |
| DEL 1 | A-22 | 18.29 | PT | NH/WP | NH/WP | U | SH |
| DEL 1 | A-26 | 8.21 | S/S | NH | NH | E | - |
| DEL 1 | A-27 | 72.17 | SST | NH | NH | U | SH |
| DEL 1 | A-28 | 59.77 | PT | NH | NH | E | IT |
| DEL 1 | A-29 | 8.51 | S/S | NH | NH | E | - |
| Steam Mill State Forest | | | | | | | |
| DEL 2 | A-1 | 30.97 | SST | NH | NH | U | SH |
| DEL 2 | A-2 | 8.19 | PT | NH/WP | NH/WP | U | SH |
| DEL 2 | A-3 | 6.05 | S/S | NH | NH | E | - |
| DEL 2 | A-4 | 9.09 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 2 | A-5 | 26.78 | SST | NH/Hem | NH/Hem | U | SH |
| DEL 2 | A-6 | 120.88 | SST | NH | NH | U | SH |
| DEL 2 | A-7 | 10.8 | S/S | NH | NH | E | - |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

Table III.H. -No Land Management Action Scheduled within 10 years (by State Forest Region 4)

| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
|---------------|--------|--------|------------|-------------|--------|----------------------|----------------|
| | | | | Current | Future | | |
| DEL 2 | A-8 | 2.08 | PT | RP | PH | E | GC |
| DEL 2 | A-9 | 9.35 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 2 | A-10 | 21.49 | SST | NH/WP | NH/WP | U | SH |
| DEL 2 | A-11 | 47.11 | SST | NH/Hem | NH/Hem | U | SH |
| DEL 2 | A-12 | 12.9 | SST | NH/Hem | NH/Hem | U | SH |
| DEL 2 | A-14 | 8.91 | SST | WS | NH/WP | E | IT |
| DEL 2 | A-16 | 11.1 | PT | NS | NS | E | IT |
| DEL 2 | A-19 | 23.04 | SST | NS | NS | E | IT |
| DEL 2 | A-22 | 2 | S/S | NH | NH | E | - |
| DEL 2 | A-23.2 | 6.19 | S/S | NH | NH | E | - |
| DEL 2 | A-25 | 14.8 | SST | NS | NS | E | EH |
| DEL 2 | A-29 | 2 | SST | WP | WP | E | IT |
| DEL 2 | A-34 | 9.22 | S/S | NH | NH | E | - |
| DEL 2 | A-37 | 12.37 | SST | NH/Hem | NH/Hem | U | SH |
| DEL 2 | A-39 | 29.75 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 2 | A-42 | 3.79 | PT | RP | NH | E | IT |
| DEL 2 | A-43 | 7.15 | SST | Larch | Larch | E | IT |
| DEL 2 | A-45 | 2.7 | S/S | NH | NH | E | - |
| DEL 2 | B-3 | 9.49 | SST | WP | WP | E | IT |
| DEL 2 | B-4 | 11.05 | SST | NS | NS | E | IT |
| DEL 2 | B-7 | 13.46 | S/S | NH | NH | E | - |
| DEL 2 | B-11.1 | 9.25 | PT | RP | NH | E | IT |
| DEL 2 | B-11.2 | 16.12 | S/S | Larch | Larch | E | - |
| DEL 2 | B-12 | 14.77 | PT | NS-RP | NS | E | IT |
| DEL 2 | B-13 | 18.15 | SST | NS | NS | E | ER |
| DEL 2 | B-14 | 3.87 | S/S | Larch | Larch | E | - |
| DEL 2 | B-15 | 7.7 | SST | NS | NS | E | EH |
| DEL 2 | B-16 | 7.1 | SST | NS | NS | E | ER |
| DEL 2 | B-17 | 15.88 | S/S | NH | NH | E | - |
| DEL 2 | B-18 | 172.84 | PT | NH | NH | U | SH |
| DEL 2 | B-19 | 4.45 | S/S | NH | NH | E | - |
| DEL 2 | B-21 | 13.05 | SST | WP | WP | E | IT |
| DEL 2 | B-22 | 16.2 | SST | NS | NS | E | EH |
| DEL 2 | B-23 | 21.25 | S/S | NH | NH | E | - |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| <i>Table III.H. -No Land Management Action Scheduled within 10 years (by State Forest Region 4)</i> | | | | | | | |
|---|--------|--------|------------|-------------|--------|----------------------|----------------|
| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
| | | | | Current | Future | | |
| DEL 2 | B-24 | 17.4 | PT | NH/WP | WP | E | IT |
| DEL 2 | B-25 | 8.01 | PT | RP | NH | E | IT |
| DEL 2 | B-27 | 17.4 | PT | RP | NH | E | IT |
| DEL 2 | B-28 | 13.48 | PT | RP | NH | E | IT |
| DEL 2 | B-29 | 10.05 | SST | RP | NH | E | IT |
| DEL 2 | B-32 | 7.05 | PT | NH | NH | E | IT |
| DEL 2 | B-34 | 12.31 | S/S | NH | NH | E | - |
| DEL 2 | B-35 | 9.68 | SST | RP | NH | E | ER |
| DEL 2 | B-36 | 14.69 | PT | NH | NH | E | IT |
| DEL 2 | B-37 | 34.66 | PT | RP | NH | E | IT |
| DEL 2 | B-39 | 26.6 | S/S | Larch | Larch | E | - |
| DEL 2 | B-40 | 34.3 | S/S | Larch | Larch | E | - |
| DEL 2 | B-43 | 10.23 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 2 | B-44 | 2 | PT | NH | NH | E | IT |
| DEL 2 | B-55.2 | 6.8 | S/S | NH | NH | E | - |
| DEL 2 | B-54 | 4.25 | SST | NS | NS | E | EH |
| DEL 2 | C-1 | 7.18 | S/S | Larch | Larch | E | - |
| DEL 2 | C-2.2 | 4.2 | S/S | NH | NH | E | - |
| DEL 2 | C-3 | 121.49 | SST | NH | NH | U | SH |
| DEL 2 | C-4 | 11.47 | SST | NH | NH | U | SH |
| DEL 2 | C-5 | 2.83 | PT | NH | NH | E | IT |
| DEL 2 | C-6 | 2.88 | PT | NH | NH | U | SH |
| DEL 2 | C-10.2 | 2.7 | S/S | NH | NH | E | - |
| DEL 2 | C-11 | 13.63 | SST | RP | NH | E | IT |
| DEL 2 | C-13 | 13.08 | SST | NH | NH | U | SH |
| DEL 2 | C-14 | 9.78 | S/S | NH | NH | E | - |
| DEL 2 | C-18 | 45.73 | PT | NH/Oak | NH/Oak | U | SH |
| DEL 2 | C-20 | 47.73 | SST | NH | NH | U | SH |
| DEL 2 | C-21 | 5.01 | S/S | NH | NH | E | - |
| DEL 2 | C-23 | 28.28 | SST | NS/RP | Oak | E | IT |
| DEL 2 | C-24 | 6.07 | PT | NH/Oak | Oak | U | SH |
| DEL 2 | C-26 | 22.13 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 2 | C-27 | 7.61 | PT | RP | NH | E | IT |
| DEL 2 | C-28 | 7.02 | PT | RP | NH | E | IT |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| <i>Table III.H. -No Land Management Action Scheduled within 10 years (by State Forest Region 4)</i> | | | | | | | |
|---|--------|-------|------------|-------------|--------|----------------------|----------------|
| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
| | | | | Current | Future | | |
| DEL 2 | C-32 | 2 | PT | NH | NH | E | IT |
| DEL 2 | C-33.1 | 22.69 | S/S | Larch | Larch | E | - |
| DEL 2 | C-34 | 14.81 | SST | NS | NS | E | IT |
| DEL 2 | C-35 | 10.24 | SST | NS-NH | NH/S | U | SH |
| DEL 2 | C-36.1 | 21.4 | PT | NH/Oak | Oak | E | IT |
| DEL 2 | C-36.2 | 16.4 | SST | NS | NH/S | E | ER |
| DEL 2 | C-37 | 4.04 | SST | NS | NS | E | ER |
| DEL 2 | C-38 | 11.42 | S/S | NH | NH | E | - |
| DEL 2 | C-39 | 2 | S/S | NH | NH | E | - |
| DEL 2 | C-42 | 4.52 | SST | NH/Hem | NH/Hem | U | SH |
| DEL 2 | C-43 | 16.5 | S/S | NH | NH | E | - |
| DEL 2 | C-47.1 | 8 | SST | NS | NH/S | E | ER |
| DEL 2 | C-47.2 | 7.8 | S/S | NH | NH | E | - |
| DEL 2 | C-48 | 2.2 | PT | RP | NH | E | IT |
| DEL 2 | C-49 | 32.55 | SST | NS | NS | E | IT |
| DEL 2 | C-50 | 4.9 | PT | NH | NH | E | IT |
| DEL 2 | C-51 | 32.5 | PT | WP | NH/WP | E | IT |
| DEL 2 | C-53 | 5.77 | S/S | NH | NH | E | - |
| DEL 2 | C-54 | 7 | S/S | NS | NS | E | - |
| DEL 2 | C-55 | 10.34 | S/S | NH | NH | E | - |
| DEL 2 | D-1.1 | 15.2 | PT | RP | NH | E | IT |
| DEL 2 | D-1.2 | 5.2 | S/S | NS | NS | E | - |
| DEL 2 | D-2 | 6.44 | S/S | NH | NH | E | - |
| DEL 2 | D-3 | 10.25 | SST | NS | NS | E | ER |
| DEL 2 | D-5 | 16.35 | SST | NS | NS | E | EH |
| DEL 2 | D-6 | 6.19 | SST | RP | NH | E | IT |
| DEL 2 | D-7 | 16.52 | SST | NS | NS | E | ER |
| DEL 2 | D-9 | 34.63 | S/S | NS | NS | E | - |
| DEL 2 | D-11 | 5 | PT | RP | NH | E | IT |
| DEL 2 | D-12 | 41.35 | SST | NH | NH | U | SH |
| DEL 2 | D-13 | 23.2 | SST | NH | NH | U | SH |
| DEL 2 | D-14 | 8.77 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 2 | D-15 | 6.63 | SST | NS | NH/S | E | ER |
| DEL 2 | D-16 | 8.65 | SST | RP | NS | E | RC |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| <i>Table III.H. -No Land Management Action Scheduled within 10 years (by State Forest Region 4)</i> | | | | | | | |
|---|--------|-------|------------|-------------|--------|----------------------|----------------|
| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
| | | | | Current | Future | | |
| DEL 2 | D-18 | 10.23 | PT | NH | NH | E | IT |
| DEL 2 | D-19.1 | 13.33 | S/S | NS | NS | E | - |
| DEL 2 | D-19.2 | 22.39 | S/S | Larch | Larch | E | - |
| DEL 2 | D-20 | 16.83 | PT | NH | NH | U | SH |
| DEL 2 | D-21 | 20.83 | SST | NS | NH/S | E | IT |
| DEL 2 | D-22 | 10.07 | PT | NS | NS | E | IT |
| DEL 2 | D-23 | 10 | S/S | NH | NH | E | - |
| DEL 2 | D-24 | 24.58 | PT | NH/S | NH/S | E | IT |
| DEL 2 | D-25 | 7.16 | SST | NS | NS | E | EH |
| DEL 2 | D-26 | 45.78 | SST | NH/Hem | NH/Hem | E | IT |
| DEL 2 | D-27 | 2.2 | SST | NS | NH/S | E | IT |
| DEL 2 | D-28 | 33.12 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 2 | D-29 | 17.67 | SST | WP | NH/WP | E | IT |
| DEL 2 | D-30 | 30 | S/S | Larch | Larch | E | - |
| DEL 2 | E-1 | 23.75 | SST | WP | NH/WP | E | ER |
| DEL 2 | E-3 | 3.73 | PT | NH/S | NH/S | U | SH |
| DEL 2 | E-5 | 61.99 | PT | NH | NH | U | SH |
| DEL 2 | E-7 | 6.99 | SST | Larch | Larch | E | IT |
| DEL 2 | E-9 | 2.25 | SST | RP | NH | E | IT |
| DEL 2 | E-13 | 10.61 | SST | WP | NH/WP | E | IT |
| DEL 2 | E-14 | 36.88 | PT | NH/Oak | NH/Oak | E | IT |
| DEL 2 | E-19 | 22.4 | SST | NS | NS | E | IT |
| DEL 2 | E-21 | 16.24 | S/S | Larch | Larch | E | - |
| DEL 2 | E-22 | 7.41 | PT | WP | NH/WP | E | IT |
| DEL 2 | E-23 | 16.81 | PT | NH/Oak | Oak | U | SH |
| DEL 2 | E-25 | 10.69 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 2 | E-31.1 | 45.2 | S/S | NH | NH | E | - |
| DEL 2 | E-31.2 | 5.8 | PT | RP | NH | E | IT |
| DEL 2 | E-32 | 5.1 | PT | Larch | Larch | E | IT |
| DEL 2 | E-33 | 18 | S/S | NH | NH | E | - |
| DEL 2 | E-34.1 | 4.6 | SST | NS | NS | E | IT |
| DEL 2 | E-34.2 | 5.8 | SST | WS | NH | E | IT |
| DEL 2 | E-35 | 8.18 | S/S | Larch | Larch | E | - |
| DEL 2 | E-36 | 18.16 | S/S | NH | NH | E | - |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| <i>Table III.H. -No Land Management Action Scheduled within 10 years (by State Forest Region 4)</i> | | | | | | | |
|---|--------|--------|------------|-------------|--------|----------------------|----------------|
| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
| | | | | Current | Future | | |
| DEL 2 | E-37 | 25 | PT | NH | NH | U | SH |
| DEL 2 | E-38 | 5.29 | PT | NH/Oak | NH/Oak | E | IT |
| DEL 2 | E-39 | 15.73 | SST | Larch | Larch | E | IT |
| DEL 2 | E-40 | 62.37 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 2 | E-41.1 | 10 | SST | NS | NH/S | E | EH |
| DEL 2 | E-41.2 | 5.8 | S/S | NS | NS | E | - |
| DEL 2 | E-42 | 2.42 | BRUSH | Brush | NH | E | - |
| DEL 2 | E-43 | 5.37 | S/S | NH | NH | E | - |
| DEL 2 | F-3.2 | 12.94 | S/S | NH | NH | E | - |
| DEL 2 | F-4 | 2 | BRUSH | Brush | NH | E | - |
| DEL 2 | F-7 | 14 | SST | NS | NH/S | E | IT |
| DEL 2 | F-8 | 2 | S/S | NH | NH | E | - |
| DEL 2 | F-9 | 170.02 | PT | Oak | Oak | U | SH |
| DEL 2 | F-10 | 8.29 | PT | NH/Oak | NH/Oak | U | SH |
| DEL 2 | F-18 | 9.9 | S/S | NH | NH | E | - |
| DEL 2 | F-19 | 3.64 | S/S | NH | NH | E | - |
| DEL 2 | F-23 | 20.36 | SST | NS/WS | NS | E | ER |
| DEL 2 | F-25 | 6.91 | SST | RP | Oak | E | ER |
| DEL 2 | F-26 | 5.79 | SST | NS | NS | E | IT |
| DEL 2 | F-27 | 2 | SST | NH | NH | E | ER |
| DEL 2 | F-28 | 37.73 | S/S | NH | NH | E | - |
| DEL 2 | F-29 | 21.39 | SST | NH | NH | U | SH |
| DEL 2 | F-32.1 | 3.9 | PT | RP | NH | E | IT |
| DEL 2 | F-32.2 | 3.3 | S/S | NH | NH | E | - |
| DEL 2 | F-33 | 22.57 | PT | RP | NH/Hem | E | IT |
| DEL 2 | F-36 | 21.5 | S/S | NS | NS | E | - |
| DEL 2 | G-7 | 29.32 | PT | NS | NS | E | IT |
| DEL 2 | H-2 | 98.12 | PT | Oak | Oak | E | IT |
| Columbia Lake State Forest | | | | | | | |
| DEL 3 | A-1 | 11 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 3 | A-2 | 11.22 | SST | NH | NH | E | IT |
| DEL 3 | A-3 | 42.15 | SST | Oak | Oak | E | IT |
| DEL 3 | A-4 | 34 | PT | NH/Oak | NH/Oak | U | SH |
| DEL 3 | A-5 | 18 | S/S | Larch | Larch | E | - |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| <i>Table III.H. -No Land Management Action Scheduled within 10 years (by State Forest Region 4)</i> | | | | | | | |
|---|-------|-------|------------|-------------|--------|----------------------|----------------|
| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
| | | | | Current | Future | | |
| DEL 3 | A-7 | 59 | PT | NH/Oak | NH/Oak | E | IT |
| DEL 3 | A-8 | 18 | PT | NH/Oak | NH/Oak | E | IT |
| DEL 3 | A-11 | 1 | S/S | NH | NH | E | - |
| DEL 3 | A-12 | 18 | S/S | RP | RP | E | - |
| DEL 3 | A-13 | 15.79 | S/S | NH | NH | E | - |
| DEL 3 | A-14 | 2 | PT | PH | PH | E | GC |
| DEL 3 | A-16 | 69.83 | PT | NH/Oak | NH/Oak | U | SH |
| DEL 3 | A-18 | 13 | PT | PH | PH | E | GC |
| DEL 3 | A-20 | 6 | S/S | NH | NH | E | - |
| DEL 3 | A-21 | 5 | PT | PH | PH | E | GC |
| DEL 3 | A-25 | 24 | S/S | NS | NS | E | - |
| Arctic China State Forest | | | | | | | |
| DEL 4 | A-1 | 50.8 | SST | NH | NH | U | SH |
| DEL 4 | A-2 | 4.47 | PT | NH | NH | E | IT |
| DEL 4 | A-3 | 2.8 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 4 | A-4 | 17.97 | PT | NH | NH | U | SH |
| DEL 4 | A-5 | 14 | S/S | NH | NH | E | - |
| DEL 4 | A-6 | 9.1 | SST | NS | NS | E | ER |
| DEL 4 | A-7 | 8.29 | SST | NS | NS | E | EH |
| DEL 4 | A-8 | 9.41 | SST | NS | NS | E | ER |
| DEL 4 | A-9 | 26.44 | SST | NS | NS | E | ER |
| DEL 4 | A-10 | 2 | S/S | NH | NH | E | - |
| DEL 4 | A-11 | 9.27 | S/S | NH | NH | E | - |
| DEL 4 | A-12 | 2.88 | PT | RP | NH | E | IT |
| DEL 4 | A-14 | 3.87 | SST | NS | NS | E | ER |
| DEL 4 | A-15 | 25.73 | SST | NH | NH | U | SH |
| DEL 4 | A-16 | 7.6 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 4 | A-17 | 13.98 | SST | NH | NH | U | SH |
| DEL 4 | A-18 | 53.05 | SST | NH | NH | U | SH |
| DEL 4 | A-19 | 4.7 | SST | NH | NH | U | SH |
| DEL 4 | A-26 | 7.78 | PT | NS | NH/S | E | IT |
| DEL 4 | A-28 | 19.3 | BRUSH | Brush | NH | E | - |
| DEL 4 | A-39 | 19.07 | SST | NH | NH | U | SH |
| DEL 4 | A-41 | 5.11 | S/S | NH | NH | E | - |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| Table III.H. -No Land Management Action Scheduled within 10 years (by State Forest Region 4) | | | | | | | |
|---|--------|-------|------------|-------------|--------|----------------------|----------------|
| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
| | | | | Current | Future | | |
| DEL 4 | A-43 | 4.32 | PT | NS | NS | E | IT |
| DEL 4 | A-44 | 26.6 | SST | Larch | Larch | E | ER |
| DEL 4 | A-46 | 7 | PT | Larch | Larch | E | IT |
| DEL 4 | A-47 | 5 | S/S | NS | NS | E | - |
| DEL 4 | B-4 | 5.93 | S/S | NH | NH | E | - |
| DEL 4 | B-11 | 2.63 | S/S | NH | NH | E | - |
| DEL 4 | B-18 | 2 | S/S | NH | NH | E | - |
| DEL 4 | B-20 | 25.69 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 4 | B-21 | 3.19 | PT | NH | NH | E | IT |
| DEL 4 | B-22.1 | 4.8 | S/S | NH | NH | E | - |
| DEL 4 | B-23 | 3.76 | SST | NH/Hem | NH/Hem | E | IT |
| DEL 4 | B-24 | 9.06 | PT | NH | NH | U | SH |
| DEL 4 | B-25 | 5.16 | S/S | NH | NH | E | - |
| DEL 4 | B-26.2 | 6.74 | S/S | NH | NH | E | - |
| DEL 4 | B-27 | 27.22 | PT | NH | NH | U | SH |
| DEL 4 | B-28 | 7.3 | SST | NH | NH | E | ER |
| Arctic China State Forest (cont) | | | | | | | |
| DEL 5 | A-5 | 19.15 | SST | NS | NH/S | E | ER |
| DEL 5 | A-6 | 40.88 | PT | NH/Oak | NH/Oak | U | SH |
| DEL 5 | A-7 | 5.37 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 5 | A-8.1 | 27.37 | SST | NS | NS | E | IT |
| DEL 5 | A-8.2 | 28.26 | S/S | NH | NH | E | - |
| DEL 5 | A-9 | 19 | SST | NH | NH | E | IT |
| DEL 5 | A-11 | 4.29 | SST | NS | NH/S | E | IT |
| DEL 5 | A-12 | 34.92 | SST | NH | NH | E | IT |
| DEL 5 | A-13 | 8.56 | PT | Larch | Larch | E | IT |
| DEL 5 | A-15 | 2 | SST | NH/Oak | NH/Oak | E | IT |
| DEL 5 | A-16 | 19.31 | SST | RP | NH | E | IT |
| DEL 5 | A-17 | 4.49 | PT | NH/Oak | NH/Oak | E | IT |
| DEL 5 | A-18 | 6.08 | PT | NS | NH/S | E | IT |
| DEL 5 | A-19 | 12.8 | SST | NS | NS | E | ER |
| DEL 5 | A-20 | 14.79 | SST | NS | NS | E | ER |
| DEL 5 | A-25 | 20.57 | PT | NH | NH | U | SH |
| DEL 5 | A-26 | 12.74 | SST | NS | NH/S | E | ER |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| <i>Table III.H. -No Land Management Action Scheduled within 10 years (by State Forest Region 4)</i> | | | | | | | |
|---|--------|-------|------------|-------------|--------|----------------------|----------------|
| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
| | | | | Current | Future | | |
| DEL 5 | A-27 | 51.12 | SST | NH | NH | E | IT |
| DEL 5 | A-29 | 5.25 | S/S | NS | NS | E | - |
| DEL 5 | A-30 | 4.11 | S/S | NH | NH | E | - |
| DEL 5 | A-32 | 22.98 | PT | NH | NH | E | IT |
| DEL 5 | A-33.2 | 3.8 | SST | NS | NH/S | E | IT |
| DEL 5 | A-35.1 | 13.9 | S/S | NH | NH | E | - |
| DEL 5 | A-35.2 | 2.5 | S/S | NH | NH | E | - |
| DEL 5 | A-37 | 15.88 | SST | NH | NH | E | IT |
| DEL 5 | A-40 | 6.34 | SST | RP | NH | E | ER |
| DEL 5 | A-42.1 | 37.9 | PT | RP | NH | E | IT |
| DEL 5 | A-42.2 | 5.9 | S/S | NH | NH | E | - |
| DEL 5 | A-43 | 9.86 | PT | NH | NH | E | IT |
| DEL 5 | A-44 | 11.44 | SST | RP | NH | E | IT |
| DEL 5 | A-45 | 3.75 | SST | NS | NS | E | ER |
| DEL 5 | A-47 | 31 | PT | NH | NH | E | IT |
| DEL 5 | A-48.1 | 18 | PT | NH | NH | U | SH |
| DEL 5 | A-48.2 | 20 | PT | NH | NH | E | IT |
| DEL 5 | A-49 | 4.51 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 5 | A-50 | 3.98 | SST | NH/S | NH/S | E | IT |
| DEL 5 | A-51 | 6.31 | SST | NS | NS | E | EH |
| DEL 5 | A-52 | 2.25 | PT | NS | PH | E | GC |
| DEL 5 | A-53 | 16.9 | PT | NH/Oak | NH/Oak | U | SH |
| DEL 5 | A-54 | 5.03 | SST | NH/WP | NH/WP | U | SH |
| DEL 5 | A-56 | 2.26 | S/S | NH | NH | E | - |
| DEL 5 | A-57 | 25.42 | SST | NH | NH | U | SH |
| DEL 5 | A-58 | 5.19 | PT | NS | NH/S | E | IT |
| DEL 5 | A-59 | 38.51 | SST | NH | NH | U | SH |
| DEL 5 | A-63 | 2 | BRUSH | Brush | NH | E | - |
| DEL 5 | A-64 | 3.96 | S/S | NH | NH | E | - |
| DEL 5 | B-1 | 61.1 | SST | NH | NH | U | SH |
| DEL 5 | B-2 | 3.13 | S/S | NH | NH | E | - |
| DEL 5 | B-4 | 23.88 | SST | NS | NH/S | E | EH |
| DEL 5 | B-5 | 7.51 | SST | RP | NH | E | ER |
| DEL 5 | B-6 | 6.28 | SST | NH | NH | U | SH |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

Table III.H. -No Land Management Action Scheduled within 10 years (by State Forest Region 4)

| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
|---------------|--------|-------|------------|-------------|--------|----------------------|----------------|
| | | | | Current | Future | | |
| DEL 5 | B-7 | 6.25 | S/S | NH | NH | E | - |
| DEL 5 | B-8 | 3.04 | SST | RP | NH | E | ER |
| DEL 5 | B-9 | 18.87 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 5 | B-10 | 2 | S/S | NH | NH | E | - |
| DEL 5 | B-11 | 7.75 | SST | RP | NH | E | ER |
| DEL 5 | B-12 | 2.22 | SST | NS | NH/S | E | ER |
| DEL 5 | B-13 | 11.97 | S/S | NH | NH | E | - |
| DEL 5 | B-14 | 9.52 | S/S | NH | NH | E | - |
| DEL 5 | B-15 | 149 | SST | Oak | Oak | U | SH |
| DEL 5 | B-16 | 16 | SST | NS | NS | E | IT |
| DEL 5 | B-17 | 6.12 | PT | NS | NS | E | IT |
| DEL 5 | B-18 | 3.3 | PT | NH | NH | E | IT |
| DEL 5 | B-19 | 3.43 | PT | NH/Oak | NH/Oak | U | SH |
| DEL 5 | B-20 | 12 | PT | NH | NH | E | IT |
| DEL 5 | B-21 | 7 | PT | Oak | Oak | E | IT |
| DEL 5 | B-22 | 16.25 | SST | NS | NS | E | ER |
| DEL 5 | B-23 | 30.15 | SST | NH/Oak | NH/Oak | E | ER |
| DEL 5 | B-24 | 11.84 | SST | NS | NH/S | E | IT |
| DEL 5 | B-26.1 | 8.18 | S/S | NH | NH | E | - |
| DEL 5 | B-26.2 | 2.98 | SST | NS | NS | E | ER |
| DEL 5 | B-27 | 19 | SST | NS | NS | E | IT |
| DEL 5 | B-28 | 9.9 | SST | NS | NS | E | IT |
| DEL 5 | B-29.1 | 7.1 | S/S | NH | NH | E | - |
| DEL 5 | B-29.2 | 6.1 | SST | Oak | Oak | U | SH |
| DEL 5 | B-34 | 9.44 | PT | Larch | Larch | E | IT |
| DEL 5 | B-35 | 12.88 | SST | NS | NS | E | ER |
| DEL 5 | B-36 | 11.01 | S/S | NH | NH | E | - |
| DEL 5 | B-37 | 14.98 | SST | NH/Hem | NH/Hem | U | SH |
| DEL 5 | B-38 | 28 | S/S | NH | NH | E | - |
| DEL 5 | B-39 | 34.75 | PT | NH/Oak | NH/Oak | E | IT |
| DEL 5 | B-40 | 6.18 | S/S | NS | NS | E | - |
| DEL 5 | B-41 | 3.06 | S/S | PH | PH | E | - |
| DEL 5 | B-42 | 16.31 | PT | NH/Oak | NH/Oak | U | SH |
| DEL 5 | C-1 | 14.98 | PT | NH | NH | E | IT |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| <i>Table III.H. -No Land Management Action Scheduled within 10 years (by State Forest Region 4)</i> | | | | | | | |
|---|--------|-------|------------|-------------|--------|----------------------|----------------|
| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
| | | | | Current | Future | | |
| DEL 5 | C-2 | 23.01 | PT | NH | NH | U | SH |
| DEL 5 | C-3 | 63.45 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 5 | C-4 | 37.58 | S/S | NH | NH | E | - |
| DEL 5 | C-6 | 12.22 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 5 | C-8 | 14.69 | PT | NH/Oak | NH/Oak | E | IT |
| DEL 5 | C-9 | 37 | PT | NH | NH | E | IT |
| Barbour Brook State Forest | | | | | | | |
| DEL 6 | A-2 | 11 | SST | NS | NS | E | IT |
| DEL 6 | A-3 | 5 | SST | NS | NS | E | ER |
| DEL 6 | A-6 | 4 | PT | NH | NH | U | SH |
| DEL 6 | A-7 | 2 | PT | NH | NH | E | IT |
| DEL 6 | A-8 | 23 | SST | RP | NH | E | ER |
| DEL 6 | A-10 | 13 | SST | NH | NH | U | SH |
| DEL 6 | A-11 | 50.4 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 6 | A-12 | 5.2 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 6 | A-13 | 4.13 | PT | NS | NS | E | IT |
| DEL 6 | A-14 | 30 | S/S | NH | NH | E | - |
| DEL 6 | A-15 | 15 | S/S | NH | NH | E | - |
| DEL 6 | A-16 | 6 | SST | WS | NH | E | ER |
| DEL 6 | A-17 | 2 | SST | NS | NH/S | E | IT |
| DEL 6 | A-22 | 7 | SST | NS | NS | E | ER |
| DEL 6 | A-23 | 12 | PT | WS | NH/Oak | E | IT |
| DEL 6 | A-24 | 18 | PT | NH | NH | U | SH |
| DEL 6 | A-25.1 | 32 | SST | NS/RP | NS | E | ER |
| DEL 6 | A-25.2 | 25 | SST | NS | NS | E | IT |
| DEL 6 | A-27 | 11 | S/S | NS | NS | E | - |
| DEL 6 | A-28 | 4.96 | SST | NS | NH/S | E | IT |
| DEL 6 | A-31 | 14.54 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 6 | A-32 | 9.61 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 6 | A-33 | 7.71 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 6 | A-35 | 9 | S/S | NH | NH | E | - |
| DEL 6 | A-36 | 11 | SST | NS | NS | E | EH |
| DEL 6 | A-37 | 4.4 | BRUSH | Brush | NH | E | - |
| DEL 6 | A-39 | 33.9 | SST | NS | NS | E | ER |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

Table III.H. -No Land Management Action Scheduled within 10 years (by State Forest Region 4)

| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
|------------------------|--------|-------|------------|-------------|--------|----------------------|----------------|
| | | | | Current | Future | | |
| DEL 6 | A-40 | 11 | SST | NS | NS | E | IT |
| DEL 6 | A-41 | 38 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 6 | A-43 | 11 | SST | NH | NH | U | SH |
| DEL 6 | A-45 | 9.31 | SST | Larch | Larch | E | IT |
| DEL 6 | A-51 | 13 | SST | NS | NS | E | ER |
| DEL 6 | A-56 | 4 | PT | NS | PH | E | GC |
| DEL 6 | A-57 | 4.69 | SST | NS | NS | E | IT |
| Pine Hill State Forest | | | | | | | |
| DEL 7 | A-1 | 64.89 | PT | NH/WP | NH/WP | E | IT |
| DEL 7 | A-4 | 9.37 | PT | WP | NH/WP | E | IT |
| DEL 7 | A-6 | 53.69 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 7 | A-8 | 60.69 | SST | NS-WP | WP-NS | E | IT |
| DEL 7 | A-9 | 24.54 | PT | NH/WP | NH/WP | U | SH |
| DEL 7 | A-15 | 2.82 | PT | NS-WP | WP-NS | E | IT |
| DEL 7 | A-17 | 3.98 | S/S | NH | NH | E | - |
| DEL 7 | A-19 | 17.83 | S/S | NH/Hem | NH/Hem | E | - |
| DEL 7 | A-20 | 18.95 | S/S | Larch | Larch | E | - |
| DEL 7 | A-21 | 18.03 | SST | NS | NS | E | IT |
| DEL 7 | A-29.1 | 2.77 | SST | RP | NH | E | ER |
| DEL 7 | A-29.2 | 19.56 | S/S | NH | NH | E | - |
| DEL 7 | A-31 | 26.67 | S/S | NH | NH | E | - |
| DEL 7 | A-34 | 46.47 | SST | NH/WP | NH/WP | U | SH |
| DEL 7 | A-35 | 25.39 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 7 | A-36 | 32.81 | S/S | NS | NS | E | - |
| DEL 7 | A-37 | 9.93 | PT | NS | NS | E | IT |
| DEL 7 | A-39 | 32.66 | PT | WP | NH/WP | E | IT |
| DEL 7 | A-41 | 3.85 | S/S | NH | NH | E | - |
| DEL 7 | A-42 | 5.09 | SST | NH/WP | NH/WP | U | SH |
| DEL 7 | A-43 | 7 | S/S | NH | NH | E | - |
| DEL 7 | A-45.1 | 8.58 | SST | RP | NH | E | ER |
| DEL 7 | A-45.2 | 11.62 | S/S | Larch | Larch | E | - |
| DEL 7 | A-47 | 20.91 | PT | WP | NH/WP | E | IT |
| DEL 7 | B-1 | 18.13 | PT | WS | NH | E | IT |
| DEL 7 | B-2 | 50.6 | SST | NH/WP | NH/WP | E | IT |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| Table III.H. -No Land Management Action Scheduled within 10 years (by State Forest Region 4) | | | | | | | |
|--|--------|-------|------------|-------------|--------|----------------------|----------------|
| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
| | | | | Current | Future | | |
| Michigan Hill State Forest | | | | | | | |
| DEL 8 | A-4 | 15.02 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 8 | A-5 | 32.35 | SST | NH | NH | U | SH |
| DEL 8 | A-6 | 23.35 | S/S | NH | NH | E | - |
| DEL 8 | A-7 | 10.32 | SST | NS | NH/S | E | ER |
| DEL 8 | A-8 | 4.93 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 8 | A-9 | 24.87 | SST | NH | NH | U | SH |
| DEL 8 | A-10 | 3.25 | SST | WP | WP | E | IT |
| DEL 8 | A-11 | 11.64 | PT | NH | NH | U | SH |
| DEL 8 | A-12 | 6.24 | SST | Oak | Oak | E | IT |
| DEL 8 | A-13 | 12.57 | PT | NH | NH | E | IT |
| DEL 8 | A-15 | 11.39 | S/S | NH | NH | E | - |
| DEL 8 | A-16 | 2.62 | PT | NH | NH | E | IT |
| DEL 8 | A-20 | 4.15 | PT | NS | NH/S | E | IT |
| DEL 8 | A-21 | 8.27 | SST | Larch | Larch | E | IT |
| DEL 8 | A-22 | 2 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 8 | A-23 | 7.07 | S/S | Larch | Larch | E | - |
| DEL 8 | A-24 | 10.58 | SST | NS | NS | E | IT |
| DEL 8 | A-29 | 10.92 | PT | Larch | Larch | E | IT |
| DEL 8 | A-31 | 10.9 | SST | WP | NH/WP | E | ER |
| DEL 8 | B-2 | 19.4 | S/S | NH | NH | E | - |
| Beals Pond State Forest | | | | | | | |
| DEL 9 | A-3 | 6.9 | S/S | NH | NH | E | - |
| DEL 9 | A-6 | 2 | S/S | NH | NH | E | - |
| DEL 9 | A-10 | 5.16 | S/S | NS | NS | E | - |
| DEL 9 | A-16 | 20.85 | PT | NH/Hem | NH/Hem | U | SH |
| DEL 9 | A-17 | 9.57 | SST | NH/Hem | NH/Hem | U | SH |
| DEL 9 | A-18 | 18.67 | SST | NH/Hem | NH/Hem | U | SH |
| DEL 9 | A-19 | 24.95 | SST | NH | NH | U | SH |
| DEL 9 | A-21.2 | 17.75 | S/S | NH | NH | E | - |
| DEL 9 | A-22 | 50.9 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 9 | A-26.1 | 14.31 | S/S | NH | NH | E | - |
| DEL 9 | A-27 | 7.97 | SST | NH | NH | E | IT |
| DEL 9 | A-28 | 6.9 | SST | NH/Hem | NH/Hem | U | SH |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

Table III.H. -No Land Management Action Scheduled within 10 years (by State Forest Region 4)

| State Forests | Stand | Acres | Size Class | Forest Type | | Management Direction | Treatment Type |
|---------------|-------|-------|------------|-------------|--------|----------------------|----------------|
| | | | | Current | Future | | |
| DEL 9 | A-30 | 14.34 | S/S | Larch | Larch | E | - |
| DEL 9 | A-33 | 12.79 | S/S | NH | NH | E | - |
| DEL 9 | A-35 | 13.95 | SST | NH | NH | U | SH |
| DEL 9 | A-53 | 8.75 | S/S | NH | NH | E | - |
| DEL 9 | A-57 | 9.67 | PT | NH/WP | NH/WP | E | IT |
| DEL 9 | A-59 | 10.64 | SST | NH/Oak | NH/Oak | U | SH |
| DEL 9 | B-5 | 7.98 | PT | NH | NH | E | IT |
| DEL 9 | B-6 | 19.11 | PT | NS | NS | E | IT |
| DEL 9 | B-10 | 9.39 | S/S | NH | NH | E | - |
| DEL 9 | B-11 | 11.63 | PT | NH/Oak | NH/Oak | E | IT |
| DEL 9 | B-12 | 3.27 | PT | NS | NH/S | E | IT |

Table III.I. -Resource Protection/Natural Areas (by State Forest Region 4)

| State Forests | Stand | Acres | Protection Status/Unmanaged | Forest Type |
|-------------------------|-------|-------|-----------------------------|-------------|
| Kerryville State Forest | | | | |
| Delaware 1 | A-23 | 6.54 | Protection Wetland | Brush |
| Delaware 1 | A-25 | 16.19 | Protection Wetland | Pond |
| Steam Mill State Forest | | | | |
| Delaware 2 | A-13 | 26 | Protection Wetland | Pond |
| Delaware 2 | A-26 | 6 | Protection Wetland | Pond |
| Delaware 2 | A-35 | 2.75 | Unmanaged | Pit |
| Delaware 2 | A-40 | 26.57 | Protection Wetland | NH/Hem |
| Delaware 2 | A-44 | 2 | Protection Riparian | NS |
| Delaware 2 | B-1 | 6.06 | Protection Wetland | Pond |
| Delaware 2 | B-10 | 3 | Protection Wetland | NH |
| Delaware 2 | B-31 | 14.06 | Protection Wetland | Brush |
| Delaware 2 | B-51 | 2 | Protection Wetland | Brush |
| Delaware 2 | D-31 | 4.5 | Protection Wetland | NH |
| Delaware 2 | E-8 | 3.72 | Protection Riparian | NH |
| Delaware 2 | E-10 | 6.6 | Protection Wetland | Brush |
| Delaware 2 | F-34 | 2 | Protection Wetland | Brush |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| | | | | |
|----------------------------------|------|-------|---------------------|--------|
| Delaware 2 | G-3 | 16.24 | Protection Wetland | Hem |
| Columbia Lake State Forest | | | | |
| Delaware 3 | A-6 | 2 | Protection Wetland | NH/Oak |
| Delaware 3 | A-10 | 2 | Protection Wetland | Brush |
| Arctic China State Forest | | | | |
| Delaware 4 | B-14 | 4.81 | Protection Riparian | NH |
| Delaware 4 | A-29 | 19.01 | Protection Wetland | NH/Hem |
| Delaware 4 | A-48 | 7.19 | Protection Riparian | RP/NH |
| Arctic China State Forest (cont) | | | | |
| Delaware 5 | A-14 | 9.57 | Protection Wetland | WP |
| Delaware 5 | A-21 | 2 | Protection Wetland | Pond |
| Delaware 5 | A-46 | 4 | Protection Wetland | Brush |
| Delaware 5 | B-25 | 2 | Protection Wetland | NH |
| Delaware 5 | B-31 | 2.94 | Protection Riparian | NH |
| Delaware 5 | C-7 | 3.17 | Protection Wetland | NH |
| Pine Hill State Forest | | | | |
| Delaware 7 | A-26 | 2 | Protection Wetland | Brush |
| Beals Pond State Forest | | | | |
| Delaware 9 | A-56 | 6.2 | Protection Wetland | Pond |
| Delaware 9 | A-62 | 2.22 | Protection Riparian | Brush |
| Delaware 9 | B-9 | 4.56 | Protection Riparian | NH |
| Delaware 9 | A-37 | 5.33 | Protection Wetland | Hem |
| Delaware 9 | A-43 | 3.64 | Protection Wetland | NH |
| Delaware 9 | A-44 | 7.83 | Protection Riparian | Hem |
| Delaware 9 | A-46 | 6.7 | Protection Wetland | NH/Hem |

Table III.J. -Land Management Action Schedule (by State Forest Region 7)

| State Forest | Stand | Acres | Forest Type | | Management Direction | Treatment Type | Treatment Year |
|--------------|-------|-------|-------------|--------|----------------------|----------------|----------------|
| | | | Current | Future | | | |
| B 2 | A-1 | 12 | RP | NH | E | IT | 2021 |
| B 2 | A-2.1 | 12 | NH/Hem | NH/Hem | ZW | | |
| B 2 | A-2.2 | 3 | NH/Hem | NH/Hem | E | NA | 10 + years |
| B 2 | A-2.3 | 5 | PH | PH | E | NA | 10 + years |
| B 2 | A-2.4 | 1 | NH | NH | E | NA | 10 + years |
| B 2 | A-3.1 | 49 | NH | NH | E | NA | 10 + years |
| B 2 | A-3.2 | 27 | NH/Hem | NH/Hem | U | NA | 10 + years |
| B 2 | A-4 | 28 | NH | NH | E | NA | 10 + years |
| B 2 | A-5 | 19 | NH/S | NH/S | E | NA | 10 + years |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| State Forest | Stand | Acres | Forest Type | | Management Direction | Treatment Type | Treatment Year |
|--------------|--------------|-------|-------------|----------|----------------------|----------------|----------------|
| | | | Current | Future | | | |
| B 2 | A-6 | 17 | NH/Hem | NH/Hem | NM | | |
| B 2 | A-7 | 8 | NH/Hem | NH/Hem | ZR | | |
| | Discontinued | | | | | | |
| B 2 | A-9 | 19 | NS | NS | E | NA | 10 + years |
| B 2 | A-10 | 23 | NS | NS | E | NA | 10 + years |
| B 2 | A-11.1 | 21 | NH/Hem | NH/Hem | U | NA | 10 + years |
| B 2 | A-11.2 | 13 | NH | NH | U | NA | 10 + years |
| B 2 | A-11.3 | 4 | NH | NH | U | NA | 10 + years |
| B 2 | A-12 | 20 | RP/Larch | RP/Larch | E | NA | 10 + years |
| B 2 | A-13 | 93 | NS/RP | NH/S | E | IT | 2022 |
| B 2 | A-14 | 2 | NH | NH | E | NA | 10 + years |
| B 2 | A-15 | 13 | Hem | Hem | ZR | | |
| B 2 | A-16 | 15 | NS/RP | NS/RP | E | NA | 10 + years |
| B 2 | A-17.1 | 6 | NH/Hem | NH/Hem | E | NA | 10 + years |
| B 2 | A-17.2 | 1 | NH | NH | E | NA | 10 + years |
| B 2 | A-18 | 30 | RP | NH | E | EH | 2022 |
| B 2 | A-19.1 | 49 | NH/Oak | NH/Oak | ZS | | |
| B 2 | A-19.2 | 3 | NH/Hem | NH/Hem | ZS | | |
| B 2 | A-19.3 | 6 | NH | NH | ZS | | |
| B 2 | A-20 | 4 | NH | NH | E | NA | 10 + years |
| B 2 | A-21 | 7 | RP/Larch | NH | E | NA | 10 + years |
| B 2 | A-22.1 | 18 | NH/Hem | NH/Hem | U | NA | 10 + years |
| B 2 | A-22.2 | 5 | NH | NH | ZR | | |
| B 2 | A-22.3 | 4 | NH | NH | E | NA | 10 + years |
| B 2 | A-22.4 | 4 | NH | NH | E | NA | 10 + years |
| B 2 | A-23 | 6 | RP/Larch | NH | E | NA | 10 + years |
| B 2 | A-24 | 7 | NH/Oak | NH/Oak | E | NA | 10 + years |
| B 2 | A-25 | 7 | RP/Larch | NH | E | NA | 10 + years |
| B 2 | A-26 | 7 | NS/RP | NH/S | E | IT | 2022 |
| B 2 | A-27 | 6 | NH/S | NH | E | IT | 2022 |
| B 2 | A-28 | 22 | NH/Hem | NH/Hem | ZR | | |
| B 2 | A-29 | 76 | NH | NH | E | NA | 10 + years |
| B 2 | A-30 | 23 | Oak | NH/Oak | E | NA | 10 + years |
| B 2 | A-31 | 2 | NH | NH | E | NA | 10 + years |
| B 2 | A-32 | 128 | RP/NH | NH | E | NA | 10 + years |
| B 2 | A-33 | 1 | NH | NH | E | NA | 10 + years |
| B 2 | A-34 | 3 | NH/Hem | NH/Hem | ZR | | |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| State Forest | Stand | Acres | Forest Type | | Management Direction | Treatment Type | Treatment Year |
|--------------|--------|-------|-------------|--------|----------------------|----------------|----------------|
| | | | Current | Future | | | |
| B 2 | A-35 | 6 | NH | NH | E | NA | 10 + years |
| B 2 | A-36 | 1 | NH | NH | E | NA | 10 + years |
| B 2 | A-37 | 13 | NH | NH | E | NA | 10 + years |
| B 2 | A-38 | 2 | RP | NH | E | NA | 10 + years |
| B 2 | A-39 | 1 | Other | Other | NM | | |
| B 2 | A-40 | 15 | NH/Hem | NH/Hem | ZR | | |
| B 2 | A-41 | 6 | RP | NH | E | IT | 2027 |
| | | | | | | | |
| B 2 | B-1.1 | 3 | RP | NH | E | IT | 2022 |
| B 2 | B-1.2 | 1 | Other | Other | ZW | | |
| B 2 | B-1.3 | 10 | NH | NH | E | NA | 10 + years |
| B 2 | B-2.1 | 2 | Other | Other | ZH | | |
| B 2 | B-2.2 | 2 | NH | NH | E | NA | 10 + years |
| B 2 | B-3 | 10 | PH | NH | E | NA | 10 + years |
| B 2 | B-4.1 | 30 | NH | NH | E | NA | 10 + years |
| B 2 | B-4.2 | 11 | NH/Hem | NH/Hem | U | NA | 10 + years |
| B 2 | B-5 | 100 | WP | NH/WP | E | NA | 10 + years |
| B 2 | B-6.1 | 110 | NH | NH | E | NA | 10 + years |
| B 2 | B-6.2 | 6 | NH/Hem | NH/Hem | NM | | |
| B 2 | B-7 | 45 | RP/WP | NH/WP | E | IT | 2027 |
| B 2 | B-8.1 | 14 | RP | NH | E | IT | 2027 |
| B 2 | B-8.2 | 2 | Other | Other | ZW | | |
| B 2 | B-9 | 10 | RP | NH | E | IT | 2027 |
| B 2 | B-10 | 13 | RP/WP | NH/WP | E | IT | 2027 |
| B 2 | B-11 | 6 | RP/NH | NH | ZR | | |
| B 2 | B-12 | 7 | RP | NH | E | NA | 10 + years |
| B 2 | B-13.1 | 55 | RP/Larch | Larch | E | NA | 10 + years |
| B 2 | B-13.2 | 3 | Other | Other | ZW | | |
| B 2 | B-13.3 | 1 | NH/Hem | NH/Hem | ZR | | |
| B 2 | B-14 | 6 | NH | NH | E | NA | 10 + years |
| B 2 | B-15 | 4 | NH | NH | E | NA | 10 + years |
| B 2 | B-16 | 39 | NH | NH | E | NA | 10 + years |
| B 2 | B-17 | 17 | NH | NH | E | Na | 10 + years |
| B 2 | B-18.1 | 21 | NH | NH | E | NA | 10 + years |
| B 2 | B-18.2 | 2 | PH | PH | E | Na | 10 + years |
| B 2 | B-19.1 | 33 | NH | NH | E | NA | 10 + years |
| B 2 | B-19.2 | 2 | NH/Hem | NH/Hem | NM | | |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| State Forest | Stand | Acres | Forest Type | | Management Direction | Treatment Type | Treatment Year |
|--------------|--------|-------|-------------|--------|----------------------|----------------|----------------|
| | | | Current | Future | | | |
| B 2 | B-20 | 21 | NH/Hem | NH/Hem | E | NA | 10 + years |
| B 2 | B-21 | 41 | NS | NH/S | E | IT | 2021 |
| B 2 | B-22 | 27 | NH | NH | E | NA | 10 + years |
| B 2 | B-23 | 17 | NH/Hem | NH/Hem | ZR | | |
| B 2 | B-24 | 13 | NH/Oak | NH/Oak | E | NA | 10 + years |
| B 2 | B-25 | 4 | NH/Oak | NH/Oak | U | NA | 10 + years |
| B 2 | B-26 | 17 | NH/WP | NH/WP | E | IT | 2026 |
| B 2 | B-27 | 62 | NS | NH/S | E | IT | 2026 |
| B 2 | B-28.1 | 12 | WS | NH/S | E | NA | 10 + years |
| B 2 | B-28.2 | 5 | NS | NH/S | E | IT | 2026 |
| B 2 | B-28.3 | 5 | NH | NH | E | NA | 10 + years |
| B 2 | B-29 | 52 | NH/Oak | NH/Oak | E | NA | 10 + years |
| B 2 | B-30 | 17 | NH | NH | E | NA | 10 + years |
| B 2 | B-31 | 6 | NH | NH | E | NA | 10 + years |
| B 2 | B-32 | 16 | PH | NH | E | NA | 10 + years |
| B 2 | B-33 | 28 | NH | NH | E | NA | 10 + years |
| B 2 | B-34 | 5 | NH/Hem | NH/Hem | ZR | | |
| B 2 | B-35 | 36 | NH | NH | E | NA | 10 + years |
| B 2 | B-36 | 35 | NH | NH | E | NA | 10 + years |
| B 2 | B-37 | 17 | NS | NH/S | E | IT | 2026 |
| B 2 | B-38 | 2 | RP | NH | E | NA | 10 + years |
| B 2 | B-39 | 1 | Other | Other | E | NA | 10 + years |
| B 2 | B-40.1 | 25 | NH/P | NH | E | NA | 10 + years |
| B 2 | B-40.2 | 10 | NH/P | NH | ZR | | |
| B 2 | B-40.3 | 1 | Other | Other | ZW | | |
| B 2 | B-40.4 | 5 | SP/S | NH/S | E | NA | 10 + years |
| B 2 | B-40.5 | 1 | RP | NH | E | NA | 10 + years |
| B 2 | B-40.6 | 2 | PH | PH | E | NA | 10 + years |
| B 2 | B-41 | 15 | NH/P | NH | E | NA | 10 + years |
| B 2 | B-42 | 3 | NH/Hem | NH/Hem | E | NA | 10 + years |
| B 2 | B-43 | 1 | NH/Hem | NH/Hem | E | NA | 10 + years |
| B 2 | B-44 | 32 | NH | NH | E | NA | 10 + years |
| | | | | | | | |
| C 9 | A-1 | 28 | NH/Oak | NH/Oak | E | NA | 10 + years |
| C 9 | A-2 | 123 | NH/Hem | NH/Hem | U | NA | 10 + years |
| C 9 | A-3.1 | 131 | NH/Oak | NH/Oak | E | NA | 10 + years |
| C 9 | A-3.2 | 71 | NH/Hem | NH/Oak | E | NA | 10 + years |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| State Forest | Stand | Acres | Forest Type | | Management Direction | Treatment Type | Treatment Year |
|--------------|--------|-------|-------------|---------|----------------------|----------------|----------------|
| | | | Current | Future | | | |
| C 9 | A-4 | 1 | NH/Hem | NH/Hem | ZW | | |
| C 9 | A-5 | 5 | NH/Hem | NH/Hem | NM | | |
| C 9 | A-6 | 15 | NS | NH/S | E | IT | 2024 |
| C 9 | A-7.1 | 21 | NS | NH/S | E | IT | 2024 |
| C 9 | A-7.2 | 4 | NS | NH/S | E | IT | 2024 |
| C 9 | A-7.3 | 1 | NH/Oak | NH/Oak | E | FW | 2019 |
| C 9 | A-8.1 | 23 | NS | NH/S | E | IT | 2024 |
| C 9 | A-8.2 | 3 | NS | NH/S | E | IT | 2024 |
| C 9 | A-9.1 | 22 | NH/Hem | NH/Hem | ZR | | |
| C 9 | A-9.2 | 4 | NH/S | NH | E | NA | 10 + years |
| C 9 | A-10 | 10 | NH/Hem | NH/Hem | ZR | | |
| C 9 | A-11 | 29 | NH/Hem | NH/Hem | E | NA | 10 + years |
| C 9 | A-12 | 6 | NH | NH | E | NA | 10 + years |
| C 9 | A-13.1 | 22 | Oak/WP | Oak/WP | E | NA | 10 + years |
| C 9 | A-13.2 | 8 | Oak/Hem | Oak/Hem | E | NA | 10 + years |
| C 9 | A-14 | 4 | NH | NH | E | NA | 10 + years |
| C 9 | A-15.1 | 74 | NH/Hem | NH/Hem | E | NA | 10 + years |
| C 9 | A-15.2 | 14 | NH/WP | NH/WP | E | NA | 10 + years |
| C 9 | A-16 | 3 | NH/Hem | NH/Hem | E | NA | 10 + years |
| C 9 | A-17 | 35 | RS/H/WP | RS/H/WP | ZW | | |
| C 9 | A-18 | 2 | Other | NH | E | FW | 2019 |
| C 9 | A-19.1 | 6 | Other | NH | ZR | | |
| C 9 | A-19.2 | 6 | Other | NH | ZW | | |
| C 9 | A-20 | 7 | NH | NH | E | NA | 10 + years |
| C 9 | A-21 | 8 | RP | NH | E | IT | 2027 |
| C 9 | A-22.1 | 29 | NH/Hem | NH/Hem | U | IT | 2020 |
| C 9 | A-22.2 | 1 | NH | NH | E | NA | 10 + years |
| C 9 | A-22.3 | 9 | NH/Hem | NH/Hem | ZR | | |
| C 9 | A-23.1 | 50 | NH/Hem | NH/Hem | NM | | |
| C 9 | A-23.2 | 41 | NH | NH | E | IT | 2020 |
| C 9 | A-24 | 22 | NS | NH/S | E | IT | 2025 |
| | | | | | | | |
| C 9 | B-1.1 | 13 | NS/RP | NH/S | E | IT | 2025 |
| C 9 | B-1.2 | 3 | RP | NH | E | NA | 10 + years |
| C 9 | B-2 | 6 | WC | NH/WP | E | NA | 10 + years |
| C 9 | B-3.1 | 11 | NH | NH | E | NA | 10 + years |
| C 9 | B-3.2 | 8 | NS/RP | NH/Hem | E | IT | 2025 |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| State Forest | Stand | Acres | Forest Type | | Management Direction | Treatment Type | Treatment Year |
|--------------|--------|-------|-------------|--------|----------------------|----------------|----------------|
| | | | Current | Future | | | |
| C 9 | B-3.3 | 4 | NH | NH | E | NA | 10 + years |
| C 9 | B-3.4 | 2 | Other | Other | ZW | | |
| C 9 | B-4.1 | 7 | NS | NH/S | E | IT | 2025 |
| C 9 | B-4.2 | 4 | NS | NH/S | E | IT | 2025 |
| C 9 | B-4.3 | 2 | NS | NH/S | E | IT | 2025 |
| C 9 | B-4.4 | 2 | NS | NH/S | ZR | | |
| C 9 | B-5.1 | 9 | NS/RP | NH/S | E | IT | 2025 |
| C 9 | B-5.2 | 7 | NS/RP | NH/S | E | IT | 2025 |
| C 9 | B-5.3 | 2 | NS/RP | NH/S | E | IT | 2025 |
| C 9 | B-6 | 5 | NS/RP | NH/S | ZR | | |
| C 9 | B-7 | 2 | Larch | NH/S | E | IT | 2025 |
| C 9 | B-8.1 | 12 | WC | NH | E | NA | 10 + years |
| C 9 | B-8.2 | 2 | WC | NH/WP | E | NA | 10 + years |
| C 9 | B-8.3 | 4 | Other | Other | ZR | | |
| C 9 | B-9 | 8 | NH | NH | E | NA | 10 + years |
| C 9 | B-10 | 18 | NH | NH | E | FW | 2018 |
| C 9 | B-11 | 10 | NH | NH | E | NA | 10 + years |
| C 9 | B-12.1 | 94 | RP | NH | E | IT | 2027 |
| C 9 | B-12.2 | 4 | RP | NH | ZW | | |
| C 9 | B-12.3 | 2 | RP | NH | ZW | | |
| C 9 | B-13 | 3 | NH | NH | E | FW | 2018 |
| C 9 | B-14.1 | 5 | SH | SH | ZW | | |
| C 9 | B-14.2 | 1 | NH | NH | E | NA | 10 + years |
| C 9 | B-15.1 | 46 | NH | NH | ZS | | |
| C 9 | B-15.2 | 29 | NH | NH | E | NA | 10 + years |
| C 9 | B-15.3 | 13 | NH | NH | E | FW | 2021 |
| C 9 | B-15.4 | 10 | Hem | Hem | ZW | | |
| C 9 | B-15.5 | 2 | Hem | Hem | ZS | | |
| C 9 | B-16.1 | 15 | NH | NH | ZW | | |
| C 9 | B-16.2 | 6 | PH | PH | ZW | | |
| C 9 | B-17.1 | 76 | NH | NH | E | NA | 10 + years |
| C 9 | B-17.2 | 25 | NH | NH | E | NA | 10 + years |
| C 9 | B-17.3 | 5 | NH | NH | ZW | | |
| C 9 | B-17.4 | 3 | NH/Hem | NH/Hem | E | NA | 10 + years |
| C 9 | B-17.5 | 2 | Oak/NH | Oak/NH | E | NA | 10 + years |
| C 9 | B-18.1 | 5 | NH/S | NH/S | E | NA | 10 + years |
| C 9 | B-18.2 | 6 | NH/S | NH/S | E | NA | 10 + years |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| State Forest | Stand | Acres | Forest Type | | Management Direction | Treatment Type | Treatment Year |
|--------------|--------|-------|-------------|---------|----------------------|----------------|----------------|
| | | | Current | Future | | | |
| C 9 | B-19.1 | 6 | NS | NH/S | E | NA | 10 + years |
| C 9 | B-19.2 | 2 | NS | NH/S | E | NA | 10 + years |
| C 9 | B-20.1 | 24 | NH | NH | E | NA | 10 + years |
| C 9 | B-20.2 | 3 | NH/Hem | NH/Hem | ZW | | |
| C 9 | B-21 | 9 | Hem | Hem | NM | | |
| C 9 | B-22 | 4 | NH/P | NH | E | NA | 10 + years |
| C 9 | B-23 | 6 | NS | NH/S | E | IT | 2025 |
| C 9 | B-24 | 17 | NH/P | NH | E | NA | 10 + years |
| C 9 | B-25 | 13 | NH | NH | E | NA | 10 + years |
| C 9 | B-26 | 6 | NH/P | NH | E | NA | 10 + years |
| C 9 | B-27 | 7 | NH | NH | E | NA | 10 + years |
| C 9 | B-28 | 3 | PH | PH | E | NA | 10 + years |
| C 9 | B-29.1 | 6 | RP | NH | E | IT | 2021 |
| C 9 | B-29.2 | 3 | RP | NH | E | IT | 2021 |
| C 9 | B-30 | 26 | RP | Larch/S | E | IT | 2021 |
| C 9 | B-31 | 7 | Other | Other | ZR | | |
| C 9 | B-32 | 33 | NH | NH | E | NA | 10 + years |
| | | | | | | | |
| C 9 | C-1 | 4 | RP | RP | E | NA | 10 + years |
| C 9 | C-2 | 35 | NH | NH | E | NA | 10 + years |
| C 9 | C-3 | 24 | NH/Hem | NH/Hem | E | NA | 10 + years |
| C 9 | C-4 | 28 | NH/Hem | NH/Hem | ZR | | |
| C 9 | C-5 | 4 | NH | NH | NM | | |
| C 9 | C-6 | 16 | NH/Hem | NH/Hem | NM | | |
| C 9 | C-7 | 17 | NH/Hem | NH/Hem | NM | | |
| C 9 | C-8 | 9 | NH | NH | NM | | |
| C 9 | C-9.1 | 19 | NH/Hem | NH/Hem | U | NA | 10 + years |
| C 9 | C-9.2 | 8 | NH | NH | NM | | |
| C 9 | C-9.3 | 18 | NH/Hem | NH/Hem | ZR | | |
| C 9 | C-10 | 10 | NH/Hem | NH/Hem | NM | | |
| C 9 | C-11.1 | 50 | RP | NH | E | NA | 10 + years |
| C 9 | C-11.2 | 21 | PH | NH | E | NA | 10 + years |
| C 9 | C-11.3 | 3 | RP | NH | E | IT | 2021 |
| C 9 | C-12.1 | 14 | NH | NH | E | NA | 10 + years |
| C 9 | C-12.2 | 1 | PH | PH | E | NA | 10 + years |
| C 9 | C-13 | 18 | PH | NH | E | NA | 10 + years |
| C 9 | C-14.1 | 51 | NH | NH | E | NA | 10 + years |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| State Forest | Stand | Acres | Forest Type | | Management Direction | Treatment Type | Treatment Year |
|--------------|--------|-------|-------------|--------|----------------------|----------------|----------------|
| | | | Current | Future | | | |
| C 9 | C-14.2 | 24 | NH/Hem | NH/Hem | NM | | |
| C 9 | C-15 | 8 | Other | Other | ZW | | |
| C 9 | C-16 | 18 | Oak/NH | Oak/NH | E | NA | 10 + years |
| C 9 | C-17 | 8 | RP | NH | E | NA | 10 + years |
| C 9 | C-18.1 | 71 | NH/Hem | NH/Hem | U | NA | 10 + years |
| C 9 | C-18.2 | 6 | NH/Hem | NH/Hem | ZR | | |
| C 9 | C-19 | 28 | NS | NS | E | NA | 10 + years |
| C 9 | C-20 | 1 | WS | NH | E | NA | 10 + years |
| C 9 | C-21.1 | 7 | SP | NH | NM | | |
| C 9 | C-21.2 | 2 | NH/WP | NH/WP | NM | | |
| C 9 | C-22.1 | 30 | RP | Oak/NH | E | NA | 10 + years |
| C 9 | C-22.2 | 7 | RP | NH | NM | | |
| C 9 | C-23 | 4 | Oak/NH | Oak/NH | E | NA | 10 + years |
| C 9 | C-24 | 6 | NH | NH | NM | | |
| C 9 | C-25.1 | 12 | NH/Hem | NH/Hem | U | NA | 10 + years |
| C 9 | C-25.2 | 3 | NH | NH | U | NA | 10 + years |
| C 9 | C-26 | 23 | NH/P | NH | E | NA | 10 + years |
| C 9 | C-27.1 | 19 | NH/Hem | NH/Hem | U | NA | 10 + years |
| C 9 | C-27.2 | 4 | NH | NH | E | NA | 10 + years |
| C 9 | C-27.3 | 15 | NH | NH | U | NA | 10 + years |
| C 9 | C-27.4 | 1 | NH/Hem | NH/Hem | U | NA | 10 + years |
| C 9 | C-28 | 21 | NH | NH | E | NA | 10 + years |
| C 9 | C-29 | 14 | NH/Hem | NH/Hem | E | NA | 10 + years |
| C 9 | C-30 | 127 | NS | NS | E | IT | 2021 |
| C 9 | C-31 | 9 | NH | NH | E | NA | 10 + years |
| C 9 | C-32 | 3 | Other | Other | ZW | | |
| C 9 | C-33 | 26 | NH/P | NH | ZR | | |
| | | | | | | | |
| C 15 | A-1 | 5 | NH/WP | NH/WP | E | NA | 10 + years |
| C 15 | A-2.1 | 237 | NH/Oak | NH/Oak | E | SH | 2020 |
| C 15 | A-2.2 | 6 | NH/Hem | NH/Hem | E | NA | 10 + years |
| C 15 | A-2.3 | 2 | NH/Hem | NH/Hem | ZW | | |
| C 15 | A-2.4 | 3 | NH/Hem | NH/Hem | NM | | |
| C 15 | A-2.5 | 2 | NH/Hem | NH/Hem | NM | | |
| C 15 | A-3 | 6 | NH/WP | NH/WP | E | NA | 10 + years |
| C 15 | A-4 | 32 | NH/WP | NH/WP | E | NA | 10 + years |
| C 15 | A-5 | 12 | NH/P | NH | E | NA | 10 + years |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| State Forest | Stand | Acres | Forest Type | | Management Direction | Treatment Type | Treatment Year |
|--------------|--------|-------|-------------|--------|----------------------|----------------|----------------|
| | | | Current | Future | | | |
| C 15 | A-6 | 17 | NH/P | NH | ZA | | |
| C 15 | A-7 | 13 | NH/WP | NH/WP | ZA | | |
| C 15 | A-8 | 27 | NH/Hem | NH/Hem | ZA | | |
| C 15 | A-9 | 3 | NH/Hem | NH/Hem | ZA | | |
| C 15 | A-10 | 10 | NH | NH | E | NA | 10 + years |
| C 15 | A-11 | 5 | NH | NH | E | NA | 10 + years |
| C 15 | A-12 | 3 | NH/P | NH | ZW | | |
| C 15 | A-13 | 10 | Other | Other | ZR | | |
| C 15 | A-14.1 | 5 | NH | NH | ZR | | |
| C 15 | A-14.2 | 7 | NH/Oak | NH/Oak | ZA | | |
| C 15 | A-14.3 | 6 | NH/WP | NH/WP | ZA | | |
| C 15 | A-15.1 | 123 | NH/Oak | NH/Oak | E | NA | 10 + years |
| C 15 | A-15.2 | 3 | Other | Other | ZW | | |
| C 15 | A-15.3 | 20 | NH/Hem | NH/Hem | NM | | |
| C 15 | A-15.4 | 2 | NH | NH | E | NA | 10 + years |
| C 15 | A-16 | 75 | NH/Hem | NH/Hem | NM | | |
| C 15 | A-17 | 22 | NH/P | NH/Hem | ZR | | |
| C 15 | A-18.1 | 53 | NS | NH/S | E | IT | 2026 |
| C 15 | A-18.2 | 11 | NH/S | NH/S | E | IT | 2026 |
| C 15 | A-18.3 | 4 | NH/Oak | NH/S | E | NA | 10 + years |
| C 15 | A-18.4 | 2 | NH/Oak | NH/Oak | E | NA | 10 + years |
| C 15 | A-19 | 37 | NH/Hem | NH/Hem | NM | | |
| C 15 | A-20 | 84 | Oak | Oak | E | NA | 10 + years |
| C 15 | A-21 | 17 | NH/Oak | NH/Oak | E | NA | 10 + years |
| C 15 | A-22 | 67 | NH/Hem | NH/Hem | E | NA | 10 + years |
| C 15 | A-23 | 9 | RP | NH/S | E | NA | 10 + years |
| C 15 | A-24 | 21 | NH/Hem | NH/Hem | E | NA | 10 + years |
| C 15 | A-25.1 | 36 | NH | NH | E | NA | 10 + years |
| C 15 | A-25.2 | 2 | NH/Hem | NH/Hem | NM | | |
| C 15 | A-26 | 3 | NH | NH | ZW | | |
| C 15 | A-27 | 47 | NH/Hem | NH/Hem | U | NA | 10 + years |
| C 15 | A-28 | 3 | NH/Hem | NH/Hem | E | NA | 10 + years |
| C 15 | A-29 | 63 | NH | NH | E | SH | 2023 |
| C 15 | A-30 | 27 | NH/Hem | NH/Hem | ZR | | |
| C 15 | A-31 | 1 | NH | NH | E | NA | 10 + years |
| C 15 | A-32 | 1 | NH | NH | E | NA | 10 + years |
| C 15 | A-33 | 45 | NH | NH | E | NA | 10 + years |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| State Forest | Stand | Acres | Forest Type | | Management Direction | Treatment Type | Treatment Year |
|--------------|-------|-------|-------------|--------|----------------------|----------------|----------------|
| | | | Current | Future | | | |
| C 15 | A-34 | 8 | NH | NH | E | NA | 10 + years |
| C 15 | A-35 | 29 | NH/Hem | NH/Hem | ZR | | |
| C 15 | A-36 | 46 | NH | NH | E | NA | 10 + years |
| C 15 | A-37 | 23 | NH/Hem | NH/Hem | E | NA | 10 + years |
| C 15 | A-38 | 5 | NH/Oak | NH/Oak | E | NA | 10 + years |

Table III.K. -Forest Management Treatment Schedule (Forests by Year Region 7)

| Treatment Year | State Forest | Comp | Stand | Acres | Forest Type | | Manage Direction | Treatment Type |
|----------------|--------------|------|-------|-------|-------------|---------|------------------|----------------|
| | | | | | Current | Future | | |
| 2018 | C 9 | B | 10 | 18 | NH | NH | E | FW |
| | C 9 | B | 13 | 3 | NH | NH | E | FW |
| 2019 | C 9 | A | 7.3 | 1 | NH/Oak | NH/Oak | E | FW |
| | C 9 | A | 18 | 2 | Other | NH | E | FW |
| 2020 | C 9 | A | 22.1 | 29 | NH/Hem | NH/Hem | U | IT |
| | C 9 | A | 23.2 | 41 | NH | NH | E | IT |
| | C 15 | A | 2.1 | 237 | NH/Oak | NH/Oak | E | SH |
| 2021 | C 9 | B | 15.3 | 13 | NH | NH | E | IT |
| | C 9 | B | 29.1 | 6 | RP | NH | E | IT |
| | C 9 | B | 29.2 | 3 | RP | NH | E | IT |
| | C 9 | B | 30 | 26 | RP | Larch/S | E | IT |
| | C 9 | C | 11.3 | 3 | RP | NH | E | IT |
| | C 9 | C | 30 | 127 | NS | NS | E | IT |
| | B 2 | A | 1 | 12 | RP | NH | E | IT |
| | B 2 | B | 21 | 41 | NS | NH/S | E | IT |
| 2022 | B 2 | A | 13 | 93 | NS/RP | NH/S | E | IT |
| | B 2 | A | 18 | 30 | RP | NH | E | IT |
| | B 2 | A | 26 | 7 | NS/RP | NH/S | E | IT |
| | B 2 | A | 27 | 6 | NH/S | NH | E | IT |
| | B 2 | B | 1.1 | 3 | RP | NH | E | IT |
| 2023 | C 15 | A | 29 | 63 | NH | NH | E | SH |
| 2024 | C 9 | A | 6 | 15 | NS | NH/S | E | IT |
| | C 9 | A | 7.1 | 21 | NS | NH/S | E | IT |
| | C 9 | A | 7.2 | 4 | NS | NH/S | E | IT |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

| | | | | | | | | |
|------|------|---|------|----|-------|--------|---|----|
| | C 9 | A | 8.1 | 23 | NS | NH/S | E | IT |
| | C 9 | A | 8.2 | 3 | NS | NH/S | E | IT |
| 2025 | C 9 | A | 24 | 22 | NS | NH/S | E | IT |
| | C 9 | B | 1.1 | 13 | NS/RP | NH/S | E | IT |
| | C 9 | B | 3.2 | 8 | NS/RP | NH/Hem | E | IT |
| | C 9 | B | 4.1 | 7 | NS | NH/S | E | IT |
| | C 9 | B | 4.2 | 4 | NS | NH/S | E | IT |
| | C 9 | B | 4.3 | 2 | NS | NH/S | E | IT |
| | C 9 | B | 5.1 | 9 | NS/RP | NH/S | E | IT |
| | C 9 | B | 5.2 | 7 | NS/RP | NH/S | E | IT |
| | C 9 | B | 5.3 | 2 | NS/RP | NH/S | E | IT |
| | C 9 | B | 7 | 2 | Larch | NH/S | E | IT |
| | C 9 | B | 23 | 6 | NS | NH/S | E | IT |
| 2026 | C 15 | A | 18.1 | 53 | NS | NH/S | E | IT |
| | C 15 | A | 18.2 | 11 | NH/S | NH/S | E | IT |
| | B 2 | B | 26 | 17 | NH/WP | NH/WP | E | IT |
| | B 2 | B | 27 | 62 | NS | NH/S | E | IT |
| | B 2 | B | 28.2 | 5 | NS | NH/S | E | IT |
| | B 2 | B | 37 | 17 | NS | NH/S | E | IT |
| 2027 | C 9 | A | 21 | 8 | RP | NH | E | IT |
| | C 9 | B | 12.1 | 94 | RP | NH | E | IT |
| | B 2 | A | 41 | 6 | RP | NH | E | IT |
| | B 2 | B | 7 | 45 | RP/WP | NH/WP | E | IT |
| | B 2 | B | 8.1 | 14 | RP | NH | E | IT |
| | B 2 | B | 9 | 10 | RP | NH | E | IT |
| | B 2 | B | 10 | 13 | RP/WP | NH/WP | E | IT |

Table III.L. –Resource Protection/Unmanaged Areas (by State Forest Region 7)

| State Forest | Stand | Acres | Protection Status/Unmanaged | Forest Type |
|--------------|--------|-------|-----------------------------|-------------|
| Broome 2 | A-2.1 | 12 | Protection Wet | NH/Hem |
| Broome 2 | A-6 | 17 | Non-Management | NH/Hem |
| Broome 2 | A-15 | 13 | Protection Riparian | Hem |
| Broome 2 | A-19.1 | 49 | Protection Slope | NH/Oak |
| Broome 2 | A-19.2 | 3 | Protection Slope | NH/Hem |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

Table III.L. –Resource Protection/Unmanaged Areas (by State Forest Region 7)

| State Forest | Stand | Acres | Protection Status/Unmanaged | Forest Type |
|--------------|--------|-------|-----------------------------|-------------|
| Broome 2 | A-19.3 | 6 | Protection Slope | NH |
| Broome 2 | A-22.2 | 5 | Protection Riparian | NH |
| Broome 2 | A-28 | 22 | Protection Riparian | NH/Hem |
| Broome 2 | A-34 | 3 | Protection Riparian | NH/Hem |
| Broome 2 | A-39 | 1 | Non-Management | Other |
| Broome 2 | A-40 | 15 | Protection Riparian | NH/Hem |
| Broome 2 | B-1.2 | 1 | Protection Wet | Other |
| Broome 2 | B-2.1 | 2 | Protection Historical | Other |
| Broome 2 | B-6.2 | 6 | Non-Management | NH/Hem |
| Broome 2 | B-8.2 | 2 | Protection Wet | Other |
| Broome 2 | B-11 | 6 | Protection Riparian | RP/NH |
| Broome 2 | B-13.2 | 3 | Protection Wet | Other |
| Broome 2 | B-19.2 | 2 | Non-Management | NH/Hem |
| Broome 2 | B-23 | 17 | Protection Riparian | NH/Hem |
| Broome 2 | B-34 | 5 | Protection Riparian | NH/Hem |
| Broome 2 | B-40.2 | 10 | Protection Riparian | NH/P |
| Broome 2 | B-40.3 | 1 | Protection Wet | Other |
| Chenango 9 | A-4 | 1 | Protection Wet | NH/Hem |
| Chenango 9 | A-5 | 5 | Non-Management | NH/Hem |
| Chenango 9 | A-9.1 | 22 | Protection Riparian | NH/Hem |
| Chenango 9 | A-10 | 10 | Protection Riparian | NH/Hem |
| Chenango 9 | A-17 | 35 | Protection Wet | RS/H/WP |
| Chenango 9 | A-19.1 | 6 | Protection Riparian | Other |
| Chenango 9 | A-19.2 | 6 | Protection Wet | Other |
| Chenango 9 | A-22.3 | 9 | Protection Riparian | NH/Hem |
| Chenango 9 | A-23.1 | 50 | Non-Management | NH/Hem |
| Chenango 9 | B-3.4 | 2 | Protection Wet | Other |
| Chenango 9 | B-4.4 | 2 | Protection Riparian | NS |
| Chenango 9 | B-6 | 5 | Protection Riparian | NS/RP |
| Chenango 9 | B-8.3 | 4 | Protection Riparian | Other |
| Chenango 9 | B-12.2 | 4 | Protection Wet | RP |
| Chenango 9 | B-12.3 | 2 | Protection Wet | RP |
| Chenango 9 | B-14.1 | 5 | Protection Wet | SH |
| Chenango 9 | B-15.1 | 46 | Protection Slope | NH |

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

Table III.L. –Resource Protection/Unmanaged Areas (by State Forest Region 7)

| State Forest | Stand | Acres | Protection Status/Unmanaged | Forest Type |
|--------------|---------|-------|-----------------------------|-------------|
| Chenango 9 | B-15.4 | 10 | Protection Wet | Hem |
| Chenango 9 | B-15.5 | 2 | Protection Slope | Hem |
| Chenango 9 | B-16.1 | 15 | Protection Wet | NH |
| Chenango 9 | B-16.2 | 6 | Protection Wet | PH |
| Chenango 9 | B-17.3 | 5 | Protection Wet | NH |
| Chenango 9 | B-20.2 | 3 | Protection Wet | NH/Hem |
| Chenango 9 | B-21 | 9 | Non-Management | Hem |
| Chenango 9 | B-31 | 7 | Protection Riparian | Other |
| Chenango 9 | C-4 | 28 | Protection Riparian | NH/Hem |
| Chenango 9 | C-5 | 4 | Non-Management | NH |
| Chenango 9 | C-6 | 16 | Non-Management | NH/Hem |
| Chenango 9 | C-7 | 17 | Non-Management | NH/Hem |
| Chenango 9 | C-8 | 9 | Non-Management | NH |
| Chenango 9 | C-9.2 | 8 | Non-Management | NH |
| Chenango 9 | C-9.3 | 18 | Protection Riparian | NH/Hem |
| Chenango 9 | C-10 | 10 | Non-Management | NH/Hem |
| Chenango 9 | C-14.2 | 24 | Non-Management | NH/Hem |
| Chenango 9 | C-15 | 8 | Protection Wet | Other |
| Chenango 9 | C-18.2 | 6 | Protection Riparian | NH/Hem |
| Chenango 9 | C-21.1 | 7 | Non-Management | SP |
| Chenango 9 | C-21.2 | 2 | Non-Management | NH/WP |
| Chenango 9 | C--22.2 | 7 | Non-Management | RP |
| Chenango 9 | C-24 | 6 | Non-Management | NH |
| Chenango 9 | C-32 | 3 | Protection Wet | Other |
| Chenango 9 | C-33 | 26 | Protection Riparian | NH/P |
| Chenango 15 | A-2.3 | 2 | Protection Wet | NH/Hem |
| Chenango 15 | A-2.4 | 3 | Non-Management | NH/Hem |
| Chenango 15 | A-2.5 | 2 | Non-Management | NH/Hem |
| Chenango 15 | A-6 | 17 | Protection Access | NH/P |
| Chenango 15 | A-7 | 13 | Protection Access | NH/WP |
| Chenango 15 | A-8 | 27 | Protection Access | NH/Hem |
| Chenango 15 | A-9 | 3 | Protection Access | NH/Hem |
| Chenango 15 | A-12 | 3 | Protection Wet | NH/P |
| Chenango 15 | A-13 | 10 | Protection Riparian | Other |

Table III.L. –Resource Protection/Unmanaged Areas (by State Forest Region 7)

| State Forest | Stand | Acres | Protection Status/Unmanaged | Forest Type |
|--------------|--------|-------|-----------------------------|-------------|
| Chenango 15 | A-14.1 | 5 | Protection Riparian | NH |
| Chenango 15 | A-14.2 | 7 | Protection Access | NH/Oak |
| Chenango 15 | A-14.3 | 6 | Protection Access | NH/WP |
| Chenango 15 | A-15.2 | 3 | Protection Wet | Other |
| Chenango 15 | A-15.3 | 20 | Non-Management | NH/Hem |
| Chenango 15 | A-16 | 75 | Non-Management | NH/Hem |
| Chenango 15 | A-17 | 22 | Protection Riparian | NH/P |
| Chenango 15 | A-19 | 37 | Non-Management | NH/Hem |
| Chenango 15 | A-25.2 | 2 | Non-Management | NH/Hem |
| Chenango 15 | A-26 | 3 | Protection Wet | NH |
| Chenango 15 | A-30 | 27 | Protection Riparian | NH/Hem |
| Chenango 15 | A-35 | 29 | Protection Riparian | NH/Hem |

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Glossary

Access trails - unpaved, minimally developed roads created for woods product removal that may be permanent. These trails may later be utilized to meet other management objectives such as recreational trails with certain upgrades. These trails are constructed according to Best Management Practices.

Age class - trees of a similar size, originating from a single natural event or regeneration activities.

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.

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 visual and aesthetic values, or as a best management practice.

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

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; the term often refers to gymnosperms in general.

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

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 include recreational trails, transportation, and 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 specie(s) 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.

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.

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. An ecosystem can be of any size; a log, pond, field, forest or the earth's biosphere.

Ecosystem management - the appropriate integration of ecological, economic, and social factors in order to maintain and enhance the quality of the environment to best meet our current and future needs. Means keeping natural communities of plants, animals, and their environments healthy and productive so people can benefit from them.

Edge - the more or less well-defined boundary between two or more elements of the environment; 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 a stand composed of trees of the same or about the same age. The maximum age difference is generally 10-20 years.

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

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 promoting the responsible management of the world's forests through standards and certification.

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.

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

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 commercial quality, condition and/or species composition.

Invasive species - a plant or animal that spreads rapidly and in great numbers in an area, often to the point of being a nuisance in an ecosystem where it is not native. Also, species that when moved from their native habitat, spread on their own, displacing other species, and sometimes causing environmental or economic damage.

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 very large size, large and numerous snags and cavities, rough bark and large dead 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.

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.

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 - 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.

Further, 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, alluvial 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 sites of newly exposed soil and persisting there or colonizing them until supplanted by successional species.

Plantation - a stand composed primarily of trees established by planting or artificial seeding. Though a plantation may contain 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 (Coarse Woody Debris and Fine Woody Materials) 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 - a treatment designed to free trees from undesirable, usually overtopping, competing vegetation. Or 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.

Sapling - a small tree, usually defined as being between 1 and 5 inches diameter at breast height (4 ½ feet).

Sawtimber - trees that are generally 12 inches and larger diameter at breast height and of a sufficient quality.

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.

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.

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.

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).

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

Temporary Revocable Permit (TRP) - a Department permit which authorizes the use of State land for a specific purpose for a prescribed length of time not to exceed 1 year.

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 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) in the harvested stand to achieve various ecological objectives; structural complexity, riparian protection and habitat improvement. The structural elements may be retained singly or in patches.

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 hydrophilic vegetation.