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St. Lawrence Foothills

UNIT MANAGEMENT PLAN

Towns of Colton, Hopkinton, Parishville, Pierrepont, Potsdam, Russell

County of St. Lawrence

June 2021

DIVISION OF LANDS AND FORESTS
Bureau of Forest Resource Management,
Region 6 6739 U.S Highway 11

Potsdam, NY 13676

www.dec.ny.gov

OFFICE OF THE COMMISSIONER

New York State Department of Environmental Conservation
625 Broadway, 14th Floor, Albany, New York 12233-1010
P: (518) 402-8545 | F: (518) 402-8541
www.dec.ny.gov

JUN 08 2021

MEMORANDUM

TO: The Record

FROM: Basil Seggos, Commissioner

SUBJECT: St. Lawrence Foothills UMP

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

St. Lawrence Foothills
Unit Management Plan

A planning unit consisting of 13 State Forests in St. Lawrence County

June 2021

Prepared by the St. Lawrence Foothills Unit Management Planning Team:

Tony Sparacino	Forester 1 – Team Leader and Author
Michael Contino	Regional Real Property Supervisor
Josh Hogan	Forest Ranger 1
Aaron Graves	Forester 1
Rodger Klindt	Biologist 1 - Aquatic
Angelena Ross	Biologist 1 – Ecology
Howard Thomes	Forest Ranger 1
Jay Terry	Forest Ranger 2
Jerry Zaykoski	Regional Minerals Manager

Acknowledgments

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

Timothy Baxter	Forester 1 (Retired)
James Canevari	Forestry Technician 2
Henry Dedrick	Forester 2
Peter D'Luhosh	Conservation Easement Specialist
John Gibbs	Forester 2 (now Region 8 Natural Resources Supervisor)
David Hamelin	Fish & Wildlife Technician 2 (Retired)
Kathryn Laubscher	Office Assistant 2
Stephen Litwhiler	Citizen Participation Specialist (Retired)
Patrick Marren	Forester 1 (now Region 9)
Mark Martin	Conservation Easement Technician
Eric Mayer	Conservation Operations Supervisor 3 (Retired)
Scott Murphy	Forest Ranger (now Lt. in Herkimer)
Andrea Pedrick	Citizen Participation Specialist
Greg Rutley	Forestry Technician 3
David Smith	Forester 3
Paul Toohey	Conservation Operations Supervisor 3 (Retired)
Blanche Town	Fish & Wildlife Technician 3 (Retired)
Pat Whalen	Forester 2 – (Retired)

Other Contributors:

Nancy Eldblom	Naturalist
Dawn Howard	St. Lawrence County Soil & Water Conservation District (Retired)
Anne Johnson	Rare and Endangered Plants Specialist – Fort Drum
Robert White	St. Lawrence County Forester (Retired)

New York State Department of Environmental Conservation
Division of Lands and Forests
Region 6
6739 U.S Highway 11
Potsdam, NY 13676
(315) 265-3090
R6.UMP@dec.ny.gov

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 St. Lawrence Foothills 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.

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Preface

State Forest Overview

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

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

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

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

Legal Considerations

Article 9, Titles 5 and 7, of the Environmental Conservation Law (ECL) authorize DEC to manage lands acquired outside the Adirondack and Catskill Parks. This management includes **watershed protection**, production of **timber** and other forest products, **recreation**, and **kindred purposes**.

For additional information on DEC's legal rights and responsibilities, please review the statewide Strategic Plan for State Forest Management (SPSFM) at http://www.dec.ny.gov/lands/64567.html. Refer specifically to pages 33 and 317.

Management Planning Overview

The St. Lawrence Foothills Unit Management Plan (UMP) is based on a long range vision for the management of Catherineville State Forest, Crary Mills State Forest, Degrasse State Forest, Downerville State Forest, Glenmeal State Forest, High Flats State Forest, Orebed Creek State Forest, Silver Hill State Forest, Snow Bowl State Forest, Taylor Creek State Forest, West Parishville State Forest, Whippoorwill Corners State Forest, and Whiskey Flats State Forest, balancing long-term ecosystem health with current and future demands. This Plan addresses management activities on this unit for the next ten years, though some management recommendations will extend beyond the ten-year period. Factors such as budget constraints, wood product markets, and forest health problems may necessitate deviations from the scheduled management activities.

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 Bureaus State Forest management system to the two most internationally accepted standards - FSC and the Sustainable Forestry Initiative® (SFI®) program. However, contract delays and funding shortfalls slowed the Departments ability to award a new agreement until early 2007.

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

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

DEC'S MANAGEMENT APPROACH AND GOALS

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.

FSC
www.fsc.org

The mark of responsible forestry
FSC® C002027

SUSTAINABLE FORESTRY INITIATIVE
SFI-00102

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.

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

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.

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 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.

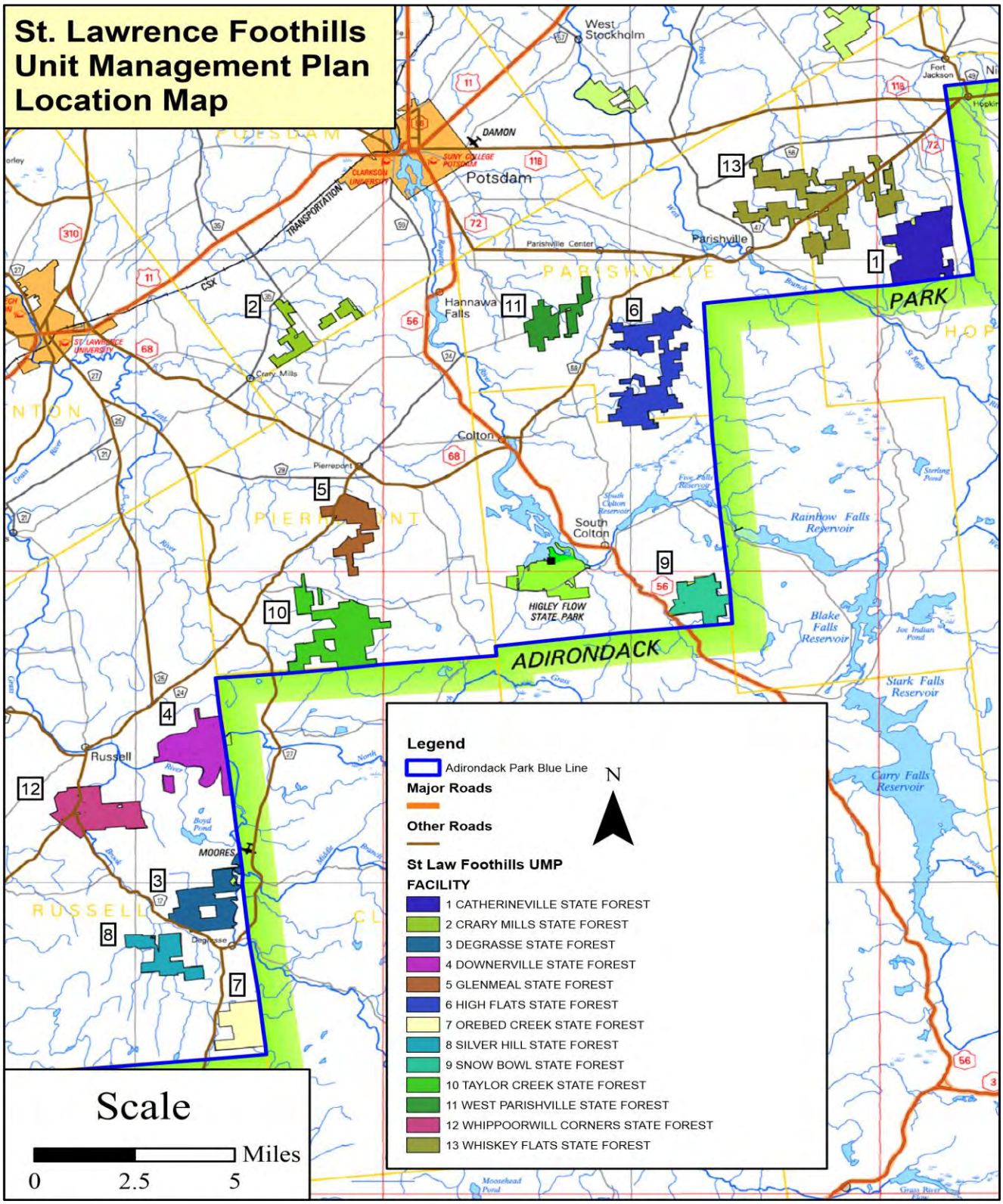
Goal 4 – Provide Economic Benefits to the People of the State

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 St. Lawrence Foothills Unit

State Lands in the Unit

Table I.A. contains the names of the state land facilities that make up this unit.

Table I.A. – State Lands in the Unit

Facility Name and Webpage	Deeded Acreage*	GIS Acreage**
Catherineville State Forest – SL RA 8 http://www.dec.ny.gov/lands/95262.html	1,619	1,623
Crary Mills State Forest – SL RA 40 http://www.dec.ny.gov/lands/82476.html	563	587
Degrasse State Forest – SL RA 13 http://www.dec.ny.gov/lands/82481.html	1,183	1,180
Downerville State Forest – SL RA 26 http://www.dec.ny.gov/lands/97736.html	1,395	1,443
Glenmeal State Forest – SL RA 19 http://www.dec.ny.gov/lands/91697.html	824	826
High Flats State Forest – SL RA 20 http://www.dec.ny.gov/lands/104007.html	2,018	1,995
Orebed Creek State Forest – SL RA 14 http://www.dec.ny.gov/lands/82487.html	776	791
Silver Hill State Forest – SL RA 35 http://www.dec.ny.gov/lands/86564.html	787	783
Snow Bowl State Forest – SL RA 34 http://www.dec.ny.gov/lands/97265.html	802	797
Taylor Creek State Forest – SL RA 3 http://www.dec.ny.gov/lands/82471.html	1,870	1,860
West Parishville State Forest – SL RA 28 http://www.dec.ny.gov/lands/86888.html	802	792
Whippoorwill Corners State Forest – SL RA 41 http://www.dec.ny.gov/lands/98638.html	1,277	1,281
Whiskey Flats State Forest – SL RA 2 http://www.dec.ny.gov/lands/96455.html	2,555	2,533
Total	16,471	16,491
*Acreage based on deeds and survey maps		
**Acreage based on GIS State Lands Forest Stands Coverage. All plan analysis uses GIS Acreage		

Facilities Not Included in this UMP

This UMP includes only properties that are located outside of the Adirondack Park. However, two state forests adjoin the park boundary and are adjacent to other state owned lands within the Adirondack Park. Degrasse and Downerville State Forests are adjacent to portions of the Grass River Wild Forest, located in the town of Clare. For more information about the Grass River UMP unit, see the DEC website at http://www.dec.ny.gov/lands/22575.html .

Several state forests also adjoin private lands within the Adirondack Park, on which the DEC owns a Conservation Easement. Snow Bowl State Forest is adjacent to the Preston Lot Conservation Easement in the town of Parishville. Taylor Creek State Forest is adjacent to the Grass River Conservation Easement in the town of Clare. Orebed Creek State Forest is adjacent to the Tooley Pond Conservation Easement in the town of Clare.High Flats State Forest is adjacent to the South Colton Conservation Easement. More information about the Conservation Easement program can be found on the DEC website at http://www.dec.ny.gov/lands/41156.html.

The DEC also maintains several boat launch and fishing access sites on rivers and lakes throughout the area. For more information about these sites, see the DEC website at http://www.dec.ny.gov/outdoor/23866.html.

Adjacent Public Lands Not Managed by the Department

There are several St. Lawrence County Forests located adjacent to state forests in this unit. These include St. Lawrence Co. Forest #2, #3, and #4 (adjacent to Whiskey Flats State Forest), SLC #8 and #38 (adjacent to Catherineville State Forest), SLC #9 (adjacent to High Flats State Forest), and SLC #13 and #37 (adjacent to West Parishville State Forest). These areas are managed by the St. Lawrence County Soil and Water Conservation District. For more information, see their website at http://www.co.st-lawrence.ny.us/Departments/SoilWater/.

Higley Flow State Park is located near the hamlet of South Colton. It is managed by the New York State Office of Parks, Recreation, and Historic Preservation. For more information on this facility, visit the OPRH website at http://nysparks.com/parks/58/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 St. Lawrence Foothills 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.

Geology

Geologically, this unit is very complex. The underlying bedrock of the Northwest Lowlands area is highly metamorphosed sedimentary and igneous, and is composed of marbles, quartzites, and gneisses which have been further deformed by folding, resulting in the present-day northeast-southwest pattern of ridges of more resistant bedrock with glacially-eroded valleys underlain by less resistant units. The Adirondacks are an outlying part of the Grenville Province of the Canadian Shield and are still connected to it by the Frontenac Axis running through the Thousand Islands region. The bedrock of the Central Adirondack Highlands is plutonic in origin (i.e., cooled from magma at great depth), consisting largely of Precambrian units that have been highly metamorphosed, and are therefore harder and more resistant to erosion. Between the Northwest Lowlands and the Central Highlands is the Carthage-Colton Mylonite Zone, a narrow region of highly deformed rock formed by ductile shearing as the Northwest plate moved over and down past the Central Highlands.

The last glacial advance (Wisconsinan Stage) receded from this area about 10,000 years ago. Short term advances and retreats within the Wisconsinan Stage resulted in a complexity of features formed by glacial Lake Iroquois, the Champlain Sea, and the rivers running into them. In the lower-energy marine plain, fine-grained glacial deposits resulted in the finer-textured soils in the Crary Mills State Forest area. The sand and gravel deposits found in the Parishville and Colton areas are the result of shoreline erosion and outflow into Lake Iroquois forming kames and dunes. Further south, where the highlands were not covered by glacial lakes or inland seas, glacial till (a poorly sorted deposit consisting of grain sizes ranging from clay to boulders) as the ice sheet receded.

The ancient crystalline rocks of this region contain some of the state's richest mineral deposits. Some of these, such as zinc, lead, and silver, were mined at a deep mine near Glenmeal State Forest.

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

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

Facility Name	Predominant Soil Type(s)	Acres
Catherineville State Forest	Malone Loam	410
Crary Mills State Forest	Roundabout Silt Loam	87
Degrasse State Forest	Tunbridge-Lyman-Dawson Complex	406
Downerville State Forest	Tunbridge-Lyman-Dawson Complex	1,046
Glenmeal State Forest	Tunbridge-Lyman-Dawson Complex	596
High Flats State Forest	Tunbridge-Lyman-Dawson Complex	1,109
Orebed Creek State Forest	Tunbridge-Lyman-Dawson Complex	505
Silver Hill State Forest	Tunbridge-Lyman-Dawson Complex	337
Snow Bowl State Forest	Berkshire-Lyman Complex	171
Taylor Creek State Forest	Tunbridge-Lyman-Dawson Complex	1,191
West Parishville State Forest	Adams Sand	334
Whippoorwill Corners State Forest	Tunbridge-Lyman-Dawson Complex	669
Whiskey Flats State Forest	Adams Sand	727

Soils in this unit vary from the somewhat poorly drained silty soils in the Crary Mills area, through the droughty outwash sands of Parishville to the shallow, loamy soils of Colton, Pierrepont and Russell.

Crary Mills State Forest soils are very fine sandy loam and Roundabout silt loam. These are deep, moderately well drained to somewhat poorly drained, clayey soils formed in marine sediments deposited during the glacial period. These soils pose some limitations to recreational development.

West Parishville and Whiskey Flats State Forest have much of their areas in the Adams sand type. This is a deep, excessively well drained, sandy soil formed in marine shoreline or glacial

outwash. It tends to be droughty with limitations for plant growth but is able to withstand more recreational use.

Catherineville, Degrasse, Downerville, Glenmeal, High Flats, Orebed Creek, Silver Hill, Snow Bowl, Taylor Creek, and Whippoorwill Corners State Forests have soils of the Tunbridge-Lyman-Dawson complex. These are rocky, loamy soils formed in glacial till and are generally shallow to bedrock or to a dense impermeable layer. The Catherineville area also has a significant area of Malone-Adjidaumo complex soils. Most of these soils are moderately well to somewhat poorly drained soils which present some limitations for road building and recreational use. Some of these soils contain an extreme amount of boulders.

Upland Natural Hardwood and/or Softwood Stands

Naumburg loamy fine sand: A very deep, level and somewhat poorly drained low lime, sandy soil formed in lake laid deposits. The available water capacity is very low and permeability is rapid.

Wegatchie silt loam: A very deep, level and poorly to very poorly drained medium lime, silty soil formed in lake laid deposits. The available water capacity is high and the permeability moderately slow.

Fahey loamy fine sand: Very deep, nearly level and moderately well drained. A low lime, sandy and gravely soil formed in wave washed material. The sand and gravel are underlain by loamy glacial till material. The sand and gravel thickness varies from 3 feet to greater than 6 feet. The available water capacity is very low. Permeability is rapid in the upper sand and gravel layer but moderately slow below.

Croghan sand, 0 to 8% slopes: Very deep and nearly level to gently sloping. A moderately well drained, low lime sandy soil formed in lake laid deposits. The available water capacity is very low and permeability very rapid.

Planted Forests

Croghan loamy fine sand: Very deep, nearly level to gentle slope and moderately well drained. Low lime, sandy soil formed in lake laid deposits. Available water capacity is very low and permeability is very rapid.

Adams loamy fine sand, 2 to 8% slopes: Very deep and gently sloping. A well to excessively drained low lime sandy soil formed in out wash. The available water capacity is low to very low. Permeability is rapid in the upper 2 feet and very rapid below that.

Trout River loamy sand, 3 to 8% slopes: A very deep, gently sloping and somewhat excessively drained low lime, sandy and gravely soil formed in wave washed material. The sand and gravel are underlain by loamy glacial till material. The thickness of sand and gravel varies from 3 feet to greater than 6 feet. Available water capacity is very low and permeability is rapid in the upper section but moderately slow below.

Coveytown loamy fine sand: Very deep, nearly level and somewhat poorly drained medium lime soil. The upper 2 to 3 feet is formed in sandy lake laid deposits and the lower part is loamy

glacial till. Available water capacity is very low. Permeability is moderately rapid to rapid in the upper part and moderately slow to moderate in the lower part.

Lowland Swamps

Carbondale muck: Deep, level and very poorly drained muck soil formed in organic residues. The organic soil material is greater than 51 inches thick over any mineral soil material. The available water capacity is high and the permeability is moderate.

Borosaprists & Fluvaquents, frequently flooded: Nearly level, moderately shallow to very deep and very poorly to somewhat poorly drained soils that are in flood plain areas. Most of these soils have formed in organic material (muck). Some have formed in mineral soil material (sand, silt or clay). These areas are subject to frequent flooding from nearby streams.

Fluvaquents - Udifluvents complex, frequently flooded: Shallow to deep, nearly level, very poorly to well drained**,** sandy to clayey soils that are in flood plain areas. These areas are subject to frequent flooding from nearby streams. Maps of soil types found in this unit are included as Figure 1.

Water Resources

DEC's GIS data contains an inventory of wetlands, vernal pools, spring seeps, intermittent streams, perennial streams, rivers and water bodies on the unit. 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.

Table I.C. – Water Resources (see Figure 2 for maps)	
Watersheds	
Hydrologic unit(s)	
Alder Meadow Brook – W. Branch St. Regis River	801 ac.
Cold Brook	753 ac.
Dan Wright Brook – Trout Brook	3,618 ac.
Deerskin Creek – Middle Branch Grass River	791 ac.
Grannis Brook	229 ac.

WATER RESOURCES

Hopkinton Brook		54 ac.
North Branch Grass River		1,319 ac.
Parkhurst Brook		1,168 ac.
Plumb Brook – Grass River		3,391 ac.
South Branch Grass River		398 ac.
Stafford Brook – Raquette River		1,301 ac.
Tracy Brook – Little River		442 ac.
Upper Trout Brook		145 ac.
Van Rensselear Creek – Little River		2,036 ac.
Wetlands		
State Regulated Wetlands		519 ac.
Federal Regulated Wetlands		861 ac.
Unregulated Wetland (not included above)		525 ac.
Streams/Rivers *		
Perennial streams/rivers	AA or A	2.9 mi.
	B	0.0 mi.
	C	0.0 mi.
	D	11.6 mi.
Trout streams/rivers	AA (T), A (T), B (T) or C (T)	37.4 mi.
Water Bodies		

Water bodies (open-water ponds and lakes)	80 ac.

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

- The classification AA or A is assigned to waters used as a source of drinking water.
- Classification B indicates a best usage for swimming and other contact recreation, but not for drinking water.
- Classification C is for waters supporting fisheries and suitable for non - contact activities.
- The lowest classification and standard is D.

Waters with classifications A, B, and C may also have a standard of (T), indicating that it may support a trout population, or (TS), indicating that it may support trout spawning (TS). Special requirements apply to sustain these waters that support these valuable and sensitive fisheries resources.

Named Class AA perennial streams in this unit include Taylor Creek and Van Rensselaer Creek. Named Class C perennial streams (T or TS) include Alder Meadow Brook, Buck Brook, Dan Wright Brook, Grass River, Middle Branch Grass River, North Branch Grass River, O'Malley Brook, Orebed Creek, Plumb Brook, Rainbow Brook, Rosenbarker Brook, Santimaw Brook, South Branch Grass River, and Trout Brook. Named Class D perennial streams include Black Brook, Sugar Creek, and Tracy Brook.

Degrasse State Forest is bounded on its eastern edge by portions of the South and Middle Branches Grass River, which are classified as Scenic Rivers (2.6 miles total).

Maps of hydrology and special management zones found in this unit are included as Figure 2.

Major Streams, Rivers and Water Bodies

The only major river in this unit is the Grass River, along with its branches. The South and Middle Branches join near the northern boundary of Degrasse State Forest, where they form the main Grass River channel. The river then flows northward through the town of Clare, passing through Grass River Wild Forest and over Lampson Falls. It then re-enters the town of Russell and flows through Downerville State Forest. The North Branch Grass River then meets the main channel just east of the hamlet of Russell. The total frontage on these rivers in Degrasse and Downerville State Forests is as follows: Grass River (4.0 miles), Middle Branch, (0.3 miles), North Branch (3.2 miles), and South Branch (2.3 miles).

Plumb Brook is an important trout stream that flows though Silver Hill and Whippoorwill Corners State Forests. The only named ponds on the unit are Close Pond on High Flats State Forest (11 ac.) and Eels Pond on Taylor Creek State Forest (59 ac.).

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.

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- 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: 4890B, 4891A, 4891B, 4891C, 4891D, 4892D, 4990A, 4992A, 4992C, 4992D, 4993A, 4993C, 5092B, 5092D, 5093A, 5093B, 5093C, 5093D, 5094B, 5094C, 5094D, 5194A, 5194B, 5194C, 5194D

Breeding Bird Atlas blocks can be searched at http://www.dec.ny.gov/cfmx/extapps/bba/

- Herp AtlasBlock Names: Albert Marsh, Colton, Degrasse, Hermon, Nicholville, Parishville, Pierrepont, Potsdam, Rainbow Falls, South Edwards, Stark, Sylvan Falls, West Pierrepont, West Potsdam

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 6C, 6F
  Summaries of deer and bear harvests for this area can be found on the DEC's website at http://www.dec.ny.gov/outdoor/42232.html . More information about hunting, trapping, and game management can be found on the DEC's website at http://www.dec.ny.gov/outdoor/hunting.html .

Habitat

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

Vegetative Types and Stages

Table I.D. - Vegetative Types and Stages within the Unit (see Figure 4 for maps)

Vegetative Type	Acres by Size Class				% of Total
	0 -5 in	6 - 11 in	12+ in	Other	
Natural Forest Hardwood	591	4,768	5,187	--	64
Natural Forest Conifer	5	291	675	--	6
Plantation Softwoods	89	907	2,138	--	19
Plantation Hardwoods	--	--	--	--	0
Wetland	--	--	--	1,302	8
Ponds	--	--	--	202	1
Open/Brush	--	--	--	--	0
Other (Roads, Parking lots, etc.)	--	--	--	336	2
Total (Acres)	685	5,966	8,000	1,840	100%

Representative Sample Areas

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

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

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

Table I.E. – RSAs and HCVFs within the Unit

Community Name	Vegetative Type	Facility Name / Stand Numbers	NYNHP Rank	Acreage
Representative Sample Areas of Commonly Occurring Natural Communities				
None				
Rare Species (Special Treatment Areas)				
Northern Running Pine	Perennial Herb	Whippoorwill Corners State Forest	S1	0.25
Eastern Pearlshell	Mussel	Downerville State Forest	S2	3
Eastern Pearlshell	Mussel	Orebed Creek State Forest	S2	24
Eastern Pearlshell	Mussel	Silver Hill State Forest	S2	1
Eastern Pearlshell	Mussel	Whippoorwill Corners State Forest	S2	34

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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 depressions, spring seeps, ponds and lakes, recreational trails, campsites and other land features requiring special consideration. See Figure 2 for a map of the SMZs as applied on the unit. For more information regarding Special Management Zones please see www.dec.ny.gov/sfsmzbuffers.pdf

The identification of large, unfragmented 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.

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 5,839 acres
- Forest Landscape Connectivity Corridor 1.2 miles

There are 6 Matrix Forest Blocks which include portions of state forests in this unit, including the Whitehill block (High Flats SF), St. Regis block (Catherineville SF), North Branch Grass block (Snow Bowl SF, Taylor Creek SF), Boyd Pond block (Degrasse SF, Downerville SF, Whippoorwill Corners SF), Stammer Creek block (Silver Hill SF), and the Big Swamp block (Orebed Creek SF). Landscape Connectivity Corridors are proposed as routes for movement and dispersal of plant and animal species between the larger Matrix Forest Blocks. There is one corridor in this unit that crosses West Parishville State Forest. See Figure 8 for a map of the Matrix Forest Blocks and Forest Landscape Connectivity Corridors in this unit.

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.

Natural Areas are stands that will not receive scheduled management. Stands such as wetlands, stream and river buffers, and forested stands that are marginally wet or inaccessible are included in this category. In general, timber management will be minimal in these areas and they will be allowed to gradually develop late successional characteristics. In the event of natural disturbances such as windstorms, ice storms, or insect and disease outbreaks, salvage harvests of timber will be very limited or will not occur in these areas. Treatments to control invasive species or re-establish a more native species mix will be considered if they improve the long term health and sustainability of the area. Low intensity recreational usage will be allowed. Due in part to wetlands and limited access, this unit has a large acreage of stands best suited as Natural Areas. There are over 4,300 acres classified as Natural Areas in this unit, which are summarized in Table III.I.

At-Risk Species

The presence of at-risk species and communities on the St. Lawrence Foothills 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 or mitigating impacts of 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 2007 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 NHP species guides.
- Consultation of the NYS Comprehensive Wildlife Conservation Strategy

Table I.F. lists the species confirmed or predicted on the State Forests that comprise this Unit and in the larger landscape, as well as their required habitats.

*Table I.F. - At-Risk Species**

Species Name	NYNHP Rank	Habitat	Record Source	NYS Status
Confirmed or Predicted within the Unit				
Animals				
Eastern Small-footed Myotis	S1S3	Forest, Talus slopes rock crevices	SF PRO (PRED)	PSC SGCN
Birds				

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American Bittern (*Botaurus lentiginosus*)	S4	Wetland	BBA (CONF)	PSC SGCN
American Woodcock (*Scolopax minor*)	S5	Forest	BBA (CONF)	GAME SGCN
Black-billed Cuckoo (*Coccyzus erythropthalmus*)	S5	Forest	BBA (CONF)	P SGCN
Black-throated Blue Warbler (*Dendroica caerulescens*)	S5	Forest	BBA (CONF)	P SGCN
Blue-winged Teal (*Anas discors*)	S5	Wetland	BBA (CONF)	GAME SGCN
Bobolink (*Dolichonyx oryzivorus*)	S5	Grassland	BBA (CONF)	P SGCN
Brown Thrasher (*Toxostoma rufum*)	S5	Forest	BBA (CONF)	P SGCN
Canada Warbler (*Wilsonia canadensis*)	S5	Forest	BBA (CONF)	P SGCN
Cerulean Warbler (*Dendroica cerulea*)	S4	Forest	BBA (CONF)	PSC SGCN
Common Loon (*Gavia immer*)	S3S4	Wetland	BBA (CONF)	PSC SGCN
Common Nighthawk (*Chordeiles minor*)	S4	Forest	BBA (CONF)	PSC SGCN
Cooper's Hawk (*Accipiter cooperii*)	S4	Forest	BBA (CONF)	PSC SGCN
Eastern Meadowlark (*Sturnella magna*)	S5	Grassland	BBA (CONF)	P SGCN
Golden-winged Warbler (*Vermivora chysoptera*)	S4	Grassland	BBA (CONF)	PSC SGCN
Least Bittern (*Ixobrychus exilis*)	S3B, S1N	Wetland	BBA (CONF)	T SGCN
Long-eared Owl (*Asio otus*)	S3	Forest	BBA (CONF)	P SGCN
Northern Harrier (*Circus cyaneus*)	S3	Grassland	BBA (CONF)	T SGCN
Osprey (*Pandion haliaetus*)	S4	River	BBA (CONF)	PSC SGCN
Pied-billed Grebe (*Podilymbus podiceps*)	S3B, S1N	Wetland	BBA (CONF)	T SGCN
Red-shouldered Hawk (*Buteo lineatus*)	S4	Forest	BBA (CONF)	PSC SGCN
Ruffed Grouse (*Bonasa umbellus*)	S5	Forest	BBA (CONF)	GAME SGCN

Scarlet Tanager (*Piranga olivacea*)	S5	Forest	BBA (CONF)	P SGCN
Sharp-shinned Hawk (*Accipiter striatus*)	S4	Forest	BBA (CONF)	PSC SGCN
Upland Sandpiper (*Bartramia longicauda*)	S3B	River	BBA (CONF)	T SGCN
Vesper Sparrow (*Pooecetes gramineus*)	S5	Grassland	BBA (CONF)	PSC SGCN
Wood Thrush (*Hylocichla mustelina*)	S5	Forest	BBA (CONF)	P SGCN
Whip-poor-will (*Caprimulgus vociferous*)	S4	Forest	BBA (CONF)	PSC SGCN
Fish				
Northern Brook Lamprey (*Ichthyomyzon fossor*)	S1	Stream	SF PRO (PRED)	U
Mollusks				
Eastern Pearlshell (*Margaritifera margaritifera*)	S2	River	NHEO (CONF)	U SGCN
Dragonflies				
Arrowhead Spiketail (*Cordulegaster obliqua)*	S3	Forest Streams, Seeps	SF PRO (PRED)	U SGCN
Extra-striped Snaketail (*Ophiogomphus anoma*)	S2S3	River	NHEO (CONF)	PSC SGCN
Spatterdock Darner *(Rhionaeschna mutata lus)*	S2	Pond	NHEO (CONF)	U SCGN
Plants				
Drummond's Rock-cress (*Boechera stricta*)	S2	Cliff	SF PRO (PRED)	T
Fernald's Sedge (*Carex merritt-fernaldii*)	S2S3	Sand Barren	NYNH (CONF)	T
Midland Sedge (*Carex mesochera*)	S2	Wetland	SF PRO (PRED)	T
Mingan Moonwort (*Botrychium minganense*)	S1	Forest	SF PRO (PRED)	E
Northern Running-pine (*Diphasiastrum complanatum*)	S1S2	Forest	NYNH (CONF)	E
Schweinitz's Flatsedge (*Cyperus schweinitzii*)	S3	Sand Barren	NYNH (CONF)	R

INFORMATION ON THE ST. LAWRENCE FOOTHILLS UNIT

BIODIVERSITY

Confirmed or Predicted in the Landscape and May Be Affected by State Forest Management				
Birds				
Bald Eagle (*Haliaeetus leucocephalus*)	S2S3B,S2N	River	BBA (CONF)	T SGCN
Northern Goshawk (*Accipiter gentilis*)	S4B, S3N	Forest	BBA (CONF)	PSC SGCN

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

Key to Codes

BBA - Breeding Bird Atlas

(PRED) - Predicted Species

(CONF) - Confirmed Species

NHEO – Natural Heritage Element Occurrences GIS Layer

Status

E - Endangered Species (New York)

T - Threatened Species (New York)

PSC - Protected, Special Concern Species (New York)

SGCN - Species of Greatest Conservation Need

U – Unlisted

GAME – Game Species (New York)

NYNH – NY Natural Heritage Program: Biodiversity Inventory of Regions 5 and 6

SF PRO – State Forest Predicted Richness Overlay GIS Layer

Northern Goshawk (*Accipiter gentilis*) is a forest dwelling hawk which is often encountered hunting or nesting on state forests in this unit. In recent years, forestry staff has observed at least 7 active goshawk nests in this unit, primarily in sawtimber sized white pine, larch, and red pine plantations. Current management practice for protecting goshawk habitat is to survey any stands scheduled for timber harvesting before marking begins, locate any active or older inactive stick nests, place uncut buffers around each nest, and restrict harvesting to times which are outside of goshawk nesting season (August 1 to February 28).

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.

The most significant visual resource of this unit contains over 4 miles of river frontage along the Grass River. This area currently provides many recreational trails, camp sites, and canoe launches to allow the public to take advantage of the beautiful scenic views that the Grass River offers.

Historic and Cultural Resources

History of the Unit

A. State Forest History

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

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

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

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

During the war years of 1941-1945, very little was accomplished on the reforestation areas. Plans for further planting, construction, facility maintenance, and similar tasks had to be curtailed. However, through postwar funding, conservation projects once again received needed attention. The Park and Recreation Land Acquisition Act of 1960, and the Environmental Quality Bond Acts of 1972 and 1986 contained provisions for the acquisition of State Forest Lands. These lands would serve multiple purposes involving the conservation and development of natural resources, including the preservation of scenic areas, watershed protection, forestry and recreation.

Today there are nearly 780,000 acres of State Forest land throughout the State. The use of these lands for a wide variety of purposes such as timber production, hiking, skiing, fishing, trapping, and hunting is of tremendous importance economically and to the health and well-being of the people of the State.

B. Local History

Prior the arrival of Europeans, the county was occupied by two of the five Nations of Iroquois Indians; the Mohawks and the Oneidas. This management unit lies within the boundary of the Mohawk Nation, the Keeper of the Eastern Door. There was never a large concentration within this unit since these people were primarily agriculturists and the more suitable topography, climate and soils would have been closer to the St. Lawrence River. The area was used by Native Americans mostly for hunting, fishing, and travel along the St. Regis and Raquette Rivers. There are no known settlements within this unit.

Crary Mills State Forest is within the St. Lawrence Ten Townships (Town of Potsdam) which were purchased from the State by Alexander Macomb in 1787. The other State Forests in this unit are within Great Tracts 2 and 3. These tracts were also purchased by Macomb, in 1791, for 8 pence per acre. They are within the Townships of Matildaville, Cookham and Catherineville in Great Tract 2 and Dewitt in Great Tract 3. These large tracts were bought as a speculation, but financial pressures soon forced Macomb to sell large subdivisions to other speculators, leading to a great complexity in the surveys and patents.

The Towns of Hopkinton and Potsdam were established in 1805 and 1806 respectively. Potsdam Township was first opened for settlement in 1803 by Benjamin Raymond. He and his party started at Rome, NY and made their way across Oneida Lake, Oswego River, Lake Ontario, St. Lawrence River and through to Potsdam from Point Iroquois, near Waddington. By 1810 the population of Potsdam (Town) was 928. Hopkinton and the other towns within the unit were not settled to any degree until the opening of the St. Lawrence Turnpike (Russell Turnpike) which passed through this management unit from west to east as it connected Malone and Carthage. The St. Lawrence Turnpike was incorporated in April 1810 and the road was cleared and made useable through the county over the next three years. This road led to the settlement of Parishville, Pierrepont and Colton by folks from New England.

Other important roads in the area were the Parishville Turnpike, which eventually connected Parishville with Ogdensburg, through Canton and Potsdam; and the Pierrepont, Fine and Watson Turnpike constructed north-south through the westerly half of the Town of Pierrepont.

As the settlers came, the usual gristmills and sawmills were built first, mostly at the intersections of the roads with the major streams and rivers. One of the first mills built in the Village of

Parishville was a distillery, where corn and other grains were converted into whiskey. This industry was encouraged by David Parish, who, along with his brother George, was active in the opening and early development of the Town of Parishville. The first purchase of grain for malt was recorded in 1813.

Other mills of importance were starch factories located in Cox's Mills (now Hannawa Falls), Fort Jackson and Parishville. The first such mill in the state, however, was opened in Colton in 1844. Large sawmills operated at Gleason's Mills, Cox's Mills and Colton. The excellent water-power at Colton and other points on the Raquette River led to the establishment of three large gang saw mills in 1850-1852. One of these had about seventy saws and another had sixty saws. Later a tannery was built at Colton. It used 5000 cords of hemlock annually and had a capacity of 40,000 hides per year.

The early settlers began clearing land immediately for farming but the farming remained secondary to forestry as a source of income. The clearing process was slow and the ax was the primary farm tool for many years. Some income could be obtained from the pearl ash extracted from the ashes from burning the excess woody material. Other sources of income from the forest were logs, bark, furs and maple sugar. Many factors contributed to the lack of growth and subsequent decline of farming and population in this general area. The climate is severe and the soils are poor (thin soil, sandy lowlands, gravelly soil, poor drainage). There was also a lack of good transportation such as canals and railroads. The Northern railroad from Ogdensburg to Malone (1845); and Hurd's Road (railroad) from Tupper Lake to Moira (opened 1889) serviced the general area. The over-all acreage in farms was already declining in 1890. In many instances, two or more generations had tested the land and learned its limitations the hard way.

The town of Russell contains several small communities with interesting histories. The hamlet of Silver Hill south of Degrasse is said to have gotten its name from a silver mine that was located nearby. Another important industry in this area was the Clifton Iron Company, formed in 1864 to mine iron ore and manufacture iron and steel. It was located in the community of Clarksboro (town of Clare), approximately 3 miles southeast of Degrasse on what is now the Tooley Pond Road. A 23.5 mile railroad was opened on January 1, 1868, to connect the mine with the New York Central Railroad at East DeKalb. It crossed what is now Silver Hill State Forest in an east to west direction, roughly parallel to the present McCarthy and Cook Roads. Due to a shortage of iron after the Civil War, the rails were made of sugar maple timbers. The mill was destroyed by fire on September 4, 1869 and was not rebuilt which made this operation very short lived.

Downerville was a small settlement located 2 miles east of Russell. Twenty two families lived in this community around 1900. All that remains today is the Downerville Cemetery which contains burials dating from the 1860s to the 1930s, including several members of the original Downer family. A 31 acre parcel purchased from Arthur Downer in 1951 makes up a portion of Downerville State Forest.

The State of New York, having passed laws in 1929 and 1931 authorizing the Conservation Department to acquire land for reforestation areas, began purchasing land in Parishville, Hopkinton and Pierrepont in 1932. Most of the State Forest within the management unit had been acquired by 1963 and much of that was during the 1930's. A few additional parcels purchased more recently have brought the total to 16,491 acres. Appendix C lists acreages purchased under various programs.

HISTORIC AND CULTURAL RESOURCES

Shortly after his inauguration in 1933, President Roosevelt signed legislation authorizing the Civilian Conservation Corps program. Walter F. Pratt was the District Forester overseeing the acquisition and subsequent conservation programs of that day. Two CCC camps were established in this area. The camp at Brasher Falls (presently the site of the NYS DEC Field Headquarters) was called camp S-95. The other camp (S-134) was located on what is now the Powers Road in Pierrepont. There was also occasional help supplied by camp S-120 in Brushton (Dickinson Center). Records in the Potsdam DEC office indicate that these young men were paid about 65¢ per day and given room and board, some clothing, and medical attention.

The lands being acquired had been mostly cleared and severely depleted by poor farming practices and heavy grazing. Some of the soils in Whiskey Flats State Forest between Parishville and Hopkinton had eroded to exposed and blowing sand at that time. The CCC men proceeded to plant 3,621,050 tree seedlings on Whiskey Flats, Catherineville, Taylor Creek and Glenmeal State Forests. This took place between 1935 and World War II. Later purchases were planted by the Conservation Department bringing the total number of seedlings planted on this unit to over 8.2 million.

The CCC men also built roads, dams, recreational facilities, thinned and pruned natural stands of timber, and built water holes for fire protection. The water holes were hand dug (in a watercourse), laid up with stone and fences built around them. From these ponds back pack sprayer tanks were filled by hand or portable pumps were used to fill tanker trucks. The last record of maintenance on the water holes was in 1953. The remains of one of them can be seen on the Taylor Creek State Forest at the boundary corner in Stand A-31. It has been filled in but the top of the rock wall is visible around it (approximately 15’ square) and steel fence posts remain on the north side. It was built in 1936 by Camp S-134, L. L. Pond, foreman. The labor cost of this water hole was around $70.00 (109 man days). There were 25-35 water holes within this management unit.

Most waterholes in this unit appear to have been built in a square or rectangular configuration, while others in the Brasher Falls area were built circular, similar to a rock lined well or cistern. There are several waterholes still surviving in various states of preservation in this unit, including those on Catherineville State Forest (1), Taylor Creek State Forest (4), and Whiskey Flats State Forest (3).

There are several historical photos dating from the CCC era which are included as Appendix D.

Forest fire protection and detection were important facets of forest management over the years. Fire lanes were cleared and maintained around most of the new plantations. Some of them still remain as access roads, especially on the Whiskey Flats State Forest. A fire tower on White’s Hill in the town of Hopkinton was put into service in 1951 and was manned for about 20 years. The observer cabin was moved to the Trout Lake Field Headquarters in Edwards where it is presently used for storage.

There is one property in this area that was initially acquired as a state forest, but was later converted to a state park. St. Lawrence Reforestation Area #12 was purchased in 15 proposals from 1936 to 1967, encompassing approximately 1,039 acres. It was located on Cold Brook Drive in South Colton and was known as Littlejohn State Forest. The Civilian Conservation Corps were active on this area, and there are many pine plantations remaining from the CCC

era as well as at least 2 waterholes that were built for fire protection. On February 2, 1968, this property was transferred by legislative action to the Division of Parks. It is now known as Higley Flow State Park and is managed by the New York State Office of Parks, Recreation, and Historic Preservation. For more information on this facility, visit the OPRHP website at http://nysparks.com/parks/58/details.aspx .

Many people worked hard to establish the state forests we have today. Henry N. Bradford (1911-1991) was a 1934 graduate of the New York State College of Forestry at Syracuse University. He began working in the Canton office of the Conservation Department in 1946, and became supervisor of the Canton office in 1957. During his tenure he coordinated the acquisition of several state forest parcels throughout this management unit, including major portions of Catherineville, Crary Mills, Whippoorwill Corners, and Whiskey Flats State Forests. He also was instrumental in developing what are now the Higley Flow State Park camping facilities in 1966. He retired as district forester for the Department of Environmental Conservation in 1973.

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.

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 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).

REAL PROPERTY

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

Table I.G. – Status of Boundary Lines

Facility Name	Length of Boundary (mi.)	Length Needing Maintenance	Length Needing Survey
Catherineville State Forest	9.49	1.46	1.46
Crary Mills State Forest	10.51	9.02	9.02
Degrasse State Forest	12.38	1.09	1.09
Downerville State Forest	10.84	0	0
Glenmeal State Forest	9.40	0.22	0.22
High Flats State Forest	23.00	1.32	1.32
Orebed Creek State Forest	5.71	1.27	1.27
Silver Hill State Forest	9.07	0	0
Snowbowl State Forest	7.22	1.45	1.45
Taylor Creek State Forest	16.64	1.23	1.23
West Parishville State Forest	10.65	0	0
Whippoorwill Corners State Forest	9.04	0.25	0.25
Whiskey Flats State Forest	34.53	3.90	3.90
Totals	168.48	21.21	21.21

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

There is an unresolved boundary line issue regarding the eastern boundary line of Orebed Creek State Forest. The line in question stretches approximately 1 mile in a north south direction. This line also forms the boundary between the towns of Russell (west) and Clare (east). When the adjacent Conservation Easement (Champion Easement – Tooley Pond Parcel) was surveyed in 1999, a new line for the easement was flagged and painted which left a gap of

50-100' with the old painted state forest boundary line. It is unclear which line is more correct, although the old state forest boundary line appears not to be maintained any longer.

Exceptions and Deeded Restrictions

Table I.H. – Exceptions and Deeded Restrictions

Facility Name	RA #	Description E.g., deeded ROW, easement, access lane, water rights, cemetery, etc.	Proposal ID (Surveyor's Reference)
Catherineville State Forest	8	Deeded ROW not less than 100' wide for power transmission	G
Catherineville State Forest	8	Reservation of mines and minerals not owned by seller	M, N
Catherineville State Forest	8	Reserved use of spring and pipeline	N
Catherineville State Forest	8	Roadside utility lines	O, Q
Crary Mills State Forest	40	Powerline to private inholding	A
Crary Mills State Forest	40	Deeded easement for electric transmission line. After the 1998 ice storm the line was relocated to the edge of the road and the interior line was abandoned.	A, C, D
Crary Mills State Forest	40	Reservation to Hanson to take water from a spring and maintain a pipeline	C
Degrasse State Forest	13	Roadside utility lines	C, J
Downerville State Forest	26	ROW for NYS to Proposal A, Parcel 2	A
Downerville State Forest	26	Reservation of mines and minerals not owned by seller	A, B, C
Downerville State Forest	26	Deeded ROW to private parcel	F
Glenmeal State Forest	19	Roadside utility lines	A, B, C, K, J
Glenmeal State Forest	19	Agreement for Concurrent Use and Occupancy of Reforestation Lands dated 11/14/1984 between NYS DEC and St. Lawrence County for relocation of County Highway 40 (now CR 24)	I, J, K, L
Glenmeal State Forest	19	Excepts rights of others to use old woods road and bed of St. Lawrence Turnpike	J
Glenmeal State Forest	19	Parcel was enrolled in the Fisher Forest Tax Law by William and Leo Endersbee on 11/22/1928	K

REAL PROPERTY

Table I.H. – Exceptions and Deeded Restrictions

Facility Name	RA #	Description E.g., deeded ROW, easement, access lane, water rights, cemetery, etc.	Proposal ID (Surveyor's Reference)
High Flats State Forest	20	Reservation of mines and minerals not owned by seller	A, B, C, D, E, F, K, L, M, N
High Flats State Forest	20	Roadside utility lines	A, B, K, M, N, O, P
High Flats State Forest	20	Deeded ROW from Crowley Rd to private landowner	G
High Flats State Forest	20	Deeded ROW from Donovan Rd to landowner to the south. Also, a separate road use agreement between DEC and private landowners south of Donovan Rd	L
High Flats State Forest	20	Reservation to Christy Brothers for the right to use a spring and pipeline	O
Orebed Creek State Forest	14	Deeded ROW for power transmission	A, B
Silver Hill State Forest	35	Road ROW south of town road to Fox Tract. Reserved mines and minerals not owned by seller.	A
Silver Hill State Forest	35	Utility line along Cook Rd	A
Snow Bowl State Forest	34	Powerline easement granted to St. Lawrence Transmission Co.	A
Snow Bowl State Forest	34	Excepting mines and minerals not owned by the seller	A, B, C, D, E, F, G
Snow Bowl State Forest	34	Right of People of NYS to use an existing road to access state parcel and right of seller to use an existing road to cross Prop H	H
Taylor Creek State Forest	3	Deeded ROW for power transmission	A, K
Taylor Creek State Forest	3	Roadside utility lines	A, G, J, M
Taylor Creek State Forest	3	Road ROW for People of NYS across 1 acre reservation. Also a reservation of mines and minerals not owned by seller	L
West Parishville State Forest	28	Deeded ROWs 1 rod wide, portrayed on map #5900	A, C, D, E
West Parishville State Forest	28	Deeded ROW recorded at L. 337 P. 382. Deeded utility line easement	C

Table I.H. – Exceptions and Deeded Restrictions

Facility Name	RA #	Description E.g., deeded ROW, easement, access lane, water rights, cemetery, etc.	Proposal ID (Surveyor's Reference)
West Parishville State Forest	28	Deeded ROW recorded at L. 451 P. 47	E
West Parishville State Forest	28	Reservation of mineral rights not owned by seller	A, B, C
Whippoorwill Corners State Forest	41	Utility ROW along Blanchard Hill Rd, CR 17, and CR 24	A
Whippoorwill Corners State Forest	41	ROW to inholding east of County Route 17	A
Whippoorwill Corners State Forest	41	Two inholdings along County Route 24 may have implied ROW's due to being excepted from Prop. A. Public road was also realigned substantially	A
Whiskey Flats State Forest	2	Deeded ROW not less than 100' wide for power transmission	A, F, G,K, L, O, R
Whiskey Flats State Forest	2	Reservation for use of a spring and pipeline	G
Whiskey Flats State Forest	2	Roadside utility lines	V, W, X, Y, A-2, D-2
Whiskey Flats State Forest	2	Reservation of mines and minerals not owned by seller	W
Whiskey Flats State Forest	2	Right of owners of a 13.6 acre exception to use a wood road from the north line of the exception to State Route 72. Also the right of NYS to use an existing road (2 rods wide) through the exception	A-2

Use and Demand Related to Exceptions and Deeded Restrictions

The State Forests in this unit are often interspersed with private properties that are bordered or completely surrounded by state property. Vehicular access to these properties is often available either through frontage on a public road or DEC maintained road open to motor vehicles, or through a deeded right of way held by the private landowner across state property. The Department works with landowners and local highway superintendents to try and maintain and improve these legal access routes whenever possible.

There are other private parcels, especially hunting camps, where the parcel has no legal vehicular access to the property, but an existing logging trail or haul road not posted open to motor vehicles is being driven to access the property. In some cases this has caused rutting and damage to low standard seasonal roads and trails that are not suited to all weather vehicular use. Vehicles driving on roads and trails not suitable for this use continue to create ongoing damage and problems throughout this unit.

REAL PROPERTY

Encroachments

Well marked boundary lines that are readily identifiable to the public reduce unintentional trespass. However, encroachments onto State Forest lands do sometimes occur. Such issues requiring resolution are listed in the following table.

Table I.I. – Encroachments

Facility Name	RA #	Description	Proposal ID (Surveyor's Reference)
Catherineville State Forest	8	Adjacent landowner is using a trail to access a camp. No deeded ROW	A
Crary Mills State Forest	40	Nearly the entire state forest boundary needs to be surveyed. There are also several encroachments along private parcels	A, C, D
Degrasse State Forest	13	Boundary line along private landowner is poorly marked and there is possible encroachment onto state land	E
Downerville State Forest	26	None	--
Glenmeal State Forest	19	Boundary line along private landowner is poorly marked and there is possible encroachment onto state land	I
High Flats State Forest	20	Adjacent landowner is using a trail to access a camp. No deeded ROW	A, Q
High Flats State Forest	20	Boundary line along private landowner is poorly marked and there is possible encroachment onto state land	K
Orebed Creek State Forest	14	Adjacent landowner is using a road to access a camp. May be a former public road.	A
Silver Hill State Forest	35	None	--
Snow Bowl State Forest	34	Private springhouse is located on state land	C
Snow Bowl State Forest	34	Former public road has been gated at private camp, preventing access to eastern edge of state forest	F
Snow Bowl State Forest	34	Boundary line is poorly marked and there is possible encroachment onto state land. Some private posted lines do not agree with state line	A, C, D, H
Taylor Creek State Forest	3	None	--
West Parishville State Forest	28	Adjacent landowner is using a trail to access a camp. No deeded ROW	A

West Parishville State Forest	28	Adjacent landowner is using a trail to access a camp. No deeded ROW	G
Whippoorwill Corners State Forest	41	Private inholding has been surveyed and lines do not agree with state boundaries	A
Whiskey Flats State Forest	2	Boundary line is poorly marked and there is possible encroachment onto state land	B

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 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

DECinfo Locator – An interactive online mapper that can be used to view properties, recreational assets, and trails on the Unit, which can help people plan outdoor activities. Located at DEC's Mapping Gateway: http://www.dec.ny.gov/pubs/212.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. (Also located at DEC's Mapping Gateway)

INFRASTRUCTURE

Table I.J. – Existing Access and Parking (see Figure 3 for maps)		
Category	**Total Amount**	**Needing Improvement**
Public Forest Access Roads	9.0 mi.	7.0 mi.
Haul Roads	18.7 mi.	18.7 mi.
Trails	48.0 mi.	48.0 mi.
Stream Crossings		
Bridges	3	0
Culverts	1	0
Related Infrastructure		
Parking Areas / Trailheads	11	3
Gates / Barriers	7	2

Use and Demand on Roads, Haul Roads and Parking Areas

Roads open to motor vehicles within this unit are frequently used by the general public to access state properties for hiking, fishing, hunting, trapping, timber harvesting, and accessing privately owned parcels located adjacent to state forests. There is a need for several gates on this unit that includes High Flats, and West Parishville State Forests which will be closed during spring mud season to protect DEC maintained roads from unnecessary maintenance.

Currently, the unit is in need of several more parking areas in order to accommodate the increased use of state lands for recreational uses. More parking areas would help to eliminate the public from having to park on neighboring public roads and highways. The following State Forests are in need of parking areas:

- Crary Mills State Forest
- High Flats State Forest
- Snow Bowl State Forest
- Whippoorwill Corners State Forest
- Whiskey Flats State Forest

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

- Downerville State Forest has a diverse trail system that receives a fair amount of use each year. Currently, there are several trails being constructed to take advantage of the unique scenery on a section of forest that has limited access across the Grass River. This section was previously accessed using a cable bridge, which has since deteriorated and is no longer present. Local users have expressed interest in building some type of foot bridge across the Grass River that would allow access to these parts of the trail system. A bridge would also allow access to hunters, mountain bikers, hikers, and other recreational enthusiasts.

Signs / Kiosks

There are currently 22 Facility ID signs and 1 kiosk on the unit.

There is a need for several kiosks in this unit to raise public awareness of the recreational opportunities available on state forests, as well as the history and management of these public lands. This plan proposes the following new kiosks in this unit:

High Flats - Kiosk near the mountain bike trails showing a map of the trails, sign in register, and pamphlets

Snow Bowl - Kiosk at the proposed new parking lot showing a map of the rock climbing area, sign in register, and pamphlets.

Whiskey Flats - Off Hayden Rd., kiosk near proposed parking area showing a map of the horse trails, sign in register, and pamphlets.

Whippoorwill Corners - Burnell Rd., kiosk near proposed parking area showing a map of the horse trails, sign in register, and pamphlets.

Boating and Fishing Facilities

There is a car top boat/canoe launch on the South Branch Grass River in Degrasse State Forest. Boating and fishing facilities as well as their use and demand are discussed under Recreation. Boating and fishing facilities as well as their use and demand are discussed under Recreation.

Designated Campsites and Lean-tos

There are several designated primitive campsites located in the southwestern portion of the unit, located on Downerville (2), Silver Hill (2), and Whippoorwill Corners (2) State Forests. Camping facilities, as well as their use and demand are discussed under Recreation.

Utility Transmission and Collection Facilities

The **Colton-Malone 3,** 115,000 volt electric transmission line operated by National Grid crosses Whiskey Flats State Forest. The Colton-Browns Falls 1 & 2, 115,000 volt electric transmission line operated by National Grid crosses Orebed Creek and Taylor Creek State Forests.

Operations Facilities

There are no DEC Division of Operations maintenance facilities located within this unit.

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.

St. Lawrence County is developing a county wide multi-use trail system that allows ATV use. There are currently many miles of roads and off highway routes completed and open for use.

FORMAL AND INFORMAL PARTNERSHIPS AND AGREEMENTS

There are no off-highway routes located on State lands within the St. Lawrence Foothills Management Area, but there are routes located on town roads that pass thru the unit. There are also off-highway routes located on nearby county forests. For additional information regarding the County Multi-use Trail, including a map, please visit the following link: http://www.northcountryguide.com/pages/atv-ride. St. Lawrence County identified a route in their 2012 Final Generic Impact Statement (FGEIS) for the proposed St. Lawrence County Multi-Use Recreational Trail System that is located on West Parishvile State Forest. A resolution by the County designated County Forest 37 open to ATVs in 2006 (Pilot Trail System), but it was never signed as open and it was not included as open on the maps produced by the County in 2008.

The proposed route is located partially on a legal Right of Way (ROW) that the County has across State land to access County Forest #37. The ROW also provides access to private parcels. From the Russell Turnpike Road, the proposed route follows the Red Pine Trail (ROW) to the BuckTtrail (ROW) to County land and then returns to State land where it follows the Kidney Killer Trail back to Russell Turnpike Road. The Russell Turnpike road is open for ATV use. Therefore this proposed route is not needed as a connecting link and will not be opened as part of the County multiuse trail.

Military Field Exercises

High Flats State Forest is sometimes used for training by local college Reserve Officer Training Corps (ROTC) units. The ROTC unit is typically issued a Temporary Revocable Permit for a 2 week or shorter period in which they practice orienteering and tactical training.

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 volunteer agreements with the department. For more information on these and other partnerships, please see SPSFM page 181 at http://www.dec.ny.gov/lands/64567.html.

There are currently five AANR/VSA agreements in place on this unit:

- Bonnie Howard Horse Trail Group for maintaining existing horse trails on Whippoorwill Corners State Forest.
- The Youth Conservation Corps for general conservation related actives on State Forest land.
- The St. Lawrence County Snowmobile Association for maintenance and grooming of trails.
- The St. Lawrence Mountain Biking Association for maintenance of trails on Downerville and High Flats State Forests.
- SUNY Potsdam Wilderness Education Program for maintenance of the rock climbing area on Snow Bowl State Forest.

St. Lawrence County is also a major partner with the Department. The Department has regular contact with County representatives about the management of these State Lands and looks forward to continuing that partnership in the future.

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. For further discussion of recreational issues and policies, please see SPSFM page 187 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 http://www.dec.ny.gov/pubs/212.html in Google format or in the State Lands Interactive Mapper.

Exceptional Recreational Opportunities

South Colton Climbing Craig - There is a small rock climbing site located near the Scovil Road in Snow Bowl State Forest that provides approximately 12 routes that range in difficulty from 5.6 to 5.11. Vertical ascent range from 25 to 35 feet of climbing. More information can be found at http://www.dec.ny.gov/lands/97265.html.

Wildlife-related Recreation

Hunting

Hunting is a major recreational use within the area including hunting for deer, turkey, ruffed grouse, waterfowl and small game species. Summaries of deer and bear harvests for this area can be found on the DEC's website at http://www.dec.ny.gov/outdoor/42232.html .

Hunting is allowed throughout this unit, with the exception of areas that are marked with "Safety Zone – No Shooting" signs near houses or other structures.

During the public scoping session for this UMP, several local sportsmen expressed interest in seeing more winter cover for game species such as ruffed grouse, woodcock, hare, and whitetail deer. Many of these species require early successional forest habitat, such as sapling and poletimber hardwood stands. Whitetail deer tend to prefer a variety of different habitat and cover conditions. Eastern Hemlock and Northern White Cedar stands tend to be the preferred winter cover habitat for whitetail deer. Areas with high concentrations of these preferred species will be managed using silvicultural practices. Having diverse forests in various stages of forest development usually provide adequate food, water, cover and space for various game species.

Management guidelines for woodcock (Sepik et al, 1996) recommend periodic patch clearcuts to provide various stages of forest succession including: recently harvested areas or fields (used for singing and roosting grounds), young sapling hardwood stands and alders (for foraging), and poletimber hardwoods (for nesting and brood rearing). Such areas might be managed on a 40 year rotation, with successive 4 acre blocks cut at 10 year intervals. This would provide continuous cover in each successive stage, located nearby the other needed cover types.

RECREATION

Guidelines for ruffed grouse management (Gullion, 1996) recommend similar periodic patch clearcuts to promote the growth of aspen, which is a major food source for grouse. Ruffed grouse need aspen in three age classes: sapling stands 4 to 15 yrs old (for brood cover), sapling and small pole stands 6 to 25 years old (for fall and spring cover), and older aspen stands (for food and as wintering and nesting cover). Areas with a high percentage of aspen in the overstory would be harvested in a series of patch clearcuts 1 to 20 acres in size, managed on a 30 year rotation, with a harvest made in successive patches every 10 years. Aspen may also be regenerated by patch clearcutting individual aspens to promote regeneration through root sprouts, which would provide an increase in aspen in localized parts of larger stands.

Fishing

This unit has a total of 112 distinct stream sections on or adjacent to State Forest parcels for a total of 70.5 miles. Approximately 38% (28.1 miles) of streams within the unit are designated as trout waters. Sections of Plumb Brook, South Branch Grass River, North Branch Grass River and Grass River currently receive annual stocking of Brown Trout. Brook Trout are only stocked in one small section of the South Branch Grass River along Degrasse State Forest. The number of stocked species are listed in Appendix E. Currently, a special angling regulation is in effect for trout in St. Lawrence County streams: Open April 1- October 15, any size, limit 5/day with only 2 longer than 12 inches. There are approximately 23.19 miles of named streams, and 5 ponds totaling 62.2 acres in this unit. They are listed in Appendix E.

There are 2 parking areas in Whippoorwill Corners State Forest that provide fishing access along Plum Brook.

Public Fishing Rights (PFR's) are permanent easements purchased by the NYSDEC from willing landowners, giving anglers the right to fish and walk along the bank (usually a 33' strip on one or both banks of the stream). Fishing rights are available on Plumb Brook in the town of Russell and the Grass River in the towns of Russell and Clare. More information about PFR's in this region can be found on the DEC website at http://www.dec.ny.gov/outdoor/44864.html.

Trapping

Trapping is a popular pastime in this unit. The large wetland complexes spread throughout the area support healthy populations of muskrat, beaver, mink, and river otter. Upland areas support populations of red fox, bobcat, coyote and fisher. Trapping is often necessary to control the large beaver population in this area, which often dam road culverts and cause localized flooding problems.

Viewing Natural Resources

Multiuse Trails in Downerville State Forest are especially popular for hiking, mountain biking, and snowshoeing along the Grasse River. There are also fantastic opportunities for viewing scenic waterfalls, pools, and riffles along several trails along Plumb Brook in Whippoorwill Corners and Silver Hill State Forests.

Camping

Camping is allowed anywhere on State Forests except that, as directed under 6 NYCRR section 190.3 (b), camping is prohibited within 150 feet of any road, trail, spring, pond or other body of water except at camping areas designated by the Department. In addition, 6 NYCRR section 190.4(a), prohibits camping in one location for four nights or more except under permit and 6

NYCRR section 190.4(e), prohibits a group of 10 or more individuals from camping on State lands at any time except under permit.

There are currently 6 primitive campsites available in this unit located on Downerville (2), Silver Hill (2), and Whippoorwill Corners (2) State Forests. These campsites receive occasional use by weekend campers and hunters.

Water-based Recreation

There is one major important river system in this unit. State frontage on the Grass River is primarily used for recreation including kayaking, canoeing, and fishing. The Grass River is accessible from a car top boat access site located on Degrasse State Forest. A campsite with a privy and fire ring has been proposed to be installed at this location.

Trail-based Recreation

*Table I.K. – Multiple Use Trails**

(see Figure 3 for maps)

Use	Length (mi.)
Foot Trail Use	75.7
Cross Country Skiing	75.7
Equestrian	75.7
Mountain Biking	75.7
Snowmobile	11.1

* Length available for each use includes use on PFARs; does not include municipal roads

Maps of roads, trails, and recreational facilities are included as Figure 3 – Infrastructure and Recreation Maps.

Foot Trail Use

There are extensive multiple use trails available for hiking in Downerville, Glenmeal, High Flats, Whippoorwill Corners, and Whiskey Flats State forests. The potential exists to create several miles of scenic hiking trails along the Grass River in Downerville State Forest and Plumb Brook in Silver Hill State Forest. Interest in non-motorized recreation has increased in the last 10 years, with many people pursuing recreational opportunities such as hiking for both exercise and to observe nature.

Cross Country Skiing

There is a large system of multiple use trails in Whiskey Flats State Forest which are open to cross country skiing. This includes 5.8 miles of PFAR's and Haul Roads, and 4.5 miles of trails. High Flats State Forest also contains 8.9 miles of trails open to skiing.

Glenmeal State Forest contains a 2.0 miles of loop trails which are open for skiing and snowshoeing. Whippoorwill Corners State Forests contains 7.4 miles of multiple use trails open to skiing. In addition, all of the Public Forest Access Roads and Haul roads in the unit are available for skiing. Interest in cross country skiing has been steady through recent years, although it is generally focused on the areas mentioned above.

RECREATION

Equestrian

This has been another popular activity on the St. Lawrence Foothills Management Unit. As authorized by 6 NYCRR section 190.8(n), “The riding, driving or leading of horses will be permitted anywhere on State lands under the jurisdiction of the Department of Environmental Conservation unless otherwise prohibited by law, regulation, posted notice or this subdivision”. 6NYCRR Section 190.8(n)(1, 2, & 3) directs that horses can’t be ridden on land devoted to intensively developed facilities or public safety, foot trails unless part of a publically maintained road, or specifically designated for horse travel, and also that no person shall ride or permit a horse on designated snowmobile trails and cross-country ski trails that are covered with ice or snow.

There is a large network of multiple use trails in Whiskey Flats and Whippoorwill Corners State Forests that were originally created as horse, skiing, and hiking trails. These trails are still used by both individual riders and larger organized group events. Many of the trails have suffered from a lack of maintenance and poor signage in recent years, and an effort is being made to rehabilitate and improve the most popular trails to promote continued usage. There has also been an increasing interest to have a horse trail system that would link Degrasse, Downerville and Whippoorwill Corners State Forests. A more formal horse trail system has been suggested by local equestrian riders in the unit.

Mountain Biking

Mountain bikes are allowed anywhere on State Forests except where prohibited by sign. Mountain biking in general has been increasing in popularity during the last 10 years. Riders often seek out challenging trails featuring hills, frequent elevation changes, picturesque scenery, and lengths of several miles. The potential exists for creating many additional miles of mountain bike trails in this unit.

The St. Lawrence Mountain Biking Association (SLMBA) has partnered with the DEC through the Volunteer Stewardship Agreement Program to develop mountain bike trails on state forests in this unit. There are currently 11 miles of trails open to mountain biking(and hiking) on Downerville State Forest in Russell, and 6.2 miles open on High Flats State Forest in Parishville. We will continue to work with SLMBA to create additional designated trails where they are deemed feasible.

Snowmobiling

Snowmobiles are allowed anywhere on State Forest roads or trails when covered by snow unless specifically posted against that use. Snowmobiles are prohibited by sign from using designated cross-country ski trails within the St. Lawrence Foothills Management Unit (6NYCRR Section 190.8[d]). One state snowmobile corridor trail and several secondary trails cross properties in this management unit, including portions of Catherineville, Downerville, Silver Hill, Snow Bowl, Whippoorwill Corners, and Whiskey Flats State Forests.

Most snowmobiling occurs on the main Public Forest Access Roads, Haul Roads, and various seasonal public roads that allow for many miles of uninterrupted travel. Snowmobiling is generally very popular, but recent winters have often been relatively warm with frequent thawing, which has caused shortened and unpredictable snowmobiling seasons. The St. Lawrence County Snowmobile Association (SLCSA) has partnered with DEC through the Volunteer Stewardship Agreement Program to maintain all snowmobile trails in the county.The

Department will continue to work with SLCSA and/or local snowmobile clubs to maintain current trails and work to rehabiliate former trails through the Volunteer Stewardship Agreement.

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.

In general, there has been a peaceful coexistence of most recreational and trail user groups. Some non-motorized trail users, such as hikers, mountain bikers, and skiers, have expressed a preference for trails which are relatively remote and not open to motorized users such as cars, ATVs, or snowmobiles, due to safety concerns as well as reduced noise.

Trail placement and maintenance in this unit requires careful planning to avoid wet soils, intermittent streams, and vernal pools, which are frequently encountered across the landscape. Once established, trails require regular maintenance and may require periodic closing during wet weather to prevent rutting. This is especially true of roads and trails open to motor vehicles.

This unit includes several large state forests that have few developed recreational facilities or infrastructure, such as designated trails, campsites, lean-to's, parking areas, or water access points. A significant number of new recreational opportunities could be expanded in this unit, while both maintaining user satisfaction and preserving the wild character of these forests.

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 following trails in the unit are open under the Motorized Access Program for People with Disabilities (MAPPWD) or Commissioner's Policy # 3 (CP3) program:

Catherineville State Forest	Firewood Trail	0.3 miles
High Flats State Forest	North Access Trail	0.4 miles
	NIMO Access Trail	0.7 miles
	Rodwell Mill Trail	0.2 miles
Whiskey Flats State Forest	Rosenbarker Brook Access Trail	0.3 miles
Adjacent MAPPWD/CP3 Trails:		
South Colton Easement	Dead Creek Marsh Trail	1.0 miles

UNIVERSAL ACCESS

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 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.

Consistent with ADA requirements, the Department incorporates accessibility for people with disabilities into siting, planning, construction and alteration of recreational facilities and assets supporting them.

In addition, Title II of the ADA requires in part, that services, programs and activities of the Department, when viewed in their entirety, are readily accessible to and usable by people with disabilities. The Department is not required to take any action which would result in a fundamental alteration to the nature of the service, program or activity or would present an undue financial or administrative burden. When accommodating access to a program, the Department is not necessarily required to make each existing facility and asset accessible, as long as the program is accessible by the other means or at a different facility.

This plan incorporates an inventory of all the recreational facilities and assets on the unit or area, and an assessment of the programs, services and facilities provided to determine the level of accessibility. In conducting this assessment, DEC employs guidelines which ensure that programs are accessible, include buildings, facilities, and vehicles, in terms of architecture and design, transportation and communication to individuals with disabilities.

For outdoor recreational facilities not covered under the current ADA standards, the Department will use standards provided under the Architectural Barriers Act, to lend credibility to the assessment result and to offer protection to the natural resource.

All new facilities, or parts of facilities that are constructed for public use, are to be accessible to people with disabilities. Full compliance is not required where DEC can demonstrate that it is structurally impracticable to meet the requirements. *(See Text of 28 CRF § 35.151 (a)(b) below)*. Compliance is still required for parts of the facility that can be made accessible to the extent that it is not structurally impracticable, and for people with various types of disabilities.

A record of accessibility determination is kept with the work planning record. Any new facilities, assets, and accessibility improvements to existing facilities or assets proposed in this plan are identified in the section containing proposed management actions.

28 CFR § 35.151 (a)(b)

(a) Design and Construction.

> *(1) Each facility or part of a facility constructed by, on behalf of, or for the use of a public entity shall be designed and constructed in such a manner that the facility or part of facility is readily accessible to and usable by individuals with disabilities, if the construction was commenced after January 26, 1992.*
>
> *(2) There are exceptions for structural impracticability:*
>
> > *"(i) Full compliance with the requirements of this section is not required where a public entity can demonstrate that it is structurally impracticable only in those rare circumstances when the unique characteristics of terrain prevent the incorporation of accessible features.*

(ii) If full compliance with this section would be structurally impracticable, compliance with this section is required to the extent that it is not structurally impracticable. In that case, any portion of the facility that can be made accessible shall be made accessible to the extent that it is not structurally impracticable.
(iii) If providing accessibility in conformance with this section to individuals with certain disabilities (e.g., those who use wheelchairs) would be structurally impracticable, accessibility shall nonetheless be ensured to persons with other types of disabilities, (e.g., those who use crutches or who have sight, hearing, or mental impairments) in accordance with this section."

(b) Alterations.

(1) Each facility or part of facility altered by, on behalf of, or for the use of a public entity in a manner that affects or could affect the usability of the facility or part of the facility shall. To the maximum extent feasible, be altered in such manner that the altered portion of the facility is readily accessible to and usable by individuals with disabilities, if the alteration was commenced after January 26, 1992.

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

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 would 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 would hold public meetings to discuss all possible leasing options and environmental impacts. A comprehensive tract assessment would 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.

Existing leases on the unit:

There are no existing or contemplated oil or gas leases on the unit.

Active wells on the unit:

- None

Inactive wells on the unit:

- None

Mining

Gravel/shale pits and other surface mines

- There are no active mining contracts, permits or operations located on state lands included in this unit. Two small gravel pits located on the Hayden Road in Whiskey Flats State Forest and the River Public Forest Access Road in Downerville State Forest were retired and reclaimed in 2012.

- Under Article 7 of the Public Lands Law, any citizen of the United States may apply for permission to explore and/or extract any mineral on State lands. However, to protect surface resources, current Department policy is to decline any commercial mining application(s) pertaining to any lands covered by this Management Plan.
- Taylor Creek State Forest has several illegal mining pits on certain portions of the forest that have been illegally mined for specialty crystals for many years. Under Title 6 New York Codes, Rules, Regulations Part 190: “No person shall deface, remove, destroy, or otherwise injure any plant like organisms, moss, rocks, soil, fossil, mineral, or object of archaeological or paleontolocial interest found or growing on state land, except for personal consumption, or under permit issued by the Department”. DEC Forest Rangers have contacted the St. Lawrence Rock and Mineral Club to make them aware that mining/harvesting of any minerals, rocks, and gems is unlawful without a permit from the Department. As of August 2017 the Department has posted the areas with signs that state the rules, regulations and use of state lands.
- Although there are no active mines within the state lands comprising this Unit, privately owned mining operations do exist within one-half mile to two miles of state lands in the Unit. There are only a few active sand and gravel mining operations located close to lands comprising the Unit. Surficial deposits surrounding these state lands are generally glacial till or lacustrine 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 is a concentration of sand and gravel mines in the Town of Parishville around the areas of West Parishville State Forrest and High Flats State Forest. Approximately nine sand and gravel mines are located in this area and vary in size with life of mines that range between one (1) and two hundred seventy-five (275) acres.
- Many of the mine sites located near the Unit are no longer in operation and have undergone reclamation, returning the land to a productive use.

Wind Facilities

- Atlantic Wind LLC, a subsidiary of Avangrid Renewables proposed a 40 turbine 100 megawatt (MW) wind power facility in the Town of Hopkinton. This proposed project was recently withdrawn by the developer. If approved, the proposed wind facility would have been constructed on private properties that are located near Catherinesville and Whiskey Flats State Forests. There were no turbines proposed to be located on State Forest lands. Large wind projects with a capacity to generate 25 megawatts or more are required to be reviewed according to the provisions of the Public Service Law Article 10 siting process. Article 10 provides a detailed review and approval process for major electric generating facilities in the New York State by addressing state and local permitting requirements in a single process. Wind projects with a capacity to generate less than 25 megawatts (MW) do not have to go through the Article 10 process but are subject to applicable state and local laws or regulations, including the State Environmental Quality Review Act (SEQR). For information can be found at http://www.dec.ny.gov/energy/40966.html.

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.

There is potential for partnering with local communities to promote recreation opportunities within this unit, in particular mountain biking, horse riding, snowmobiling, hiking, canoeing and kayaking. Several local horse riding clubs have expressed interest in promoting riding opportunities to others from outside the area, especially in Whiskey Flats State Forest and Whippoorwill Corners State Forest.

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 lands are assessed as if privately owned.

Detailed tax information can be obtained by contacting the St. Lawrence County Real Property Department (http://www.co.st-lawrence.ny.us/Departments/RealProperty/). The following taxes are projected for State lands in this unit for the 2014 tax year:

- Township Tax (incl. highway, general, fire taxes, etc) for all Towns: $60,719.88

  Colton – $2,235.46 Hopkinton –$8,213.12 Parishville – $12,231.68

  Pierrepont – $8,481.13 Potsdam – $0 Russell – $29,558.49

- Total School Tax for all districts (totals are for the 2014-15 tax year): $113,445.62

  Canton – $731.93 Colton-Pierrepont – $34,521.57 Edwards-Knox – $31,159.80
  Parishville-Hopkinton – $47,032.32 Potsdam – $0

- Total County Tax (including chargebacks): St. Lawrence County - $5,123.97

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.

FOREST PRODUCTS

Information on upcoming timber production 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 DEC administered lands is provided by the Environmental Conservation Law. To perpetuate the growth, health and quality of the forest resources, the Department has implemented a sustained yield timber management program for State Forest lands.

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 publically advertised and competitively bid.

This unit has a long history of producing forest products for the local economy. The timber management program has provided the local community with sales of firewood, cedar posts, black ash, pulpwood, and small lots of pine sawtimber. In recent years, there has been a steady demand for firewood and small pine lots, which are still offered for sale on a limited basis. There has been an increase in sales of white pine and red pine sawtimber, and red pine utility poles, due to the abundance of sawtimber sized pine stands planted during the CCC era that are now reaching maturity. There are also many plantations that are in need of improvement thinning's of pulpwood size and quality stands, but the closure of most nearby pulp mills within the last 30 years has made it increasingly difficult to sell low quality pulpwood.

This plan identifies 5,205 acres of stands suitable for timber harvesting within the next 10 years, as well as 6,846 additional acres that may be suitable for harvesting more than 10 years in the future. These additional stands will be evaluated further during the next update of this management plan.

Stand Identification maps are included as Figure 4. Maps of Current Forest Cover Type are included as Figure 5. Maps of Management Direction for forest stands are included as Figure 7.

Non-Timber Forest Products

In addition to timber and firewood, forests are valuable for the many non-timber resources they provide. Members of the Mohawk Nation use the forest for hunting and fishing, as well as collection of medicinal plants, berries, mushrooms, and sweet grass which are all important in their traditional culture. The Mohawk Nation and the SUNY ESF Ranger School have also partnered with the DEC to create an experimental planting of black ash located on Glenmeal State Forest. Black ash is an important species in native culture used for basket making.

Maple tapping is also a non-timber resource that this unit provides. Many small roadside maple tapping contracts have been done in the past on Downerville State Forest in stands A-47, A-50 and Whippoorwill Corners State Forests in stands C-1, C-7. There has also been some interest in larger maple tapping contracts for producers in the area. The maple syrup industry is a large part of the local economy within this unit.

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.

Invasive Species

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

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

Plants	Status
Common Reed (*Phragmites australis*)	It occurs in a patchy distribution throughout wetlands in the unit.
Common Buckthorn (*Rhamnus cathartica*)	Common along roads and near houses. Difficult to eradicate once established.
Honeysuckle (*Lonicera* spp.)	Some understory infestations near old house sites and along powerlines.

FOREST HEALTH

Table I.L. – Invasive Species, Pests and Pathogens	
Japanese Knotweed (*Fallopia japonica*)	Infrequently found near old house sites and along waterways.
Pale Swallow-wort (*Vincetoxicum rossicum*)	Currently rare but is becoming more common in disturbed areas along roads and powerlines. Spreads quickly once established.
Purple Loosestrife (*Lythrum salicaria*)	Common in wetlands and roadside ditches.
Diseases	**Status**
Beech Bark Disease	This disease is caused by the interaction of an invasive beech scale insect (*Cryptococcus fagisuga*) which feeds on the bark surface, and the fungi *Nectria coccinea* var. *faginata* and *Nectria galligena* which form cankers in the scale feeding area. Most beech trees become infected and die when they reach 6-12" DBH, resulting in large beech sprout thickets which grow for 5-20 years and then are killed back by the disease. A small number of beech trees grow to sawtimber size without becoming diseased and appear to show some resistance to infection.
Butternut Canker (*Sirococcus clavigignenti-juglandacearum*)	This fungal disease is very common and it is rare to find sawtimber sized Butternut trees that do not show signs of injury. Butternut is uncommon on our State Forests but is present is some areas.
Dutch Elm Disease (*Ophiostoma ulmi*)	Dutch elm disease has had a severe negative impact on both American and Slippery elms which once dominated wetlands in this unit. Most trees become infected and die when they reach 8-14" DBH, with some trees infrequently reaching 20 to 30" DBH before succumbing.
Scleroderris Canker (*Gremmeniella abietina*)	This is a fungal disease affecting primarily red pine plantations. There was a high incidence of defoliation and mortality of red pine during the 1960s and 1970s, but damage has been low in recent years.
White Pine Blister Rust (*Cronartium ribicola*)	Common in both natural and planted white pine stands. It is often more prevalent on wetter sites where high water tables impede rooting and high atmospheric moisture promotes transmission of the fungal spores.
Insects	**Status**

Table I.L. – Invasive Species, Pests and Pathogens	
Emerald Ash Borer (*Agrilus planipennis*)	In 2017 it was confirmed in Northern St. Lawrence County in and around the Hogansburg area, and now extends southwest along much of the shore of the St. Lawrence River. It has the potential to cause widespread and devastating mortality in wetlands dominated by green and black ash. Sampling using lure traps has been conducted yearly since 2009 but no Emerald Ash Borers have been found in this unit.
Pine False Webworm (*Acantholyda erythrocephala*)	This insect has caused locally significant defoliation and mortality of Scotch and White Pines in eastern St. Lawrence County. It was first reported locally in 1981 and populations have fluctuated greatly, with a particularly large outbreak between 1987 and 1996. Insect damage has been low since that time.
Pine Shoot Beetle (*Tomicus piniperda*)	This insect is native to Europe and was first discovered in New York State in 1992. It can infest all of the locally growing pine species, especially Scotch and red pines. St. Lawrence County is currently under a quarantine due to the pine shoot beetle which restricts the transport of pine trees and logs during certain times of the year.
Sirex Wood Wasp (*Sirex noctilio*)	Confirmed in nearby Jefferson Co. on the Fort Drum Military Reservation. Tends to cause mortality of low vigor pine trees in stands which are overstocked or are otherwise experiencing growing stresses. Sampling using lure traps was conducted in 2006 but no Sirex Wood Wasps were found in this unit.
White Pine Weevil (*Pissodes strobi)*	Common in both natural and planted white pine stands. Insect feeding kills the topmost leader which causes the tree to grow in a twisted and crooked manner. Less damage occurs to young pine seedlings when they are grown under conditions of partial shade during early development.
Animals	**Status**
Feral Swine	There have not been any reported cases of feral swine on the properties in this unit, but they are increasing in numbers and may become established in the area.

Pine False Webworm

Introduction

Probably the most significant forest health issue affecting this management unit has been the impact of repeated defoliation on several thousand acres of pine trees by an insect known as the pine false webworm. A native of Europe, this pest was first discovered in North America in 1925 at Chestnut Hill, Pennsylvania. From the time of its discovery until its appearance in St. Lawrence County in 1981, this insect was generally considered a relatively minor pest of ornamentals, young plantations under 20 feet tall, and Christmas tree farms. While some

damage of economic importance occurred in Europe during the late 1930's and early 1940's, experiences in North America have been generally sporadic in nature, minor in extent and of fairly short duration. There is no historical record either nationally or internationally of any problem even remotely approaching the infestation in both St. Lawrence and Franklin Counties. This outbreak was both unique and unprecedented.

The Insect – Its Life Cycle and Habits

This web spinning member of the sawfly family has a single generation each year. The adult flies lay their eggs on needles from the previous year's growth. Young larvae begin to hatch in late May at which time they construct an elongated web or nest on the end of the branch within which they feed. Feeding is completed by early July and the full-grown larvae drop to the ground where they spend the winter just below the soil surface. After undergoing a short pupation in early spring, the adult flies emerge again from the soil to begin a new generation. Many pine species are vulnerable to attack by the webworm and while red pine has been favored in the past in both Europe and Canada, white pine has been the favored host in the local infestation. Except under extreme duress, feeding is usually restricted to older needles.

Local History

Defoliation damage was first discovered in 1981 on 70 acres of plantation pine located just down river from the hamlet of Fort Jackson in northeastern St. Lawrence County. By 1996, the infestation had expanded its range to include 144,000 acres in St. Lawrence County as well as an even greater area in neighboring Franklin County. Since then, population densities have been decreasing and the acreage of heavy defoliation in St. Lawrence County has been reduced to about 400 acres (as of 2001).

Impact and management Decisions

By the fall of 1992, some stands within the Whiskey Flats State Forest were experiencing 20% sawtimber mortality and many more trees that were still alive were doomed by virtue of having secondary wood borers present. A decision was made to salvage 724 acres of merchantable white pine on the Whiskey Flats and Catherineville State Forests. With the exception of about 15 acres that was replanted with red pine and larch, adequate residual stocking of natural regeneration and/or other planted species remained in the harvested areas.

Research

Under the direction of Dr. Douglas Allen from the College of Environmental Science and Forestry at Syracuse, two major study projects were conducted from 1993 through 2000 for the purpose of providing landowners with practical management tools. Final results and recommendations are forthcoming.

Future Management

Where practical and consistent with current departmental policy, the management of the pine resource within this unit will incorporate the findings and recommendations that result from completed study projects.

Outlook

The future for the white pine resource is perhaps somewhat more guardedly optimistic than once feared. They have exhibited a remarkable ability to re-establish healthy crowns once an infestation passes and natural white pine regeneration is present in most of the stands that were salvaged. However, possible reasons for this downward trend in the pine false webworm population have as yet to be explained and there remains the potential for a flare up.

January 1998 Ice Storm

The ice storm of January 1998 caused severe damage to most of the hardwood stands in the St. Lawrence Foothills Unit. Virtually every hardwood tree sustained damage. The ice load was so heavy that large branches were ripped off the trees and some main stems were broken. Many trees suffered over 75% crown loss and very few trees sustained less than 25% crown loss. Damage to sapling sized reproduction was variable with some patches bent over at such an angle that they will not recover. The long term effects of such a severe ice storm on forests are unknown. Many different scientific research projects are ongoing and as results are published they will be incorporated into plans when consistent with Department policies. One such ongoing study by the college of Environmental Science and Forestry at Syracuse is being conducted on the Taylor Creek State Forest within this management unit. The ice storm was a catastrophic event which caused fairly drastic changes in the forest environment. With the loss of overstory crowns there is a greatly increased light level on the forest floor. This has resulted in at least a temporary change in microclimate. Which species of plants and animals will benefit and which will be harmed is unknown at this time.

State Forests contain many stands which have been carefully managed in the past with improvement thinnings and harvests. These stands are of very high quality and have valuable species. On this Unit many of the best stands containing mature sawtimber were badly damaged. Due to the severe damage to so many high quality trees containing lumber useful for fine furniture, flooring and many other wood products, salvage harvests were conducted on 1,975 acres of state forests in the unit. The health of the heavily damaged overstory trees in stands not salvaged will be monitored in the future.

Another ice storm in December of 2013 resulted in a coating of approximately 1 inch of ice on trees across the county for one week. Many trees were severely damaged, especially pole-timber sized red and Scotch pine plantations which had recently been thinned. Some stands suffered 25-50% mortality of trees, many of which snapped at the main stem due to the heavy ice loads. Surviving conifers and softwoods suffered from extensive crown damage and broken tree limbs. Damage was especially severe in the central and southwestern parts of St. Lawrence County.

Efforts have been made within the last 5 years to delineate and treat some invasive plant species, such as Japanese Knotweed and Pale Swallow-wort. They are currently found in isolated patches, and there is still the possibility of eradication by herbicide application. Aquatic invasive plants such as Common Reed and Purple Loosestrife should also be delineated and monitored, although this has not yet been feasible due to staffing constraints. A summer intern or field technician assigned to map and eradicate invasive species would be of great benefit in this unit.

Managing Deer Impacts

There is limited ability to manage deer impacts using silvicultural systems. 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.

There are localized areas on state forests in this unit where deer browse is very high and may be impeding the regeneration of some preferred browse species, such as sugar maple, yellow birch, and red maple. There is a need in this unit to better map areas that are suffering from poor regeneration due to deer browse, and document the intensity of deer browse by use of fenced deer enclosures or deer density surveys.

Summary of Ecoregional 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 in and around this management unit. The St. Lawrence Foothills UMP falls within the St. Lawrence - Champlain Valley (79%) and Northern Appalachian - Acadian (21%) Ecoregions.

Ecoregion Summaries

The St. Lawrence – Champlain Valley (SL-CV) Ecoregion includes vast stretches of fertile land, rich woodlands, vibrant wetlands, dramatic cliffs, one of the continent's largest rivers, the St. Lawrence, and the continent's sixth largest lake, Lake Champlain (Thompson 2002). The ecoregion hosts a number of endemic species as well as more widespread species at the edges of their ranges. It provides critical habitat for migratory birds, breeding grassland birds, and wintering raptors.

Because of its fertile soils, relatively mild climate, and stunning scenery, the ecoregion has been used by humans for at least 10,000 years, and very heavily for the last 300. Some of the species that once occurred in the ecoregion have been extirpated, either throughout the east or in the ecoregion alone. Others are in decline or otherwise vulnerable. The upland and wetland natural communities of the region have been reduced in many cases to small, isolated fragments that harbor exotic species and have lost much of their integrity. The lakes, ponds, rivers, and streams that define this ecoregion are compromised by pollution and damming. Conservation of this region's biological diversity will be a challenge.

Several key threats to the biological diversity of the ecoregion were identified. These threats include water flow manipulation, landscape fragmentation, invasive exotic species, intensive agriculture, intensive forestry, a weak conservation ethic in the human population overall, and pollution of all kinds. Abating these threats will require creative approaches and hard work. Restoration of ecological systems and their component species will be vital to success in conserving both the uplands and the aquatic features of the ecoregion. Influencing public policy in the areas of water management, agriculture, forestry, and transportation will be crucial. Deep and committed partnerships in all these endeavors will be more important than ever to be successful in achieving the goals for the SL-CV.

The Northern Appalachian – Acadian (NAP) Ecoregion extends over large ecological gradients from the boreal forest to the north and deciduous forest to the south (The Nature Conservancy n.d). The Gaspe Peninsula and higher elevations support taiga elements. At lower elevations and latitudes, there is a gradual shift toward higher proportions of northern hardwood mixed-wood species which marks the transition into the Acadian forest. It also supports local endemic species, as well as rare, disjunct, and peripheral populations of arctic, alpine, Alleghenian and coastal plain species that are more common elsewhere. In New York, the primary portion of the NAP Ecoregion consists of the Adirondack Forest Preserve and Tug Hill Plateau.

The forest is a heterogeneous landscape containing varying proportions of upland hardwood and spruce-fir types. It is characterized by long-lived, shade-tolerant conifer and deciduous

species, such as red spruce, balsam fir, yellow birch, sugar maple, red oak, red maple, and American beech, while red and eastern white pines and eastern hemlock occur to a lesser but significant degree.

There has been a historical shift away from the uneven-aged and multi-generational “old growth” forest toward even-aged and early successional forest types due to human activities. This mirrors the historical trends toward mechanization and industrialization within the forest resource sector over the past century and shift from harvesting large dimension timber to smaller dimension pulpwood.

For vertebrate diversity, the NAP ecoregion is among the 20 richest ecoregions in the continental United States and Canada, and is the second-richest ecoregion within the temperate broadleaf and mixed forest types. The forests also contain 14 species of conifers, more than any other ecoregion within this major habitat type, with the exception of the Southern Appalachian-Blue Ridge Forests and the Southeastern Mixed Forest.

Characteristic mammals include moose, black bear, red fox, snowshoe hare, porcupine, fisher, beaver, bobcat, lynx, marten, muskrat, and raccoon, although some of these species are less common in the southern parts of the ecoregion. White-tailed deer have expanded northward in the ecoregion, displacing (or replacing) the woodland caribou from the northern realms where the latter were extirpated in the late 1800s by hunting. Coyotes have recently replaced wolves, which were eradicated from this ecoregion in historical times, along with the eastern cougar.

A diversity of aquatic, wetland, riparian, and coastal ecosystems are interspersed between forest and woodland habitats, including floodplains, marshes, estuaries, bogs, fens, and peatlands. The ecoregion has many fast-flowing, cold water rocky rivers with highly fluctuating water levels that support rare species and assemblages.

Ecoregional Assessment

Table II.A. Land Use and Land Cover for the Landscape Surrounding St. Lawrence Foothills Unit

Land Use and Land Cover	Approximate Acreage	Percent of Landscape
Mixed Forest	3	>1
Crop Land and Pasture	2	>1
Evergreen Forest Land	2	>1
Residential Commercial & Services	958 496	13 7
Transportation & Utilities	2	>1
Other Urban/Built-up Land	186	2
Deciduous Forest Land	6	>1
Mixed Urban/Built-up Land	13	>1
Strip Mines, Quarries & Gravel Pits	927	13
Lakes	85	1
Reservoirs	1,787	25
Forested Wetland	2,369	33
Non-forested Wetlands	206	3
Industrial	9	>1
Other Agricultural Land	9	>1
Transitional Areas	181	2
Old Growth		
Total	**7,241**	**100**

Local Landscape Conditions

The local landscape consists of a patchwork of farms, small woodlots, and rural communities. In general the state properties in this unit provide a higher percentage of sawtimber sized forests, larger contiguous ownership, and less development of roads and infrastructure than the surrounding privately owned landscape. Due to these factors, state forests may be better able to fill landscape gaps such as later successional forests, habitat for species which need larger territories or more uninterrupted interior forest habitat (such as hermit thrushes or goshawks), and forest structural characteristics which take long periods to develop (such as large diameter snags and coarse woody debris). Connectivity corridors along the major watercourses in the unit may provide opportunities that are not available on smaller adjacent private parcels.

Habitat Related Demands

This unit contains very little early successional habitat conditions throughout the unit as a whole. Early successional habitat is essential for various species of game birds such as woodcock, and ruffed grouse. Early successional forest habitats are those in the beginning stages of development that usually contain small sapling and pole sized timber of early successional tree species such as aspen, birch, and pines. Many of the game birds depend, at least in part, on early successional habitat for cover, food, and mating. This unit has relatively low amounts of areas that contain these young forests or early successional habitats. Creating early successional habitat can be achieved by using silviculture. Silviculture is the art and science of controlling the growth and development of trees and is a tool that is used to manipulate natural disasters or disturbances to a particular landscape. Clearcuts or patch clearcuts tend to create early successional habitat by removing the majority or all of the trees present within an area and allowing for a new generation of trees to grow. Clearcuts are especially useful in large mature stands of aspen that no longer provide habitat conditions that many game species require. Once a clearcut of a mature aspen stand takes place, sunlight will penetrate the forest floor and a new stand or cohort of trees will start to grow within a couple of years, depending on the site.

Two categories of habitat that are well represented in this unit, more so than in other regions of the state. There are over 7,000 acres of wetlands, ranging from open water beaver ponds and wet grasslands, to seasonally flooded shrub lands dominated by speckled alder, viburnums, winterberry, and dogwoods. They are especially important not only for resident plants and animals but also for large flocks of migrating waterfowl which use these areas on a seasonal basis. A major goal of future management of this unit will be to maintain the quality of these areas by preserving existing hydrology and utilizing Best Management Practices in all timber harvesting and road building activities to minimize sedimentation, and delineating and controlling invasive species such as purple loosestrife and common reed.

Sawtimber-sized white pine stands are another unusually common habitat type in this unit. The quality of this white pine is generally better than in other regions of the state. There is a reduced incidence of damage caused by white pine weevil, better regeneration of white pine seedlings, and an abundance of sandy soils on which white pine attains its best growth. There are several thousand acres of white pine plantations planted during the CCC era (1934-1941) that are now approximately 18-24” DBH and 75 years old. These stands are currently even aged, with 2 distinct age classes: the sawtimber sized overstory trees, and a layer of seedling and poletimber sized regeneration of pine, maple, and spruce species. These stands will slowly be converted to uneven aged stands, by periodic partial harvests which open the overstory and establish new age classes of trees, while maintaining a significant amount of the original overstory. This will help address a shortage of uneven aged forests in the unit, while also perpetuating a significant conifer cover across the landscape.

There are also hundreds of acres of naturally occurring white pine stands in the unit. Many of these areas are on marginally wet drainage, with a canopy of large scattered sawtimber sized white pine trees, and an understory of swamp hardwood poletimber. These areas are in general unsuitable for timber harvesting due to poor drainage, and will be left as Natural Areas to develop and regenerate without active management.

This ecoregion has a shortage of some habitat types, especially native grassland communities and early successional shrublands. Many of the state properties in the unit were originally in these categories when acquired in the 1930s, 1940s, and 1960s, but have since advanced to later successional stages such as poletimber and sawtimber sized forests. Grasslands cannot easily be re-established on areas which have succeeded to forests. However, any future state land acquisitions that contain grasslands or shrublands should be considered for periodic mowing, brush cutting, or other activities to postpone succession and maintain early successional habitat.

There is also a shortage of late successional (>140 yrs old) forests in this unit. Many of the current state forests were cleared for agriculture before state acquisition. The oldest stands in the unit are generally plantations ranging from 70 to 80 years old, with some scattered older native trees in less accessible areas and on marginal sites. A goal of this plan will be to increase the percentage of late successional stands over time, by removing from timber management stands which are: wet or marginally wet, inaccessible, prone to windthrow or other post-harvest deterioration, or which contain locally rare or threatened habitat types. Approximately 2,600 acres of forest have been included in the Natural Areas category, which will receive minimal timber management now or in the future.

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	Silvicultural practices are guided by prescriptions created for each stand prior to harvest. Sales are closely monitored during harvest to ensure compliance with Best Management Practices (BMP's). Maintaining forest health, vigor, and sustainable harvesting are integral parts of all state forest management.
AFM II – Use harvesting plans to enhance diversity of species, habitats & structure	Future management will promote a diversity of habitats by increasing the percentage of older forests, gradually converting even-aged white pine plantations to uneven-aged stands with several age classes, and creating scattered early successional stands across the landscape by harvesting mature red pine and Scotch pine plantations and converting them to seedling pine and hardwood forests.
AFM III – Fill ecoregional gaps to maintain and enhance landscape-level biodiversity	Shrublands and fields will be maintained by mowing or brush cutting to postpone succession to forest. Later successional forests >140 years old will eventually develop as pine plantations continue to age and develop late successional characteristics.
AFM IV – Enhance matrix forest blocks and connectivity corridors where applicable	Matrix Forest Blocks in State Forests will be managed with an emphasis on forest contiguity, and new acquisitions that enhance these blocks will be considered. Connectivity corridors may be enhanced by selected acquisitions that link isolated state forest parcels.
AFM V – Practice forest and tree retention on stands managed for timber	Forest and tree retention will be practiced in all silvicultural treatments, especially regeneration harvests, which convert red pine and Scotch pine plantations to more native species mixes.

Management Objectives and Actions

Objectives

Table III.A. –Ecosystem Management Objectives and Actions	
Objective	**Actions**
HCVF- Identify and maintain HCVFs	All HCVFs will be identified and will be managed using guidelines to protect, maintain and enhance their values present within this unit.

Resource Protection

Table III.B. –Resource Protection Objectives and Actions	
Objective	**Actions**
Soil and Water Protection	
SW I – Prevent erosion, compaction and nutrient depletion	Special management zones will be maintained around sensitive natural features. Harvesting will be limited to dry or frozen ground conditions. Best Management Practices will be used to protect water quality.
SW II – Identify and map SMZ's and adapt management for highly-erodible soils	Special management zones have been created around state and classified wetlands, classified and unclassified streams, rivers, and seep/spring areas. Stands with many vernal pools or seasonally wet conditions will receive minimal or no timber management.
At-Risk Species and Natural Communities	
ARS I – Protect ARS&C ranked S1, S2, S2-3, G1, G2 or G2-3 where present	Known locations of rare or threatened species are protected by special management zones. Areas proposed for timber harvesting are searched for RTE species before marking begins.
ARS II – Conduct habitat restoration and promote recovery of declining species	Habitat needs of declining species will be considered in all management actions in this unit.
ARS III - Consider protection and management of Species of Greatest Conservation Need	Many SGCN occupy wetlands and corridors located along streams and rivers, which are already protected by special management zones. Species such as northern goshawk are monitored for nesting activity, and any nearby timber harvesting or construction is scheduled to avoid goshawk disturbance.
Visual Resources and Aesthetics	
VR I – Maintain or improve overall quality of visual resources	Corridors along major streams and rivers have been removed from active timber management. Aesthetics are considered in all silvicultural prescriptions.

Table III.B. –Resource Protection Objectives and Actions	
Objective	**Actions**
VR II – Use natural materials where feasible	Wood and stone will be used for building projects whenever possible.
VR III – Lay out any new roads/trails to highlight vistas and unique natural features	Hiking and mountain biking trails have been recently developed in Downerville and High Flats State Forests. Other trails are proposed in Downerville, High Flats, Orebed Creek, Snow Bowl, Taylor Creek, Whippoorwill Corners, and Whiskey Flats State Forests.
VR IV – Develop kiosks to provide education and reduce sign pollution	Kiosks are proposed for major recreational areas such as in High Flats, Snow Bowl, Whippoorwill Corners, and Whiskey Flats State Forests.
Historic and Cultural Resources	
HC I – Preserve and protect historic and cultural resources wherever they occur	Features such as building foundations, wells, stone walls, and CCC waterholes are identified before any nearby timber harvesting occurs, and uncut buffers are used to minimize disturbance.
HC II – Inventory resources in GIS and with OPRHP	Historic features will be identified and added to the State Lands Assets GIS layer.

Infrastructure and Real Property

Table III.C. –Infrastructure and Real Property Objectives and Actions	
Objective	**Actions**
Boundary Line Maintenance	
BL I – Maintain boundary lines	Boundary lines will be maintained throughout the unit on a 5-year maintenance schedule.
BL II – Address encroachments and other real property problems	Requests have been made to survey encroachments, re-establish missing monuments, and survey recently acquired state forest parcels.
Infrastructure	
INF I – Provide and maintain public forest access roads, access trails, haul roads, parking areas, and associated appurtenances	Roads, trails, and infrastructure on this unit will be maintained on an as needed basis. New parking areas and recreational trails are proposed on State Forests, which currently contain little developed infrastructure.

Objectives

Table III.C. –Infrastructure and Real Property Objectives and Actions	
Objective	**Actions**
INF II – Upgrade, replace or relocate infra-structure out of riparian areas where feasible	Infrastructure will not be located near riparian areas, except for non-motorized recreational trails and river access points.
INF III – Resolve issues of uncertain legal status or jurisdiction	The status of former public roads and maintenance responsibilities will be discussed as part of the planning process.
INF IV – Prevent over-development	Planning and development will focus on maintaining the rural and wild character of properties in this unit.

Public/Permitted Use

Table III.D –Public / Permitted Use Objectives and Actions	
Objective	**Actions**
Universal Access	
UA I – Use minimum tool approach to provide universal access to programs	New facilities proposed in this plan will be built to current accessibiity standards
Formal and Informal Partnerships and Agreements	
PRT I – Collaborate with local organizations and governments to reach mutual goals	The Department will work with local governments and recreational organizations to promote access and responsible use of state managed properties.
PRT II – Consider full range of impacts associated with VSAs and recurring TRPs	VSA's and TRP's will continue to be evaluated to ensure that they provide a net benefit to the experience of all users of state properties in this unit.
Recreation	
REC I – Accommodate public use while preventing illegal activity, reducing impacts and enhancing public safety	Forest Ranger staff will continue to patrol properties in this unit and enforce all applicable laws and regulations. The public will be informed of low intensity use standards such as 'leave no trace" camping.
REC II – Provide public recreation information	Recreational opportunities in this unit will be publicized by creation of new informational kiosks in the unit, as well as development of public web pages for each state forest in the unit.

Table III.D –Public / Permitted Use Objectives and Actions	
Objective	**Actions**
REC III – Inventory recreational amenities and schedule recreation management actions	Existing facilities and trails are inventoried in this plan, as well as the creation of proposed new trails, parking areas, and other infrastructure.
REC IV – Enhance fish & game species habitat	Techniques to improve game management will be considered whenever possible. For example, harvests might promote early successional habitat for grouse or rabbits, or protect areas known to serve as winter deer yards.
Off-Highway and All-Terrain Vehicle Use	
ATV I – Enhance recreational access by people with disabilities under the MAPPWD program	There are currently 5 MAPPWD accessible ATV routes located on Catherineville, High Flats, and Whiskey Flats State Forests. There is also 1 MAPPWD accessible ATV route located on the South Colton Conservation Easement parcel directly adjacent to High Flats State Forest.
ATV II – Consider requests for ATV connector routes across the unit	Requests for ATV connector routes will be evaluated on a case by case basis. Evaluation and consideration will follow criteria detailed on page 223 of the SPSFM at http://www.dec.ny.gov/lands/64567.html .
Mineral Resources	
MR I – Provide for mineral exploration and development while protecting natural resources and recreation	There are currently no proposals for mineral exploration or development in this unit.
Supporting Local Communities	
LC I – Provide revenue to New York State and economic stimulus for local communities	Timber harvesting will continue on state forests in this unit, to provide both jobs and forest products for the local community.
LC II – Improve local economies through forest-based tourism	Recreational opportunities will be maintained or increased throughout this unit through volunteer stewardship agreements or through DEC Operations staff. Kiosks and web pages created for state forests in the unit will improve public knowledge of available trails and facilities.
LC III – Protect rural character and provide ecosystem services to local communities.	Properties will be managed to maintain their rural and minimally developed characteristics.

Management Objectives and Actions

Objectives

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	Timber management is practiced in carefully selected stands in this unit, to improve forest vigor and health, promote a diversity of tree species and age classes, and provide forest products needed by the community.
FP II – Educate the public about the benefits of silviculture	Informational signs are posted near the landing on all timber sales offered through a bid process, which include sale objectives and contact information for the forester supervising the sale.
Plantation Management	
PM I – Convert plantation stands to natural forest conditions where appropriate	Species that are non-native (Scotch pine, Japanese and European Larch) or do not naturally regenerate well in this area (red pine) will slowly be replaced by white pine and native hardwood forests.
PM II – Artificially regenerate plantations where appropriate	Plantations are gradually being converted to forests with a variety of species and age classes. White pine and red spruce seedlings are sometimes planted underneath existing red pine plantations where natural regeneration is absent.
Forest Health	
FH I – Use timber sales to improve forest health and the diversity of species	Improvement thinnings are used to reduce tree overcrowding, remove crooked and diseased trees, create canopy gaps which allow the development of tree regeneration, and sustain early successional species which would otherwise decline in numbers.
FH II – Protect the unit and surrounding lands from introduced diseases and invasive plant and animal species	Forests are monitored for invasive plant species such as pale swallow-wort and Japanese knotweed, and selected areas are treated by limited herbicide application.
Managing Deer Impacts	
DM I – Monitor impacts of deer browsing on forest health and regeneration	Deer browse is monitored by tree regeneration surveys conducted during forest inventory mapping, and pre-timber harvest regeneration surveys.

Table III.E. –Forest Management and Health Objectives and Actions	
Objective	**Actions**
DM II – Address issues of over-browsing	Over-browsing of tree regeneration by deer will be addressed locally by promoting a higher deer harvest in areas with a demonstrated pattern of excessive browse. The Deer Management Assistance Program (DMAP) may be used to issue more deer harvesting permits in areas with high deer populations.
Fire Management	
FM I – Support Forest Rangers in controlling the ignition and spread of wildfires	Timber sales require the lopping of tree branches and slash to minimize the threat of wildfire. Timber harvesting may be suspended during periods of extreme drought.
FM II – Maintain naturally occurring fire-dependent communities	There are no known fire dependent communities located in this unit.
Carbon Sequestration	
CS I – Keep forests as forests, where appropriate	Forests in this unit will be maintained in tree cover for the long term. Periodic timber management will promote a diversity of tree species, sizes, and age classes across the larger landscape.
CS II – Enhance carbon storage in existing stands	The proportion of later successional forests >140 years will gradually increase, creating an increase in long term carbon storage in these forests.
CS III – Keep forests vigorous and improve forest growth rates	Periodic thinning will reduce overstocking and remove diseased and defective trees. An example of this would be an improvement thinning in a white pine plantation, which would focus on removing crooked trees damaged by the white pine weevil and trees weakened by infection with white pine blister rust.
CS IV – Sequester carbon in forest products	Carbon will be sequestered in wood which is harvested for production of sawtimber and utility poles.

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
Improve maintenance and signage of 48.0 miles of designated recreational trails.

Action 4
Annually grade and mow 9.0 miles of public forest access roads.

Action 5
Annually mow or brush 18.7 miles of haul roads.

Action 6
Maintain infrastructure such as signs, gates, kiosks, and parking areas as needed.

Action 7
Maintain and upgrade existing roads and trails whenever possible in conjunction with timber management.

Action 8
Conduct periodic timber management on a total of 5,205 acres of forest in this unit. Of these proposed harvests, 4,996 acres will be thinnings, and 209 acres will be regeneration harvests that create stands of native hardwood and conifer seedlings and saplings.

Action 9
Conduct limited commercial maple tapping contracts. Tapping of large roadside maple trees will also be allowed when spring road access is available.

Action 10
Maintain early successional stands by periodic mowing or brush cutting. Additionally, stands scheduled for management will be considered for creating early successional wildlife habitat for species such as Ruffed grouse, American woodcock, and New England cottontail.

Action 11
Maintain 4,375 acres classified as Natural Areas. Of these, 2,600 acres are forest and 1,775 acres are non-forest (wetlands, streams, rivers, road and trail corridors, utility corridors, etc).

Action 12
Monitor invasive species and practice control with limited herbicide application.

Action 13
Purchase properties for addition to State Forests in this unit, especially those that improve access to state managed properties, provide enhanced recreational opportunities, contain habitat for rare, threatened, or endangered species, or that enhance existing Matrix Forest Blocks or Forest Landscape Connectivity Corridors.

Action 14
Work with the St. Lawrence Snowmobile Association to rehabiliate and reopen former snowmobile trails on State Forests included in this plan.

State Forest Specific Actions Schedule 2017-2027

Catherineville State Forest (St. Law RA 8) Actions
- Boundary line maintenance (2022)
- Forest stand inventory (2023)
- Replace gate on Santamont Access Trail (2019-2021)
- Improve/install parking areas on old landings (2019-2022)

Crary Mills State Forest (St. Law RA 40) Actions
- Boundary line maintenance (2020, 2025)
- Forest stand inventory (2018)
- Improve parking areas on old landings (2017-2021)
- Create new trails that could potentially link up with adjacent town owned lands (2019-2022)
- Create new ADA accessible trail opportunities

Degrasse State Forest (St. Law RA 13) Actions
- Boundary line maintenance (2019, 2024)
- Forest stand inventory (2018)
- Upgrade the Canoe Launch Haul Road (2022-2027)
- Install a lean-to with privy, fire ring, and picnic table (2022-2027)
- Create new horse trail opportunities that could potentially link to nearby Downerville and Whippoorwill Corners State Forests (2019-2022)

Downerville State Forest (St. Law RA 26) Actions
- Boundary line maintenance (2020, 2025)
- Forest stand inventory (2023)
- Remove existing cable across North Branch Grass River (2019-2021)
- Install a new foot bridge across the N. Br. Grass River to connect with the Palmer Hill area (2019-2022)
- Install foot/mountain bike connector trails to Grass River Wild Forest (2017-2021)
- Create new horse trail opportunities that could potentially link to nearby Degrasse and Whippoorwill Corners State Forests (2019-2022)

Glenmeal State Forest (St. Law RA 19) Actions
- Boundary line maintenance (2023)
- Forest stand inventory (2023)
- Create a trail that would connect the Bonno and Dillabaugh Access Roads and Co. Rt. 24 (2022-2027)
- Improve existing parking areas (2022-2027)

High Flats State Forest (St. Law RA 20) Actions

Boundary line maintenance (2021)
Forest stand inventory (2018)
Upgrade the Crowley Access Trail to PFAR standards (2022-2027)
Install a parking area on the Crowley Access Road for the mountain bike trail system (2019-2022)
Install a kiosk and trail register on the Donovan Road for the mountain bike trail system (2019-2022)
Install gate on NIMO Access Trail (2019-2022)
Move the gate on the Donovan Road to allow private landowner access (2019-2022)

Work with St. Lawr. County Mountain Bike Association to create new trails and promote use (2017-2021)

Orebed Creek State Forest (St. Law RA 14) Actions

Boundary line maintenance (2019, 2024)
Forest stand inventory (2018)
Create a hiking trail along Orebed Creek that connects to the Tooley Pond CE (2022-2027)

Silver Hill State Forest (St. Law RA 35) Actions

Boundary line maintenance (2019, 2024)
Forest stand inventory (2019)
Create a hiking trail along Plum Brook (2022-2027)
Upgrade existing Silver Hill Road campsite to an universailly accessible site (2022-2027)

Snow Bowl State Forest (St. Law RA 34) Actions

Boundary line maintenance (2023)
Forest stand inventory (2019)
Upgrade the unmaintained portion of the Scovil Road (2019-2021)
Install a parking area near the rock climbing area (2019-2022)
Install a kiosk near proposed parking lot for the rock climbing area (2019-2022)

Taylor Creek State Forest (St. Law RA 3) Actions

Boundary line maintenance (2021)
Forest stand inventory (2023)
Restore the CCC waterhole along the Selleck Road and install an interpretive sign (2022-2027)
Improve the road to Eels Pond and install a canoe launch (2022-2027)
Install a lean-to with privy and fire ring near Eels Pond (2022-2027)
Upgrade southern portion of Charlie Hall Access Trail to PFAR standards and install a parking lot (2022-2027)

West Parishville State Forest (St. Law RA 28) Actions

Boundary line maintenance (2021)
Forest stand inventory (2024)
Upgrade the Red Pine Trail to PFAR standards (2019-2022)
Improve parking (2019-2022)
Install a new gate on the Red Pine Access Trail (2019-2022)

Whippoorwill Corners State Forest (St. Law RA 41) Actions

Boundary line maintenance (2023)
Forest stand inventory (2024)
Upgrade the campsites on the Circle Road to include a fire ring, privy, and regular mowing (2019-2022)
Upgrade the campsite on the Burnell Access Road with a fire ring, privy, picnic table (2019-2022)
Install a new parking lot off the Burnell Access Road along with horse mounting steps (hitching post), and a kiosk/sign in register (2019-2022)
Install an univerally accessbile walkway from parking area down to plum brook at current fishing access site (2018-2022)
Reestablish and maintain the former horse trail system (2019-2022)
Install a new trail that connects the Fishing Access Trail to the Loop trail (2019-2022)
Install a new lean-to with privy and fire ring along Plum Brook (2019-2022)
Create new horse trail opportunities that could potentially link to nearby Degrasse and Downerville State Forests (2019-2022)

Whiskey Flats State Forest (St. Law RA 2) Actions

Boundary line maintenance (2021)
Forest stand inventory (2024)
Upgrade and maintain the horse trail system (2022-2027)
Reroute +/- 2.0 miles of snowmobile trails (S85) along the Capell Road (2019-2022)
Restore the CCC waterhole along State Routee 72 and install parking area with an interpretive sign (2022-2027)
Install a new parking area near the old gravel pit off the Hayden Road (2022-2027)
Install a kiosk/sign in register at the new proposed parking area off the Hayden Road (2022-2027)

*Completion of management actions may be contingent upon available funding and/or continued collaboration, and support from local user groups under Volunteer Stewardship Agreements.

FOREST TYPE CODES

Forest Type Codes

Natural Forest Types

10 Northern Hardwood
11 Northern Hardwood-Hemlock
13 Northern Hardwood-Spruce-Fir
12 Northern Hardwood-White Pine
14 Pioneer Hardwood
15 Swamp Hardwood
16 Oak
17 Black Locust
18 Oak-Hickory
19 Oak-Hemlock
20 Hemlock
21 White Pine
22 White Pine-Hemlock
23 Spruce-Fir
24 Spruce-Fir-Hemlock-White Pine
25 Cedar
26 Red Pine
27 Pitch Pine
28 Jack Pine
29 Tamarack
30 Oak-Pine
31 Transition Hardwoods (NH-Oak)
32 Other Natural Stands
33 Northern Hardwood-Norway Spruce
97 Seedling-Sapling- Natural
99 Non-Forest
-99 Null

Plantation Types

40 Plantation: Red Pine
41 Plantation: White Pine
42 Plantation: Scotch Pine
43 Plantation: Austrian Pine
44 Plantation: Jack Pine
45 Plantation: Norway Spruce
46 Plantation: White Spruce
47 Plantation: Japanese Larch
48 Plantation: European Larch
49 Plantation: White Cedar
50 Plantation: Douglas Fir
51 Plantation: Balsam Fir
52 Plantation: Black Locust
53 Plantation: Pitch Pine
54 Plantation: Misc. Species (Pure)
60 Plantation: Red Pine-White Pine
61 Plantation: Red Pine-Spruce
62 Plantation: Red Pine-Larch
63 Plantation: White Pine-Spruce
64 Plantation: White Pine-Larch
65 Plantation: Scotch Pine-Spruce
66 Plantation: Scotch Pine-Larch
67 Plantation: Larch-Spruce
68 Plantation: Bucket Mixes
70 Plantation: Pine-Natural Species
72 Plantation: Misc. Hardwood
98 Plantation: Seedling-Sapling

Management Direction

Wildlife (WL)
Experimental (EXP)
Recreation (REC)
Protection (PRO)
Non-Management (NM)
Sugar Bush/Maple Tapping (SB)
Timber Management:
- Even Age (T-EA)
- Un-Even Age (T-UE)
- Non-Silvicultural (T-NS)

Treatment Type

Harvest (HV)
Release (RL)
Salvage (SL)
Sanitation (SN)
Thinning (TH)
Regeneration (RG)
Habitat Management (HM)
Sale Stand (SS)

Size Class

Seedling/Sapling <5” DBH (S-S)
Pole Timber 6”-11” DBH (PT)
Small Saw Timber 12”-17” DBH (SST)
Medium Saw Timber 18”-23” DBH (MST)
Large Saw Timber > 24” DBH (LST)

Land Management Action Schedules

Land Management Actions

The tables below list all stands for which it is anticipated there will be management actions within the next 10 years. All stands identified are in need of treatment. At the actual time of treatment, the forester responsible for each harvest will do a detailed stand analysis. All guidelines and policies will be considered and applied including:

Final Management Rules for Special Management Zones on State Forests
http://www.dec.ny.gov/docs/lands_forests_pdf/sfsmzbuffers.pdf

Plantation Management on State Forests (ONR-DLF-1)
http://www.dec.ny.gov/docs/lands_forests_pdf/policysfplantation.pdf

Retention on State Forests (ONR-DLF-2)
http://www.dec.ny.gov/docs/lands_forests_pdf/policysfrention.pdf

Clearcutting on State Forests (ONR-DLF-3)
http://www.dec.ny.gov/docs/lands_forests_pdf/policysfclearcutting.pdf

State Forest Rutting Guidelines
http://www.dec.ny.gov/docs/lands_forests_pdf/ruttingguidelines.pdf

This information will then be used to create a specific treatment prescription for each stand on an acre by acre basis that will be implemented by the foresters that mark out the sale.

Table III.F. -Land Management Action Schedule for First Five-Year Period **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction		Treatment Type
				Current	Future	Current	Future	
Catherineville SF (SL 8)	A-10.1	9.9	SST	10	10	T-EA	T-EA	TH
	A-11	26.4	SST	10	10	T-EA	T-UE	TH
	A-14.1	14.1	PT	10	10	T-EA	T-EA	TH
	A-14.2	17.2	SST	10	10	T-EA	T-EA	TH
	A-14.3	10.9	SST	13	13	T-EA	T-EA	TH
	A-30	7.3	SST	10	10	T-EA	T-EA	TH
	A-32	9.6	SST	13	13	T-EA	T-EA	TH
	B-9	3.8	SST	47	47	T-EA	T-EA	TH
	B-31	57.2	PT	10	10	T-EA	T-EA	TH

Table III.F. -Land Management Action Schedule for First Five-Year Period **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction		Treatment Type
				Current	Future	Current	Future	
	B-33	37.6	PT	13	13	T-EA	T-EA	TH
Crary Mills SF (SL 40)	A-1	13.3	SST	41	41	T-EA	T-EA	TH
	B-1.1	8.6	PT	70	97	T-EA	WL	RG
	B-1.2	9.9	PT	70	97	T-EA	WL	RG
Degrasse SF (SL 13)	A-47	12.9	SST	63	63	T-EA	T-EA	TH
	A-49	3.7	SST	42	41	T-EA	T-EA	TH
	A-52	2.6	MST	63	63	T-EA	T-EA	TH
	A-53	26.0	SST	63	63	T-EA	T-UE	TH
	A-54	10.6	SST	10	10	T-EA	T-EA	TH
	A-72	16.9	SST	60	60	T-EA	T-UE	TH
	A-74	25.9	SST	63	63	T-EA	T-EA	TH
Downerville SF (SL 26)	A-13.1	13.9	SST	40	10	T-EA	WL	RG
	A-13.2	7.3	SST	40	70	T-EA	WL	RG
	A-19	23.7	PT	10	10	T-EA	T-EA	TH
	A-20	15.7	SST	10	10	T-EA	T-EA	TH
	A-47	8.3	SST	10	10	T-EA	WL	BRUSH
	A-48	3.1	PT	10	10	T-EA	T-UE	TH
	A-50	9.6	PT	10	10	T-UE	T-EA	TH
	A-51	3.8	PT	10	10	T-EA	T-EA	TH
	A-53	2.7	SST	10	10	T-EA	T-UE	TH
	A-55	22.8	PT	12	12	T-EA	T-EA	TH
	A-56	5.9	SST	11	11	T-UE	T-UE	TH
	A-57	5.0	PT	12	12	T-UE	T-UE	TH
	A-820	2.2	NA	99	99	NA	WL	MOW
Glenmeal SF (SL 19)	NONE							

Table III.F. -Land Management Action Schedule for First Five-Year Period **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction		Treatment Type
				Current	Future	Current	Future	
High Flats SF (SL 20)	A-1	5.9	SST	42	42	T-EA	T-EA	TH
	A-2	6.9	SST	40	40	T-EA	T-EA	TH
Orebed Creek SF (SL 14)	A-1	14.2	PT	42	42	T-EA	T-EA	TH
	A-25	3.5	SST	47	47	T-EA	T-EA	TH
Silver Hill SF (SL 35)	A-39.1	95.8	SST	10	10	T-EA	T-UE	TH
	A-42	9.0	PT	12	12	T-EA	T-UE	TH
	A-44	12.5	SST	12	12	T-EA	T-UE	TH
	A-50.1	38.1	SST	41	41	T-EA	T-EA	TH
	A-51	16.4	PT	42	70	T-EA	T-EA	TH
	A-52	6.2	PT	41	41	T-EA	T-EA	TH
	A-53	41.7	SST	41	41	T-EA	T-EA	TH
	A-60	35.9	SST	10	10	T-UE	T-EA	TH
Snow Bowl SF (SL 34)	A-1	9.9	SST	10	10	T-EA	T-EA	TH
	A-2	17.6	SST	10	10	T-EA	T-UE	TH
	A-3.1	49.2	SST	10	10	T-EA	T-EA	TH
	A-3.2	24.1	PT	10	10	T-EA	T-EA	TH
	A-4	8.5	PT	10	10	T-EA	T-UE	TH
	A-5	11.3	SST	10	10	T-EA	T-UE	TH
	A-17.1	7.3	SST	10	10	T-EA	T-UE	TH
	A-25	9.3	PT	10	10	T-EA	T-UE	TH
	A-27	12.7	PT	10	10	T-EA	T-EA	TH
	C-1	10.4	SST	10	10	T-EA	T-UE	TH
	C-2	14.0	PT	10	10	T-EA	T-EA	TH
	C-3	14.7	SST	10	10	T-EA	T-UE	TH
	C-5	62.4	PT	10	10	T-EA	T-EA	TH

Table III.F. -Land Management Action Schedule for First Five-Year Period **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction		Treatment Type
				Current	Future	Current	Future	
	C-8	14.4	PT	10	10	T-UE	T-UE	TH
Taylor Creek SF (SL 3)	A-19	12.7	PT	10	10	T-EA	T-UE	TH
	A-42	7.5	SST	41	41	T-EA	T-EA	TH
	A-53	3.4	SST	41	41	T-EA	T-EA	TH
	A-55	14.3	SST	12	12	T-UE	T-UE	TH
	A-57	8.2	SST	41	41	T-EA	T-EA	TH
	A-58	13.5	PT	12	12	T-EA	T-EA	TH
	A-59	11.0	SST	70	70	T-EA	T-EA	TH
	A-76	6.2	SST	68	68	T-EA	WL	RG
West Parishville SF (SL 28)	NONE							
Whippoorwill Corners SF(SL 41)	A-18.1	19.3	SST	68	68	T-EA	T-EA	TH
	A-18.2	3.9	SST	60	60	T-EA	T-EA	TH
	A-23	8.0	PT	10	10	T-UE	T-EA	TH
	A-26.1	4.8	PT	10	10	T-UE	T-UE	TH
	A-35	0.5	PT	40	70	T-EA	T-EA	TH
	A-39	1.4	SST	10	10	T-EA	T-EA	TH
	A-40	12.9	PT	68	68	T-EA	T-EA	TH
	A-46	3.8	SST	11	11	T-EA	T-UE	TH
	A-47	8.0	PT	10	10	T-EA	T-EA	TH
	A-53	1.3	PT	41	41	T-EA	T-EA	TH
	A-54	3.8	SST	41	41	T-EA	T-EA	TH
	A-64	6.5	SST	12	12	T-EA	T-EA	TH
	B-3	3.1	PT	70	70	T-EA	T-EA	TH
	B-5	77.4	PT	11	11	T-EA	T-UE	TH
	B-7.1	43.1	PT	12	12	T-EA	T-EA	TH

Table III.F. -Land Management Action Schedule for First Five-Year Period **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction		Treatment Type
				Current	Future	Current	Future	
	B-7.2	9.3	PT	12	12	T-UE	T-EA	TH
	B-8	6.8	PT	12	12	T-UE	T-UE	TH
	B-9	7.4	S-S	12	12	T-EA	T-UE	TH
	B-10	3.6	PT	21	21	T-UE	T-UE	TH
	B-11	10.1	SST	12	12	T-UE	T-EA	TH
	B-12	20.2	PT	12	12	T-EA	T-EA	TH
	B-14	83.6	PT	12	12	T-UE	T-UE	TH
	B-17	1.9	SST	63	63	T-EA	WL	RG
	B-18	6.0	PT	12	12	T-UE	T-UE	TH
	B-19	5.4	SST	70	70	T-EA	T-EA	TH
	B-21	2.7	SST	60	60	T-EA	T-EA	TH
	B-23.1	11.5	SST	60	60	T-EA	T-EA	TH
	C-6	36.3	SST	10	10	T-EA	SB	MAPLE TAPPING
Whiskey Flats SF (SL 2)	B-1	16.9	SST	60	60	T-EA	T-EA	TH
	B-7	3.7	PT	68	70	T-EA	WL	RG
	B-8	8.1	PT	10	10	T-EA	T-EA	TH
	B-10	23.3	SST	40	40	T-EA	T-EA	TH
	B-11	2.9	SST	68	68	T-EA	T-EA	TH
	B-18.2	2.7	SST	41	41	T-EA	T-UE	TH
	B-21	3.7	S-S	68	68	T-EA	T-EA	TH
	B-24	21.5	SST	40	40	T-EA	T-EA	TH
	B-26	30.7	SST	42	42	T-EA	T-EA	TH
	C-9	10.0	SST	42	42	T-EA	T-EA	TH
	C-10	18.5	SST	47	47	T-EA	T-EA	TH
	C-11	4.7	SST	10	10	T-UE	T-UE	TH

Table III.F. -Land Management Action Schedule for First Five-Year Period **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction		Treatment Type
				Current	Future	Current	Future	
	C-12	4.9	PT	71	71	T-EA	T-EA	TH
	C-14	7.9	SST	42	70	T-EA	WL	RG
	C-17	6.2	PT	11	11	T-EA	T-UE	TH
	D-23	29.5	SST	40	40	T-EA	T-EA	TH
	E-13	16.9	SST	40	40	T-EA	T-EA	TH
	E-14	5.0	PT	42	42	T-EA	T-EA	TH
	E-16	2.6	PT	10	10	T-UE	T-EA	TH
	E-17.1	2.7	PT	40	40	T-EA	T-EA	TH
	E-17.2	4.3	SST	40	40	T-EA	T-EA	TH
	E-18	2.5	S-S	44	44	T-EA	WL	RG
	E-19	9.4	SST	40	40	T-EA	T-EA	TH
	E-39	14.3	SST	60	60	T-EA	T-EA	TH
	E-40	37.7	PT	42	42	T-EA	T-EA	TH
	E-47	17.5	SST	40	40	T-EA	T-EA	TH
	G-14	10.9	SST	10	10	T-EA	T-UE	TH
	G-18	11.6	PT	10	10	T-UE	WL	RG

Table III.G. -Land Management Action Schedule for Second Five-Year Period **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction		Treatment Type
				Current	Future			
Catherineville SF (SL 8)	A-1.2	9.1	PT	14	14	T-EA	WL	RG
	A-1.3	5.8	PT	10	10	T-EA	T-EA	TH
	A-2	32.3	PT	11	11	T-EA	T-UE	TH

Table III.G. -Land Management Action Schedule for Second Five-Year Period **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction		Treatment Type
				Current	Future			
	A-4	1.4	NA	99	99	T-EA	WL	BRUSH/MOW
	A-5.1	9.8	PT	10	10	T-EA	T-UE	TH
	A-6.1	22.6	SST	10	10	T-EA	T-UE	TH
	A-6.2	7.3	S-S	10	10	T-EA	T-UE	TH
	A-6.3	8.1	PT	10	10	T-EA	T-EA	TH
	A-8	5.7	PT	10	10	T-EA	T-UE	TH
	A-9	13.4	PT	10	10	T-EA	T-EA	TH
	B-5	4.3	S-S	12	12	T-EA	WL	HM
	B-24	20.6	SST	13	13	T-EA	WL	RG
	B-26	47.6	SST	10	10	T-EA	T-UE	TH
Crary Mills SF (SL 40)	A-6	47.4	PT	10	10	T-EA	T-EA	TH
	A-8.3	10.7	SST	32	32	T-EA	T-EA	TH
	A-8.4	5.2	SST	10	10	T-EA	T-EA	TH
Degrasse SF (SL 13)	A-2	13.2	SST	70	10	T-EA	WL	RG
	A-6.2	16.8	SST	40	40	T-EA	T-EA	TH
	A-7.2	4.5	S-S	68	68	T-EA	T-EA	BRUSH
	A-25	14.4	SST	40	40	T-EA	T-EA	TH
	A-26	48.1	MST	12	12	T-UE	T-UE	TH
	A-27	8.1	SST	63	63	T-EA	T-UE	TH
	A-30.1	1.7	MST	60	60	T-EA	T-UE	TH
	A-30.2	4.5	PT	42	42	T-EA	T-EA	TH
	A-31	11.4	PT	42	42	T-EA	T-EA	TH
	A-32	52.3	SST	40	40	T-EA	T-EA	TH
	A-33	8.1	SST	40	40	T-EA	T-EA	TH
	A-41.1	5.7	SST	60	60	T-EA	T-EA	TH
	A-41.2	14.6	SST	40	10	T-EA	WL	RG

Table III.G. -Land Management Action Schedule for Second Five-Year Period **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction		Treatment Type
				Current	Future			
	A-41.3	4.1	S-S	40	40	T-EA	T-EA	BRUSH
	A-42	6.9	SST	42	10	T-EA	WL	RG
	A-43	7.1	MST	41	41	T-EA	T-EA	TH
	A-71	10.4	SST	40	40	T-EA	T-EA	TH
	A-76	15.1	SST	11	11	T-UE	T-UE	TH
Downerville SF (SL 26)	A-1.2	8.7	PT	10	10	T-EA	T-UE	TH
	A-3	42.4	PT	10	10	T-EA	T-EA	TH
	A-4	16.1	SST	10	10	T-EA	T-UE	TH
	A-5	15.1	SST	11	11	T-UE	T-UE	TH
	A-8	6.6	S-S	10	10	T-EA	T-UE	TH
	A-9	3.5	PT	10	10	T-EA	T-EA	TH
	A-13.3	6.2	SST	40	40	T-EA	T-EA	TH
	A-13.4	2.7	S-S	40	70	T-EA	WL	RG
	A-52	2.0	SST	11	11	T-EA	T-UE	TH
Glenmeal SF (SL 19)	A-13.1	21.8	MST	12	12	T-UE	T-UE	TH
	A-13.2	11.0	MST	12	12	T-UE	T-UE	TH
	A-13.3	5.0	SST	12	12	T-UE	T-UE	TH
	A-23.1	8.9	SST	61	61	T-EA	T-EA	TH
	A-24	4.7	SST	10	10	T-EA	T-UE	TH
	A-26	3.9	SST	63	63	T-EA	T-EA	TH
	A-27	21.8	PT	63	63	T-UE	T-EA	TH
	A-35.1	30.5	SST	12	12	T-UE	T-UE	TH
	A-35.2	12.3	SST	12	12	T-UE	T-UE	TH
	A-45	10.8	SST	64	64	T-EA	T-UE	TH
	A-46.1	13.0	PT	10	10	T-EA	T-UE	TH
	A-46.2	2.5	PT	64	64	T-EA	T-UE	TH

Table III.G. -Land Management Action Schedule for Second Five-Year Period **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction		Treatment Type
				Current	Future			
	A-47	9.2	PT	11	11	T-EA	T-UE	TH
	A-55	8.7	SST	60	60	T-EA	T-EA	TH
High Flats SF (SL 20)	A-13	4.4	SST	21	21	T-UE	T-UE	TH
	A-14	10.3	SST	63	63	T-EA	T-UE	TH
	A-16	65.1	SST	40	40	T-EA	T-EA	TH
	A-17	6.1	PT	70	70	T-EA	T-EA	TH
	A-20	1.9	PT	63	63	T-EA	T-UE	TH
	C-1	14.2	SST	10	10	T-EA	T-UE	TH
	C-3	12.1	SST	12	12	T-EA	T-UE	TH
	C-4	9.7	PT	10	10	T-EA	T-UE	TH
	C-6	11.8	SST	12	12	T-UE	T-EA	TH
	C-9.3	1.8	NA	99	99	NA	WL	MOW
	C-22	14.1	SST	12	12	T-EA	T-EA	TH
	C-23	6.5	MST	10	10	T-EA	T-EA	TH
	C-25	8.3	SST	40	40	T-EA	T-EA	TH
	C-26	12.3	PT	10	10	T-EA	T-UE	TH
	C-30	51.8	SST	10	10	T-EA	T-EA	TH
	C-32	48.5	PT	10	10	T-EA	T-EA	TH
	C-34	13.7	PT	10	10	T-EA	T-EA	TH
	C-35	9.7	PT	10	10	T-EA	T-EA	TH
	C-36	25.2	PT	10	10	T-EA	T-EA	TH
Orebed Creek SF (SL 14)	A-3	41.4	PT	10	10	T-UE	T-EA	TH
	A-4	158.5	PT	10	10	T-UE	T-EA	TH
	A-5	12.0	PT	71	71	T-EA	T-UE	TH
	A-6	0.9	NA	99	99	NA	WL	BRUSH
	A-7	14.6	SST	10	10	T-EA	T-UE	TH

Table III.G. -Land Management Action Schedule for Second Five-Year Period **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction		Treatment Type
				Current	Future			
	A-10	10.2	SST	70	70	T-EA	T-EA	TH
	A-11	2.8	PT	47	47	T-EA	T-EA	TH
	A-12	7.4	PT	11	11	T-EA	T-EA	TH
	A-15	7.7	SST	41	41	T-EA	T-UE	TH
	A-19	21.2	SST	10	10	T-EA	T-EA	TH
	A-21	29.8	PT	10	10	T-UE	T-EA	TH
	A-22	21.6	PT	71	71	T-EA	T-EA	TH
	A-24	58.2	PT	10	10	T-UE	T-EA	TH
	A-27	3.4	PT	10	10	T-UE	T-UE	TH
	A-29.1	11.3	SST	70	70	T-EA	T-EA	TH
	A-29.2	5.4	PT	40	40	T-EA	T-EA	TH
	A-30.2	8.1	SST	40	40	T-EA	T-EA	TH
	A-30.3	3.9	PT	40	10	T-EA	WL	RG
	A-36.1	2.7	MST	41	41	T-EA	T-UE	TH
	A-36.2	3.0	PT	41	41	T-EA	T-EA	TH
	A-37	10.4	PT	40	70	T-EA	WL	RG
	A-40	19.0	PT	10	10	T-EA	T-EA	TH
	A-43	15.1	SST	10	10	T-EA	T-UE	TH
	A-46	3.7	PT	12	12	T-UE	T-UE	TH
	A-47	4.3	PT	71	71	T-EA	WL	RG
	A-52	14.1	PT	71	71	T-EA	T-EA	TH
	A-54	21.3	PT	10	10	T-EA	T-EA	TH
	A-55	4.8	SST	40	40	T-EA	T-EA	TH
Silver Hill SF (SL 35)	A-22.1	46.8	SST	11	11	T-UE	T-EA	TH
	A-22.2	10.2	PT	10	10	T-EA	T-EA	TH
	A-24	3.9	SST	12	12	T-EA	T-UE	TH

Table III.G. -Land Management Action Schedule for Second Five-Year Period **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction		Treatment Type
				Current	Future			
	A-27	22.1	SST	10	10	T-EA	T-EA	TH
	A-28	8.7	SST	10	10	T-EA	T-UE	TH
	A-30	9.3	SST	10	10	T-UE	T-UE	TH
Snow Bowl SF (SL 34)	A-18	23.0	SST	10	10	T-EA	T-EA	TH
	A-22	6.2	SST	70	70	T-EA	T-EA	TH
	A-23	22.5	PT	42	42	T-EA	T-EA	TH
	B-1	10.0	SST	11	11	T-EA	T-EA	TH
	B-2	7.6	PT	10	10	T-EA	T-EA	TH
	B-3	4.3	SST	40	40	T-EA	T-EA	TH
	B-5.2	7.0	PT	10	10	T-EA	T-EA	TH
	B-9	17.3	PT	10	10	T-EA	T-UE	TH
	B-10	7.4	PT	10	10	T-EA	T-UE	TH
	B-11.1	60.4	SST	10	10	T-UE	T-UE	TH
	B-12	7.8	PT	10	10	T-EA	T-UE	TH
	B-13	36.4	SST	10	10	T-EA	T-UE	TH
	B-14	1.9	PT	10	10	T-EA	T-EA	TH
	B-15	74.1	SST	10	10	T-UE	T-UE	TH
Taylor Creek SF (SL 3)	A-3	11.0	SST	63	63	T-EA	T-UE	TH
	A-4	5.3	SST	41	41	T-EA	T-UE	TH
	A-6	4.9	LST	63	63	T-EA	T-UE	TH
	A-7	11.1	SST	10	10	T-EA	T-EA	TH
	A-10	5.8	SST	10	10	T-EA	T-EA	TH
	A-12	4.2	SST	10	10	T-EA	T-UE	TH
	A-14	10.2	PT	10	10	T-EA	T-UE	TH
	A-16	61.4	PT	10	10	T-EA	T-UE	TH
	A-23	17.1	PT	71	71	T-EA	T-UE	TH

Table III.G. -Land Management Action Schedule for Second Five-Year Period **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction		Treatment Type
				Current	Future			
	A-28	45.7	SST	10	10	T-EA	T-EA	TH
	A-33	4.7	MST	41	41	T-EA	T-EA	TH
	A-34	53.2	PT	10	10	T-EA	T-UE	TH
	A-38	85.7	SST	10	10	T-EA	T-UE	TH
	A-39	36.3	SST	10	10	T-EA	T-UE	TH
	A-41	8.1	PT	10	10	T-EA	T-UE	TH
	A-43	10.1	SST	70	70	T-EA	WL	RG
	A-45	17.5	PT	10	10	T-EA	T-EA	TH
	A-48	9.9	SST	41	41	T-EA	T-EA	TH
	A-49	9.8	SST	10	10	T-EA	T-UE	TH
	A-63	92.5	SST	10	10	T-EA	T-UE	TH
	A-64	6.0	SST	71	71	T-EA	WL	RG
	A-69	16.0	PT	70	70	T-EA	T-UE	TH
	A-71	23.8	PT	71	71	T-EA	WL	RG
West Parishville SF (SL 28)	A-5	7.5	SST	40	40	T-EA	T-EA	TH
	A-7.1	34.5	SST	11	11	T-UE	T-UE	TH
	A-7.2	11.6	MST	11	11	T-UE	T-UE	TH
	A-7.3	2.7	PT	10	10	T-EA	T-UE	TH
	A-8.1	25.4	PT	42	42	T-EA	T-EA	TH
	A-8.2	4.4	SST	42	70	T-EA	WL	RG
	A-18	43.7	SST	10	10	T-EA	T-UE	TH
	B-7	13.6	SST	12	12	T-UE	T-UE	TH
	B-18	8.9	MST	12	12	T-EA	T-UE	TH
	B-19	6.7	MST	21	21	T-UE	T-UE	TH
	B-20.1	26.5	SST	42	42	T-EA	T-EA	TH
	B-20.2	4.4	SST	68	68	T-EA	T-EA	TH

Table III.G. -Land Management Action Schedule for Second Five-Year Period **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction		Treatment Type
				Current	Future			
	B-21	6.3	SST	60	60	T-EA	T-EA	TH
	B-22	8.8	PT	12	12	T-UE	T-UE	TH
	B-24	14.0	PT	12	12	T-UE	T-UE	TH
	B-27	22.1	SST	12	12	T-UE	T-UE	TH
Whippoorwill Corners SF (SL 41)	A-1.1	5.7	PT	10	10	T-EA	T-EA	TH
	A-1.2	5.6	PT	10	10	T-EA	T-EA	TH
	A-4	2.5	PT	10	10	T-EA	T-UE	TH
	A-13	5.4	SST	60	70	T-EA	WL	RG
	A-30.2	1.1	PT	10	10	T-EA	T-EA	TH
	A-33	32.8	PT	10	10	T-EA	T-UE	TH
	A-36	5.6	PT	41	41	T-EA	T-EA	TH
	A-49	0.5	PT	71	71	T-EA	T-EA	TH
	A-51	35.9	PT	10	10	T-EA	T-UE	TH
	A-52.1	6.8	PT	15	15	T-EA	T-EA	TH
	A-57.1	11.6	PT	11	11	T-UE	T-UE	TH
	A-57.2	2.9	SST	20	20	T-EA	T-UE	TH
	A-57.3	1.8	SST	20	20	T-EA	T-UE	TH
	A-58	35.7	PT	11	11	T-EA	T-UE	TH
	A-61	1.4	MST	14	14	T-UE	WL	BRUSH
Whiskey Flats SF (SL 2)	A-19	8.9	PT	12	12	T-EA	T-UE	TH
	A-22	12.8	PT	10	10	T-EA	T-UE	TH
	A-24	57.5	PT	11	11	T-EA	T-UE	TH
	E-37	23.6	SST	11	11	T-EA	T-UE	TH
	E-38	10.7	PT	10	10	T-UE	T-UE	TH
	E-46	19.1	SST	10	10	T-EA	T-UE	TH

Table III.G. -Land Management Action Schedule for Second Five-Year Period **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction		Treatment Type
				Current	Future			
	F-15	2.5	SST	40	40	T-EA	T-EA	TH
	F-21	34.9	SST	10	10	T-EA	T-UE	TH
	F-23	19.5	PT	10	10	T-EA	T-UE	TH
	F-24	8.7	PT	71	71	T-EA	T-EA	TH
	F-25	41.7	PT	63	63	T-EA	T-EA	TH
	F-26	29.9	PT	10	10	T-EA	T-UE	TH
	F-28	13.0	PT	10	10	T-EA	T-UE	TH
	F-29	5.1	SST	13	13	T-EA	T-UE	TH
	F-30	21.9	PT	71	71	T-EA	T-EA	TH
	F-31	7.3	SST	40	40	T-EA	T-EA	TH
	F-32	5.1	SST	40	40	T-EA	T-EA	TH
	F-33	2.3	PT	71	71	T-EA	T-EA	TH
	F-34	75.8	SST	10	10	T-EA	T-UE	TH
	F-35	2.6	SST	40	40	T-EA	T-EA	TH
	G-4	9.7	SST	10	10	T-EA	T-UE	TH
	G-9	27.2	PT	10	10	T-EA	T-UE	TH
	G-15	63.5	PT	10	10	T-EA	T-UE	TH
	G-16	5.4	SST	25	25	T-UE	T-EA	TH
	G-17	8.0	PT	10	10	T-EA	T-UE	TH

Table III.H. –Stands without Scheduled Management within 10 Years **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction
				Current	Future	
Catherineville SF (SL 8)	A-13	17.4	SST	13	13	T-EA

Table III.H. –Stands without Scheduled Management within 10 Years **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction
				Current	Future	
	A-15.1	50.3	PT	10	10	T-EA
	A-15.2	12.2	SST	13	13	T-UE
	A-15.3	6.5	PT	25	25	T-EA
	A-17	1.6	SST	40	40	T-EA
	A-18	1.9	SST	10	10	T-EA
	A-20	5.0	PT	60	60	T-EA
	A-21	20.6	PT	13	13	T-EA
	A-22	9.8	SST	40	40	T-EA
	A-23	7.0	PT	10	10	T-EA
	A-24.1	11.2	PT	10	10	T-EA
	A-31.1	20.1	S-S	10	10	T-EA
	A-31.2	6.5	PT	10	10	T-EA
	A-31.4	3.2	SST	14	14	T-EA
	A-31.5	2.4	S-S	10	10	T-EA
	A-31.6	5.1	PT	13	13	T-EA
	A-34	11.8	PT	10	10	T-EA
	A-35	5.5	PT	13	13	T-EA
	A-36.1	4.9	PT	40	40	T-EA
	A-36.2	5.6	PT	40	40	T-EA
	B-1	8.2	PT	11	11	T-UE
	B-3	64.4	SST	10	10	T-UE
	B-4	10.8	PT	12	12	T-EA
	B-10	15.0	SST	41	41	T-EA
	B-11	34.5	SST	10	10	T-UE
	B-12.1	53.1	SST	10	10	T-EA
	B-12.2	5.3	SST	11	11	T-UE

Table III.H. –Stands without Scheduled Management within 10 Years **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction
				Current	Future	
	B-16.1	23.7	SST	10	10	T-EA
	B-16.2	17.6	SST	11	11	T-UE
	B-17	13.5	SST	13	13	T-UE
	B-18.1	28.3	SST	13	13	T-UE
	B-18.2	15.9	SST	11	11	T-UE
	B-19	30.2	SST	13	13	T-UE
	B-20	34.5	SST	13	13	T-EA
	B-21.1	12.1	SST	10	10	T-EA
	B-23.1	186.1	SST	10	10	T-EA
	B-23.2	22.1	PT	13	13	T-EA
	B-23.3	17.5	PT	13	13	T-EA
	B-25	23.5	SST	13	13	T-EA
	B-27	24.4	SST	13	13	T-EA
	B-28	29.5	SST	13	13	T-UE
Crary Mills SF (SL 40)	A-5	2.5	PT	42	97	WL
	A-10	9.7	SST	41	41	T-EA
	A-12	4.5	SST	70	70	T-EA
	A-16.1	23.7	SST	68	68	T-EA
	A-16.2	5.5	SST	68	68	T-EA
	A-17	2.4	PT	46	46	T-EA
	A-19.1	14.7	SST	41	41	T-EA
	A-19.3	2.4	SST	41	41	T-EA
	A-20.1	7.6	PT	12	12	T-EA
	A-22.1	22.3	SST	11	11	T-UE
	A-23	40.9	SST	11	11	T-UE
	B-3	4.3	PT	41	41	T-EA

Table III.H. –Stands without Scheduled Management within 10 Years **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction
				Current	Future	
	B-4	6.2	PT	42	42	T-EA
	B-5.1	9.4	PT	41	41	T-EA
	C-1	3.1	PT	11	11	T-UE
	C-2	13.2	SST	11	11	T-UE
	C-3	73.6	PT	47	47	WL
Degrasse SF (SL 13)	A-1	21.9	SST	11	11	T-UE
	A-5	23.1	MST	63	63	T-UE
	A-7.1	21.8	SST	40	10	WL
	A-8	45.5	SST	40	40	T-EA
	A-11.1	105.5	MST	10	10	T-UE
	A-12.2	26.3	SST	20	20	T-UE
	A-18	11.3	SST	10	10	T-EA
	A-21.1	12.4	SST	11	11	T-UE
	A-21.2	6.9	SST	71	71	T-EA
	A-22	11.4	MST	63	63	T-EA
	A-23	6.5	MST	41	41	T-UE
	A-34	5.9	PT	68	68	T-EA
	A-35	13.8	SST	40	40	T-EA
	A-36.1	13.8	SST	71	71	T-EA
	A-36.2	15.6	PT	71	71	T-EA
	A-36.3	3.8	SST	63	63	T-EA
	A-37.1	2.5	PT	10	10	T-UE
	A-37.2	13.7	SST	10	10	T-EA
	A-40	14.3	MST	41	41	T-UE
	A-58.1	7.8	MST	41	41	T-EA
	A-58.2	5.0	MST	63	63	T-EA

Table III.H. –Stands without Scheduled Management within 10 Years **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction
				Current	Future	
	A-62	10.6	SST	41	41	T-UE
	A-63.2	7.6	SST	12	12	T-UE
	A-65	3.4	SST	68	68	T-EA
	A-66	9.2	SST	70	10	WL
	A-68	27.1	SST	70	70	T-UE
	A-69	51.2	SST	11	11	T-UE
	A-70	23.6	S-S	10	10	T-EA
	A-73	44.2	MST	10	10	T-UE
Downerville SF (SL 26)	A-1.1	8.4	PT	10	10	T-UE
	A-11	9.5	PT	10	10	T-UE
	A-12	41.3	PT	10	10	T-UE
	A-16.1	18.1	PT	10	10	T-UE
	A-16.2	10.9	PT	10	10	T-UE
	A-17	60.1	PT	12	12	T-EA
	A-22.1	111.0	SST	10	10	T-UE
	A-22.3	18.1	SST	10	10	T-UE
	A-31	74.6	SST	10	10	T-EA
	A-34	365.1	SST	10	10	T-UE
Glenmeal SF (SL 19)	A-1	63.1	PT	11	11	T-UE
	A-2	18.6	SST	11	11	T-UE
	A-3	10.4	SST	10	10	T-UE
	A-4.1	22.2	SST	41	41	T-UE
	A-4.2	13.8	SST	41	41	T-UE
	A-6	1.5	PT	14	14	T-UE
	A-10	34.6	SST	10	10	T-UE
	A-11	42.5	PT	10	10	T-UE

Table III.H. –Stands without Scheduled Management within 10 Years **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction
				Current	Future	
	A-12.1	90.5	PT	10	10	T-EA
	A-12.2	6.6	PT	10	10	T-EA
	A-14	2.2	PT	13	13	T-EA
	A-15	10.4	PT	10	10	T-EA
	A-21	7.2	PT	12	12	T-EA
	A-22	8.9	PT	10	10	T-UE
	A-36	2.4	SST	10	10	T-EA
	A-38	49.8	SST	10	10	T-EA
	A-39	50.7	SST	10	10	T-UE
	A-40	4.7	SST	10	10	T-EA
	A-41	11.0	PT	10	10	T-EA
	A-43	4.7	SST	12	12	T-UE
	A-44	3.6	PT	12	12	T-EA
	A-52	67.0	SST	12	12	T-UE
	A-53	3.8	SST	10	10	T-EA
High Flats SF (SL 20)	A-4	18.2	SST	12	12	T-EA
	A-5	15.9	PT	10	10	T-EA
	A-7.1	19.0	PT	11	11	T-EA
	A-12.2	7.4	PT	10	10	T-EA
	A-12.3	2.7	PT	11	11	T-UE
	A-23	8.2	PT	22	22	T-UE
	A-25	79.2	SST	10	10	T-UE
	A-26	36.9	SST	10	10	T-UE
	A-27	11.7	PT	71	71	T-UE
	A-28.1	44.2	PT	10	10	T-UE
	A-29	90.4	PT	10	10	T-EA

Table III.H. –Stands without Scheduled Management within 10 Years **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction
				Current	Future	
	A-32.1	17.1	PT	64	64	T-EA
	A-32.2	10.4	PT	60	70	WL
	A-34.1	13.0	PT	42	70	WL
	A-34.2	3.6	PT	42	42	T-EA
	A-38	16.5	PT	11	11	T-UE
	A-40	25.0	PT	11	11	T-UE
	B-1	32.9	PT	10	10	T-UE
	B-2.1	6.8	PT	11	11	T-UE
	B-3	37.7	SST	11	11	T-UE
	B-4	23.5	SST	10	10	T-UE
	B-5	32.4	PT	10	10	T-UE
	B-8.1	12.8	PT	70	70	T-UE
	B-10	14.4	PT	10	10	T-EA
	B-12	19.4	SST	10	10	T-UE
	B-13	2.5	PT	11	11	T-UE
	B-15	35.8	PT	10	10	T-EA
	B-17	17.0	SST	10	10	T-EA
	C-2	9.2	PT	60	60	T-EA
	C-8	26.0	SST	10	10	T-EA
	C-9.1	50.6	SST	71	71	T-EA
	C-10	16.6	SST	10	10	T-EA
	C-11	9.4	SST	10	10	T-EA
	C-13	59.3	PT	10	10	T-UE
	C-14	23.4	SST	10	10	T-UE
	C-15.1	53.0	SST	10	10	T-EA
	C-17	34.7	SST	10	10	T-UE

Table III.H. –Stands without Scheduled Management within 10 Years **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction
				Current	Future	
	C-19	33.5	SST	10	10	T-EA
	C-20	20.8	SST	10	10	T-EA
	C-27.1	35.1	SST	40	40	T-EA
	C-27.2	19.6	SST	40	40	T-EA
	C-37.1	6.4	SST	40	40	T-EA
	C-37.2	8.1	SST	40	40	T-EA
	C-40	13.8	SST	41	41	T-UE
	C-41.1	34.5	SST	40	40	T-EA
	C-41.2	12.1	SST	40	40	T-EA
	C-42	12.5	MST	47	47	T-EA
Orebed Creek SF (SL 14)	A-30.1	7.9	PT	10	10	T-EA
Silver Hill SF (SL 35)	A-1	21.9	SST	10	10	T-EA
	A-2	4.6	SST	70	70	WL
	A-3	5.9	SST	40	40	T-EA
	A-4.1	5.7	SST	40	70	WL
	A-4.2	2.1	SST	12	12	T-UE
	A-5.1	5.1	SST	40	40	T-EA
	A-6	2.8	PT	10	10	T-EA
	A-8	28.6	SST	40	40	T-EA
	A-14.1	18.1	SST	12	12	T-UE
	A-21	3.2	SST	60	60	T-EA
	A-32.1	11.5	PT	10	10	T-UE
	A-32.2	4.6	SST	10	10	T-UE
	A-33	8.1	SST	11	11	T-UE
	A-34	8.1	PT	12	12	T-UE
	A-59	6.4	SST	42	70	WL

Table III.H. –Stands without Scheduled Management within 10 Years **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction
				Current	Future	
Snow Bowl SF (SL 34)	A-30.1	18.0	PT	40	40	T-EA
	B-8	10.6	SST	10	10	T-UE
Taylor Creek SF (SL 3)	A-5	5.2	PT	71	71	T-EA
	A-9	1.1	PT	70	70	T-EA
	A-11	31.8	SST	70	70	T-UE
	A-20	1.3	SST	61	61	WL
	A-25	10.6	MST	41	41	T-UE
	A-30	10.0	MST	12	12	T-UE
	A-31	13.6	SST	10	10	T-EA
	A-32	7.7	MST	41	41	T-EA
	A-33	4.7	MST	41	41	T-EA
	A-36	28.7	PT	70	70	T-EA
	A-44	10.1	SST	10	10	T-EA
	A-50	20.6	SST	10	10	T-UE
	A-52	51.4	SST	10	10	T-UE
	A-60	19.4	SST	71	71	T-EA
	A-62	10.0	SST	71	71	T-EA
	A-66	8.8	PT	10	10	T-EA
	A-67	25.3	PT	10	10	T-EA
	A-70	10.2	SST	71	71	T-UE
	A-75	25.3	SST	12	12	T-UE
	A-77	81.9	SST	10	10	T-UE
	A-79	19.0	SST	10	10	T-UE
	A-80	16.7	SST	63	63	T-UE
	A-87	43.7	PT	12	12	T-UE
	A-88	6.1	PT	10	10	T-EA

Table III.H. –Stands without Scheduled Management within 10 Years **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction
				Current	Future	
	A-89	7.5	PT	10	10	T-EA
	A-90	52.9	PT	10	10	T-UE
	A-92	2.5	PT	71	71	T-EA
	A-94	68.4	PT	10	10	T-UE
	A-95	16.3	PT	10	10	T-UE
	A-97	51.8	SST	10	10	T-UE
West Parishville SF (SL 28)	A-1	19.0	PT	10	10	T-UE
	A-12.1	8.3	SST	41	41	T-EA
	A-12.2	6.0	SST	41	41	T-EA
	A-13	12.9	PT	10	10	T-EA
	A-14.1	28.6	SST	70	70	T-EA
	A-14.2	2.1	SST	70	10	WL
	A-14.3	18.3	SST	70	70	T-EA
	A-14.4	2.1	SST	70	70	T-EA
	A-15	41.6	SST	10	10	T-EA
	A-21	7.8	SST	71	41	T-UE
	A-22	8.8	SST	12	12	T-UE
	A-23.1	7.7	SST	70	10	WL
	A-23.2	2.0	SST	70	70	T-EA
	A-25	5.1	SST	10	10	T-EA
	A-27	7.0	SST	10	10	T-UE
	B-5	3.8	PT	10	10	T-UE
	B-6	20.7	PT	12	12	T-UE
	B-8	13.7	SST	70	70	T-EA
	B-9	33.3	PT	12	12	T-UE
	B-10	3.8	SST	60	60	T-EA

Table III.H. –Stands without Scheduled Management within 10 Years **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction
				Current	Future	
	B-12	2.1	SST	12	12	T-EA
	B-13	3.3	MST	21	21	T-UE
	B-14	6.2	SST	60	60	T-EA
	B-17	19.7	SST	60	60	T-EA
	B-23	7.6	SST	11	11	T-UE
	B-28	2.9	SST	70	70	T-EA
	C-3.1	4.4	SST	42	70	WL
	C-3.2	2.9	SST	70	70	WL
	C-4	7.1	SST	11	11	T-UE
	C-7	15.6	SST	10	10	T-EA
	C-8	39.8	SST	41	41	T-EA
	C-9	27.5	PT	11	11	T-UE
	C-11	16.3	PT	68	68	T-EA
Whippoorwill Corners SF (SL 41)	A-7.1	68.2	SST	11	11	T-UE
	A-7.2	7.5	PT	11	11	T-UE
	A-8	0.9	PT	10	10	T-EA
	A-14	3.7	PT	10	10	T-EA
	A-20.1	64.5	SST	11	11	T-UE
	A-20.2	18.6	SST	11	11	T-UE
	A-21	18.3	PT	10	10	T-EA
	A-27	11.0	PT	10	10	T-EA
	A-30.1	13.1	PT	11	11	T-EA
	A-45	2.9	SST	42	42	T-EA
	B-22	2.2	S-S	10	10	T-EA
	B-23.2	6.0	S-S	11	11	T-UE
	C-1	30.2	PT	12	12	T-UE

Table III.H. –Stands without Scheduled Management within 10 Years **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction
				Current	Future	
	C-2	20.1	SST	68	70	WL
	C-5.1	55.4	PT	12	12	T-UE
	C-5.2	23.0	PT	10	10	T-UE
	C-7.1	4.6	PT	14	14	T-EA
	C-7.2	3.5	PT	11	11	T-UE
	C-8.1	4.2	PT	71	71	T-EA
	C-9.1	22.2	PT	41	41	T-UE
	C-9.2	14.1	SST	41	41	T-UE
	C-11	16.6	PT	10	10	T-EA
Whiskey Flats SF (SL 2)	A-10	12.3	PT	40	40	T-EA
	A-11.1	22.1	SST	40	40	T-EA
	A-11.2	8.7	SST	40	40	T-EA
	A-12	10.6	S-S	70	70	T-EA
	A-20.1	10.5	SST	60	60	T-EA
	A-20.2	6.5	S-S	70	70	T-EA
	A-21	19.2	SST	47	47	T-EA
	B-4.1	34.3	PT	10	10	T-EA
	B-4.2	9.9	PT	12	12	T-UE
	B-13.1	25.0	SST	41	41	T-EA
	B-13.2	10.1	SST	41	41	T-EA
	B-13.3	5.0	PT	12	12	T-UE
	B-16	27.7	SST	11	11	T-UE
	B-17	9.6	SST	10	10	T-EA
	B-18.1	27.9	S-S	14	14	T-EA
	B-19	5.9	PT	10	10	T-UE
	B-20	5.7	S-S	10	10	T-UE

Table III.H. –Stands without Scheduled Management within 10 Years **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction
				Current	Future	
	B-27	18.7	S-S	10	10	T-EA
	C-2	4.7	SST	70	70	T-EA
	C-4	5.1	SST	40	40	T-EA
	C-15	2.6	PT	10	10	T-EA
	C-21	40.9	PT	12	12	T-UE
	C-22.1	16.7	S-S	12	12	T-UE
	C-22.2	6.7	S-S	12	12	T-EA
	C-22.3	3.3	PT	12	12	T-EA
	C-23	9.1	PT	10	10	T-EA
	C-24	7.2	PT	12	12	T-EA
	C-25	4.0	PT	42	42	T-EA
	C-26	11.3	SST	42	42	T-EA
	C-28	4.6	PT	40	40	T-EA
	C-29.1	6.5	SST	12	12	T-UE
	C-29.2	4.8	S-S	10	10	T-EA
	C-36	71.2	PT	10	10	T-EA
	D-3	10.7	SST	40	40	T-EA
	D-4	8.2	PT	12	12	T-UE
	D-6	4.1	PT	11	11	T-UE
	D-7	8.4	SST	40	40	T-EA
	D-8	21.7	S-S	40	70	WL
	D-9	2.9	PT	70	70	T-EA
	D-10	7.6	SST	40	40	T-EA
	D-12	6.5	SST	40	40	T-EA
	D-13	15.6	PT	40	40	T-EA
	D-16	4.9	SST	40	40	T-EA

Table III.H. –Stands without Scheduled Management within 10 Years **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction
				Current	Future	
	D-26	7.3	S-S	10	10	T-EA
	D-28	19.3	S-S	70	70	T-EA
	D-29	2.6	S-S	10	10	T-EA
	D-30	55.7	SST	40	40	T-EA
	D-31	3.7	PT	60	60	T-EA
	D-32	29.1	S-S	10	10	T-UE
	E-1	19.6	PT	40	40	T-EA
	E-2	2.1	S-S	12	12	T-EA
	E-3	3.3	S-S	10	10	T-EA
	E-4	10.0	SST	42	42	T-EA
	E-5	3.2	PT	70	70	T-EA
	E-9.1	10.9	PT	10	10	T-UE
	E-9.2	28.5	S-S	10	10	T-UE
	E-10	16.3	SST	10	10	T-UE
	E-20	7.4	SST	10	10	T-UE
	E-21	15.0	S-S	12	12	T-EA
	E-29	20.5	S-S	10	10	T-EA
	E-33	37.3	SST	11	11	T-UE
	E-43	7.4	SST	10	10	T-UE
	E-44	37.9	SST	10	10	T-UE
	E-48	43.5	SST	10	10	T-UE
	F-1	9.0	SST	10	10	T-UE
	F-2.1	16.5	S-S	12	12	T-EA
	F-2.2	3.2	S-S	10	10	T-EA
	F-4	22.1	S-S	12	12	T-EA
	F-7	10.5	SST	11	11	T-UE

Table III.H. –Stands without Scheduled Management within 10 Years **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type		Management Direction
				Current	Future	
	F-10	28.0	PT	10	10	T-UE
	F-12	34.0	SST	10	10	T-UE
	F-13	8.5	SST	10	10	T-UE
	G-10	24.5	SST	70	70	T-EA
	G-11	6.9	PT	10	10	T-EA
	G-12	15.1	SST	40	40	T-EA
	G-13	2.2	PT	10	10	T-EA

Table III.I.–Resource Protection/Natural Areas **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type
Catherineville SF (SL 8)	A-1.1	11.6	S-S	10
	A-3	7.8	NA	99
	A-5.2	3.8	PT	13
	A-7	7.5	PT	13
	A-10.2	9.5	SST	10
	A-12	3.1	PT	13
	A-16	26.2	PT	13
	A-19	11.7	PT	13
	A-24.2	5.2	PT	13
	A-24.3	5.2	PT	13

Table III.I.–Resource Protection/Natural Areas **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type
	A-24.4	4.4	PT	12
	A-25	11.7	PT	11
	A-26	15.8	NA	99
	A-27	39.6	SST	11
	A-28	3.0	NA	99
	A-29	3.4	PT	13
	A-31.3	3.7	NA	99
	A-33	6.3	PT	13
	A-37	43.9	NA	99
	A-711	20.0	NA	99
	B-2	7.7	NA	99
	B-6	5.3	S-S	15
	B-15	5.5	S-S	15
	B-21.2	8.1	SST	10
	B-22	3.8	SST	13
	B-23.4	5.6	SST	13
	B-23.5	3.3	SST	13
	B-23.6	2.0	PT	11
	B-29	31.2	PT	29
	B-30	23.7	PT	13
	B-32	12.7	PT	10
	B-711	8.8	NA	99
Crary Mills SF (SL 40)	A-2	8.3	PT	46
	A-3	1.4	SST	18
	A-4.1	18.5	NA	99

Table III.I.–Resource Protection/Natural Areas **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type
	A-4.2	12.3	PT	15
	A-8.1	12.3	PT	32
	A-8.2	6.7	PT	32
	A-9.1	3.0	NA	99
	A-9.2	14.6	NA	99
	A-9.3	6.8	PT	32
	A-11	7.0	PT	15
	A-13	3.0	PT	15
	A-14	3.6	S-S	15
	A-15	5.8	PT	32
	A-18	26.5	PT	32
	A-19.2	1.6	SST	41
	A-20.2	2.6	PT	11
	A-20.3	22.9	PT	32
	A-21.1	14.6	NA	99
	A-21.2	7.3	PT	15
	A-22.2	6.8	NA	99
	A-711	4.8	NA	99
	A-722	2.3	NA	99
	B-2	6.4	PT	70
	B-5.2	2.6	PT	41
	B-6	11.4	NA	99
	B-711	1.6	NA	99
	B-722	1.2	NA	99
	B-820	2.0	NA	99

Table III.I.–Resource Protection/Natural Areas **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type
	C-4.1	11.6	PT	32
	C-4.2	13.1	PT	11
	C-711	1.8	NA	99
	C-722	1.7	NA	99
Degrasse SF (SL 13)	A-3	24.8	NA	99
	A-4	82.3	S-S	15
	A-6.1	2.1	SST	42
	A-9	6.6	NA	99
	A-10	8.4	PT	46
	A-13.1	3.3	NA	99
	A-13.2	2.9	SST	10
	A-15	7.2	NA	99
	A-24	1.8	NA	99
	A-28.1	25.0	NA	99
	A-28.2	14.6	NA	99
	A-44	4.4	NA	99
	A-50	11.6	MST	11
	A-57	5.6	SST	11
	A-61	5.6	MST	63
	A-63.1	7.1	NA	99
	A-64	3.1	PT	10
	A-67	4.0	SST	11
	A-75	24.2	NA	99
	A-711	25.0	NA	99
Downerville SF (SL 26)	A-2	1.8	NA	99

Table III.I.–Resource Protection/Natural Areas **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type
	A-6	2.1	NA	99
	A-7	3.0	S-S	15
	A-10	0.9	NA	99
	A-14	15.4	NA	99
	A-15	7.8	NA	99
	A-18	5.5	PT	15
	A-21	6.9	SST	10
	A-22.2	35.4	SST	10
	A-22.4	10.4	SST	10
	A-24	12.7	SST	10
	A-25	23.9	SST	10
	A-26	7.2	NA	99
	A-27.1	4.1	SST	10
	A-27.2	3.4	PT	11
	A-28.1	21.4	SST	10
	A-28.2	5.3	PT	11
	A-29.1	5.6	SST	10
	A-29.2	2.8	PT	11
	A-32	2.7	PT	11
	A-33	28.2	PT	15
	A-35	11.8	SST	10
	A-36	7.3	NA	99
	A-37	11.4	PT	31
	A-38.1	14.9	PT	31
	A-38.2	7.6	SST	10

Table III.I.–Resource Protection/Natural Areas **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type
	A-39	33.9	SST	10
	A-40	45.2	NA	99
	A-41.1	27.3	SST	10
	A-41.2	12.8	SST	10
	A-41.3	2.3	S-S	10
	A-42	7.0	PT	11
	A-43	2.2	SST	10
	A-44.1	16.7	SST	10
	A-44.2	2.8	SST	10
	A-44.3	2.8	NA	99
	A-45	34.5	SST	10
	A-46	4.4	NA	99
	A-49	1.3	PT	15
	A-54	8.7	NA	99
	A-58	15.1	PT	15
	A-711	20.5	NA	99
Glenmeal SF (SL 19)	A-8	1.8	NA	99
	A-9	1.8	PT	25
	A-16	19.2	PT	32
	A-17	1.6	PT	10
	A-18	10.4	NA	99
	A-23.2	4.5	SST	63
	A-25	13.2	NA	99
	A-29	2.5	PT	71
	A-30	13.0	SST	63

Table III.I.–Resource Protection/Natural Areas **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type
	A-32	5.9	SST	10
	A-37	12.2	NA	99
	A-42	5.7	MST	10
	A-48	6.2	NA	99
	A-49	15.4	NA	99
	A-50	3.0	PT	15
	A-51	3.4	SST	15
	A-54	1.5	NA	99
	A-711	10.6	NA	99
High Flats SF (SL 20)	A-3	4.4	NA	99
	A-6	13.3	PT	10
	A-7.2	1.7	PT	12
	A-8	16.8	PT	10
	A-9	27.5	PT	11
	A-10	5.7	PT	15
	A-11	49.6	NA	99
	A-12.1	10.6	PT	15
	A-15	3.4	PT	10
	A-21.1	1.8	S-S	15
	A-21.2	1.2	PT	21
	A-28.2	3.3	PT	10
	A-33	27.6	PT	11
	A-36	50.9	SST	11
	A-39	6.7	NA	99
	A-41	38.6	PT	15

Table III.I.–Resource Protection/Natural Areas **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type
	A-42	14.0	NA	99
	A-43	15.6	PT	12
	A-44	1.3	NA	99
	A-45	1.0	NA	99
	A-711	10.5	NA	99
	B-2.2	1.2	NA	99
	B-6	6.1	NA	99
	B-7	13.1	NA	99
	B-8.2	6.0	PT	71
	B-9	21.9	PT	11
	B-11.1	2.5	PT	11
	B-11.2	1.5	NA	99
	B-14	6.2	NA	99
	B-16	3.4	NA	99
	B-711	2.0	NA	99
	C-5	3.3	PT	12
	C-7	7.4	PT	12
	C-9.2	2.9	NA	99
	C-12	9.0	NA	99
	C-15.2	2.5	NA	99
	C-16	10.1	PT	12
	C-18	10.0	PT	10
	C-21	4.9	NA	99
	C-24	5.7	NA	99
	C-28	8.7	NA	99

Table III.I.–Resource Protection/Natural Areas **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type
	C-29	11.6	NA	99
	C-31.1	10.3	NA	99
	C-31.2	10.9	SST	11
	C-33	15.5	NA	99
	C-38	8.6	PT	10
	C-39	7.0	NA	99
	C-41.3	2.9	NA	99
	C-711	18.0	NA	99
	C-722	1.7	NA	99
Orebed Creek SF (SL 14)	A-14	3.4	SST	10
	A-16	2.3	NA	99
	A-17	9.8	NA	99
	A-18.1	7.8	PT	11
	A-18.2	5.4	PT	10
	A-23	23.5	PT	10
	A-26	3.5	PT	10
	A-28	2.9	PT	14
	A-31	3.5	PT	12
	A-34	2.2	PT	12
	A-35	5.5	PT	12
	A-38	6.0	NA	99
	A-39	3.5	PT	71
	A-41	36.8	NA	99
	A-42	87.7	PT	10
	A-48	5.1	PT	15

Table III.I.–Resource Protection/Natural Areas **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type
	A-51	17.9	NA	99
	A-53	12.2	PT	10
	A-711	8.8	NA	99
Silver Hill SF (SL 35)	A-5.2	2.9	SST	61
	A-9	4.3	PT	71
	A-10	7.6	NA	99
	A-11	4.2	SST	41
	A-12	2.1	PT	42
	A-13	2.4	NA	99
	A-14.2	5.0	PT	12
	A-16	20.9	PT	11
	A-17	4.1	SST	10
	A-23	25.2	NA	99
	A-25	4.0	SST	11
	A-26	5.2	NA	99
	A-29	2.3	PT	11
	A-31	5.9	SST	11
	A-35	17.9	NA	99
	A-36	3.4	SST	41
	A-37	10.0	NA	99
	A-38	26.9	SST	11
	A-39.2	5.8	NA	99
	A-40	12.3	PT	10
	A-41	5.4	SST	60
	A-43	11.2	SST	11

Table III.I.–Resource Protection/Natural Areas **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type
	A-45	5.7	PT	11
	A-46	3.6	NA	99
	A-47	7.8	SST	21
	A-48	5.4	PT	22
	A-49	3.4	NA	99
	A-50.2	3.6	MST	21
	A-54	23.4	NA	99
	A-58	6.0	NA	99
	A-711	18.8	NA	99
Snow Bowl SF (SL 34)	A-6	6.3	SST	10
	A-7	5.5	PT	13
	A-8	3.3	NA	99
	A-10	14.1	PT	13
	A-14	15.7	NA	99
	A-15	15.5	NA	99
	A-16	10.7	SST	10
	A-17.2	3.3	PT	13
	A-19	4.5	PT	13
	A-20	8.6	PT	13
	A-24	6.1	SST	10
	A-26	4.8	PT	10
	A-28	22.1	SST	10
	A-30.2	4.7	SST	40
	A-35	10.1	SST	10
	A-36	9.1	NA	99

Table III.I.–Resource Protection/Natural Areas **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type
	A-37	1.9	SST	10
	A-38	8.8	SST	13
	A-711	2.6	NA	99
	A-722	2.0	NA	99
	B-4	1.3	NA	99
	B-5.1	16.4	PT	10
	B-5.3	4.3	PT	13
	B-11.2	1.6	SST	11
	B-16	1.2	NA	99
	B-711	7.6	NA	99
	C-4	4.6	SST	10
	C-6	9.8	PT	10
	C-7	8.8	SST	10
	C-9	1.0	NA	99
	C-711	1.7	NA	99
Taylor Creek SF (SL 3)	A-1	4.1	SST	63
	A-2	2.4	NA	99
	A-8	2.3	NA	99
	A-13	6.8	NA	99
	A-15	2.3	NA	99
	A-17	8.0	NA	99
	A-18	20.7	NA	99
	A-21.1	1.0	NA	99
	A-21.2	9.4	SST	11
	A-22	8.5	SST	11

Table III.I.–Resource Protection/Natural Areas **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type
	A-24	22.9	NA	99
	A-26	17.6	SST	15
	A-27	3.6	SST	71
	A-29	5.0	MST	41
	A-35	6.8	NA	99
	A-37	16.1	NA	99
	A-40	34.2	SST	11
	A-46	2.2	SST	10
	A-47	17.4	NA	99
	A-51	4.7	PT	15
	A-54	2.5	NA	99
	A-56	3.2	S-S	15
	A-61	84.6	NA	99
	A-65	13.3	SST	71
	A-68	14.0	SST	41
	A-72	10.4	NA	99
	A-73	12.6	SST	10
	A-74	11.6	PT	15
	A-78	59.1	NA	99
	A-81	2.8	NA	99
	A-82	24.2	PT	10
	A-83	22.5	NA	99
	A-84	50.3	PT	10
	A-85	6.3	NA	99
	A-86	5.4	NA	99

Table III.I.–Resource Protection/Natural Areas **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type
	A-91	4.5	PT	11
	A-93	10.5	NA	99
	A-96	19.7	NA	99
	A-711	21.9	NA	99
West Parishville SF (SL 28)	A-2	2.0	PT	25
	A-3	3.2	PT	25
	A-4	4.7	PT	25
	A-6	2.0	PT	32
	A-10	4.8	PT	20
	A-11	4.8	S-S	15
	A-14.5	2.4	SST	40
	A-16	2.1	SST	11
	A-17	2.1	NA	99
	A-19	2.5	S-S	15
	A-20	4.0	PT	10
	A-24	5.9	NA	99
	A-26	5.1	NA	99
	A-711	12.8	NA	99
	B-2	2.1	NA	99
	B-4	4.3	PT	15
	B-11	14.5	SST	12
	B-15	3.6	NA	99
	B-16	15.7	NA	99
	B-25	5.2	NA	99
	B-26	12.7	SST	11

Table III.I.–Resource Protection/Natural Areas **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type
	B-711	2.5	NA	99
	C-1	6.7	PT	15
	C-2	6.8	PT	10
	C-10	4.7	NA	99
	C-711	5.8	NA	99
Whippoorwill Corners SF (SL 41)	A-2	4.1	NA	99
	A-5.1	3.6	S-S	10
	A-5.2	2.3	S-S	14
	A-5.3	1.9	PT	10
	A-6	3.2	S-S	14
	A-9	1.3	PT	71
	A-10	1.2	S-S	14
	A-11	6.5	NA	99
	A-12	7.9	S-S	14
	A-15	5.8	PT	15
	A-16	8.4	PT	15
	A-17	9.7	NA	99
	A-19	0.9	PT	21
	A-22	7.2	PT	14
	A-24	1.9	PT	15
	A-25	2.8	PT	12
	A-26.2	1.6	MST	21
	A-28	1.1	MST	22
	A-29	5.7	SST	20
	A-31	11.4	NA	99

Table III.I.–Resource Protection/Natural Areas **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type
	A-32	9.7	PT	14
	A-34.1	3.9	NA	99
	A-34.2	3.0	NA	99
	A-37	2.7	NA	99
	A-38	0.5	PT	11
	A-41	4.7	SST	15
	A-42	1.1	PT	10
	A-43	1.3	PT	14
	A-44	1.2	SST	20
	A-48	2.1	NA	99
	A-50	5.8	NA	99
	A-52.2	5.7	PT	15
	A-62	2.1	SST	41
	A-63	3.2	SST	12
	A-711	20.9	NA	99
	B-1	6.7	PT	15
	B-2	7.1	PT	14
	B-4	4.3	PT	11
	B-6	5.9	PT	11
	B-13.1	26.0	PT	10
	B-13.2	4.4	SST	10
	B-13.3	2.2	PT	15
	B-15	45.1	SST	10
	B-16	2.8	PT	11
	B-20	6.3	PT	70

Table III.I.–Resource Protection/Natural Areas **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type
	B-24	0.9	PT	15
	B-711	4.1	NA	99
	C-3	11.1	PT	10
	C-4	1.3	NA	99
	C-5.3	5.0	PT	15
	C-8.2	2.5	PT	41
	C-9.3	1.4	PT	14
	C-10.1	10.1	NA	99
	C-10.2	1.1	NA	99
	C-12	1.1	SST	14
	C-13	2.0	PT	15
	C-14	2.0	NA	99
	C-711	2.3	NA	99
Whiskey Flats SF (SL 2)	A-2	2.7	PT	25
	A-3	2.0	SST	10
	A-4	3.9	SST	10
	A-5	10.3	SST	15
	A-6	8.1	SST	65
	A-8	8.5	PT	12
	A-9	7.4	PT	70
	A-15	3.8	SST	11
	A-16	13.9	NA	99
	A-23	5.8	SST	11
	A-25	2.1	NA	99
	A-26	5.6	S-S	14

Table III.I.–Resource Protection/Natural Areas **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type
	A-27	28.1	NA	99
	A-711	3.9	NA	99
	A-722	2.1	NA	99
	B-2.1	2.4	NA	99
	B-2.2	2.4	NA	99
	B-3	8.3	PT	12
	B-9	5.0	NA	99
	B-12	11.1	SST	10
	B-14	12.6	NA	99
	B-15	4.9	NA	99
	B-25	11.5	PT	11
	B-711	3.1	NA	99
	C-1	3.1	PT	71
	C-5	2.5	NA	99
	C-6	9.7	PT	25
	C-16	10.2	SST	25
	C-18	27.8	SST	11
	C-19	8.9	NA	99
	C-20.1	3.1	SST	11
	C-20.2	4.1	PT	11
	C-30.1	2.1	SST	10
	C-30.2	4.7	SST	10
	C-34	91.6	SST	15
	C-35	3.6	NA	99
	C-37	3.2	NA	99

Table III.I.–Resource Protection/Natural Areas **(by State Forest)**

State Forests	Stand	Acres	Size Class	Forest Type
	C-711	3.3	NA	99
	C-722	4.0	NA	99
	D-1	3.2	PT	32
	D-2	23.9	NA	99
	D-5	14.1	PT	32
	D-15	3.2	NA	99
	D-17.1	6.3	SST	10
	D-17.2	7.1	SST	11
	D-19	2.1	PT	10
	D-711	6.7	NA	99
	D-722	10.3	NA	99
	E-11	3.5	SST	41
	E-12	13.2	PT	10
	E-22	3.8	NA	99
	E-23	3.3	SST	15
	E-28	11.4	SST	15
	E-34	7.4	NA	99
	E-45	3.7	S-S	15
	E-49	2.2	NA	99
	E-50	21.0	SST	11
	E-711	9.3	NA	99
	E-722	5.1	NA	99
	F-6	11.5	NA	99
	F-9	10.3	NA	99
	F-11	9.2	NA	99

Table III.I.–Resource Protection/Natural Areas (by State Forest)				
State Forests	**Stand**	**Acres**	**Size Class**	**Forest Type**
	F-22	2.1	PT	20
	F-711	4.4	NA	99
	G-1	11.5	PT	15
	G-711	2.9	NA	99
	G-722	2.3	NA	99

Bibliography

Angus, Christopher. *The Extraordinary Adirondack Journey of Clarence Petty: Wilderness Guide, Pilot, and Conservationist.* Syracuse University Press: Syracuse, NY. 2002. 265 pp.

Asaro, Christopher. *The Biology and Impact of Pine False Webworm, Acantholyda erythrocephala (L.) (Hymenoptera: Pamphiliidae), in Northern New York.* Master's Thesis. SUNY College of Environmental Science and Forestry. Syracuse, NY. 1996. 94 pp.

Benedict, Les, and O'Ceillaigh, Setanta. *St. Regis Mohawk Tribe – A Partnership for Hardwood Wetlands Habitat Restoration and Management*. USFWS TWG 2007 – Project Report. 2009. 73 pp. +

Benedict, Les, and David, Richard. *Handbook for Black Ash - Preservation Reforestation / Regeneration.* Mohawk Council of Akwesasne – Department of the Environment. 2004. 79 pp.

Civilian Conservation Corps Records. 1934-1941. There are several boxes of miscellaneous records and correspondence from the CCC era located at the Potsdam DEC Office. There are also extensive maps of the tree planting done during this era.

Crocoll, Scott. *Raptor Management on State Forests.* New York State Department of Environmental Conservation: Albany, NY. Unpublished report. 2013. 49 pp.

Davis, Jeremy K. 2014. *Lost Ski Areas of the Northern Adirondacks.* The History Press: Charleston, SC. 2014. 190 pp.

Dodds, Kevin J., Cooke, Robert R., Dubois, Garret, Wagner, Jason, Voss, Rodger, and Ganter, Travis. *Silvicultural Treatments to Reduce Pine Susceptibility to Sirex noctilio Attack on Fort Drum Military Base, New York.* Progress Report. 2008. 13 pp.

Durant, Samuel W., and Pierce, Henry B. *History of St. Lawrence Co., New York, with illustrations and biographical sketches of some of its prominent men and pioneers, 1749-1878.* Reprinted by the St. Lawrence County Historical Association. Heart of the Lakes Publishing. Interlaken, NY. 1982. 521 pp.

Eldblom, Nancy C., and Johnson, Anne M. *Plants of St. Lawrence County, NY: An Annotated Checklist of Vascular Flora.* Bloated Toe Publishing. Peru, NY. 2010. 263 pp.

Huebner, Cynthia D., Olson, Cassandra, and Smith, Heather C. *Invasive Plants Field and Reference Guide: An Ecological Perspective of Plant Invaders of Forests and Woodlands.* USDA Forest Service. Morgantown, WV. 2005. Publication NA-TP-05-04.

Johnson, Warren T., and Lyon, Howard H. *Insects that Feed on Trees and Shrubs: An Illustrated Practical Guide.* Cornell University Press. Ithaca, NY. 1976. 464 pp.

Kudish, Michael. *Railroads of the Adirondacks.* Purple Mountain Press. Fleischmanns, NY. 1996. 496 pp. "Chapter 30: Clifton Iron Company's Railroad" pp 328-330.

Larue, Robert J. *St. Lawrence County Almanac . Volume 1.* Peerless Press. Syracuse, NY. 1996.

Larue, Robert J. *St. Lawrence County Almanac . Volume 2.* Peerless Press. Syracuse, NY. 1997.

Larue, Robert J. *St. Lawrence County Almanac . Volume 3.* Peerless Press. Syracuse, NY. 1999.

Larue, Robert J. *St. Lawrence County Almanac . Volume 4.* Peerless Press. Syracuse, NY. 2000.

New York Natural Heritage Program. *State Lands Assessment Project: Biodiversity Inventory of Regions 5 & 6 State Forests & Forest Preserve.* Albany, NY. 2008. 2,898 pp.

New York State Department of Environmental Conservation. *New York State Forestry Best Management Practices for Water Quality: BMP Field Guide.* NYS DEC: Albany, NY. 2011. 81 pp.

New York State Department of Environmental Conservation. *New York State Strategic Plan for State Forest Management.* NYS DEC: Albany, NY. 2010. 356 pp.
Available online at: http://www.dec.ny.gov/lands/64567.html

Omohundro, Susan, and Omohundro, John. "The Colton Tannery". *The Quarterly*. St. Lawrence County Historical Association. Vol. 48 No. 3. Summer 2003. Pp 12-15.

Palmer, Richard F., and Thomas, John. "Wooden Rails in the Wilderness: Part II – The Railroad." *The Quarterly*. St. Lawrence County Historical Association. Vol. 14 No. 3. July 1969. Pp 11, 14, 22.

Parishville Historical Association. *Sketches of Parishville in Word and Picture, 1809-1976*. The Association. 1976. 88 pp.

Podskoch, Martin. *Adirondack Civilian Conservation Corps Camps: History, Memories & Legacy of the CCC.* Podskoch Press. East Hampton, CT. 2011. 347 pp.

Rocca, Marie. *History of the Town of Russell: Includes Clare, Degrasse, Downerville, North Russell, South Russell. 1807-2007*. 2008.

Rogers, W.B. et al. (eds). *Geology of New York: A Simplified Account*. 2nd Edition. Educational Leaflet No. 28. The New York State Museum. Albany, NY. 2000. 284 pp.

Sinclair, Wayne A., and Lyon, Howard, H. *Diseases of Trees and Shrubs.* Cornell University Press. Ithaca, NY. 2005. 660 pp.

Van Diver, Bradford B. *Rocks and Routes of the North Country, New York*. W.F. Humphrey Press. Geneva, NY. 1976. 204 pp.

Van Diver, Bradford B. *Upstate New York, Field Guide (K/H Geology Field Guide Series)*. Kendall / Hunt Publishing Company. Dubuque, IA. 1980. 276 pp.

Van Driesche, Roy, Blossey, Bernd, Hoddle, Mark, Lyon, Suzanne, and Reardon, Richard eds. *Biological Control of Invasive Plants in the Eastern United States.* USDA Forest Service. 2002. Publication FHTET-2002-04. 413 pp.

Walrath, F.F.E. "Downerville." *The Quarterly*. St. Lawrence County Historical Association. Vol. 9 No. 2. April 1964. P. 11.

"Profile - Henry Bradford: You Never Retire From Trees, Tranquility." *The Observer* (Massena, NY), Thur 15 Nov 1973. p. 11. Retrieved from the Northern New York Historical Newspapers database, available at: http://news.nnyln.net/ . Downloaded 2014.

"Obituary – Henry N. Bradford." *The Tribune-Press* (Gouverneur, NY), Wed 20 Nov 1991. P. 7. Retrieved from the Northern New York Historical Newspapers database, available at: http://news.nnyln.net/ . Downloaded 2014.

Glossary

ALLOWABLE CUT- The amount of wood fiber that may be harvested annually or periodically from a specified area over a stated period in accordance with the objectives of management.

BASAL AREA- The cross sectional area of a tree at breast height, measured in square feet. For a stand: the total basal area per unit of area, usually expressed as square feet per acre.

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

CLEARCUT- A Method of regenerating an even-aged stand in which a new age class develops in a fully exposed microclimate after removal, in a single cutting, of all trees in the previous stand. Regeneration is from natural seeding, planted seedlings, and/or advance regeneration. Harvesting may be done in groups, patches or strips.

CLIMAX FOREST- The culminating stage in forest succession, where the vegetation has reached a highly stable condition. It is self perpetuating. A climax forest will persist until a catastrophic disturbance occurs.

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

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

CUTTING INTERVAL- The number of years between harvest-regeneration cuts in a stand using the uneven-aged system.

ECOSYSTEM- All the interacting populations of plants, animals and microorganisms occupying an area, plus their physical environment.

EVEN-AGED- A class of forest or stand composed of trees of about the same age. The maximum age difference admissible is generally 10-20 years.

FOREST DEVELOPMENT STAGES- The various stages of forest stand growth and development ranging from seedling/sapling to mature trees.

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

INTERIOR SPECIES- Species, vegetative and animal, whose habitat dependence requires significant tracts of unbroken forest types, often sensitive to fragmentation and to varying degrees of disturbance.

LARGE POLES- Trees 9-11" diameter at breast height.

LARGE SAWTIMBER- Trees 18"+ diameter at breast height.

MEDIUM SAWTIMBER- Trees 15-17" diameter at breast height.

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

NATURAL AREA- Areas without scheduled management. Many of these stands will eventually attain late successional conditions. These areas are generally not managed for the production of wood products.

OLD GROWTH FOREST- No universally accepted definition exists, however, old growth stands would have these characteristics: Large trees, Dead snags, Downed logs, Broken or multiple layered canopy, Community would be in an advanced or "climax" successional stage.

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

REGENERATION/REPRODUCTION- The act of replacing old trees, either naturally or artificially. Also refers to the new growth that develops.

RELEASE- The act of removing an overstory of trees to release an understory of established seedlings or saplings.

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

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

SEEDLING/SAPLING- Trees less than 6" diameter at breast height.

SEED TREE CUT- The removal of the mature timber in one cutting, except for a small number of trees left singly, or in small groups, as a source of seed for natural regeneration.

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

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

SMALL POLES- Trees 6-8" diameter at breast height.

SMALL SAWTIMBER- Trees 12-14" diameter at breast height.

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

STAND- Any area of forest vegetation with site conditions, past history and current species composition and age sufficiently uniform to distinguish it from adjacent areas. (Chambers)

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.

SUSTAINED YIELD- The achievement and maintenance in perpetuity of a reasonable regular periodic output of the various renewable resources without impairment of the land's productivity.

TIMBER STAND IMPROVEMENT (TSI)- Pre-commercial silvicultural treatments, typically thinnings intended to regulate stand density and species composition while improving wood product quality and fostering individual tree health and vigor

UNEVEN-AGED- A class of forest or stand composed of intermingled trees or groups of trees that differ markedly in age.

WATER QUALITY CLASSES- A system of classification in ECL Article 17 which presents a ranked listing of the State's surface waters by the letters AA, A, B, C or D according to certain quality standards and specifications. AA is the highest quality rank and has the greatest suitability for human usage.

WETLAND CLASSES- A system of classification set forth in ECL Article 24, section 664.5 which ranks wetlands I through IV based upon wetland functions and benefits, I being the highest rank. (DEC publication WM-P11, b/80).