



Department of  
Environmental  
Conservation

Division of Lands & Forests

Bureau of Public Lands

---

# Adirondack Foothills

## UNIT MANAGEMENT PLAN

### *(Draft)*

Towns of Boonville and Forestport, County of Oneida

Towns of Norway, Russia, Salisbury, County of Herkimer

---

July 2016

NYS Department of Environmental Conservation

Region 6

Herkimer Sub-Office

225 N. Main St., Herkimer, NY 13350

Governor **ANDREW M. CUOMO**

Commissioner **Basil Seggos**

State Forester **ROB DAVIES**

# **Adirondack Foothills**

## **Unit Management Plan**

**A planning unit consisting of 4 State Forests in Oneida County, and 2 State Forests in Herkimer County**

**July, 2016**

Prepared by the Adirondack Foothills Unit Management Planning Team:

Mary Kay Allen, Senior Forester  
Justanna Bohling, Forest Technician  
Bob Coscomb, Forest Ranger  
Dave Erway, Senior Fisheries Biologist  
Scott Healy, Supervising Forester  
Steve Heerkens, Senior Wildlife Biologist  
Steve Litwhiler, Citizen Participation Specialist  
Jessica Mosher, Forest Technician  
Kevin Reed, Conservation Operations Supervisor II  
Bruce Robinson, Lands and Claims Adjuster II

### **Acknowledgments**

The Adirondack Foothills Hills 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:

Elaine Carlin, Salisbury Historical Society  
Dave Smith, Regional Forester

New York State Department of Environmental Conservation  
Division of Lands and Forests  
Region 6  
Herkimer Sub-office  
225 N. Main St.  
Herkimer, NY 13350  
315-866-6330

<http://www.dec.ny.gov/lands/97049.html>

## **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 Adirondack 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.



# TABLE OF CONTENTS

<b>DEC'S MISSION .....</b>	<b>3</b>
<b>VISION STATEMENT .....</b>	<b>3</b>
<b>TABLE OF CONTENTS.....</b>	<b>5</b>
<b>PREFACE .....</b>	<b>7</b>
STATE FOREST OVERVIEW.....	7
<i>Legal Considerations .....</i>	<i>7</i>
MANAGEMENT PLANNING OVERVIEW .....	7
<i>Public Participation .....</i>	<i>7</i>
<i>Strategic Plan for State Forest Management.....</i>	<i>8</i>
DEC'S MANAGEMENT APPROACH AND GOALS .....	8
<i>Sustainability and Forest Certification .....</i>	<i>8</i>
<i>Ecosystem Management Approach .....</i>	<i>9</i>
<i>Ecosystem Management Strategies.....</i>	<i>9</i>
<i>State Forest Management Goals .....</i>	<i>10</i>
<b>LOCATION MAP .....</b>	<b>12</b>
<b>I.    INFORMATION ON THE ADIRONDACK FOOTHILLS UNIT.....</b>	<b>13</b>
STATE LANDS IN THE UNIT .....	13
SOILS.....	14
WATER RESOURCES.....	15
<i>Major Streams, Rivers and Water Bodies.....</i>	<i>16</i>
BIODIVERSITY .....	16
<i>Common Fauna Species .....</i>	<i>17</i>
<i>Habitat .....</i>	<i>19</i>
<i>At-Risk Species.....</i>	<i>22</i>
VISUAL RESOURCES .....	25
HISTORIC AND CULTURAL RESOURCES .....	25
<i>History of the Unit.....</i>	<i>25</i>
<i>Inventory of Resources .....</i>	<i>27</i>
<i>Archaeological Site Protection .....</i>	<i>28</i>
<i>Archaeological Research .....</i>	<i>28</i>
REAL PROPERTY.....	28
<i>Boundary Lines .....</i>	<i>28</i>
<i>Exceptions and Deeded Restrictions.....</i>	<i>29</i>
<i>Encroachments.....</i>	<i>29</i>
<i>Land Acquisition .....</i>	<i>29</i>
INFRASTRUCTURE .....	30
<i>Roads and Trails .....</i>	<i>30</i>
<i>Signs/Kiosks.....</i>	<i>31</i>
<i>Boating and Fishing Facilities.....</i>	<i>31</i>
<i>Designated Campsites and Lean-tos .....</i>	<i>31</i>
<i>Communications Facilities.....</i>	<i>31</i>
<i>Utility Transmission and Collection Facilities .....</i>	<i>32</i>
<i>Seed Production Areas .....</i>	<i>32</i>
<i>Non-recreational Uses.....</i>	<i>32</i>
FORMAL AND INFORMAL PARTNERSHIPS AND AGREEMENTS .....	32
RECREATION .....	33
<i>Wildlife-related Recreation .....</i>	<i>33</i>
<i>Camping .....</i>	<i>35</i>
<i>Water-based Recreation .....</i>	<i>35</i>

<i>Overall Assessment of the Level of Recreational Development</i> .....	37
UNIVERSAL ACCESS .....	37
<i>Application of the Americans with Disabilities Act (ADA)</i> .....	37
MINERAL RESOURCES .....	38
<i>Oil, Gas and Solution Exploration and Development</i> .....	38
<i>Mining</i> .....	39
SUPPORTING LOCAL COMMUNITIES .....	39
<i>Tourism</i> .....	39
<i>Taxes Paid</i> .....	40
FOREST PRODUCTS .....	40
<i>Timber</i> .....	40
<i>Non-Timber Forest Products</i> .....	40
<i>Maple Tapping</i> .....	41
FOREST HEALTH .....	41
<i>Invasive Species</i> .....	41
<i>Native Pests and Pathogens</i> .....	42
<i>Managing Deer Impacts</i> .....	43
STATE AND REGIONAL TUG HILL INITIATIVES .....	43
<b>II. SUMMARY OF ECO-REGION ASSESSMENTS</b> .....	<b>45</b>
ECO-REGION DESCRIPTION SUMMARY .....	46
ECO-REGION ASSESSMENT .....	48
LOCAL LANDSCAPE CONDITIONS .....	48
<b>III. MANAGEMENT CHALLENGES ON THE UNIT</b> .....	<b>51</b>
<b>IV. MANAGEMENT OBJECTIVES AND ACTIONS</b> .....	<b>52</b>
<i>Ecosystem Management</i> .....	53
<i>Resource Protection</i> .....	54
<i>Infrastructure and Real Property</i> .....	55
<i>Public/Permitted Use</i> .....	55
<i>Forest Management and Health</i> .....	57
TEN-YEAR LIST OF MANAGEMENT ACTIONS .....	60
LAND MANAGEMENT ACTIONS .....	65
<i>Forest Type Codes</i> .....	65
<i>Land Management Action Schedules</i> .....	66
<b>V. BIBLIOGRAPHY</b> .....	<b>67</b>
<b>VI. APPENDICES &amp; FIGURES</b> .....	<b>69</b>
APPENDIX A - GLOSSARY .....	69
APPENDIX B - SUMMARY OF COMMENTS DURING PUBLIC SCOPING SESSIONS .....	79
APPENDIX C - STATE ENVIRONMENTAL QUALITY REVIEW (SEQR) .....	81
FIGURE 1. – EXISTING AND FUTURE FACILITIES .....	82
FIGURE 2. – SOILS MAPS .....	82
FIGURE 3. – WATER RESOURCES MAPS .....	82
FIGURE 4. – FOREST COMPOSITION AND RESOURCE PROTECTION AREAS .....	82
FIGURE 5. – RECREATION MAPS .....	82
FIGURE 6. – FOREST STANDS .....	82
FIGURE 7. – FOREST AGE STRUCTURE .....	82
FIGURE 8. – DETACHED FOREST PRESERVE PARCELS .....	82

## 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 Adirondack Foothills Unit Management Plan (UMP) is based on a long range vision for the management of Black Creek, Hinckley, Hogsback, Popple Pond, Punkeyville, and Woodhull State Forests, as well as 13 separate parcels of Detached Forest Preserve, 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, staffing 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.

### **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**

#### **Sustainability and Forest Certification**

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

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

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

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

The Department is part of a growing number of public, industrial and private forest land owners throughout the United States and the world whose forests are certified as sustainably managed. The



Department's State Forests can also be counted as part a growing number of working forest land in New York that is *third-party certified* as well managed to protect habitat, cultural resources, water, recreation, and economic values now and for future generations.



The mark of  
responsible forestry  
FSC® C002027



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

### Landscape Ecology

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

### Ecosystem Management Strategies

The following strategies are the tools at DEC's disposal, which will be carefully employed to practice landscape ecology and multiple-use management on the unit. The management strategy will affect

species composition and habitat in both the short and long term. For more information on these management strategies, please see SPSFM page 81 at <http://www.dec.ny.gov/lands/64567.html>.

### *Passive Management*

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

### *Silviculture (Active Management)*

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

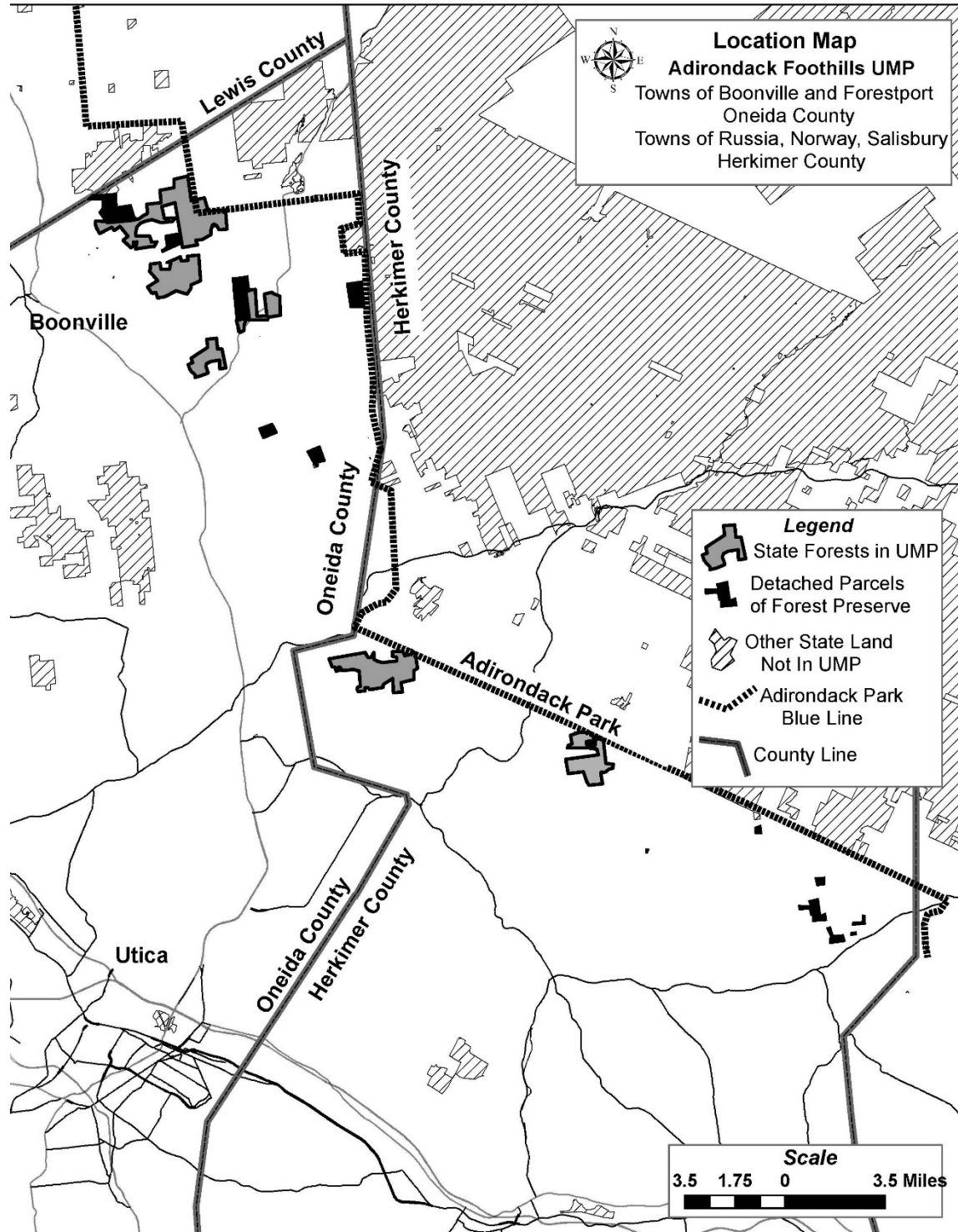
*Goal 4 – Provide Economic Benefits to the People of the State*

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 wellbeing.” (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



## I. Information on the Adirondack Foothills Unit

### State Lands in the Unit

Table I.A. contains the names of the state land facilities that make up this unit. A web page will be developed for each of the State Forests. When available, each web page will feature an updated map of the State Forest with recreational information and natural features.

<i>Table I.A. – State Lands in the Unit</i>	
<b>Facility Name and Webpage</b>	<b>Acreage</b>
Black Creek State Forest (Herkimer 4)	998
Hinckley State Forest (Herkimer 1)	1590
Hogsback State Forest (Oneida 1)	1115
Popple Pond State Forest (Oneida 6)	2446
Punkeyville State Forest (Oneida 25)	535
Woodhull State Forest (Oneida 24)	567
Detached Parcel ON 1	25
Detached Parcel ON 2	60
Detached Parcel ON 3	153
Detached Parcel ON 4	170
Detached Parcel ON 5C	62
Detached Parcel ON 5D	94
Detached Parcel ON 31	55
Detached Parcel ON 32	115
Detached Parcel ON 33, 34	100
Detached Parcel ON 36	156
Detached Parcel 38	301
Detached Parcel ON 19	84
Detached Parcel ON 21	148
Detached Parcel He 20	0.5
Detached Parcel He 24	53
Detached Parcel He 25	32
Detached Parcel He 22, 26	206
Detached Parcel He 23, 28, 30	70
Detached Parcel He 31	40

## INFORMATION ON THE ADIRONDACK FOOTHILLS UNIT

---

### HIGH CONSERVATION VALUE FORESTS

<i>Table I.A. – State Lands in the Unit</i>	
Unknown Parcel # (Herkimer County)	11
<b>TOTAL</b>	9186.5

### 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.*

Hinckley State Forest (1590 acres) has been identified as having high conservation value for watershed protection due to its proximity to Hinckley Reservoir. For more information on HCVFs please go to <http://www.dec.ny.gov/lands/42947.html>.

### Soils

Soils provide the foundation, both figuratively and literally, of forested ecosystems. They support an immense number of microorganisms, fungi, mosses, insects, herptofauna 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>.



Soils susceptible to disturbance are a key indicator of the potential for erosion and water quality impacts in the unit and adjacent lands. Table I.B. below lists the acres of soils considered highly susceptible to erosion, due to the characteristics of the soil as well as slope.

<i>Table I.B. - Soils (see Figure 2 for maps)</i>			
Facility Name	Predominant Soil Type(s)	Soil Characteristics	Highly Erodible Soils (Acres)
Black Creek State Forest (Herkimer 4)	Tunbridge –Potsdam – Lyman – Crary Complex	Well Drained	56*
Hinckley State Forest (Herkimer 1)	Windsor – Oakville – Limerick – Hoosic Complex	Well Drained	49*
Hogsback State Forest (Oneida 1)	Adams Loamy Sand	Excessively Well Drained	283
Popple Pond State Forest	Adams Loamy Sand	Excessively Well Drained	970
Punkeyville State Forest	Adams Loamy Sand	Excessively Well Drained	239
Woodhull State Forest	Adams Loamy Sand	Excessively Well Drained	153
<b>Total (Acres)</b>			<b>1750</b>

\* Detailed soils information for this part of Herkimer County is not available. The Soil Survey for this area was never completed.

### 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.

<i>Table I.C. – Water Resources (see Figure 3 for maps)</i>	
<b>Watersheds</b>	
Hydrologic unit (areas in Oneida County)	Great Lakes (Northeastern Lake Ontario basin)
Hydrologic Unit (areas in Herkimer County)	Mid-Atlantic (Upper Hudson basin)

## INFORMATION ON THE ADIRONDACK FOOTHILLS UNIT

### BIODIVERSITY

<i>Table I.C. – Water Resources (see Figure 3 for maps)</i>		
Municipal Water Supply (serving communities of over 5,000 people)		Hinckley Reservoir 2854 acres
<b>Wetlands</b>		
Regulated wetland		274 ac.
<b>Streams/Rivers</b>		
Perennial streams/rivers	AA or A	0.5 mi.
	B	0 mi.
	C	0 mi.
	D	0 mi.
Trout streams/rivers	AA (T), A (T), B (T) or C (T)	12.5 mi.
<b>Water Bodies</b>		
Water bodies (open-water ponds and lakes)		16 ac.

In New York State, waters with a designation of A or AA signify that the water can be used as a source of drinking water. A designation of B indicates that the water can be used for swimming or other contact recreation but is not used for drinking water.

A designation of C indicates that the water could support a fish population, but is not suitable for drinking water.

A designation of D is the lowest classification.

Streams with a classification of A, B or C may also have a (T) or (TS) designation which means that the stream is capable of supporting a trout population (T), or trout spawning (TS). All streams with a designation of C (T) or higher are subject to the stream protection provisions of the Protection of Waters regulations

While there are only a few miles of streams actually on the state lands in this unit, they are of very high quality.

#### Major Streams, Rivers and Water Bodies

The streams running through the State Forests in this unit that are in Oneida County all eventually drain into the Black River. The streams running through Hinckley State Forest drain into Hinckley Reservoir or the West Canada Creek. The streams running through Black Creek State Forest drain into Black Creek.

#### Biodiversity

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



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

### Common Fauna Species

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

- **NYS Breeding Bird Atlas**
- Block Numbers : 14781 A, B, C, D; 4782 C, D; 4879 C, D; 4880 A; 4881 A, B, C, D; 4978 B; 5078 A, D; 5177 A; 5178 C
- **NYS Herpetological Atlas**
- Block Numbers: L36, L37, M37, M38, N38, N39, O39, O40, O41
- **Game Species Harvest Levels**
- WMU Numbers: 5H, 6J

## INFORMATION ON THE ADIRONDACK FOOTHILLS UNIT

### BIODIVERSITY

#### Big Game Harvest Totals for WMU # 6J and 5H

##### White Tailed Deer Harvest Totals For WMU # 6J

Year:	2008		2009		2010		2011		2012		2013	
Type:	Bucks	Total Deer	Bucks	Total Deer	Bucks	Total Deer	Bucks	Total Deer	Bucks	Total Deer	Bucks	Total Deer
Take:	1,783	2,319	898	1,268	873	1,192	920	1,278	1,150	1,548	1,175	1,590

##### White Tailed Deer Harvest Totals For WMU # 5H

Year:	2008		2009		2010		2011		2012		2013	
Type:	Bucks	Total Deer	Bucks	Total Deer	Bucks	Total Deer	Bucks	Total Deer	Bucks	Total Deer	Bucks	Total Deer
Take:	2,913	3,529	1,520	2,035	1,570	2,181	1,625	2,109	2,114	2,732	2,498	3,230

##### Black Bear Harvest Totals for WMU # 6J

Year:	2008		2009		2010		2011		2012		2013	
	Not available		121		89		48		78		70	

##### Black Bear Harvest Totals for WMU # 5H

Year:	2008		2009		2010		2011		2012		2013	
	Not available		285		161		98		165		101	

### Summer Wild Turkey Sightings For The Tug Hill Transition Zone

Year:	2009		2010		2011	
Type:	# Hen Flocks Observed	Poults per Hen	# Hen Flocks Observed	Poults per Hen	# Hen Flocks Observed	Poults per Hen
Count:	23	2.40	14	2.90	2	3.00

Year:	2012		2013	
Type:	# Hen Flocks Observed	Poults per Hen	# Hen Flocks Observed	Poults per Hen
Count:	23	2.80	14	2.60

### Trapping Pelt-Sealed Take Totals By Species For Towns That Encompass The Adirondack Foothills Unit

Year:	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Bobcat	1	5	6	4	3
Fisher	38	29	73	47	115
Marten	0	5	31	0	19
Otter	9	14	23	34	30
Beaver	No Data	179	No Data	No Data	

## 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*

Vegetative Type	Acres by Size Class				% of Total
	0 -5 in	6 - 11 in	12+ in	Other	
Natural Forest Hardwood	33.9	889.7	1217.6	0	29.6%
Natural Forest Conifer	4.9	849.8	612.4	0	20.1%

## INFORMATION ON THE ADIRONDACK FOOTHILLS UNIT

### BIODIVERSITY

*Table I.D. - Vegetative Types and Stages within the Unit*

Vegetative Type	Acres by Size Class				% of Total
	0 -5 in	6 - 11 in	12+ in	Other	
Plantation Softwoods	6.7	401.7	2497.2	0	40.1%
Forested Wetlands	0	32	235.5	0	3.7%
Wetland	0	0	0	212.4	2.9%
Ponds	0	0	0	31.9	0.4%
Open/Brush	74.4	0	0	39.3	1.6%
Other (Roads, Parking lots, etc.)	0	0	0	121.8	1.6%
Total (Acres)	119.9	2173.2	4562.7	405.4	100%

The statistics above show that the Adirondack Foothills unit is predominantly a forest composed of pole and sawtimber stands, with twice as many acres in softwood plantation than in hardwoods, and a significant component of natural conifer. Non- forest is relatively low. The plantations were likely croplands or pasture lands before they were planted.

#### *Significant Natural Communities*

A search of the New York Natural Heritage Data Base found no Significant Natural Communities listed on the unit.

The entire Hinckley State Forest (1567.2 acres) is a High Conservation Value Forest (HCVF) for Watershed Protection due to its proximity to Hinckley Reservoir, a major drinking water source for the city of Utica. Buttermilk Brook flows from about the center of the State Forest into the reservoir. All other drainages in the State Forest flow to the south into the West Canada Creek downstream from the reservoir.

#### *Habitat Related Demands*

**Open Grasslands:** There is a continuing decline in grassland habitat across New York State. This habitat is critical for a number of grassland bird species of management concern within the state, such as: Northern Harrier (*Circus cyaneus*), Upland Sandpiper (*Bartramia longicauda*), Horned Lark (*Eremophila alpestris*), Sedge Wren (*Cistothorus platensis*), Eastern Bluebird (*Sialia sialis*), Clay-colored Sparrow (*Spizella pallida*), Vesper Sparrow (*Pooecetes gramineus*), Savannah Sparrow (*Passerculus sandwichensis*), Grasshopper Sparrow (*Ammodramus savannarum*), Henslow's Sparrow (*Ammodramus henslowii*), Dickcissel (*Spiza americana*), Bobolink (*Dolichonyx oryzivorus*), and Eastern Meadowlark (*Sturnella magna*).

**Early-Successional Habitat:** As with Open Grasslands, Early-successional habitat of forests has become increasingly scarce across New York State. This type of habitat is the beginning stages of a forest, where saplings and shrubs dominate the cover type. Important game bird species, such as the American Woodcock (*Scolopax minor*) and the Ruffed Grouse (*Bonasa umbellus*), are reliant upon early successional woodlands for food, cover, and for their mating rituals. Another wildlife species that is dependent upon early successional (mainly conifer) woodlands is the Snowshoe Hare (*Lepus americanus*). Due to habitat loss, the numbers of these animals has been on the decline over the past few decades. Within the Adirondack Foothills Unit, there

is approximately 109 acres of early successional forestland at the writing of this plan. Softwood plantation stands could be evaluated at the time of harvest for consideration of being converted to either early successional hardwood or softwood stands. Stands where dense pockets of Quaking or Large Tooth Aspen occur will be targeted for the removal of the mature aspen trees. In doing so, this produces a rapid response of root suckering from the aspen stumps, which is a highly desirable habitat for the above-mentioned species.

### *Resource Protection Areas*

In the course of practicing active forest management, it is important to identify areas on the landscape that are either reserved from management activity or where activity is conducted in such a manner as to provide direct protection and enhancement of habitat and ecosystem functions. For more information on these protective measures, see SPSFM page 85 at <http://www.dec.ny.gov/lands/64567.html>.

Special Management Zones (SMZs) provide continuous over-story shading of riparian areas and adjacent waters, by retaining sufficient tree cover to maintain acceptable aquatic habitat and protect riparian areas from soil compaction and other impacts. DEC's buffer guidelines also maintain corridors for movement and migration of all wildlife species, both terrestrial and aquatic. Buffers are required within SMZs extending from wetland boundaries, high-water marks on perennial and intermittent streams, vernal pool depression, spring seeps, ponds and lakes, recreational trails, campsites and other land features requiring special consideration. See Figure 4 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](http://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:** 192 acres of the southeast corner of Woodhull State Forest is included in the West Canada Lakes Matrix Forest Block
- **Forest Landscape Connectivity Corridor:** Hogsback, Popple Pond, Punkeyville and Woodhull State Forests are included in a matrix block linkage zone.
- **USFWS Critical Habitat Area:** *Not Present on the 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>.

## INFORMATION ON THE ADIRONDACK FOOTHILLS UNIT

### BIODIVERSITY

#### At-Risk Species

The presence of at-risk species and communities on the Adirondack 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 the spring of 2005 by the New York Natural Heritage Program.
- Element Occurrence Records for the New York Natural Heritage Program (NHP)s Biological and Conservation Data System were consulted for information.
- Utilization of DEC's Predicted Richness Overlays (PRO's) to identify potential habitat and sensitive sites.
- Consultation with NHP species guides.
- Consultation with the NYS Comprehensive Wildlife Conservation Strategy

No endangered, threatened, or special concern wildlife or plant species are known to exist within the State Forests that comprise this Unit at this time. However, at the larger landscape level, the presence of several at-risk species has been predicted by PRO's. Table I.F. lists these species and their required habitats.

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

Species Name	NYNHP State Rank	Global Rank	Habitat	Record Source	NYS Status
<i>Predicted in the Landscape and May Be Affected by State Forest Management</i>					
Alpine Cliff Fern	S1	G4	Rocky cliffs, crevices, and banks	NYNH PRO's: Predicted	Endangered
Arctic Rush	S2	G5	Alpine meadows, rock outcrops, ledges, cliffs	NYNH PRO's: Predicted	Threatened

## INFORMATION ON THE ADIRONDACK FOOTHILLS UNIT

### BIODIVERSITY

Auricled Twayblade	S1	G3	Alluvial banks, alder thickets, cedar swamps	NYNH PRO's: Predicted	Endangered
Daisy Fleabane	S1	G5	Open areas, fields, road sides	NYNH PRO's: Predicted	Endangered
Green Spleenwort	S1	G4	Moist shale limestone cliffs and outcrops	NYNH PRO's: Predicted	Endangered
Downy Lettuce	S1	G5	Open woods, thickets, powerline and pipeline rights of way	NYNH PRO's: Predicted	Endangered
Hill's Pondweed	S2	G3	Aquatic plant of high alkaline shallow impoundments	NYNH PRO's: Predicted	Threatened
Marsh Arrow Grass	S2	G5	Marsh plant	NYNH PRO's: Predicted	Threatened
Roseroot	S1	G5	Shaded cool cliffs or in the misty areas of waterfalls	NYNH PRO's: Predicted	Endangered
Smooth Cliff Brake	S2	G5	Limestone Cliffs	NYNH PRO's: Predicted	Threatened
Southern Twayblade	S1	G4	Bogs, poor fens, wet woods	NYNH PRO's: Predicted	Endangered
Virginia False Gromwell	S1	G4	Sandy, open sites	NYNH PRO's: Predicted	Endangered





*Table I.F. - At-Risk Species- Insects and Mammals\**

Species Name	NYNHP State Rank	Global Rank	Habitat	Record Source	NYS Status
<i>Predicted in the Landscape and May Be Affected by State Forest Management</i>					
Extra Striped Snaketail (dragon fly)	S2	G4	Large size forested streams and rivers	NYNH PRO's: Predicted	Special Concern

\*Defined as NY NHP ranking of S1, S2, S2-3, or a Global ranking of G1, G2 or G2-3. Species with a rank of 1 are critically imperiled. Species with a rank of 5 are demonstrably secure.

### 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 State Lands in this unit are pleasant places to visit and encompass more rolling terrain as opposed to the steep gorges and higher altitude overlooks of other UMP units in the region. The ponds, streams and wetlands are diverse and interesting areas to visit, though not always the easiest to get to.

### Historic and Cultural Resources

#### History of the Unit

This unit management plan covers 4 State Forests in the northeast corner of Oneida County and 2 State Forests located in about the middle of Herkimer County. This area was involved in most of the major military conflicts that shaped not only the geographical boundaries of the state and nation, but also the heritage of the early settlers.

The French and Indian War (1754 – 1763), the Revolutionary War (1775 – 1783) and the War of 1812 (1812 – 1815) all had important battles take place in this general area. Due in large part to these conflicts, the area did not see permanent settlers until the late 1700's. At that time, an unending wilderness of mature mixed forest was broken only by the winding and sometimes fierce streams and rivers. Military actions had eked out a few foot trails for the troops to travel on, but the vast majority of the land was true wilderness.

Once the major conflicts were over, settlers began migrating to these areas at an increasing pace. Lands were cleared for crops, pastures and living space and towns and villages sprouted up at crossroads and natural gathering places.

## **INFORMATION ON THE ADIRONDACK FOOTHILLS UNIT**

---

### **HISTORIC AND CULTURAL RESOURCES**

It became clear early on that the soils and growing seasons were more conducive to grazing livestock than they were to trying to grow large amounts of cash crops. This guided the major industries of the area into cheese production and hide tanning.

The unbroken wilderness also became an important source of forest products not only for local use, but for shipment to other communities that needed the lumber. The easily obtained bark from the large abundant hemlock trees made the tanning industry even more lucrative.

The streams and rivers that had hindered initial settlement now became important sources of power, navigation and transport. Numerous mills were built to saw lumber, grind grain, and manufacture everything from window sashes to chairs to cheese boxes to broom handles. Even at this time quality control was sometimes an issue. One gristmill was reportedly so poor that “a kernel of corn was ground into only 2 pieces and the meal prepared for use by sifting it through a ladder. It was in business but a few years”.

The early to mid-1800's saw towns such as Boonville, Forestport, Cold Brook, Norway and Salisbury Center well established and thriving. Settlers in each town began to appreciate some basic services to help with daily life. Most towns had blacksmiths, wagon shops, general stores, sawmills, gristmills, small foundries, taverns and rooming houses or hotels. In addition to these common industries, an iron mine was developed just north of Salisbury Center.

About this same time, proposals were made to connect the northern portions of New York State with the Erie Canal. By 1837, the New York State Legislature authorized funds to start building the Black River Canal. Several feeder canals and reservoirs were included in this undertaking to provide the needed amount of water during the drier summer months. The dam at Forestport and the Forestport Feeder Canal were constructed for this very reason.

Navigable waters would eventually stretch from the Erie Canal at Rome, north to Boonville and then to Carthage. This was a huge endeavor and provided jobs for many, not only during the construction phase but also to maintain and operate the canal and build the boats that would travel on it. It also provided good markets for the commodities that would be shipped on it. Construction was completed by 1855.

This normal industry was not quite enough for some. In 1897 and 1898 sections of the Forestport feeder canal suspiciously washed out. The Pinkerton Agency was hired to investigate the suspected foul play and in 1900 the guilty parties were brought to justice.

By the 1920's the roads and railroads had greatly improved and motorized transportation over land had come into its own. The Black River Canal was closed in 1922.

Since that time, population levels in the area have fluctuated. Farmland that had been in production for roughly 100 years, in some cases, was not terribly productive anymore. Little by little, families left the farms and drifted into the towns and cities.

The 1929 State Reforestation Act and the 1931 Hewitt Amendment paved the way for the formation of the State Forests as we know them today. These pieces of legislation allowed the state to purchase lands to be managed under a multiple use concept. The State Forests in this plan were largely purchased in the late 1930's and early 1940's.

After acquiring these parcels, the open areas that were pasture and cropland were replanted with various softwood species. This work was done mostly through the efforts of the Civilian Conservation Corps. The areas that were already forested were allowed to grow.

At the same time, the care and management of these lands was also evolving. Protection from fire and insects along with proper forest management techniques became very important.

Today, these lands provide many opportunities for recreation. The harvest of forest products provides raw materials and jobs. Many different habitats are available for many different species of plants, animals, fish, reptiles and amphibians.

#### **Inventory of Resources**

The term "cultural resource" encompasses a number of categories of human created assets including structures, archaeological sites and related wherewithal. It also may denote areas of significant importance to local and/or tribal communities. For more information on protection of historic and cultural resources, please see SPSFM page 139 at <http://www.dec.ny.gov/lands/64567.html>.

On lands managed by the Division of Lands and Forests, the number of standing structures is, in general, limited due to the nature of land use. Often those that remain are structures that relate to the Department's land management activities such as fire towers, "ranger" cabins and related resources.

Archaeological sites are, simply put, any location where materials (artifacts, ecofacts) or modifications to the landscape reveal evidence of past human activity. This includes a wide range of resources ranging from pre-contact Native American camps and villages to Euroamerican homesteads, cemeteries and graves as well as mills and other and industrial sites. Such sites can be entirely subsurface or can contain above ground remains such as foundation walls or earthwork features.

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

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

## **INFORMATION ON THE ADIRONDACK FOOTHILLS UNIT**

---

### **REAL PROPERTY**

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.

### **Archaeological Site Protection**

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

### **Archaeological Research**

There are no known archaeological sites located on State Forest lands within this unit. Any unrecorded sites that may exist on the property will be made available for appropriate research. All future archaeological research to be conducted on the property will be accomplished under the auspices of all appropriate permits. Research permits will be issued only after consultation with the New York State Museum and the Office of Parks, Recreation and Historic Preservation. Extensive excavations are not contemplated as part of any research program in order to assure that the sites are available to future researchers who are likely to have more advanced tools and techniques as well as different research questions.

### **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**

This unit includes 6 separate State Forests with a total of 101.6 miles of boundary line. Table IV.F Boundary Line Management Action Schedule outlines each State Forest, miles of boundary line and the proposed maintenance schedule.

Boundary lines are maintained on a 5 year to 7 year schedule.

Encroachments and other issues are addressed as they become apparent.

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

### Exceptions and Deeded Restrictions

<i>Table I.H. – Exceptions and Deeded Restrictions</i>		
Facility Name	RA #	Description E.g., deeded ROW, easement, access lane, water rights, cemetery, etc.
Woodhull State Forest	ON-24	Town of Forestport Wells and Waterlines

### *Use and Demand Related to Exceptions and Deeded Restrictions*

There is an existing well and water line on Oneida R.A. # 24 (Woodhull State Forest), which purportedly is under an easement to the Town of Forestport. According to the Town of Forestport Supervisor, this well and water line is abandoned.

### Encroachments

Well marked boundary lines that are readily identifiable to the public reduce unintentional trespass. However, encroachments onto State Forest lands do sometimes occur. No new encroachment issues exist at this time on the unit. Should any new encroachments be found, they will be addressed in a timely fashion.

<i>Table I.I. – Encroachments</i>		
Facility Name	RA #	Description
Hinckley State Forest	Herkimer 1	Adjacent landowner built a private pond which extends approximately 10 feet onto State Land

### 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>.

## INFORMATION ON THE ADIRONDACK FOOTHILLS UNIT

### REAL PROPERTY

#### 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. This data is available at DEC's Mapping Gateway <http://www.dec.ny.gov/pubs/212.html> in Google format or in the State Lands Interactive Mapper. Table I.G. below contains a summary of roads, trails and related infrastructure on the unit.

<i>Table I.J. – Existing Access and Parking (see Figure 5 for maps)</i>		
<b>Category</b>	<b>Total Amount</b>	<b>Needing Improvement</b>
Public Forest Access Roads	11.7 mi.	11.7 mi.
Haul Roads	3.3 mi.	3.3 mi.
Trails	3.5 mi.	0 mi.
<b>Stream Crossings</b>		
Culverts	Unknown	Unknown
<b>Related Infrastructure</b>		
Parking Areas / Trailheads	3	0
Gates / Barriers	3	0

Haul Roads and Public Forest Access Roads listed above are two classes of roads that provide access to the unit for many purposes, but are built and maintained to different standards. The two paragraphs below detail the differences.

Haul roads are permanent, unpaved roads which are not designed for all-weather travel, but may have hardened or improved surfaces with drainage features/structures. They are constructed according to forestry best management practices primarily for the removal of forest products, providing limited access by log trucks and other heavy equipment. Most of the haul roads listed

here are open for public motor vehicle use but are not maintained according to specific standards or schedules.

Public Forest Access Roads (PFAR) are permanent, unpaved roads which may be designed for all weather use depending upon their location, surfacing and drainage. These roads provide primary access for administration and public use within the Unit. The design standards for these roads are those of the Class A and Class B access roads as provided in the Unpaved Forest Road Handbook (8/74) ([http://www.dec.ny.gov/docs/lands\\_forests\\_pdf/sfunpavedroad.pdf](http://www.dec.ny.gov/docs/lands_forests_pdf/sfunpavedroad.pdf)).

### ***Use and Demand on Roads, Haul Roads and Parking Areas***

The State Forest Access Roads on the Unit are open to the public, and are periodically maintained by DEC Operations. Most roads are in fair condition, but due to the sandy nature of their base material, they are easily eroded. They are also prone to damage from the public trying to drive on them before the winter frost has completely left the ground, especially on roads used as snowmobile trails during the winter. This leads to extensive rutting. Of particular note is the State Forest Access Road on Hinckley State Forest, which has been heavily damaged by illegal All Terrain Vehicle traffic.

The formal parking areas on the Unit, which are on Black Creek State Forest and Hinckley State Forest, are used mainly by hunters. These parking areas are presently in good condition. Dumping of construction material and household trash at these parking areas is a continuous problem.

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

### ***Signs/Kiosks***

There are a total of 5 State Forest I.D. sign standards on the unit. The signs at Hinckley State Forest have been removed due to repeated vandalism.

There are no informational kiosks on the unit. Addition of informational kiosks for each state forest is scheduled for the second 5 years of this plan and will be addressed as funding allows.

### ***Boating and Fishing Facilities***

There are no developed boating facilities within the unit, however a canoe or kayak may be put in at the shore of any of the bodies of open water. There are also opportunities for fishing from the shorelines of these areas.

### ***Designated Campsites and Lean-tos***

At present, there are no formally designated campsites, though camping does happen at informal locations like log landings.

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

### ***Communications Facilities***

There are no communication facilities existing on the Unit at this time. Herkimer Detached Parcel of Forest Preserve #20 was the site of the former Dairy Hill Firetower. There has been some

## **INFORMATION ON THE ADIRONDACK FOOTHILLS UNIT**

---

### **FORMAL AND INFORMAL PARTNERSHIPS AND AGREEMENTS**

consideration in utilizing this one acre parcel as the site of a communication tower, but one has never been developed.

#### **Utility Transmission and Collection Facilities**

There is an electric transmission line and natural gas transmission line which traverses Woodhull State Forest, and is located within the NYSDOT concurrent use and occupancy right-of-way of State Route 28. These transmission lines are maintained by National Grid. National Grid has approached NYSDEC with regards to relocating their electric transmission line further off of the NYSDOT right-of-way, and onto State Forest land. It has been determined that this would require a Constitutional Amendment, as relocation on to State Forest land in a Forest Preserve county would be exclusive use of State Land, which is prohibited by the State Constitution.

#### **Operations Facilities**

Although there are no Operations Facilities on the Unit, the Hinckley Day Use area is in close proximity to Hinckley State Forest. This day use area has a beach on Hinckley Reservoir, pavilions for rent, and numerous picnicking areas.

#### **Seed Production Areas**

There is a red pine seed production area located on Hinckley State Forest, Compartment A, Stand 13. Seed cone has not been harvested from this location for over 10 years, due to the viability of the cone being extremely poor.

#### **Non-recreational Uses**

##### ***Military Field Exercises***

Occasionally requests from nearby installations are submitted. These requests are handled on a case by case basis and if no conflicts are identified a temporary revocable permit is issued.

##### ***Agricultural Use***

Each year incidences of illegal agricultural activity (mostly marijuana) are discovered by DEC personnel or reported. The trend for this activity has been on the increase.

#### **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 DEC's Volunteer Stewardship Agreement Program. For more information on these and other partnerships, please see SPSFM page 181 at <http://www.dec.ny.gov/lands/64567.html>.

Partnerships with several organizations exist on this unit. Each is beneficial and extremely important to the Herkimer DEC Office. These partnerships are formalized through the Volunteer Stewardship Agreement Program (VSA) and Temporary Revocable Permits (TRP).



The Department presently has entered in Volunteer Stewardship Agreements with the Trackside Blazers Snowmobile Club, the Salisbury Ridgerunners Snowmobile Club, the Lost Trail Snowmobile Club, and the Ohio Ridge Riders Snowmobile Club for maintaining and grooming snowmobile trails on the Unit. These trails are open for public use, and are also used by hikers during the off-season.

### 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.

#### ADDITIONAL INFORMATION

**State Lands Interactive Mapper (SLIM)** – An interactive online mapper can be used to create custom maps of recreational trails on this Unit to 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)

### Wildlife-related Recreation

#### Hunting

Big game and small game hunting occurs quite frequently across the Adirondack Foothills Unit. Due to its close proximity to the Adirondack Park, the area is teeming with a variety of game species. White-tailed deer, Black Bear, Wild Turkey, and Ruffed Grouse are all present on the unit, and routinely hunted. Of particular note is that the habitat on Hogsback and Popple Pond State Forests is ideal for Snowshoe Hare. These State Forests are very popular among the Snowshoe Hare hunting communities.

#### Fishing

- Punkeyville State Forest has approximately ¾ of a mile of frontage along the Black River, which is stocked with Brook Trout. Punkeyville State Forest also has two very small ponds, which used to be part of a trout farm from the mid 20<sup>th</sup> century. There may be fishing opportunities in these small ponds, but it has yet to be determined what species are in these waterbodies.

## INFORMATION ON THE ADIRONDACK FOOTHILLS UNIT

### RECREATION

- Popple Pond State Forest contains its namesake pond, which is about 8 acres in size. It is unknown at this time what fish species are present, but it does receive occasional use by fishermen. Popple Pond State Forest also has several streams that course through it, such as Cropsey Creek, Mile Creek and Long Lake Outlet. These streams are fished for brook trout.
- Oneida Detached Parcel of Forest Preserve # 21 borders on the Black River. This section of the river is fished primarily for brook trout.

*Table I.K. – Waterways with Fish and Water Fowl Use (see Figure 3 for maps)*

Facility Name	Waterway	Fish and Game Species	Type
Punkeyville State Forest	Black River	Brook Trout	Natural River
Popple Pond State Forest	Long Lake Outlet	Brook Trout	Natural Stream
Oneida Det. Parcel F.P. 21	Black River	Brook Trout	Natural River

*Table I.H. – Water Bodies with Fish and Water Fowl (see Figure 3 for maps)*

Facility Name	Water Body	Acreage	Type
Popple Pond (Oneida 6)	pond at northwest end	2.8 acres	manmade
Popple Pond (Oneida 6)	beaver pond at northeast end	1.1 acres	natural open water
Popple Pond (Oneida 6)	beaver pond at northeast end	0.7 acres	natural open water
Popple Pond (Oneida 6)	beaver pond at northwest end	1.1 acres	natural open water
Woodhull (Oneida 24)	pond at north end	1.4 acres	manmade
Punkeyville (Oneida 25)	pond at northwest end	0.4 acres	natural open water
Punkeyville (Oneida 25)	old trout pond	0.6 acres	manmade
Punkeyville (Oneida 25)	old trout pond raceway	0.1 acres	manmade
Hinckley (Herkimer 1)	old beaver pond in center of state forest	0.1 acres	natural open water
Hinckley (Herkimer 1)	old beaver pond in center of state forest	0.1 acres	natural open water
Black Creek (Herkimer4)	pond just south of Stanley Rd.	1.5 acres	manmade
Black Creek (Herkimer4)	old beaver pond at southeast end	2.1 acres	natural open water

*Table I.H. – Water Bodies with Fish and Water Fowl (see Figure 3 for maps)*

Facility Name	Water Body	Acreage	Type
Black Creek (Herkimer4)	old beaver pond at southeast end	0.4 acres	natural open water

### **Trapping**

Due to its heavily forested landscape, the Adirondack Foothills Unit is rich with small game species that are ideal for trapping. The Wildlife Management Units that encompass the Unit continue to be some of the most highly productive in the state for Fisher, Otter, and Muskrat. Trapping is available on all of the state lands within the unit, in accordance with existing trapping regulations.

### **Viewing Natural Resources**

Whether driving the roads in search of wildlife, hiking through the woods exploring rocks and upturned trees, bird watching, visiting an open spot at night to view the stars, or just being out in the middle of the woods, away from the noise and distraction of everyday life, many people go to State Lands for many different reasons.

### **Camping**

At present, no formal, designated campsites exist on the unit. Most camping is done by big game hunters who camp with trailers in old log landings, parking areas and wide spots in the road. Designation and construction of several sites would place campers in locations resulting in little environmental impact and enhanced site conditions for a better camping experience. In the near future, in collaboration with our NYS Forest Rangers, several campsites will be formally designated and signed.

### **Water-based Recreation**

Swimming is allowed in the bodies of open water that exist on the unit. However, there are no lifeguards or beaches. The manmade ponds are relatively shallow with muddy bottoms and not terribly appealing to swim in. The wetlands and beaver flows with open water are similar in nature.

Boating on these water bodies is allowed, however, there are no boat launch sites for any of them. Lightweight canoes and kayaks could easily be put in from level areas adjacent to the water. Most of these open water sites are shallow and fairly small in size and offer flat water boating opportunities.

Demand for these activities is very light.

### **Trail-based Recreation**

## INFORMATION ON THE ADIRONDACK FOOTHILLS UNIT

---

### RECREATION

<i>Table I.J. Trails*</i> <i>(see Figure 5 for maps)</i>	
Use	Length (mi.)
Snowmobile*	7

\*Trail distance available includes some segments on PFARs; does not include municipal roads

#### *Foot Trail Use*

No designated foot trails exist on the unit. Old fire lanes, old farm lanes, skid trails and other old logging roads provide many informal opportunities for hiking.

#### *Cross Country Skiing*

Cross country skiing opportunities are widely available on this unit. Unplowed PFARs and logging roads/skid trails provide great opportunities to enjoy this pastime. This area also averages higher snowfall than other locations in the area, due to higher elevations and periodic lake effect snowfall.

Use and demand for this activity of course varies with the weather and snow conditions.

#### *Equestrian*

There are no specifically designated horse trails on this unit. As stated in the Strategic Plan for State Forest Management, the riding, driving or leading of horses is permitted unless it is otherwise prohibited by law, regulation or posted notice. The existing truck trails, old logging roads, old fire lanes and old farm lanes provide opportunities for this use.

Two major horseback riding areas (Otter Creek Trail System, south of Lowville in Lewis County, and Brookfield Horse Trail System in eastern Madison County) are within a day's drive of this unit. These areas provide good opportunities for destination travelers. Local neighbors of the state forests on this unit occasionally use the roads and trails with their horses.

#### *Mountain Biking*

There are no trails specifically designed for mountain bikes on this unit. As stated in the Strategic Plan, mountain bikes are permitted to travel on any existing road or trail on State Forests, unless it is prohibited by signage. The existing PFARs, old logging roads, old fire lanes and old farm lanes provide opportunities for this use.

#### *Snowmobiling*

Three of the six State Forests in this unit have designated snowmobile trails running through them. Popple Pond, Woodhull and Hinckley have trails that traverse the unit.

Punkeyville has main trails that are on the highway running through it. Where possible, the trail will be relocated off the road to reduce safety hazards and conflicts with motor vehicles. Specifically, the trail will run through the softwood plantation (Stand A-17) on the west side of River Road starting at the northern gate, following an existing skid trail from a previous timber harvest, down to the gate closest to the village and then back out on the road. (The remaining State land to the south - Stand A-19 - is too

wet to support a trail.) Just north of the River Road - West River Street intersection, the trail will turn west just before the old barn foundation, it will go around the foundation and cross West River Street about 100 yards west of the intersection.

On Woodhull State Forest the Route 28 trail crossing will be slightly altered to remove the sharp curve on the north side of Route 28.

Like other winter sports, use of these trails is directly dependent on weather conditions. With cold temperatures and good snow totals, the trails are groomed regularly by the local clubs. The use of these trails will sky rocket when conditions are good.

### **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.

Trash and garbage that is left on site after a party are some of the most visible negative impacts of recreational use. That, along with dumping of household garbage, results in many hours spent trying to track down the culprits. The labor and equipment costs to clean up these messes can be in the thousands of dollars annually, which could be much better spent maintaining existing facilities such as roads, trails and campsites.

Use of off-road motor vehicles on designated foot trails, snowmobile trails and multiple use trails causes these trails to become rutted and eventually unusable for their original intent, and is probably the next most obvious sign of inappropriate recreational use. At the time of the writing of this plan, off-road motor vehicles are not allowed on the Unit.

### **Universal Access**

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

### **Application of the Americans with Disabilities Act (ADA)**

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

## INFORMATION ON THE ADIRONDACK FOOTHILLS UNIT

---

### MINERAL RESOURCES

modification would result in a fundamental alteration in the nature of the service, program or activity or an undue financial or administrative burden. Consistent with ADA requirements, the Department incorporates accessibility for people with disabilities into the planning, construction and alteration of recreational facilities and assets supporting them. This UMP incorporates an inventory of all the recreational facilities or assets supporting the programs and services available on the unit, and an assessment of the programs, services and facilities on the unit to determine the level of accessibility provided. In conducting this assessment, DEC employs guidelines which ensure that programs are accessible, including buildings, facilities, and vehicles, in terms of architecture and design, transportation and communication to individuals with disabilities. A federal agency known as the Access Board has issued the ADA Accessibility Guidelines (ADAAG) for this purpose.

An assessment was conducted, in the development of this UMP, to determine appropriate accessibility enhancements which may include developing new or upgrading of existing facilities or assets. The Department is not required to make each of its existing facilities and assets accessible so long as the Department's programs, taken as a whole, are accessible. Any new facilities, assets and accessibility improvements to existing facilities or assets proposed in this UMP are identified in the section containing proposed management actions.

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@gw.dec.state.ny.us](mailto:UniversalAccessProgram@gw.dec.state.ny.us)

### Motorized Access Permit for People With Disabilities (MAPPWD)

The Department's Motorized Access Program for People with Disabilities (MAPPWD) permits qualifying people with disabilities to use motor vehicles along specific routes for access to programs, such as hunting and fishing, on state lands. These routes are provided to facilitate access to these traditional programs and not for the support of ORV or ATV riding activities. This program provides access to significant recreational opportunities throughout the state and is one more way that New York is opening the outdoors to people with disabilities. This permit program is maintained pursuant to DEC Commissioner's Policy 3 (CP-3).

MAPPWD permits may be obtained from Regional DEC Foresters through regional DEC offices. The permit provides access for those who seek solitude, connection to nature, undisturbed wildlife habitat, and inclusion with fellow sportspeople. Permit holders can use specified vehicles to travel beyond the reach of public roads, to areas where others must hike or bike.

### Mineral Resources

#### Oil, Gas and Solution Exploration and Development

Oil and gas production from State Forest lands, where the mineral rights are owned by the state, are only undertaken under the terms and conditions of an oil and gas lease. As surface managers, the Division of Lands and Forests will evaluate any concerns as they pertain to new natural gas leases on State Forest lands. Consistent with past practice, prior to any new leasing of state lands within the unit,

DEC will hold public meetings to discuss leasing options and potential environmental impacts. A comprehensive tract assessment would be completed as part of the leasing process; such an assessment would identify areas where drilling and associated infrastructure may be permitted. 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>.

Leases on the unit:

- There are no existing or planned leases on the unit at this time.

Active wells on the unit:

- There are no active wells on the unit at this time.

Inactive wells on the unit:

- There are no inactive wells on the unit at this time.

### Mining

Gravel/shale pits and other surface mines:

There are no active shale pits in this unit. There is one very small inactive shale pit on Hinckley State Forest. This shale pit will remain inactive. The shale derived from this pit is generally of low quality that doesn't hold up well. It is often very sharp-edged and can cut into and damage tires. Crushed stone and gravel needs will be met with material obtained from commercial pits in the area. This material is of much better quality and will last for a longer amount of time. Anticipated needs include routine maintenance of PFARs and any new log landings needed for timber harvesting.

Under Article 7 of the New York Consolidated Laws / Public Lands, any citizen of the United States may apply for permission to explore and/or extract any mineral on State lands. However, current Department policy is to decline any commercial mining application(s) pertaining to any lands covered by this plan.

On the Detached parcel of Forest Preserve just north of Salisbury Center, there are remnants of an abandoned iron mine. The mine was abandoned in the 1920's and has been State Land since that time. The original mine shafts are unmarked and unprotected and pose a threat to public safety. These hazards need to be identified and have warning fences installed.

## 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>.

## INFORMATION ON THE ADIRONDACK FOOTHILLS UNIT

---

### FOREST PRODUCTS

#### Taxes Paid

The New York State Real Property Tax Law provides that all reforestation areas (State Forests) are subject to taxation for school and town purposes. Some are also subject to taxation for county purposes. Most unique areas (such as Rome Sand Plains) and multiple use areas (sometimes part of some State Forests) are exempt from taxation. Taxes are based on the assessed value of these lands as determined by the local (town or county) assessor. They are assessed as if privately owned.

Detailed tax information can be obtained by contacting Oneida County Real Property Tax Services ([ocgov.net](http://ocgov.net)), Adirondack Central School District ([infotaxonline.com](http://infotaxonline.com)), Holland Patent School District ([TaxLookup.net](http://TaxLookup.net)), and Herkimer County Real Properties Tax Service Webpage ([herkimercounty.org](http://herkimercounty.org)), and [herkimercounty.org.sdgny.com](http://herkimercounty.org.sdgny.com) for school tax information (Poland School District).

The following taxes have been paid for State lands in this unit for 2012:

- Township Tax (incl. highway, general, fire taxes, etc.): \$10,928
- Total School Tax: \$70,029

### Forest Products

#### Timber

Timber management is used as a tool to enhance biodiversity, create habitat features that might be lacking in the landscape, and provide a renewable supply of sustainably-harvested forest products. These products may include furniture quality hardwoods, softwoods for log cabins, fiber for paper making, firewood, animal bedding, wood pellets, biofuel, and chips for electricity production. For more information, please see SPSFM page 251 at <http://www.dec.ny.gov/lands/64567.html>.

Information on timber expected to be produced from timber management activities on the unit is contained in the Land Management Action Schedules in Part IV of this plan.

Due to the recent economic downturn, timber prices have dropped off somewhat over the last few years. In spite of this, a base level of demand still exists. However, due to inadequate staffing levels, timber harvesting for this working circle has been far below anticipated and sustainable levels.

These circumstances have decreased the ability to manage overcrowded timber stands, resulting in adverse effects on forest health, tree growth rates, State Forest infrastructure (the latter which is often enhanced when roads are upgraded as part of a timber sale contract) and wildlife populations.

#### Non-Timber Forest Products

Berry picking, mushroom picking and leek picking are the major non-timber forest products that are harvested on these areas.



### Maple Tapping

Regionally, the decision was made to focus maple tapping opportunities on the Lowville and Potsdam working circles. This decision was based on proximity to major maple producers and the much larger acreage of appropriate stands.

### Forest Health

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

In the State Forests in this plan, overall forest health is good. The untended softwood plantations are slowly declining and will likely continue to do so until they are thinned out. Emerald Ash Borer has been detected to the west in the Syracuse area and to the east in the Albany area. If the Emerald Ash Borer is detected in this area, all of the current protocols and guidelines will be followed. New methods of control and response are still being developed as we learn about this particular pest.

### 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.K includes invasives that are or may be present on Adirondack Foothills.

<i>Table I.K. – Invasive Species, Pests and Pathogens*</i>	
Plants	Status
Japanese Knotweed ( <i>Polygonum cuspidatum</i> or <i>Fallopia japonica</i> )	<b>Invasive:</b> Various sized patches growing on all state forests in this unit.
Giant Knotweed ( <i>Polygonum sachalinense</i> or <i>Fallopia sachalinensis</i> )	<b>Invasive:</b> Various sized patches growing on all state forests on this unit.
Wild Parsnip ( <i>Pastinaca sativa</i> L.)	<b>Invasive:</b> Patches commonly found along roadsides in Oneida County.
Garlic Mustard ( <i>Alliaria petiolata</i> )	<b>Invasive:</b> Various sized patches growing on most state forests in this unit.

## INFORMATION ON THE ADIRONDACK FOOTHILLS UNIT

### FOREST HEALTH

<i>Table I.K. – Invasive Species, Pests and Pathogens*</i>	
Insects	Status
Forest Tent Caterpillar (Malacosoma disstria)	<b>Native:</b> Infestations are cyclical and come in waves, generally from north to south. Populations crashed about 5 years ago and are building at this time. The next infestation will depend on weather and population dynamics of this insect.
Eastern Tent Caterpillar (Malacosoma americanum)	<b>Native:</b> Infestations are cyclical and come in waves, generally from north to south. Populations crashed about 5 years ago and are building at this time. The next infestation will depend on weather and population dynamics of this insect.
Gypsy Moth (Lymantria dispar)	<b>Invasive:</b> Infestations are cyclical for this insect however, it usually occurs in hotspots that vary according to weather, elevation and population dynamics. This insect is susceptible to some natural predators and parasites that can help keep the population in check.
Sirex Woodwasp (Sirex noctilio)	<b>Invasive:</b> This wasp has reportedly been found in Oneida County. Very few problems have been identified due to this insect.
Diseases	Status
Beech Bark Disease (Nectria coccinea)	<b>Invasive:</b> Present throughout the northeast for many years. Unfortunately there is no effective treatment. Not cutting beech trees that appear to be immune is practiced with scattered and limited success.
Ash Dieback (various agents)	<b>Native:</b> Occurs in pockets throughout this unit. Keeping the hardwood stands healthy and properly thinned appears to help.
Red Rot, Butt Rot (various species) primarily in White Pine	<b>Native:</b> Found in some softwood plantations in this unit. Keeping the plantations healthy and properly thinned seems to help.
Animals	Status
Porcupines	<b>Native:</b> These animals have been found in this area for hundreds of years. Due to lack of predators and limited hunting pressure, populations in some areas have skyrocketed. High populations can seriously damage trees that are being grown for high quality forest products.

At this time, the knotweed infestations are mostly small patches. Herbicide spot treatments and some cultural practices done in a timely manner should help keep these patches in check. If not treated, current research indicates that this plant will spread out of control, though it doesn't survive well under a closed forest canopy.

#### Native Pests and Pathogens

Forest tent caterpillars pose a threat to hardwood stands, though they can occasionally cause problems in softwood stands. Heavy infestations occur in cycles based on weather, cold temperatures and the availability of organisms that are parasites and that prey on these creatures. Trees (especially sugar

maple) that have repeatedly been severely defoliated by the tent caterpillar often go into decline and die. Management options include aerial spraying, releasing parasitic wasps or trapping the larvae with commercially available implements. Delaying treatments of stressed stands is also recommended.

#### 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. Deer browse is not a problem in this unit except for the southern areas of Popple Pond S.F. (Oneida 6). For more information on managing deer impacts, please see SPSFM page 291 at <http://www.dec.ny.gov/lands/64567.html>.

#### State and Regional Tug Hill Initiatives

The Adirondack Foothills Unit is one of 10 state forest management units at least partly within the Tug Hill Region. These state forest units, along with public easement lands and private non-industrial forest lands, collectively provide a unique region wide natural resource. There are now in place several regional and state wide initiatives that recognize the importance of open space, natural resources and quality of life on the Tug Hill Plateau. These planning initiatives provide direction and support for protection and management of natural, cultural and recreation resources, broad public participation in the planning and decision making process and assessing economic impacts on local communities. The objectives and recommendations of the Adirondack Foothills UMP are in part shaped by the goals of the following initiatives.

#### Tug Hill Connectivity Initiative

The objective of Tug Hill-Adirondack Habitat Connectivity Project is to maintain or enhance landscape permeability across the Black River Valley for all species, natural communities and ecological processes. The project envisions a landscape where all native species can move freely and persist in the face of threats like land conversion (development) and climate change. The more immediate planning effort is to develop a set of place-based strategies to address functional and genetic connectivity for a suite of wide-ranging focal species that currently or historically move between the Adirondacks and the Tug Hill. The northern portion of the Adirondack Foothills unit is located directly within the prime connectivity corridor. The wildlife and silvicultural recommendations within the UMP can play a role in enhancing the quality and abundance of habitats required by these focal species. Active, sustainable natural resource management will continue the Tug Hill region's essential role of providing critical habitat for the natural communities and wildlife species of New York State.

#### Tug Hill Area Watershed Initiatives

The Tug Hill region has 4 watershed based initiatives currently going on; the Black River Watershed Management Plan, Oneida Lake Watershed Plan, Salmon River Watershed Natural Resources Assessment Project and Sandy Creek Watershed Ecosystem Based Management Project. The Adirondack

## INFORMATION ON THE ADIRONDACK FOOTHILLS UNIT

---

### STATE AND REGIONAL TUG HILL INITIATIVES

Foothills unit is partly located within the Black River Watershed. The Tug Hill region has seen that comprehensive, long-term watershed planning can help to maintain a healthy, sustainable watershed while attracting business, tourism and recreation to strengthen the local economy. These watershed plans foster an environment that builds regional partnerships between state and local governments, local industry and resource professionals behind a common goal. The four watershed projects have been promoted as an opportunity to protect water resources while strengthening the region's economic viability. The management recommendations in this UMP will assure that the unit will protect watershed values in the Black River, as well as other watersheds such as West Canada Creek/Hinckley Reservoir.

### NYS Comprehensive Wildlife Conservation Strategy Plan

The Wildlife Conservation Strategy Plan is broken up into management unit by watersheds. The Adirondack Foothills unit is mostly located in the Upper Hudson Watershed with a small portion in the Northeast Lake Ontario Watershed. The vision for these basins, which is reflected in this unit management plan, is to be a part of a landscape where economic growth needs of the region and effective wildlife management on public and private lands exist in balance. Public and private conservation partners work in a coordinated fashion to gather the most accurate, comprehensive data on Species of Greatest Concern within the basin in a format that can be shared with natural resource managers as well as the public. Below are basin wide goals and objectives:

- Establish a conservation framework within the Upper Hudson Basin through which the public and private stakeholders interested in wildlife conservation can work cooperatively towards the management, enhancement and protection of biodiversity in the Basin.
- Ensure that no at-risk (threatened/endangered) species become extirpated from the Basin and seek opportunities to restore extirpated species where feasible.
- Manage animals, habitats and land use practices to produce long-term benefits for species of conservation concern.
- Maintain knowledge of species and their habitats in sufficient detail to recognize long term population shifts.
- Fill "data gaps" for those species where population status, distribution and habitat needs are unknown.
- Identify, manage, protect, maintain and restore habitat/natural communities over as broad a spacial scale as possible. Work to keep large forest, wetland and grassland complexes unfragmented and to restore fragmented habitats where feasible to increase patch size and connectivity.
- Work with land managers to incorporate wildlife-based objectives into traditional land management activities such as forestry and agriculture that still allow these activities to be economically sustainable.
- Strengthen existing relationships between water quality and wildlife management planning programs in the basin and create new ones.
- Develop a "stepped down", more targeted plan for the Basin that expands upon the recommendations made in the Plan. This plan may focus on specific species and habitats,

where and when management actions occur, who will execute those actions and how they will be implemented “on the ground”.

The recommendations in this UMP which include managing for wildlife needs, producing forest products to contribute to the local economy, and protecting habitats are in line with the goals and objectives of this initiative.

#### Statewide Comprehensive Outdoor Recreation Plan

The Plan is prepared periodically by the New York Office of Parks, Recreation and Historic Preservation to provide statewide policy direction and to fulfill the agency’s recreation and preservation mandate. The Department of Environmental Conservation Division of Lands and Forests also manages state forest lands for public recreation. The following objectives of the Outdoor Recreation Plan are also considerations in the Adirondack Foothills UMP.

- Improve recreation and historic site operation, maintenance and resource management practices.
- Improve and expand water-oriented recreation opportunities.
- Apply research techniques and management practices to improve and expand trails and other open spaces.
- Preserve and protect natural and cultural resources.
- Support compatible recreation and interpretive programs.
- Develop comprehensive, interconnected recreationway, greenway, blueway and heritage trail systems.
- Protect natural connections between parks and open space areas.
- Improve access to opportunities for regular physical activity that is in close proximity to where people live, work and/or go to school.
- Improve cooperation and coordination between all levels of government and the private sector in providing recreational opportunities and in enhancing natural and cultural resource stewardship.
- Employ ecosystem-based management to ensure healthy, productive and resilient ecosystems which deliver the resources people want and need.

## II. Summary of Eco-Region Assessments

To practice ecosystem management, foresters must assess the natural landscape in and around the management unit. State Forest managers utilized The Nature Conservancy Eco-Region Assessments to

## SUMMARY OF ECO-REGION ASSESSMENTS

---

### ECO-REGION DESCRIPTION SUMMARY

evaluate the landscape in and around this management unit. The Adirondack Foothills Unit falls within the Great Lakes and Northern Appalachian – Acadian Eco-regions.

### Eco-Region Description Summary

**Northern Appalachian – Acadian Ecoregion:** 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). The Gaspé 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 pine 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 lumber 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 confers, 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.



**Great Lakes Ecoregion** The Great Lakes (GL) Ecoregion encompasses 234,000 square miles in parts of eight Midwestern states and one Canadian province (The Nature Conservancy, Great Lakes Ecoregional Planning Team 1999). The ecoregion extends from northeastern Minnesota across to north central New York, and south to northern Indiana and Ohio. The entire

landscape was glaciated during the last Ice Age, and is characterized by level lake plains, level to gently rolling lowlands, and hillier upland areas. Elevation across the ecoregion ranges from 300 to over 2,000 feet. Michigan's Porcupine and Huron Mountains and Minnesota's North Shore are some of the areas with higher elevations, while the southern shores of Lakes Michigan, Erie and Ontario have lower elevations and less relief.

In New York, the Great Lakes Ecoregion represents the watersheds of the Finger Lakes, Lake Ontario and Lake Erie, including the Mohawk River Valley. Historically, the northern part of the ecoregion was dominated by northern hardwood forests, pine forests, and spruce-fir forests. The vast majority of these forests was cut over by 1910, and is now in second growth; some areas are even in third growth. Much of the Great Lakes Ecoregion in New York was dominated by tallgrass prairies and savannas, with some beech-maple and other hardwood forests mixed in. This area has been almost completely converted to agricultural and urban or residential uses. The primary disturbance events that helped to shape these ecosystems were fire, blow-downs, and insect and disease outbreaks in the forested parts of the ecoregion, and fire in the grasslands and savannas.

## **SUMMARY OF ECO-REGION ASSESSMENTS**

---

### **ECO-REGION ASSESSMENT**

#### **Eco-Region Assessment**

##### **Local Landscape Conditions**

The Adirondack Foothills Unit encompasses an area that lies just outside the southwest corner of the Adirondack Park. Due to its close proximity to the Adirondack Mountains, the area is primarily forested, with a mix of agricultural lands scattered throughout. Small lakes and ponds dot the landscape. The area has had a long, rich history of being a major hub of timber production.

The area has been identified as an important wildlife connectivity corridor by the Wilderness Conservation Society, providing an avenue for major wildlife species to travel between the Adirondack Mountains and the Tug Hill Plateau. Because of this, and the importance of timber to the local economy, it is recommended that the area remain as it is, in a highly forested state.

There does not appear to be a demand for filling in any specific landscape gaps in this unit.



## SUMMARY OF ECO-REGION ASSESSMENTS

### LOCAL LANDSCAPE CONDITIONS

*Table II.A. Land Use and Land Cover for the Landscape Surrounding The Adirondack Foothills Unit*

Land Use and Land Cover	Approximate Acreage	Percent of Landscape
Mixed Forest	180,877	72.6
Crop Land and Pasture	33,537	13.5
Conifer Forest	8,680	3.5
Shrub and Brush Range Land (includes seedling/sapling type)	7483	3.0
Residential	1,110	0.4
Commercial & Services	200	0.1
Transportation & Utilities	133	0.1
Other Urban/Built-up Land	527	0.2
Mixed Urban/Built-up Land	1,280	0.5
Strip Mines, Quarries & Gravel Pits	1,814	0.7
Lakes	1,277	0.5
Reservoirs	2,573	1.0
Forested Wetland	9,002	3.6
Non-forested Wetlands	690	0.3
Industrial	0	0
Other Agricultural Land	29	< 0.1
Old Growth	0	0
<b>Total</b>	<b>249,214</b>	<b>100</b>



### III. Management Challenges on the Unit

**Trash, Dumping and Vandalism** – A common problem region wide is the illegal dumping of trash and the destructive vandalism that takes place on these State Forests. These areas are in rural locations with only a few neighbors. The roads are lightly traveled most times of the year making them attractive places for unsavory characters to illegally dump their trash, cause trouble by vandalizing the old grave yards that are located within the boundaries of the State Forest or damaging the land by going off road illegally with ATV's and full sized vehicles. The resources that need to be used to clean up the trash and fix the other problems caused by illegal use could be much better utilized to keep up on routine maintenance or make much needed improvements.

At Hinckley State Forest, the State Forest signs have been vandalized twice in the past year and a half. Because of this the signs have been removed. The thought process here is to allow some time to go by and replace the signs next year sometime when law enforcement can keep an eye on them.

**Access Roads** - Another major challenge on the unit is maintenance of the roadways that provide access to the State Forests. Public Forest Access Roads are roads built and maintained by DEC for State Forests. Additional access is provided by numerous town roads that are supposed to be maintained by the local municipalities.

Due to a combination of long term reduced funding and staffing, many roads of each type are steadily degrading. These roads are critical to providing public access to the property and moving forest products from timber sales. Poor maintenance can also lead to erosion and sedimentation which not only degrades the road but also impacts adjacent areas, including streams, wetlands and water bodies.

More state resources need to be spent on these roads, including funds for rehabilitation and annual maintenance not only for Public Forest Access Roads but for the other categories of roads as well. Improved roads should be one of the primary management objectives for this unit.

**Information on the Unit** – State Forests generally are relatively low profile state lands. Most provide extensive versus intensive recreation opportunities, unless there is a particular point of interest like a trail network, scenic vista, etc. But each has its own unique opportunities which could be better presented to potential public users.

Currently these state forests that comprise the Adirondack Foothills unit are identified by “sign standards” which are brown hanging wooden signs with yellow lettering about 3’by 3’ that identify the name of the state forest and usually the acreage. The boundaries are then marked by small DEC boundary line signs and yellow paint. There is usually no other on site information unless there is a trailhead with a trail register for signing in, which sometimes also includes a map of the property.

Providing the public more information about these state forests is an important objective of management of these lands. Providing kiosks on site with information and a map or maps of the SF,

and a web page for each of the state forests would provide more detailed info before a user ventured into the field.

**Campsites** - At present, there are no formally designated campsites on any of the State Forests in this unit. Informal sites are used during the hunting season, some with permits for multiple night stays. Recognizing the interest in more formal sites on other state lands, it is expected that if some sites are developed on these State Forests they will be used. Developing formal sites also has the advantage of being able to place them in more appropriate locations, appropriate environmentally and for the enjoyment and privacy of the users.

**Partnerships for Public Recreation** – There are a few partnerships already in place between DEC and private groups that have helped establish and maintain trails for public users. Four snowmobile clubs, the Trackside Blazers Snowmobile Club, the Salisbury Ridgerunners Snowmobile Club, the Lost Trail Snowmobile Club, and the Ohio Ridge Riders Snowmobile Club maintain snowmobile trails that cross State Forests in this unit and connect to a regional network of trails.

Continuing these working relationships, and entering into additional ones for other public use opportunities, should be a priority objective for this plan.

**ATV Routes** - In the original scoping and comment period for this UMP there were a few suggestions that there be some ATV routes. No specific suggestions for where to locate ATV routes have come forward, and there is no active ATV organization in this UMP area, private or municipal, that is promoting ATVing.

The towns in this area have not designated any roads or trails open to ATVs, so there is not a formal network in this area at this time, unlike in adjacent portions of Lewis County (and in St. Lawrence County to the north). Requests for such routes in the future will be considered, but must reflect compliance with the NYS Vehicle and Traffic law, have potentially only minimal impacts on the unit's natural resources and comply with the guidelines of the SPSFM.

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](http://www.dec.ny.gov/lands/64567.html).

## Management Objectives and Actions

Management objectives and actions for Adirondack Foothills are based on DEC's "Management Approach and Goals" outlined at the beginning of this UMP, as well as on the specific resource conditions, community and user's interests, and management tools and resources identified over the course of developing this UMP.

Objectives below are paired with actions; some more specific actions are spelled out in the "Ten-Year Management Actions" which follows the tables below.

## Ecosystem Management

<i>Table IV.A. –Ecosystem Management Objectives and Actions</i>	
Objective	Actions
<b>Active Forest Management</b>	
<b>AFM I</b> – Apply sound silvicultural practices	All current guidelines will be followed.
<b>AFM II</b> – Use harvesting plans to enhance diversity of species, habitats & structure	All current guidelines and Best Management Practices will be followed.
<b>AFM III</b> – Fill ecoregional gaps to maintain and enhance landscape-level biodiversity	Currently, the unit has about a 40% softwood plantation component and about 20% in natural conifer component. The natural stands will remain as conifer stands. Over time, the majority of softwood plantations will see an increasing component of hardwood regeneration, and likely will slowly develop into mixed stands.
<b>AFM IV</b> – Enhance matrix forest blocks and connectivity corridors where applicable	Maintain forest cover, manage a mix of even and uneven-aged stands and deciduous and conifer cover, minimize construction of new roads, build no structures other than kiosks or leantos and provide small parking areas (less than 5 cars).
<b>AFM V</b> – Practice forest and tree retention on stands managed for timber	All current guidelines will be followed.

The following guidelines and policies which relate to the above objectives and actions are in place and being followed.

- Final Management Rules for Special Management Zones on State Forests (June 2008)  
[http://www.dec.ny.gov/docs/lands\\_forests\\_pdf/sfsmzbuffers.pdf](http://www.dec.ny.gov/docs/lands_forests_pdf/sfsmzbuffers.pdf)
- Retention on State Forests (ONR-DLF-2)  
<http://www.dec.ny.gov/lands/69658.html>
- Clearcutting on State Forests (ONR-DLF-3)  
<http://www.dec.ny.gov/lands/69658.html>
- State Forest Rutting Guidelines  
[http://www.dec.ny.gov/docs/lands\\_forests\\_pdf/ruttingguidelines.pdf](http://www.dec.ny.gov/docs/lands_forests_pdf/ruttingguidelines.pdf)
- Plantation Management on State Forests (ONR-DLF-1)  
[http://www.dec.ny.gov/docs/lands\\_forests\\_pdf/policyfplantation.pdf](http://www.dec.ny.gov/docs/lands_forests_pdf/policyfplantation.pdf)

## Resource Protection

<i>Table IV.B. –Resource Protection Objectives and Actions</i>	
Objective	Actions
<b>Soil and Water Protection</b>	
<b>SWP I</b> – Prevent erosion, compaction and nutrient depletion	NYS Best Management practices will be followed. Areas that are too steep or too wet will not be harvested. New skid trails and access roads will be engineered at the appropriate grades. These guidelines are outlined and enforced in the timber harvest contracts used in the sale of all forest products on State Forests.
<b>SWP II</b> – Identify and map SMZ's and highly-erodible soils	Special management zones are identified in a GIS layer and on the ground before any treatments take place.
<b>At-Risk Species and Natural Communities</b>	
<b>ARSNC I</b> – Protect species and communities ranked S1, S2, S2-3, G1, G2 or G2-3 where present	All current guidelines will be followed.
<b>ARSNC II</b> – Conduct habitat restoration and promote recovery of declining species	Use of the new Predicted Richness Overlays in the Geographic Information System (PRO GIS) will help identify opportunities. Early successional habitat will be enhanced and maintained where possible. All guidelines will be followed.
<b>ARSNC III</b> - Consider protection and management of Species of Greatest Conservation Need	Use of the new PROS GIS layer will help identify opportunities. All guidelines will be followed.
<b>Visual Resources and Aesthetics</b>	
<b>VRA I</b> – Maintain or improve overall quality of visual resources	New opportunities will be taken advantage of as they are identified.
<b>VRA II</b> – Use natural materials where feasible	All current guidelines will be followed.
<b>VRA III</b> – Lay out any new roads/trails to highlight vistas and unique natural features	New opportunities will be taken advantage of as they are identified, and as partners are identified to help maintain them.
<b>VRA IV</b> – Develop kiosks to provide info and education and reduce sign pollution	Kiosks will be provided for each state forest unit.
<b>Historic and Cultural Resources</b>	
<b>HCR I</b> – Preserve and protect historic and cultural resources wherever they occur	All current guidelines will be followed.

*Table IV.B. –Resource Protection Objectives and Actions*

Objective	Actions
<b>HCR II</b> – Inventory resources and document in the state forest GIS and with OPRHP	All current guidelines will be followed.

**Infrastructure and Real Property***Table IV.C. –Infrastructure Objectives and Actions*

Objective	Actions
<b>Boundary Line Maintenance</b>	
<b>BL I</b> – Maintain boundary lines	See maintenance schedule in Ten Year List of Mgt. Actions
<b>BL II</b> – Address encroachments and other real property problems	Pursue any situations identified as encroachments or related situations.
<b>Infrastructure</b>	
<b>INF I</b> – Provide and maintain public forest access roads, access trails, haul roads, parking areas, and associated appurtenances	See maintenance schedule in Ten Year List of Mgt. Actions
<b>INF II</b> – Upgrade, replace or relocate infrastructure out of riparian areas where feasible	Identify problem areas, develop work plans and solicit funding to remedy them.
<b>INF III</b> – Resolve issues of uncertain legal status or jurisdiction	Problems will be addressed as they become evident.
<b>INF IV</b> – Prevent over-development	Current guidelines will be followed. Very limited development is planned on this unit.

**Public/Permitted Use***Table IV.D –Public / Permitted Use Objectives and Actions*

Objective	Actions
<b>Universal Access</b>	
<b>UA I</b> – Use minimum tool approach to provide universal access to programs	Current guidelines will be followed.
<b>Formal and Informal Partnerships and Agreements</b>	
<b>FIPA I</b> – Collaborate with local organizations and governments to reach mutual goals	Partnerships are sought out and nurtured where ever possible.
<b>FIPA II</b> – Consider full range of impacts associated with VSAs and recurring TRPs	VSAs and TRPs will authorize activities which benefit the natural resources and users of the unit and have minimal or no negative impact.

*Table IV.D –Public / Permitted Use Objectives and Actions*

Objective	Actions
<b>Recreation</b>	
<b>REC I</b> – Accommodate public use while preventing illegal activity, reducing impacts and enhancing public safety	Appropriate facilities will be provided for public recreational use (described in detail elsewhere) with considerations for how to prevent illegal use without taking away from the experience of those recreating legally. Punkeyville and Woodhull State Forests will have portions of the snowmobile trails relocated to enhance public safety.
<b>REC II</b> – Provide public recreation information	Kiosks will be placed at all state forest units as funding allows, and a web page will be prepared for each state forest. (See Table IV.J for kiosk locations.) In addition, this UMP and Google Earth are excellent sources of specific information.
<b>REC III</b> – Inventory recreational amenities and schedule recreation management actions	A list of all recreational resources is maintained in a G.I.S. database and through the NYSDEC Maintenance Management System. This database will be updated on a yearly basis to reflect any changes to the recreational amenities, add any newly constructed amenities, and plan for any future maintenance or construction activities.
<b>REC IV</b> – Enhance fish & game species habitat	Fish species within the Unit will be periodically monitored through angler surveys and through fish sampling. Fish species will then be managed by the Bureau of Fisheries, based on suitable habitat for appropriate species. Timber harvesting activities will be performed utilizing NYS BMP guidelines to protect water quality. Game species will be monitored through the DECALS program, and game take allowances will be adjusted accordingly by the Bureau of Wildlife. Wildlife habitat enhancement will be considered with all timber harvesting activities.



<i>Table IV.D –Public / Permitted Use Objectives and Actions</i>	
Objective	Actions
<b>All-Terrain and Off Highway Vehicle Use</b>	
<b>ATV I</b> – Enhance recreational access by people with disabilities under the MAPPWD program	Department staff will evaluate any possible new MAPPWD routes for disabled persons as opportunities allow.
<b>ATV II</b> – Consider requests for ATV connector routes across the unit	All requests will be handled on a case by case basis, and follow the guidance provided in the “Strategic Plan for State Forest Management” or subsequent policy.
<b>ATV III</b> – Minimize illegal use of ATVs	Use enforcement tools available to keep illegal use of ATVs to a minimum.
<b>Mineral Resources</b>	
<b>MR I</b> – Provide for mineral exploration and development while protecting natural resources and recreation	There is no proposed mineral exploration on the unit at this time. Warning fences and signs will be installed at the abandoned Salisbury Steel and Iron Company mine site near Salisbury Center.
<b>Supporting Local Communities</b>	
<b>SLC I</b> – Provide revenue to New York State and economic stimulus for local communities	Timber harvesting activities on State lands provides income for New York State and provides local jobs for communities.
<b>SLC II</b> – Improve local economies through forest-based tourism	State Forest lands are promoted through multiple brochures and through the NYSDEC website to enhance tourism.
<b>SLC III</b> – Protect rural character and provide ecosystem services to local communities.	State Forest land on the Unit will remain undeveloped and retain Open Space within the local communities.

### Forest Management and Health

<i>Table IV.E. –Forest Management and Health Objectives and Actions</i>	
Objective	Actions
<b>Forest Products</b>	
<b>FP I</b> – Sustainably manage for forest products	Current guidelines will be followed.
<b>FP II</b> – Educate the public about the benefits of silviculture	This plan, public meetings, county wide conservation field days, and other public forums will be used to get the word out.
<b>Plantation Management</b>	

*Table IV.E. –Forest Management and Health Objectives and Actions*

<b>Objective</b>	<b>Actions</b>
<b>PM I</b> – Convert plantation stands to natural forest conditions where appropriate	Current guidelines will be followed.
<b>PM II</b> – Artificially regenerate plantations where appropriate	Current guidelines will be followed.
<b>Forest Health</b>	
<b>FH I</b> – Help maintain healthy forests through vegetation management.	Any timber harvest conducted will include considerations in the prescription to help improve the health of the harvested stand.
<b>FH II</b> – Protect the unit and surrounding lands from introduced diseases and invasive plant and animal species	Will conduct yearly aerial pest flights, on the ground surveillance, timely inventory and alerts from the public provide to identify potential forest health issues. Appropriate actions will be taken when these problems are discovered.
<b>Managing Deer Impacts</b>	
<b>DM I</b> – Minimize the impacts of deer browsing on forest health and regeneration	Monitor deer browse impacts as part of/during inventory field work and when in the field for other activities
<b>DM II</b> – Address issues of over-browsing	Use tools available to reduce deer browsing, such as DMAP permits, harvesting techniques, timing of harvest, etc. Deer browse is not a problem in this unit except for the southern areas of Popple Pond S.F. (Oneida 6)
<b>Fire Management</b>	
<b>FM I</b> – Support Forest Rangers in controlling the ignition and spread of wildfires	Support staff wildland fire training and certifications. Assist with fire control operations as needed.
<b>FM II</b> – Maintain naturally occurring fire-dependent communities	There are no known fire-dependent communities on this unit.
<b>Carbon Sequestration</b>	
<b>CS I</b> – Keep forests as forests, where appropriate	No major covertime changes are proposed for this unit.
<b>CS II</b> – Enhance carbon storage in existing stands	Current guidelines will be followed.
<b>CS III</b> – Keep forests vigorous and improve forest growth rates	Forest health is the number one goal with any timber harvest conducted.

*Table IV.E. –Forest Management and Health Objectives and Actions*

Objective	Actions
CS IV – Sequester carbon in forest products	Current guidelines are being followed.

## Ten-Year List of Management 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**

Maintain boundary lines and roads per the schedule below.

### **Action 4**

Follow all stand treatment and recreation schedules as listed.

### **Action 5**

Relocate the snowmobile trail at Punkeyville State Forest. Traveling from north to south, the trail will turn right off of River Road at the north gate, travel through the woods (Stand A-17) along an existing skid trail from a previous timber harvest, turn back onto River Road at the south gate, turn right just before the old barn foundation at the intersection of River Road and West River Street and cross West River street about 200 yards west of the intersection with River Road.

### **Action 6**

Meet with local citizens to discuss picnic areas at Punkeyville State Forest. Local Scout groups, the Town of Forestport and interested citizens have expressed interest in donating picnic tables and helping to mow and maintain a picnic site that will be primitive in nature (carry in/carry out, no running water or other amenities). Precise location and formal Volunteer Stewardship Agreements will need to be finalized.

### **Action 7**

Formally designate appropriate campsites on state forests on the unit.

### **Action 8**

Establish a split rail warning fence and signs around mine shaft 1 and mine shaft 2 at the old Salisbury Steel and Iron Company on the Detached Parcel of Forest Preserve just north of Salisbury Center, Herkimer County.

### **Action 9**

Meet with Forestport officials to determine status and exact locations of water mains on Punkeyville and Woodhull State Forests.

### **Action 10**

Replace State Forest signs at Hinckley State Forest. The signs will be placed at the intersection of the PFAR and Hinckley Road and the intersection of the PFAR and Black Creek Road.

# TEN-YEAR LIST OF MANAGEMENT ACTIONS

<i>Table IV.F. Boundary Line Management Action Schedule (BL I, BL II)</i>				
<b>State Forest</b>	<b>Length of Boundary (mi.)</b>	<b>Year of Last Maintenance</b>	<b>Year of Next Maintenance</b>	<b>Issues</b>
Oneida 1, Hogsback	7.2	2011	2016	None
Oneida 6, Popple Pond	19.8	2013	2018	None
Oneida 24, Woodhull	9.1	2008	2015	None
Oneida 25, Punkeyville	5.3	2013	2018	None
Herkimer 1, Hinckley	13.4	2011	2016	None
Herkimer 4, Black Creek	12.3	2014	2019	None
Detached Parcels of Forest Preserve (21 parcels total)	27.3	unknown	unknown	unknown

*Table IV.G. Roads Management Routine Maintenance Schedule (INF I, II)*

Road	Length (miles)	Last Brushing	Last Grading	Next Brushing	Next Grading <sup>[DS1]</sup>	Issues
<b>Herkimer 1, Hinckley State Forest</b>						
haul road, south east corner	0.6	as needed	as needed	as needed	as needed	None at this time.
public forest access road (PFAR) (between Black Creek Rd. and Hinckley Rd.)	1.6	2013	2013	2015	2015	None at this time.
<b>Herkimer 4, Black Creek State Forest</b>						
haul road (west of Newport – Gray Rd. in northwest corner)	0.4	2015	2015	2017 or as needed	2017 or as needed	None at this time.
public forest access road (also known as Stanley Rd., between Black Creek Rd, and Newport – Gray Rd.)	1.1	2015	2015	2017 or as needed	2017 or as needed	None at this time.
<b>Oneida 1, Hogsback State Forest</b>						
public forest access road (loop and access from Sheen Rd.)	2.9	2013	2013	2016	2016	None at this time.
haul road (west side of loop)	0.8	not maintained at this time	not maintained at this time	not maintained at this time	not maintained at this time	None at this time.
haul road (east side of loop)	0.2	not maintained at this time	not maintained at this time	not maintained at this time	not maintained at this time	Dubious access to private land
<b>Oneida 6, Popple Pond State Forest</b>						

# TEN-YEAR LIST OF MANAGEMENT ACTIONS

*Table IV.G. Roads Management Routine Maintenance Schedule (INF I, II)*

main public forest access road between Pines Rd. and Smith Rd.	3.8	2015	2015	2017 or as needed	2017 or as needed	None at this time.
public forest access road northeast corner	1.6	2015	2015	2017 or as needed	2017 or as needed	None at this time.
haul road south east corner	0.8	not maintained at this time	not maintained at this time	not maintained at this time	not maintained at this time	None at this time.
haul road spur north of main PFAR	0.3	2015	2015	2017 or as needed	2017 or as needed	None at this time.
haul road spur south of main PFAR	0.2	not maintained at this time	not maintained at this time	not maintained at this time	not maintained at this time	None at this time.
haul road north of Long Lake Outlet, southeast corner	1.3	not maintained at this time	not maintained at this time	not maintained at this time	not maintained at this time	None at this time.
<b>Oneida 24, Woodhull State Forest</b>						
haul road, northwest corner	0.4	not maintained at this time	not maintained at this time	not maintained at this time	not maintained at this time	Not drivable at this time

*Table IV.H. Recreation Management Action Schedule  
For first 5 - Year Period*

State Forest	Proposed Action
Oneida 25, Punkeyville State Forest	Relocate snowmobile trail off of River Road through Stand A-17, and 200 yards west on W. River Street  Finalize Picnic Area locations and Volunteer Stewardship Agreements

<i><b>Table IV.J. Recreation Management Action Schedule For second 5 - Year Period</b></i>	
<b>State Forest</b>	<b>Proposed Kiosk Location</b>
Herkimer 1, Hinckley State Forest	Intersection of the PFAR and Black Creek Road
Herkimer 4, Black Creek State Forest	Intersection of Stanley Road and Newport – Gray Road
Oneida 1, Hogsback State Forest	Intersection of PFAR and Hawkinsville Road
Oneida 6, Popple Pond State Forest	Intersection of the main PFAR and the PFAR in the northeast corner of the State Forest
Oneida 24, Woodhull State Forest	Intersection of NYS Route 28 and Deer Hollow Road  Remove switchback from snowmobile trail on north side of Rt.28 crossing
Oneida 25, Punkeyville State Forest	Intersection of River Road and Irish Settlement Road



## Land Management Actions

The tables below list all stands for which it is anticipated that there will be management actions within the next 5 years. All stands identified are in need of treatment. Treatment types have been listed as thinning. 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 \(June 2008\)](#)

[Plantation Management on State Forests \(ONR-DLF-1\)](#)

[Retention on State Forests \(ONR-DLF-2\)](#)

[Clearcutting on State Forests \(ONR-DLF-3\)](#)

[State Forest Rutting Guidelines](#)

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.

Because of extremely low staffing levels, stand treatments in this unit are lagging far behind expected schedules. Most stands are scheduled for thinnings to decrease unacceptable growing stock, jumpstart growth rates and so regulate the stand. After this is done, a much better determination can be made as to the true future potential of these areas.

No major changes in covertime or stand conversions (barring any natural disasters or major pest or disease infestations) are anticipated over the next 10 years.

Stands not listed are not scheduled for treatment in the 10 year consideration of this unit management plan. However, natural occurrences (wind storms, insect or disease infestations) as well as economic conditions (demand or lack thereof for forest products) may also alter which stands will be treated in this time period.

No designated natural areas have been identified in the unit.

## Species and Forest Type Codes

### Softwood Species

**EL** – European Larch

**Hem** – Hemlock

**NS** – Norway Spruce

hemlock

### Hardwood Species

**Aspen** – Quaking or Bigtooth Aspen

**BC** – Black Cherry

**Bee** – Beech

### Forest Type

**Hem-NH** – Hemlock with  
Northern Hardwoods

**NH-Hem** – Northern  
Hardwoods with

**JL** – Japanese Larch

**HM** – Hard (Sugar) Maple

**RP** – Red Pine

**RM** – Red (Soft) Maple

**SP** – Scotch Pine

**WA** – White Ash

**WP** – White Pine

**YB** – Yellow Birch

**WS** – White Spruce

### Land Management Action Schedules

<i>Table IV.I. - Land Management Action Schedule for First Five-Year Period (by State Forest)</i>								
State Forests	Stand	Acres	Forest Type			Management Category		Treatment Type
			Species	Current	Future	Current	Future	
Herkimer 1	A-5,10,11	45	WP, RP	Softwood Plantation	Softwood Plantation	Even Aged	Even Aged	Thinning
Herkimer 1	A-20.2, 25	44	RP, WP	Softwood Plantation	Softwood Plantation	Even Aged	Even Aged	Thinning
Herkimer 1	B-25.2	56	RP, WP	Softwood Plantation	Softwood Plantation	Even Aged	Even Aged	Thinning
Herkimer 1	8.1,8.2,16.1, 17.1,17.5	16	WP, RP	Softwood Plantation	Softwood Plantation	Even Aged	Even Aged	Thinning
Herkimer 4	A-10.1,23.2, 26.2,36.2	25.5	RP, WP, WS	Softwood Plantation	Softwood Plantation	Even Aged	Even Aged	Thinning
Oneida 1	A-15.1,15.2	41.4	WP	Softwood Plantation	Softwood Plantation	Even Aged	Even Aged	Thinning
Oneida 1	A-2.2,4.1,17.1	22.7	WP	Softwood Plantation	Softwood Plantation	Even Aged	Even Aged	Thinning
Oneida 6	A-9.3	81	WP	Softwood Plantation	Softwood Plantation	Even Aged	Even Aged	Thinning

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

State Forests	Stand	Acres	Forest Type			Management Category		Treatment Type
			Species	Current	Future	Current	Future	
Oneida 6	A-9.1, 22.1, 29.1, 29.2, 29.3	24	WP, RP	Softwood Plantation	Softwood Plantation	Even Aged	Even Aged	Thinning
Oneida 6	B-22.2, 33	23	HEM, HM, RM	Hem-N H	Hem-N H	Even Aged	Even Aged	Thinning
Oneida 6	B-5.1, 9.1, 9.2	31	RP, WP	Softwood Plantation	Softwood Plantation	Even Aged	Even Aged	Thinning
Oneida 24	A-4.1	73	SP	Softwood Plantation	Softwood Plantation	Even Aged	Even Aged	Thinning
Oneida 24	A-5	64	WP	Softwood Plantation	Softwood Plantation	Even Aged	Even Aged	Thinning
Oneida 24	A-15	23	WP	Softwood Plantation	Softwood Plantation	Even Aged	Even Aged	Thinning
Oneida 24	A-19	23	WP	Softwood Plantation	Softwood Plantation	Even Aged	Even Aged	Thinning

## V. Bibliography

NYSDEC, "New York State Strategic Plan for State Forest Management". Albany, NY, 2010

New York Natural Heritage Program Classification and Management of High Conservation Value Forests (HCVF) and Representative Sample Areas (RSA) On State Forests. Version 6-2013  
Public Site from NYSDEC website.

Predicted Richness Overlays (PROs): User Guide and Disclaimers  
New York Natural Heritage Program (NYNHP) May 2009

NYSDEC Website, NY Natural Heritage Program Active Inventory List. Plants that are Actively Tracked and Surveyed. <http://www.dec.ny.gov/animals/66348.html>

Oneida County Historical Society Website, <http://www.oneidacountyhistory.org/>

Cookingham, Henry J.: *History of Oneida County, New York: From 1700 to the Present Time*. S. J. Clark Publishing Co., 1912, Chicago

Hardin, George: *History of Herkimer County, New York*. D. Mason and CO., Syracuse, NY 1893

## VI. Appendices & Figures

### Appendix A - Glossary

**Access trails** temporary, unpaved roads which do not provide all weather access within the state land. They are not designed for long term and repeated use by heavy equipment. These corridors were originally constructed for the seasonal removal of forest products by skidding to log landings or other staging areas. Constructed according to best management practices, these trails may be used to support other management objectives such as recreational access corridors. Maintenance is limited to activities which minimally support seasonal access objectives.

**Adaptive management** a dynamic approach to forest management in which the effects of treatments and decisions are continually monitored and used, along with research results, to modify management on a continuing basis to ensure that objectives are being met

**Afforestation** The establishment of a forest or stand in an area where the preceding vegetation or land use was not forest

**Age class(es)** trees of a similar age originating from a single natural event or regeneration activity

**All-aged** a condition of a forest or stand that contains trees of all or almost all age classes.

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

**Best Management Practices (BMP's)** a practice or a combination of practices that are designed for the protection of water quality of water bodies and riparian areas, and determined to be the most effective and practicable means of controlling water pollutants

**Biodiversity** 1. the variety and abundance of life forms, processes, functions, and structures of plants, animals, and other living organisms, including the relative complexity of species, communities, gene pools, and ecosystems at spatial scales that range from local through regional to global —synonym biological diversity, diversity

2. an index of richness in a community, ecosystem, or landscape and the relative abundance of these species —note 1. there are commonly five levels of biodiversity: (a) genetic diversity, referring to the genetic variation within a species; (b) species diversity, referring to the variety of species in an area; (c) community or ecosystem diversity, referring to the variety of communities or ecosystems in an area; (d) landscape diversity, referring to the variety of ecosystems across a landscape; and (e) regional diversity, referring to the variety of species, communities, ecosystems, or landscapes within a specific geographic region —note 2. each level of biodiversity has three components: (a) compositional diversity or the number of parts or elements within a system, indicated by such measures as the number of species, genes, communities, or ecosystems; (b) structural diversity or the variety of patterns or organizations within a system, such as habitat structure, population structure, or species morphology; and (c) functional diversity or the number of ecological processes within a system, such as disturbance regimes, roles played by species within a community, and nutrient cycling within a forest

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

Blowdown tree or trees felled or broken off by wind

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

Buffer zone(s)/buffer strip a vegetation strip or management zone of varying size, shape, and character maintained along a stream, lake, road, recreation site, or other vegetative zone to mitigate the impacts of actions on adjacent lands, to enhance aesthetic values, or as a best management practice

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

Clearcut the cutting of essentially all trees, producing a fully exposed microclimate for the development of a new age class —note 1. regeneration can be from natural seeding, direct seeding, planted seedlings, or advance reproduction —note 2. cutting may be done in groups or patches (group or patch clearcutting), or in strips (strip clearcutting) —note 3. the management unit or stand in which regeneration, growth, and yield are regulated consists of the individual clearcut stand —note 4. when the primary source of regeneration is advance reproduction, the preferred term is overstory removal

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

Coarse filter approach a strategy for conserving biodiversity that involves maintaining a variety of native ecosystems within a landscape context. A coarse filter approach would ensure the availability of grasslands, shrublands, open wetlands, forest wetlands, riparian zones, northern hardwood forest and mixed northern hardwood/conifer forest in various stages of successional development. This approach assumes that a representative array of native ecosystems will contain the vast majority of species in a region

Coarse woody material any piece(s) of dead woody material on the ground in forest stands or in streams

Cohort a population of trees that originate after some type of disturbance

Community **1.** an assemblage of plants and animals interacting with one another, occupying a habitat, and often modifying the habitat; a variable assemblage of plant and animal populations sharing a common environment and occurring repeatedly in the landscape. **2.** a group of people living in a particular local area

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

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

Cover type(s) the plant species forming a majority of composition across a given area

Crown class a category of tree based on its crown position relative to those of adjacent trees. a) dominant: a tree whose crown extends above the general level of the main canopy and receives full light from above and partial to full light from the sides. b) co-dominant: a tree whose crown helps to form the general level of the main canopy and receives full light from above and comparatively little from the sides. c) intermediate: a tree whose crown extends into the lower portion of the main canopy and receives little direct light from above and none from the sides. d) suppressed / overtopped: a tree whose crown is completely overtopped by the crowns of one or more neighboring trees and receives little or no direct sunlight

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 or regeneration cuts in a stand

Designated recreational trail(s) a Department authorized recreational trail that is signed and/or mapped

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

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

Early successional habitat the earliest stage of development in an ecosystem. An example: vegetative habitat where early successional is seen as old fields, brushy shrubby type plants, with species that are shade intolerant

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

Ecosystem management the appropriate integration of ecological, economic, and social factors in order to maintain and enhance the quality of the environment to best meet current and future needs. Involves management at the landscape level, prompting the biodiversity of natural communities of plants, animals, and seeking to maintain healthy and productive environments

Edge(s) the more or less well-defined boundary between two or more elements of the environment, e.g., a field adjacent to a woodland or the boundary of different silvicultural treatments

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

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

Even-aged (silviculture) a program of forest management directed to the establishment and maintenance of stands of trees having relatively little (10-20 yrs) variation in ages. The guidelines to be applied in using this system at all stages of tree development are uniquely different from the uneven-aged system

Flood plain(s) the level or nearly level land with alluvial soils on either or both sides of a stream or river that is subject to overflow flooding during periods of high water level

Forest fragmentation 1. the process by which a landscape is broken into small islands of forest within a mosaic of other forms of land use or ownership. Note- fragmentation is a concern because of the effect of noncontiguous forest cover on connectivity and the movement and dispersal of animals in the landscape 2. islands of a particular age class (e.g., old growth) that remain within areas of younger-aged forest

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

Fragipan a dense and brittle layer of soil. Its hardness results mainly from extreme density or compactness rather than from high clay content; the material may be dense enough to restrict root, nutrient, and water penetration

Gaps natural communities, habitats, successional stages, or organisms which have been identified as lacking in the landscape

Geocaching an outdoor activity in which the participants use a Global Positioning System (GPS) receiver or other navigational techniques to hide and seek containers

Geographic Information System (GIS) an organized collection of computer hardware, software, geographic and descriptive data, personnel, knowledge and procedures designed to efficiently capture, store, update, manipulate, analyze, report and display the forms of geographically referenced information and descriptive information

Group selection - trees are removed and new age classes are established in small groups —note 1. the width of groups is commonly approximately twice the height of the mature trees with smaller openings providing microenvironments suitable for tolerant regeneration and larger openings providing conditions suitable for more intolerant regeneration —note 2. the management unit or stand in which regeneration, growth, and yield are regulated consists of an aggregation of groups

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

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

Haul roads - permanent, unpaved roads which are not designed for all-weather travel, but may have hardened or improved surfaces with artificial drainage; they are constructed according to best management practices primarily for the removal of forest products, providing limited access by log



trucks and other heavy equipment; these roads may or may not be open for public motor vehicle use, depending on management priorities and objectives; they may serve as recreational access corridors, but are not maintained according to specific standards or schedules

Improvement thinning(s) - the removal of less desirable trees of any species in a stand of poles or larger trees, primarily to improve composition and quality

Indicator species - species with such specialized ecological needs that they can be used for assessing the quality, condition, or extent of an ecosystem on the basis of their presence and density, or the accumulation and effect of materials in their tissues

Invasive species - species that have become established outside their natural range which spread prolifically, displacing other species, and sometimes causing environmental damage

Keystone species - a plant or animal species that strongly influences that functioning of an entire ecosystem; for example, the way beaver influence wetlands

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

Landscape ecology - the study of the distribution and abundance of elements within landscapes, the origins of these elements, and their impacts on organisms and processes.

Landscape matrix - the most extensive and connected landscape element type present, which plays the dominant role in landscape functioning; for example, New York's South-Central Highlands (Central Appalachian) landscape is dominantly forest cover; thus, the landscape matrix is forest cover

Large poles - trees that are 9 to 11 inches in diameter at breast height

Large sawtimber - trees that are 24 inches or greater in diameter at breast height

Late successional habitat - habitats predominated by forests with older and larger trees, having more structural complexity than mature forest, and being either in the process of developing or have developed old growth characteristics; they may exhibit evidence of past human or natural disturbances; these forests may exist as entire stands or as smaller patches within younger stands

Log landing(s)/(Log deck) - a cleared area to which logs are skidded and are temporarily stored before being loaded onto trucks for transport

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

Mature forest cover - pertaining to an even-aged stand that has attained most of its potential height growth, or has reached merchantability standards. Within uneven-aged stands, individual trees may become mature but the stand itself consists of trees of diverse ages and stages of development

Medium sawtimber - trees that are 18-23 inches in diameter at breast height

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

Mid Successional - forests that are pole-sized or larger, with relatively open understories

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

Natural area(s) - an area allowed to develop naturally; intervention will be considered to protect forest health ( e.g. fire or invasive plant or animal invasive species), to enhance structural or species diversity, to protect, restore or enhance significant habitats or to exploit or create regeneration opportunities for desired plant species

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

Neotropical migratory birds (migrants) - birds that breed in Canada and the United States and spend the winter in Mexico, Central America, South America or the Caribbean islands; these species represent more than 50% (340 of the 600 species) of North American birds

Niche - **1.** the ultimate unit of the habitat, i.e., the specific spot occupied by an individual organism **2.** by extension, the more or less specialized relationships existing between an organism, individual or synusia, and its environment **3.** the specific set of environmental and habitat conditions that permit the full development and completion of the life cycle of an organism — note the ecological niche of a species is the functional role of the species in a community; the fundamental niche is the totality of environmental variables and functional roles to which a species is adapted; the realized niche is the niche a species normally occupies

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

Old growth - an abundance of late successional tree species, at least 180 - 200 years of age in a contiguous forested landscape that has evolved and reproduced itself naturally, with the capacity for self perpetuation, arranged in a stratified forest structure consisting of multiple growth layers throughout the canopy and forest floor, featuring canopy gaps formed by natural disturbances creating an uneven canopy, and a conspicuous absence of multiple stemmed trees. Old growth forest sites typically are characterized by an irregular forest floor containing an abundance of coarse woody materials which are often covered by mosses and lichens; show limited signs of artificial disturbance and have distinct soil horizons. The understory displays well developed and diverse surface herbaceous layers. Single, isolated trees may be considered as old growth if they meet some of the above criteria

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

Overstory removal - the cutting of trees constituting an upper canopy layer to release adequate desirable advanced regeneration in the understory

Parcelization - the subdivision of land into smaller ownership blocks. This intrudes new features and activities into the forest and changes its character, but does not necessarily fragment it in biophysical terms

Patch cut - a type of clearcut where the cut area consists of a small part of a stand or forest —note 1. the minimum size of a patch depends primarily on (a) the creation of microclimate conducive to establishment of desired regeneration of particular tolerance, and (b) the area needed for safe felling and yarding of harvested trees

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

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

Poletimber - trees that are generally 6-11 inches diameter at breast height

Prescribed fire - fire that is deliberately ignited to burn wildland fuels in either their natural or modified state and under specific environmental conditions which allow the fire to be confined to a predetermined area and produces the fireline intensity and rate of spread required to attain planned resource management objectives.

Protection area - land excluded from most active management to protect sensitive sites; exclusions include: timber harvesting, road construction, oil and gas exploration and development and some recreational activities. These sites most often include steep slopes, wet woodlands and riparian zones along stream corridors

Public Forest Access Roads (PFAR) - permanent, unpaved roads which may be designed for allweather use depending upon their location, surfacing and drainage. These roads provide primary access for administration and public use within the Unit. The design standards for these roads are those of the Class A and Class B access roads as provided in the Unpaved Forest Road Handbook (8/74) ([http://www.dec.ny.gov/docs/lands\\_forests\\_pdf/sfunpavedroad.pdf](http://www.dec.ny.gov/docs/lands_forests_pdf/sfunpavedroad.pdf)). As a general guideline, sufficient access is typically achieved when 1 mile of PFAR is developed for each 500 acres of state land, and no position within the Unit lies more than one half-mile from a PFAR or public highway

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

Regeneration - seedlings or saplings of any origin

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

Riparian buffer (zone) - areas of transition between terrestrial and aquatic ecological systems; they are characterized as having soils and vegetation analogous to floodplains, or areas transitional to upland zones; these areas help protect the water by removing or buffering the effects of excessive nutrients, sediments, organic matter, pesticides, or pollutants

Rotation - the period of years between stand establishment and final harvest as designated by management decisions

Salvage cutting - the removal of dead trees or trees damaged or dying because of injurious agents other than competition, to recover economic value that would otherwise be lost

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

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

Seed tree - 1. a regeneration method consisting of cutting all trees except for a small number of widely dispersed trees retained for seed production and to produce a new age class in fully exposed microenvironment 2. a tree retained for seed production —note seed trees are usually removed after regeneration is established

Seedling - a young tree originating from seed that is less than one inch in diameter

Seedling(s)/sapling(s) - trees less than 6 inches diameter at breast height

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

Shelterwood - an even-aged method of natural regeneration designed to regenerate and maintain a stand with a single age class; the cutting of most trees, leaving those needed to produce sufficient shade to produce a new age class in a moderated microenvironment —note the sequence of treatments can include three types of cuttings: (a) an optional preparatory cut to enhance conditions for seed production, (b) an establishment cut to prepare the seed bed and to create a new age class, and (c) a removal cut to release established regeneration from competition with the overstory; cutting may be done uniformly throughout the stand (uniform shelterwood), in groups or patches (group shelterwood), or in strips (strip shelterwood); in a strip shelterwood, regeneration cuttings may progress against the prevailing wind

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

Single tree selection - individual trees of all size classes are removed more or less uniformly throughout the stand, to promote growth of remaining trees and to provide space for regeneration — a synonym is individual tree selection

Site - the area in which a plant or forest stand grows, considered in terms of its environment, particularly as this determines the type and quality of the vegetation the area can support

Skid trail(s) - a temporary or permanent trail used to skid or forward felled trees from the stumps to the log landing

Small poles - trees 6-8 inches diameter at breast height

Small sawtimber - trees 12-17 inches in diameter at breast height

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

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

Spatial analysis - an examination of data in the context of where it occurs geographically or “on the ground;” This is usually accomplished by tying database information to GIS based maps

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

Species richness - the number of different species present within a defined area

Stand - a contiguous group of trees sufficiently uniform in age-class distribution, composition, and structure, and growing on a site of sufficiently uniform quality, to be a distinguishable unit —see all-aged stand, mixed, pure, even-aged, and uneven-aged stands —note 1. a mixed stand is composed of a mixture of species —note 2. a pure stand is composed of essentially a single species —note 3. in a stratified mixture stand different species occupy different strata of the total crown canopy

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

State Forest / State Reforestation Area - lands owned by the State of New York, administered by the Department of Environmental Conservation Division of Lands & Forests, and authorized by Environmental Conservation Law to be devoted to the establishment and maintenance of forests for watershed protection, the production of timber and other forest products, and for recreation and kindred purposes. These forests shall be forever devoted to the planting, growth, and harvesting of such trees (Title 3 Article 9-0303 ECL). (G)

Stocking - 1. the amount of material on a given area – example: the stand is fully stocked 2. an indication of growing- space occupancy relative to a pre-established standard

Succession - the gradual supplanting of one community of plants by another —note 1. the sequence of communities is called a sere, or seral stage —note 2. a sere whose first stage is open water is termed a hydrosere, one whose first stage is dry ground, a xerosere —note 3. succession is primary (by pioneers) on sites that have not previously borne vegetation, secondary after the whole or part of the original vegetation has been supplanted, allogenic when the causes of succession are external to and independent of the community (e.g., accretion of soil by wind or water, or a change of climate), and autogenic when the developing vegetation is itself the cause

Suite - species similar in their habitat needs which may respond similarly to habitat changes

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

Temporary revocable permit (TRP) - a Department permit which authorizes the use of state land for a specific purpose for a prescribed length of time

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

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

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

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

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

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

Universal Design - Universal design is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.

Variable patch retention (harvest system) - an approach to harvesting based on the retention of structural elements or biological legacies (trees, snags, logs, etc.) from the harvested stand for integration into the new stand to achieve various ecological objectives

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

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

## **Appendix B- Summary of Comments from Public Scoping Period**

### **Recreation**

Registration of UTV's should be allowed.

Provide more access for camping.

Establish more campsites including outhouses and leantos.

Move the snowmobile trail off of the main road on to Punkeyville State Forest to help with safety issues.

Provide more hunting access on Popple Pond – reopen blocked off road.

Provide picnic tables at Punkeyville.

Remove the gates at Punkeyville.

Increase law enforcement to discourage dumping and vandalism.

Block off illegal trails.

Dirt bikes, ATV's and off road 4 wheel driving should definitely not be allowed.

### **Fish and Wildlife**

Rehab the fish ponds at Punkeyville State Forest.

Maintain wild strains of brook trout.

Snow shoe rabbit and grouse populations are declining mostly due to decreased habitat.

There are too many deer; the season should be lengthened and hunters should be allowed to shoot more does.

There are no deer anywhere; the season should be shortened to allow the population to bounce back.

Trapping is illegal near recreational trails; new recreational trail locations should be carefully considered so as not to restrict trapping.

### **Forestry**

Manage more land; clean out downed trees in the understory.

Maximize early age forest for wildlife habitat.

Harvest more timber.

Manage lands to maximize wildlife carrying capacity.

Provide more access to more State Land.

Consider animals and vegetation when doing forest management.

Keep Detached Parcels the same to preserve niches and unique habitat.

Logging should be conducted according to best management practices.

Maximize biodiversity.

Harvest red pine stands to increase wildlife habitat and increase biodiversity.

### **Facilities**

More signs should be placed on the State Forests and should be maintained better.

Open the roads that are blocked by gates or berms.



## Appendix C- State Environmental Quality Review (SEQR)

This Unit Management Plan (UMP) does not propose pesticide applications of more than 40 acres, any clearcuts of 40 acres or larger, or prescribed burns in excess of 100 acres. Therefore the actions in the plan do not exceed the thresholds set forth in the Strategic Plan/Generic Environmental Impact Statement for State Forest Management.

This Unit Management Plan also does not include any of the following:

1. Forest management activities occurring on acreage occupied by protected species ranked S1, S2, G1, G2 or G3
2. Pesticide applications adjacent to plants ranked S1, S2, G1, G2 or G3
3. Aerial pesticide spraying by airplane or helicopter
4. Any development of facilities with potable water supplies, septic system supported restrooms, camping areas with more than 10 sites or development in excess of other limits established in this plan.
5. Well drilling plans
6. Well pad densities of greater than one well pad in 320 acres or which does not comply with the limitations identified through a tract assessment
7. Carbon injection and storage or waste water disposal

Therefore the actions proposed in this UMP will be carried out in conformance with the conditions and thresholds established for such actions in the Strategic Plan/Generic Environmental Impact Statement , and do not require any separate site specific environmental review (see 6 NYCRR 617.10[d]).

Actions not covered by the Strategic Plan/Generic Environmental Impact Statement

Any action taken by the Department on this unit that is not addressed in this Unit Management Plan and is not addressed in the Strategic Plan/Generic Environmental Impact Statement may need a separate site specific environmental review.

## **Figure 1. – Existing and Future Facilities**

[Link Figure 1 - Existing and Future Facilities Maps](#)

## **Figure 2. – Soils Maps**

[Link to Figure 2 - Soils Maps](#)

## **Figure 3. – Water Resources Maps**

[Link to Figure 3 - Water Resources Maps](#)

## **Figure 4. – Forest Composition and Resource Protection Areas**

[Link to Figure 4 - Forest Composition and Resource Protection Areas](#)

## **Figure 5. - Recreation Maps**

[Link to Figure 5 - Recreation Maps](#)

## **Figure 6. - Forest Stands**

[Link to Figure 6 – Forest Stands Maps](#)

## **Figure 7. – Forest Age Structure**

[Link to Figure 7 – Forest Age Structure](#)

## **Figure 8. – Detached Forest Preserve Parcel Maps**

[Link to Figure 8 – Detached Forest Preserve Parcels](#)