



**NEW YORK**  
STATE OF  
OPPORTUNITY.

**Department of  
Environmental  
Conservation**

# Catskill Creek

## UNIT MANAGEMENT PLAN

### DRAFT

Towns of Broome, Conesville, Fulton, Gilboa, Middleburgh,  
and Rensselaerville

Counties of Albany and Schoharie

February 2020

#### **DIVISION OF LANDS AND FORESTS**

Bureau of State Land Management, Region 4

65561 State Highway 10, Suite 1

Stamford, New York 12167

607-652-7365







# **Catskill Creek**

## **Unit Management Plan**

**A planning unit consisting of nine State Forests and one Wildlife Management Area in Schoharie and Albany Counties**

**February 2020**

Prepared by the Catskill Creek Unit Management Planning Team:

Vicki Cross, Forester 2

Robert Cross, Forester I

Donald Guest, Forester 1

### **Acknowledgments**

The Catskill Creek 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:

Bruce Hulbert, Surveyor III

Josh Houghton, Natural Resource Planner

New York State Department of Environmental Conservation

Division of Lands and Forests

Region 4

65561 State Highway 10, Suite 1

Stamford, New York 12167

607-652-7365

<https://www.dec.ny.gov/lands/4979.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 Catskill Creek 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

---

### STATE FOREST OVERVIEW

## TABLE OF CONTENTS

CATSKILL CREEK .....	1
<i>Counties of Albany and Schoharie</i> .....	1
<b>DEC'S MISSION</b> .....	<b>2</b>
<b>VISION STATEMENT</b> .....	<b>2</b>
<b>PREFACE</b> .....	<b>5</b>
STATE FOREST OVERVIEW.....	5
<i>Legal Considerations</i> .....	5
<i>CP-42 Contact Cooperation, and Consultation with Indian Nations</i> .....	5
MANAGEMENT PLANNING OVERVIEW .....	6
<i>Public Participation</i> .....	6
<i>Strategic Plan for State Forest Management</i> .....	6
DEC'S MANAGEMENT APPROACH AND GOALS .....	6
<i>Forest Certification of State Forests</i> .....	6
<i>Ecosystem Management Approach</i> .....	7
<i>Ecosystem Management Strategies</i> .....	8
<i>State Forest Management Goals</i> .....	8
<i>Location Map</i> .....	10
<b>INFORMATION ON THE CATSKILL CREEK UNIT</b> .....	<b>11</b>
STATE LANDS IN THE UNIT .....	11
SOILS.....	11
GEOLOGY .....	12
<i>Surficial Geology</i> .....	12
<i>Bedrock Geology</i> .....	13
WATER RESOURCES.....	15
<i>Major Streams, Rivers and Water Bodies</i> .....	17
BIODIVERSITY .....	19
<i>Common Species</i> .....	19
<i>Habitat</i> .....	19
<i>At-Risk Species</i> .....	20
VISUAL RESOURCES .....	22
HISTORIC AND CULTURAL RESOURCES .....	22
<i>History of the Unit</i> .....	22
<i>Inventory of Resources</i> .....	22
<i>Archaeological Site Protection</i> .....	23
<i>Archaeological Research</i> .....	23
REAL PROPERTY.....	23
<i>Boundary Lines</i> .....	23
<i>Exceptions and Deeded Restrictions</i> .....	24
<i>Encroachments</i> .....	25
<i>Land Acquisition</i> .....	26
INFRASTRUCTURE .....	27
<i>Roads and Trails</i> .....	27
<i>Signs / Kiosks</i> .....	29
<i>Boating and Fishing Facilities</i> .....	29
<i>Utility Transmission and Collection Facilities</i> .....	29
<i>Non-recreational Uses</i> .....	29
FORMAL AND INFORMAL PARTNERSHIPS AND AGREEMENTS .....	30
RECREATION .....	30
<i>Wildlife-related Recreation</i> .....	30
<i>Viewing Natural Resources</i> .....	32
<i>Camping</i> .....	32

**STATE FOREST OVERVIEW**

<i>Water-based Recreation</i> .....	32
<i>Trail-based Recreation</i> .....	32
<i>Other Recreational Activities</i> .....	33
<i>Overall Assessment of the Level of Recreational Development</i> .....	33
UNIVERSAL ACCESS .....	34
<i>Application of the Americans with Disabilities Act (ADA)</i> .....	34
MINERAL RESOURCES .....	35
<i>Oil, Gas, and Solution Mining</i> .....	35
<i>Pipelines</i> .....	35
<i>Mining</i> .....	36
SUPPORTING LOCAL COMMUNITIES .....	37
<i>Tourism</i> .....	37
<i>Taxes Paid</i> .....	37
FOREST PRODUCTS.....	38
<i>Timber</i> .....	38
<i>Non-Timber Forest Products</i> .....	39
FOREST HEALTH.....	39
<i>Invasive Species</i> .....	39
<i>Managing Deer Impacts</i> .....	42
<b>SUMMARY OF ECO-REGION ASSESSMENTS</b> .....	<b>42</b>
LOCAL LANDSCAPE CONDITIONS .....	42
ECO-REGION SUMMARY .....	43
ECO-REGION ASSESSMENT .....	44
<i>Statewide Habitat Gaps</i> .....	44
<i>High Allegheny Plateau (HAP) Eco-Region Habitat Gaps</i> .....	44
HABITAT RELATED NEEDS AND DEMANDS.....	44
<i>Early Successional Forest and Shrub</i> .....	45
<i>Evergreen</i> .....	46
<i>Wooded Wetland</i> .....	48
<i>Even Age/Uneven Age</i> .....	48
<b>MANAGEMENT OBJECTIVES AND ACTIONS</b> .....	<b>48</b>
OBJECTIVES .....	48
<i>Ecosystem Management</i> .....	48
<i>Resource Protection</i> .....	49
<i>Infrastructure and Real Property</i> .....	50
<i>Public/Permitted Use</i> .....	51
<i>Forest Management and Health</i> .....	52
TEN-YEAR LIST OF MANAGEMENT ACTIONS.....	53
FOREST TYPE CODES.....	55
MANAGEMENT STRATEGY .....	55
TREATMENT TYPE .....	55
LAND MANAGEMENT ACTION SCHEDULES .....	56
<b>BIBLIOGRAPHY</b> .....	<b>83</b>
<b>APPENDICES &amp; FIGURES</b> .....	<b>84</b>
APPENDIX A - SUMMARY OF COMMENTS DURING PUBLIC SCOPING SESSIONS .....	84
APPENDIX B - RESPONSIVENESS SUMMARY TO PUBLIC COMMENTS .....	85
APPENDIX C - STATE ENVIRONMENTAL QUALITY REVIEW (SEQR) .....	86
<i>State Environmental Quality Review (SEQR)</i> .....	86
FIGURE 1. – SOILS MAP .....	87
FIGURE 2 – WATER RESOURCES, SPECIAL MANAGEMENT ZONES AND TRANSPORTATION MAPS .....	88
FIGURE 3. – ASSET MAPS.....	93
FIGURE 4. – CURRENT FOREST TYPE, MANAGEMENT DIRECTION, AND FOREST STAND IDENTIFICATION NUMBER MAPS .....	99



## **PREFACE**

---

### STATE FOREST OVERVIEW

## **PREFACE**

### **STATE FOREST OVERVIEW**

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

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

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

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

This Unit also contains lands categorized as Wildlife Management Area. They are managed by DEC biologists, with different management priorities, described herein.

### **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.

### **CP-42 Contact Cooperation, and Consultation with Indian Nations**

The Commissioner's Policy (CP-42) (<https://www.dec.ny.gov/public/36929.html>) provides guidance to DEC staff concerning cooperation and consultation with Indian Nations on issues relating to protection of environmental and cultural resources within New York State. Specifically, this policy (i) formally recognizes that relations between the Department and Indian Nations will be conducted on a government-to-government basis; (ii) identifies the protocols to be followed by Department staff in working with Indian Nations; and (iii) endorses the development of cooperative agreements between the Department and Indian Nations to address environmental and cultural resource issues of mutual concern.

Nine Indian Nations reside within or have common geographic borders with New York State: the Mohawk, Oneida, Onondaga, Cayuga, Seneca, Tonawanda Seneca, Tuscarora, Unkechaug, and

## MANAGEMENT PLANNING OVERVIEW

Shinnecock. Communication between DEC and the Indian Nations should be direct and involve two-way dialogue and feedback. Face-to-face meetings are generally desirable; however, phone calls, correspondence, and other methods of communication are also encouraged. Therefore, DEC staff should be reaching out to the respective Nations as early in the UMP planning process as possible. The Department wishes to ensure that its actions, with respect to the environment and cultural resources, are sensitive to the concerns of Indian Nations, and that the perspective of the recognized Indian Nations is sought and taken into account when the Department undertakes an action having implications for indigenous peoples, their territories, and their culture. The Department and Indian Nations share key roles in protecting and preserving natural and cultural resources important to all citizens, and early consultation and cooperation between the Department and Indian Nations will foster more comprehensive protection and preservation of those resources.

## MANAGEMENT PLANNING OVERVIEW

The Catskill Creek Unit Management Plan (UMP) is based on a long-range vision for the management of Armlin Hill, Stone Store, Leonard Hill, Dutton Ridge, High Knob, Bates, Gates Hill, and Scott Patent State Forests, balancing long-term ecosystem health with current and future demands. This Plan addresses management activities on this Unit for the next ten years, though some management recommendations will extend beyond the ten-year period. Factors such as budget constraints, wood product markets, and forest health problems may necessitate deviations from the scheduled management activities.

### Public Participation

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

### Strategic Plan for State Forest Management

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

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

## DEC'S MANAGEMENT APPROACH AND GOALS

### Forest Certification of State Forests

In 2000, New York State DEC Bureau of State Land Management received Forest Stewardship Council® (FSC®) certification under an independent audit conducted by the National Wildlife Federation - SmartWood Program. This certification included 720,000 acres of State Forests in DEC Regions 3 through

### DEC'S MANAGEMENT APPROACH AND GOALS

9 managed for water quality protection, recreation, wildlife habitat, timber and mineral resources (multiple-use). To become certified, the Department had to meet more than 75 rigorous criteria established by FSC. Meeting these criteria established a benchmark for forests managed for long-term ecological, social and economic health. The original certification and contract was for five years.

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

## DEC'S MANAGEMENT APPROACH AND GOALS

### ***Multiple-use Management***

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

### ***Landscape Ecology***

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



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

### **Ecosystem Management Strategies**

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

### ***Passive Management***

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

### ***Silviculture (Active Management)***

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

### **State Forest Management Goals**

#### ***Goal 1 – Provide Healthy and Biologically Diverse Ecosystems***

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

### DEC'S MANAGEMENT APPROACH AND GOALS

demonstrate a high degree of health as measured by multiple criteria, including the biodiversity that they support.

#### ***Goal 2 – Maintain Man-made State Forest Assets***

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

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

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

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

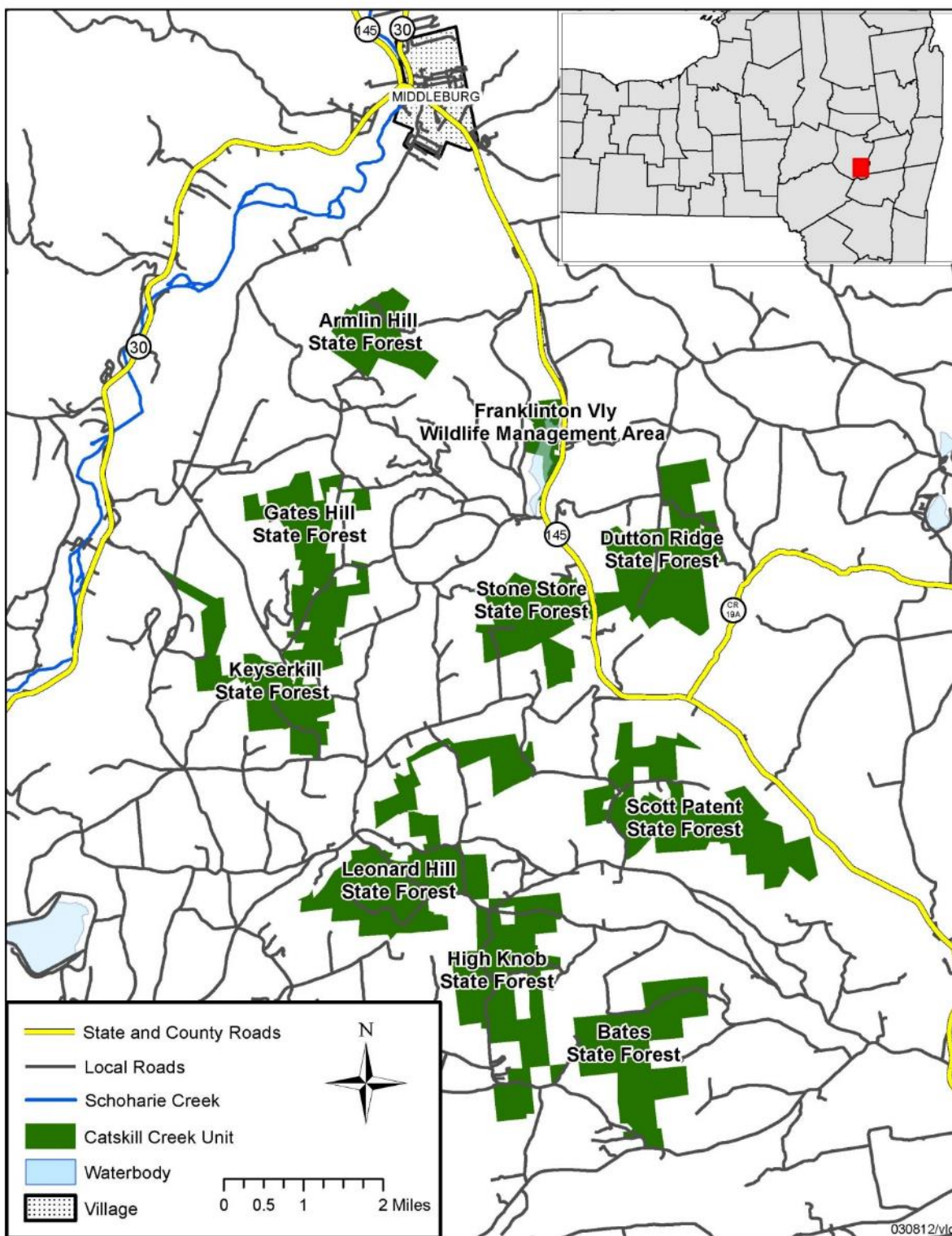
ECL §1-0101(1) provides in relevant part that "It is hereby declared to be the policy of the State of New York to conserve, improve and protect its natural resources and environment and to prevent, abate and control water, land and air pollution, in order to enhance the health, safety and welfare of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

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

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



# Location Map



## **INFORMATION ON THE CATSKILL CREEK UNIT**

### **STATE LANDS IN THE UNIT**

## **INFORMATION ON THE CATSKILL CREEK 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 has been developed for each of the State Forests. Each web page features a map of the State Forest with recreational information and natural features.

<b>Table I.A. – State Lands in the Unit</b>	
<b>Facility Name</b>	<b>Acreage</b>
Armlin Hill State Forest <a href="http://www.dec.ny.gov/lands/103057.html">http://www.dec.ny.gov/lands/103057.html</a>	515
Stone Store State Forest <a href="http://www.dec.ny.gov/lands/103029.html">http://www.dec.ny.gov/lands/103029.html</a>	723
Leonard Hill State Forest <a href="http://www.dec.ny.gov/lands/103069.html">http://www.dec.ny.gov/lands/103069.html</a>	1,628
Dutton Ridge State Forest <a href="http://www.dec.ny.gov/lands/103071.html">http://www.dec.ny.gov/lands/103071.html</a>	1,246
Keyserkill State Forest <a href="http://www.dec.ny.gov/lands/103057.html">http://www.dec.ny.gov/lands/103057.html</a>	1,163
High Knob State Forest <a href="http://www.dec.ny.gov/lands/103069.html">http://www.dec.ny.gov/lands/103069.html</a>	1,344
Bates State Forest <a href="http://www.dec.ny.gov/lands/103073.html">http://www.dec.ny.gov/lands/103073.html</a>	1,140
Gates Hill State Forest <a href="http://www.dec.ny.gov/lands/103057.html">http://www.dec.ny.gov/lands/103057.html</a>	752
Scott Patent State Forest <a href="http://www.dec.ny.gov/lands/103067.html">http://www.dec.ny.gov/lands/103067.html</a>	1,463
Franklinton Vlaie Wildlife Management Area <a href="http://www.dec.ny.gov/outdoor/86040.html">http://www.dec.ny.gov/outdoor/86040.html</a>	195
<b>Total</b>	<b>10,169</b>

### **SOILS**

Soils provide the foundation, both figuratively and literally, of forested ecosystems. They support an immense number of microorganisms, fungi, mosses, insects, herpetofauna and small mammals which form the base of the food chain. They filter and store water and also provide and recycle nutrients essential for all plant life. For information on DEC's policies for the protection of forest soils, as well as water resources, please see SPSFM page 108 at <http://www.dec.ny.gov/lands/64567.html>.

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

Facility Name	Predominant Soil Type(s)	Acres
Armlin Hill State Forest	Lordstown channery silt loam	189
Stone Store State Forest	Oquaga stony silt loam	243
Leonard Hill State Forest	Volusia, Morris, and Erie very stony soils	234
Dutton Ridge State Forest	Oquaga stony silt loam	250
Keyserkill State Forest	Mardin and Culvers very stony soils	136
High Knob State Forest	Volusia, Morris, and Erie very stony soils	153
Bates State Forest	Lordstown, Oquaga, and Nassau soils/Oquaga stony silt loam	100/99
Gates Hill State Forest	Lordstown channery silt loam	199
Scott Patent State Forest	Culvers stony silt loam	203
Franklinton Vlaie Wildlife Management Area	Muck and peat	63

## GEOLOGY

### Surficial Geology

The Catskill Creek Unit is located in the northern Catskill Mountains province, a dissected segment of the greater Allegheny Plateau. This large upland plateau extends from central and western New York into northern Pennsylvania. Most surficial geology in the Allegheny Plateau was influenced by the processes of glaciation that occurred during the Pleistocene Epoch. Ice sheets from the last glaciation episode (Wisconsinan) retreated from the area about eleven thousand (11,000) years ago. This glacial activity resulted in a variety of sedimentary deposits and surficial features which included elongate scour features. Weathering and erosion have continued to sculpt the surficial geologic units to the present day, resulting in the hills and valleys prevalent throughout the region. Some features filled with water, creating numerous waterbodies - the best-known examples of these waterbodies are the Finger Lakes.

Most soils and sediments in the region are related to glacial activity and the subsequent weathering and erosional processes that have occurred during the last 20,000 years. The underlying bedrock in this region consists of sedimentary strata - specifically shale, siltstone, sandstone, and minor limestone - that were deposited in shallow seas that existed in this region during the Devonian Period of the Paleozoic Era approximately 370 million years ago. Any post-Devonian rocks have been eroded from the region. The presence of rounded igneous and metamorphic clasts is indicative of glacial activity that has transported material into the region from the Canadian Shield to the north. The resulting surficial geology of the state lands included in this Unit is similar due to their close proximity to each other.



## INFORMATION ON THE CATSKILL CREEK UNIT

### SOILS

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

Further information on the surficial geology of the region is provided by the: *Surficial Geologic Map of New York, Hudson-Mohawk Sheet, New York State Museum - Geological Survey Map and Chart series #40, 1987.*

### Bedrock Geology

Bedrock underlying the Allegheny Plateau of New York is inclusive of sedimentary rock units (strata) deposited in association with ancient seas and their marine-fluvial-deltaic depositional environments during the Cambrian (540-485 million years ago (mya)), Ordovician (485-445 mya), Silurian (445-420 mya) and Devonian (420-360 mya) Periods of the Paleozoic Era.

Younger bedrock units deposited during the post-Devonian periods (e.g., Mississippian and Pennsylvanian) have been subsequently removed by erosional and glacial processes. Underlying the Paleozoic strata are pre-Paleozoic or Pre-Cambrian rocks of igneous and metamorphic in origin. These rocks are generally referred to as “basement” rocks.

Bedrock units outcropping (or subcropping beneath surficial deposits) in the Unit area consist of shales, sandstones, and siltstones of the Middle Devonian age Hamilton Group, as well as the Upper Devonian age Genesee Group. The Unit is predominantly underlain by shales of the Moscow and Panther Mountain Formations. Leonard Hill State Forest, High Knob State Forest, and portions of the Bates State Forest are underlain by shales, sandstones, and conglomerates of the Oneonta Formation.

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

Table I.C - Surficial and Bedrock Geologic Units		
State Land Name	Geology	Description
Armlin Hill State Forest	Surficial	Glacial Till - clay, silt, sand, gravel, cobbles, and boulders deposited by glacial activity.
		Bedrock - exposures are present in the northern edge of the state forest.
	Bedrock	Sandstones and shales of the Hamilton Group, Moscow Formation. The eastern portion of the state forest is underlain by shales of the Hamilton Group, Panther Mountain Formation.
	Surficial	Bedrock - exposures are present in the central portion of the state forest.

## INFORMATION ON THE CATSKILL CREEK UNIT

### SOILS

Bates State Forest		Kame Moraine - variably sorted sediment ranging in size from boulders to sand deposited by glacial retreat occur in the northeastern most portion of the state forest.
		Glacial Till - clay, silt, sand, gravel, cobbles, and boulders deposited by glacial activity.
	Bedrock	Shales, Sandstones, and conglomerates of the Genesee Group, Oneonta Formation. The northern portion of the state forest is underlain by sandstones and shales of the Hamilton Group, Moscow Formation.
Dutton Ridge State Forest	Surficial	Glacial Till - clay, silt, sand, gravel, cobbles, and boulders deposited by glacial activity.
		Bedrock - exposures are present in the eastern portion of the state forest.
		Outwash Sand & Gravel - coarse to fine gravel with sand from proglacial fluvial deposition occur on the western edge of the state forest.
	Bedrock	Sandstones and shales of the Hamilton Group, Moscow Formation. The western portion of the state forest is underlain by shales of the Hamilton Group, Panther Mountain Formation.
Franklinton Vlaie WMA	Surficial	Swamp Deposits - poorly drained peat, muck, organic silt and sand deposits occur in the northern portion of the management area.
		Outwash Sand & Gravel - coarse to fine gravel with sand from proglacial fluvial deposition occur in the southern portion of the management area.
		Glacial Till - clay, silt, sand, gravel, cobbles, and boulders deposited by glacial activity.
	Bedrock	Shales from the Hamilton Group, Panther Mountain Formation.
Gates Hill State Forest	Surficial	Glacial Till - clay, silt, sand, gravel, cobbles, and boulders deposited by glacial activity.
		Bedrock - exposures are present in the northwestern portion of the state forest.
	Bedrock	Sandstones and shales of the Hamilton Group, Moscow Formation. The lower elevations to the west are underlain by shales of the Hamilton Group, Panther Mountain Formation.
High Knob State Forest	Surficial	Glacial Till - clay, silt, sand, gravel, cobbles, and boulders deposited by glacial activity.
		Kame Moraine - Variably sorted sediment ranging in size from boulders to sand deposited by glacial retreat occur on the northern edge of the state forest.
		Bedrock - exposures are present in the central portion of the state forest.
	Bedrock	Shales, Sandstones, and conglomerates of the Genesee Group, Oneonta Formation. The northeastern edge of the state forest is underlain by sandstones and shales of the Hamilton Group, Moscow Formation.
Keyserkill State Forest	Surficial	Glacial Till - clay, silt, sand, gravel, cobbles, and boulders deposited by glacial activity.
		Bedrock - exposures are present in the central portion of the state forest.
		Kame Deposit - coarse to fine sand and gravel deposit adjacent to glacial ice.
	Bedrock	Sandstones and shales of the Hamilton Group, Moscow formation and shales of Hamilton Group, Panther Mountain Formation.

## INFORMATION ON THE CATSKILL CREEK UNIT

### WATER RESOURCES

Leonard Hill State Forest	Surficial	Glacial Till - clay, silt, sand, gravel, cobbles, and boulders deposited by glacial activity.
		Kame Moraine - Variably sorted sediment ranging in size from boulders to sand deposited by glacial retreat.
		Bedrock - exposures are present in the southern portion of the state forest.
	Bedrock	Shales, Sandstones, and conglomerates of the Genesee Group, Oneonta Formation. The northern portion of the state forest is underlain by sandstones and shales of the Hamilton Group, Moscow Formation.
Scott Patent State Forest	Surficial	Glacial Till - clay, silt, sand, gravel, cobbles, and boulders deposited by glacial activity.
		Kame Moraine - Variably sorted sediment ranging in size from boulders to sand deposited by glacial retreat occur in the northwestern portion of the state forest.
		Bedrock - exposures are present on the southern edge of the state forest.
	Bedrock	Sandstones and shales of the Hamilton Group, Moscow Formation. The eastern portion of the state forest is underlain by comprised of sandstones and shales of the Hamilton Group's Panther Mountain, Plattekill, Marcellus, and Skaneateles Formations.
Stone Store State Forest	Surficial	Glacial Till - clay, silt, sand, gravel, cobbles, and boulders deposited by glacial activity.
		Kame Moraine - Variably sorted sediment ranging in size from boulders to sand deposited by glacial retreat occur in the southeastern portion of the state forest.
		Outwash Sand & Gravel - coarse to fine gravel with sand from proglacial fluvial deposition occur in the eastern portion of the state forest.
	Bedrock	Sandstones and shales of the Hamilton Group, Moscow Formation. The eastern section of the state forest is underlain by shales of the Hamilton Group, Panther Mountain Formation.

### 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.D. contains a summary of water resources data on the unit.

<i>Table I.D. – Water Resources (see Figure 2 for maps)</i>	
<b>Watersheds</b>	
Hydrologic unit(s)	Manor Kill 020200050205
	Cole Brook- Schoharie Creek 020200050403
	Platter Kill- Schoharie Creek 020200050305
	Keyser Kill 020200050403
	Line Creek- Schoharie Creek 020200050405
	Little Schoharie Creek 020200050405
	Squirmer Valley-Catskill Creek 020200060804
	Lake Creek- Catskill Creek 020200060802
<b>Wetlands</b>	
Regulated wetland (includes regulated ponds)	239 ac.
Unregulated wetland (less than 12.4 acres)	76 ac.
<b>Streams/Rivers</b>	
Intermittent streams	5 mi.

## INFORMATION ON THE CATSKILL CREEK UNIT

---

### WATER RESOURCES

<b>Table I.D. – Water Resources (see Figure 2 for maps)</b>		
Perennial streams/rivers	AA or A	0 mi.
	B	2.4 mi.
	C	36.5 mi.
	D	0 mi.
Trout streams/rivers	C (T) or C (TS)	11.2 mi.
<b>Water Bodies</b>		
Water bodies (open-water ponds excluding beaver ponds)		6 ac.

### Major Streams, Rivers and Water Bodies

#### *Franklinton Vlaie*

Franklinton Vlaie Wildlife Management Area (WMA) consists of about 195 acres of open water, wetland and upland habitat in Schoharie County. It was acquired from private landowners in the 1980's and 90's as part of a state-wide program to acquire some of the most productive wetlands in New York. It is located in the Town of Broome, about five miles south of the Village of Middleburgh. The pond and wetlands of Franklinton Vlaie are the headwaters to Catskill Creek.

Fish survey data from 2008 indicates the presence of the following species in the Vlaie: American eel, black crappie, bluegill, brown bullhead, chain pickerel, common carp, golden shiner, largemouth bass, pumpkinseed, white sucker, and yellow perch.

#### *Keyserkill Creek*

The Keyserkill Creek runs through portions of Keyserkill State Forest and Leonard Hill State Forest. Fish survey data from 2009 and 2010 indicates the presence of brook trout, brown trout, creek chub, eastern blacknose dace, fathead minnow, and pumpkinseed in the waters of the Keyserkill Creek on and around the Keyserkill and Leonard Hill State Forests.

#### *Catskill Creek*

Dutton Ridge State Forest has approximately 1,200 feet of frontage on the Catskill Creek. This portion of Catskill Creek is located where the creek channel passes through Benjamin Pond, approximately one mile to the south of the Franklinton Vlaie. This area is primarily accessible from NYS Route 145, however, there are no facilities there for access. The area is also accessible on foot from the west via Fawn Ridge Road and Stone Store State Forest. The hike from Fawn Ridge Road across the state forest land to the creek frontage is steep and therefore is not frequently used.

Dutton Ridge, Stone Store, Leonard Hill, Scott Patent, High Knob, and Bates State Forests all contain tributaries to Catskill Creek. Fish survey data from 2007-2011 indicate the presence of the following species in some of these tributary waters: black crappie, bluegill, brook trout, brown bullhead, brown

### WATER RESOURCES

trout, chain pickerel, creek chub, eastern blacknose dace, fathead minnow, golden shiner, longnose dace, pumpkinseed, rainbow trout, slimy sculpin, white sucker, and yellow perch.

#### *Shallow Water Impoundments*

There is one five-acre shallow water impoundment on this Unit, located on Scott Patent State Forest. Shallow water impoundments were constructed in the 1950s under Federal Aid to Wildlife programs. The intention of these impoundments was to provide habitat for wildlife, particularly waterfowl. These impoundments typically include a dike as well as an outlet structure that allows for manipulation of water levels. At the time of their creation, beavers were absent from much of New York State. Since that time beaver have reoccupied most of New York State, including most of these impoundments. Beaver activity has resulted in plugged water control structures on most of the impoundments.

Floating cattail mats repeatedly plug the water control structure of the impoundment on Scott Patent State Forest and cause the water to rise to very high levels. The impoundment is very poorly located as it sits immediately above Teter Road, a Town of Broome highway, with the dike located as little as 25 feet from the road. When the water levels are high the water from the impoundment spills onto and runs down Teter Road, causing erosion damage to the road. The presence of beaver in the area compounds the problem, as they have further raised water levels by building a dam across the spillway and have built a second, smaller dam between the dike and the town highway. In addition, the beavers are chewing down the trees along the town road, often resulting in trees falling into the road.



Shallow water impoundment on Teter Road on Scott Patent State Forest (Vicki Cross, Forester 2, 12/12/2012)

The problems with this impoundment have existed for at least 30 years. Various attempts have been made at addressing the problems over the years, with little success. The presence of the dike so close to the Teter Road and the high-water levels represent a threat to the road and thus are a public safety concern. In addition, the town's maintenance of Teter Road is complicated by the proximity of the pond to the road and the erosion that occurs on the road during high water events. The best solution to these problems is to remove the dike and allow the area to return to its natural condition. If the dike is removed, an additional environmental assessment will be conducted prior to the start of any activities. There are twelve other freshwater wetlands and beaver ponds on Scott Patent State Forest, including four acres of freshwater wetland, six acres of forested wetland, and seven freshwater beaver ponds totaling six acres. Altogether there are over 200 acres of wetlands

## INFORMATION ON THE CATSKILL CREEK UNIT

### BIODIVERSITY

and ponds within a 2-mile radius of this impoundment. Beavers have done an excellent job of creating wetlands and ponds on the landscape, making shallow water impoundments like this one less than critical.

### BIODIVERSITY

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

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

### Common Species

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

- NYS Breeding Bird Atlas: Block Numbers 3257, 3258, 3357, 3358, 3359, 3360, 3458, 3459, 3460, 3560, 3561, 3562, 3665. For more information, please visit <http://www.dec.ny.gov/animals/51030.html>.
- Herp Atlas: Block Numbers 4207441, 4207443, 4207444, 4207453, 4207454. For more information, please visit <http://www.dec.ny.gov/animals/7140.html>.
- Game Species Harvest Levels: WMU Numbers 4G, 4H. For more information, please visit <http://www.dec.ny.gov/outdoor/9338.html>.

### Habitat

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

#### *Vegetative Types and Stages*

<b>Table I.E. - Vegetative Types and Stages within the Unit (see Figure 4 for maps)</b>					
<b>Vegetative Type</b>	<b>Acres by Size Class</b>				<b>% of Total</b>
	0 -5 in	6 - 11 in	12+ in	Other	
Natural Forest Hardwood	538	1,653	2,161	0	42
Natural Forest Conifer	8	415	855	0	13
Plantation Softwoods	451	647	2,834	0	39
Wetland	-	-	-	315	3
Ponds	-	-	-	6	0
Open/Brush	-	-	-	109	1

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

Vegetative Type	Acres by Size Class				% of Total
	0 -5 in	6 - 11 in	12+ in	Other	
Other (Roads, Parking lots, etc.)	-	-	-	177	2
Total (Acres)	997	2,715	5,850	607	100%
% of Total	10	27	57	6	

### **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 2 for a map of the SMZs as applied on the unit.

### **Least Cost Path Corridor**

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:

- Forest Landscape Connectivity Corridor: 41,677 acres

### **At-Risk Species**

The presence of at-risk species and communities on the Catskill Creek 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 by the New York Natural Heritage Program.
- Element Occurrence Records for the New York Natural Heritage Program's Biological and Conservation Data System were consulted for information.
- Consultation of NHP species guides.



## INFORMATION ON THE CATSKILL CREEK UNIT

### BIODIVERSITY

- Consultation of the NYS Comprehensive Wildlife Conservation Strategy

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

<b>Table I.F. - At-Risk Species*</b>				
<b>Species Name</b>	<b>NYNHP Rank</b>	<b>Habitat</b>	<b>Record Source</b>	<b>NYS Status</b>
<b>Confirmed or Predicted within the Unit</b>				
Daisy Fleabane	S1	Moist cliffs, ledges, or rocky slopes with calcareous rock and sand; open woods, river gravel, rock ledges and crevices, gravel barrens, roadsides	PRED	E
Drummond's Rock Cress	S2G5	Most often on rocky ledges, cliffs, and ravines, sometimes on disturbed sites including trails, mowed areas, and sandy roadsides	PRED	T
Mingan Moonwort	S1	Northern white cedar forests; open fields and meadows, or sandy or gravelly stream banks; dry pastures, meadows, and on hillsides and rocky ledges	PRED	E
Mountain Goldenrod	S1G5	Calcareous rocks, ledges, and cliffs along rivers	PRED	E
Smooth Cliff Brake	S2	Calcareous cliffs, often with eroding or crumbly white limestone	PRED	T
Appalachian Tiger Beetle	S2G3	Edges of forested streams and rivers. In New York, sand, cobble, and some larger rocks with sparse to moderate vegetation of various herbaceous species and saplings of cottonwood, willow, or sycamore.	PRED	NL
Bald Eagle	S2B, S2N, G5	Near large bodies of water; nests usually built near water in tall pine, spruce, fir, cottonwood, oak, poplar, or beech trees.	CONF	T
Extra-striped Snaketail	S2G4	Clear, rapid, and cold, medium to large rivers with high dissolved oxygen content and high water quality.	PRED	SC
Spine-crowned Clubtail	S1G4	Clean, medium to large streams and rivers with sandy or rocky substrates containing muck deposits.	PRED	NL

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

#### Key to Codes

(PRED) - Predicted Species

(CONF) - Confirmed Species

#### Status

E - Endangered Species (New York)

T - Threatened Species (New York)

PSC - Protected, Special Concern Species (New York)

NL – Not Listed

## **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>.

A small scenic vista was created years ago on Leonard Hill State Forest near the end of the Leonard Hill Public Forest Access Road. A good portion of the north-eastern part of the Town of Gilboa is visible from this location. The labor required to maintain the vista by periodically removing encroaching saplings is no longer available due to the closure of the Summit Shock Facility that was located in the Town of Fulton, Schoharie County. Other possible methods to maintain the vista such as a Volunteer Stewardship Agreement (VSA) do exist and may be explored in the future.

## **HISTORIC AND CULTURAL RESOURCES**

### **History of the Unit**

Prior to state ownership most of these State Forests were agricultural lands. Farming, logging, and hunting have been an integral part of the lives of the families that have lived in this area for generations. The lands on this unit were purchased by the state in the 1930s and have been kept as forested land ever since. Most of this unit is located in Schoharie County, which is still a rural area where farming, logging, and hunting are a way of life for many residents. The continued management of these lands for timber production, wildlife habitat, recreation, and water quality is in keeping with the historical uses of the land and the surrounding areas.

### **Inventory of Resources**

The term cultural resource encompasses a number of categories of human created assets including structures, archaeological sites and related artifacts. 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>.

There are numerous old home sites on this Unit that are evidenced by stone foundations and wells. There are also CCC water holes, cemeteries and approximately 200 miles of stone walls on the Unit.

The most prominent cultural feature on the unit is the Leonard Hill fire tower, located on Leonard Hill State Forest. The tower originally stood at Gilbert Lake State Park in Otsego County. In 1947 it was dismantled and then reassembled at its current location, where it was first manned in 1949.

Construction of a cabin for observers near the base of the tower was completed in the spring of 1949. In the mid-1980s the tower was closed, and subsequent various acts of vandalism and the passage of time have taken a toll on the condition of the structure. The floor of the tower cab was burned by vandals more than a decade ago, the steel of the structure is rusting, and the treads of the stairs are missing or are in various stages of rot. The observer's cabin no longer exists on the site, although the concrete slab it stood on is still present.

## INFORMATION ON THE CATSKILL CREEK UNIT

### REAL PROPERTY

In the last ten years, efforts have been made by Lands and Forests to initiate the process of rehabilitating the tower. To date, a Technical Service Request (TSR) has been submitted to the Department's Division of Operations and discussion regarding the feasibility of rehabilitating the fire tower has started.

### Archaeological Site Protection

The archaeological sites located within this Unit as well as additional unrecorded sites that may exist on the property are protected by the provisions of the New York State Historic Preservation Act (SHPA - Article 14 PRHPL), Article 9 of Environmental Conservation Law and Section 233 of Education Law. No actions that would impact these resources are proposed in this UMP. 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

The archaeological sites located on this Unit as well as additional 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

<b>Table I.G. – Status of Boundary Lines</b>			
<b>Facility Name</b>	<b>Length of Boundary (mi.)</b>	<b>Length Needing Maintenance (mi)</b>	<b>Length Needing Survey (mi)</b>
Armlin Hill State Forest	4.6	4.6	0
Stone Store State Forest	7.2	7.2	0
Leonard Hill State Forest	17.2	14.8	0
Dutton Ridge State Forest	9.7	9.0	0
Keyserkill State Forest	14.5	14.5	1.7
High Knob State Forest	12.1	12.1	0
Bates State Forest	9.0	5.4	0
Gates Hill State Forest	11.2	11.2	0
Scott Patent State Forest	15.6	15.6	0

**Table I.G. – Status of Boundary Lines**

Facility Name	Length of Boundary (mi.)	Length Needing Maintenance (mi)	Length Needing Survey (mi)
Franklinton Vlaie Wildlife Management Area	3.9	3.9	0.1

Maintenance and surveying of boundary lines on this unit will be completed as resources permit. For more information on boundary line maintenance, please see SPSFM page 153 at

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

### Exceptions and Deeded Restrictions

**Table I.H. – Exceptions and Deeded Restrictions**

Facility Name	RA #	Description E.g., deeded ROW, easement, access lane, water rights, cemetery, etc.	Proposal ID (Surveyor's Reference)
Stone Store State Forest	Sch. 10	Subject to 400' wide permanent easement as described by NY Power Authority Agreement with DEC for Gilboa/New Scotland transmission line	Proposals B, C, D
Stone Store State Forest	Sch. 10	Subject to 400' wide permanent easement for NY Power Authority Gilboa/New Scotland transmission line	Q-AC Schoharie 41.1
Leonard Hill State Forest	Sch. 12	Cemetery	Proposal A
Leonard Hill State Forest	Sch. 12	Subject to 12' wide ROW	Proposal H
Leonard Hill State Forest	Sch. 12	Cemetery reservation	Proposal I
Leonard Hill State Forest	Sch. 12	Subject to 33' wide ROW	Proposal J
Leonard Hill State Forest	Sch. 12	2 cemetery reservations plus ROW	Proposal K
Leonard Hill State Forest	Sch. 12	Together with 50' ROW southerly to Hubbard Road	Proposal M
Dutton Ridge State Forest	Sch. 14	Subject to 400' wide permanent easement as described by NY Power Authority Agreement with DEC for Gilboa/New Scotland transmission line	Proposals A, B, D, E, F
Dutton Ridge State Forest	Sch. 14	Subject to rights of others to remove dam and drain Benjamin Pond; Subject to 400' wide permanent easement for NY Power Authority Gilboa/New Scotland transmission line	Q-AC Schoharie 41

## INFORMATION ON THE CATSKILL CREEK UNIT

### REAL PROPERTY

<b>Table I.H. – Exceptions and Deeded Restrictions</b>			
<b>Facility Name</b>	<b>RA #</b>	<b>Description</b> E.g., deeded ROW, easement, access lane, water rights, cemetery, etc.	<b>Proposal ID</b> (Surveyor's Reference)
Keyserkill State Forest	Sch. 15	Subject to 400' wide permanent easement as described by NY Power Authority Agreement with DEC for Gilboa/New Scotland transmission line	Proposal F
High Knob State Forest	Sch. 16	37.6'x 37.6' cemetery reservation	Proposal F
Bates State Forest	Sch. 17	Cemetery	Proposal A
Bates State Forest	Sch. 17	Subject to 250' wide permanent easement for NY Power Authority Gilboa/New Scotland transmission line	Q-AC Sch 37
Scott Patent State Forest	Alb-Sch 2	Subject to 33' wide NY Telephone ROW	Proposal D
Scott Patent State Forest	Alb-Sch 2	Subject to 16.5' wide ROW	Proposal G
Scott Patent State Forest	Alb-Sch 2	Subject to 30' wide ROW	Proposal I

### Encroachments

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

<b>Table I.I. – Encroachments</b>			
<b>Facility Name</b>	<b>RA #</b>	<b>Description</b>	<b>Proposal ID</b> (Surveyor's Reference)
Stone Store State Forest	Sch 10	Driveways	B
Dutton Ridge State Forest	Sch 14	Mowed area	A
Keyserkill State Forest	Sch 15	Mowed area	E
Keyserkill State Forest	Sch 15	Unimproved driveway	F
Keyserkill State Forest	Sch 15	Unimproved driveways	K
Bates State Forest	Sch 17	Driveway	D
Gates Hill State Forest	Sch 22	Driveway	E
Gates Hill State Forest	Sch 22	Unimproved driveway	E

The Department owns in fee a 33-foot wide strip of land that lies between Stone Store Mountain Road (County Route 19) and Proposal B of Stone Store State Forest. Fawn Ridge Road is presumed to be

located entirely on that strip of land and is maintained by the Department to provide access to the state forest. When the properties immediately to the east and west of Fawn Ridge Road were subdivided, the owners of those properties created two 100-foot wide rights-of-way running parallel to and bordering the strip owned by the Department to access the parcels created by the subdivision. One 100-foot right of way is located on the east side of the state owned strip and one is on the west side. These right-of-ways are the legal access to the properties created by the subdivision, however, since Fawn Ridge Road already existed on the state-owned strip, the subdivided parcels have been and continue to be accessed from Fawn Ridge Road. Driveways have been constructed into various parcels from Fawn Ridge Road. Since the state owns the 33-foot wide strip of land that Fawn Ridge Road lies upon, each of those driveways is technically an encroachment on state land. Since resolution of the issue would require a large investment of time and resources by the Department and as of yet there have been no significant adverse impacts on Fawn Ridge Road, the issue has been allowed to go unaddressed.

A small area on Keyserkill State Forest has been cleared and mowed in the past. The boundary lines are not well marked and not readily identifiable in this area. A survey request was submitted on January 28, 2010 in order to re-establish the location of the boundary line.

There are three unimproved driveways that cross Keyserkill State Forest. These driveways are located in areas where the boundary lines are clearly marked and are used to access parcels of private land adjacent to the state forest. The first driveway runs from the Keyserkill Truck Trail across state land to private land, underneath the Gilboa/New Scotland transmission line. The driveway was created after the state acquired that portion of Keyserkill State Forest and there is no right of way on state land for the driveway. The private land has ample frontage on Campbell Road, and Campbell Road would appear to be the legal access to the property.

The other two unimproved driveways that cross Keyserkill State Forest run from the Guinea Road Truck Trail across state land to private land. These driveways were also created after the state acquired that portion of Keyserkill State Forest and there is no right of way on state land for these driveways. The private land has ample frontage on Guinea Road, and Guinea Road would appear to be the legal access to the property.

There is a driveway on a portion of Bates State Forest that is used to access a parcel of private land adjacent to the Forest. The driveway runs from an old town highway called Bennett Notch Road across state land to a cabin on the private land. The driveway was built after the state acquired that portion of Bates State Forest and there is no right of way on state land for the driveway. The private land has ample frontage on Bennett Notch Road, and Bennett Notch Road would appear to be the legal access to the property.

These encroachment issues will be addressed as staff time and financial resources become available.

### **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

## INFORMATION ON THE CATSKILL CREEK UNIT

### INFRASTRUCTURE

- the mineral estate wherever it is split from a State Forest tract
- properties within identified matrix forest blocks and connectivity corridors
- forested lands in underserved areas of the state
- forested lands in areas that are in need of watershed protection

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

### INFRASTRUCTURE

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

### Roads and Trails

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

#### ADDITIONAL INFORMATION

**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)

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

Category	Total Amount	Needing Improvement
Public Forest Access Roads	20.1 mi.	20.1 mi.
Haul Roads	8.9 mi.	8.9 mi.
Trails	6.7 mi.	6.7 mi.
CP-3 / MAPPWD Routes	9.4 mi.	9.4 mi.
Culverts		

<b>Table I.J. – Existing Access and Parking (see Figure 3 for maps)</b>		
<b>Category</b>	<b>Total Amount</b>	<b>Needing Improvement</b>
Stream Crossing Culverts	14	14
Cross Drainage Culverts	187	116
<b>Related Infrastructure</b>		
Gates / Barriers	6	2

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

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

The Public Forest Access Roads (PFARs) on this Unit are used by the public to access state forests for a variety of purposes. They are also used by the Department for administrative purposes and to access state forests for timber harvesting. Shale Pit Road, located on High Knob State Forest, is used as a short cut between the Towns of Conesville and Broome and thus receives a larger amount of traffic than other PFARs on the Unit.

All of the PFARs on this Unit are in need of improvement. The roads need surfacing material, ditching, widening, culvert replacement/upsizing, and new culvert installation in order to be in compliance with the state's Best Management Practices and PFAR standards as defined by the Department's Forest Road Handbook. Maintenance activities such as roadside mowing, grading, raking, and rolling, which should be carried out annually, are currently done every two to four years. As the resources available to Lands and Forests for the maintenance of state forest assets continues to dwindle, the condition of the PFARs continues to deteriorate. As the Department falls behind on road maintenance, PFARs will be downgraded to haul roads or may be closed to the public if the condition of the road presents a safety hazard.

The haul roads on this Unit are mostly accessible only by four-wheel drive. As with PFARs, the Department does not have the resources to keep up with annual maintenance activities required on haul roads such as mowing, surfacing, and erosion control. As a result, some roads that were previously classified as haul roads have been downgraded to access trails. As the haul roads continue to deteriorate, more will be downgraded to access trails. Access trails are not open to the public for motorized access.

The haul road that accesses the easternmost portion of Scott Patent State Forest is classified as an administrative access only road due to the fact that the state land accessed by the road was purchased by the state after the road ceased to be a town highway. Administrative access only roads are not open to the general public, but they are open to the Department for administrative purposes, including timber harvesting operations.



## **INFORMATION ON THE CATSKILL CREEK UNIT**

---

### **INFRASTRUCTURE**

#### **Signs / Kiosks**

There are a total of 15 facility ID signs and one kiosk on the Unit. These existing facility ID signs and kiosk will be maintained as needed, and any additional facility ID signs and kiosks will be installed as needed.

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

The Franklinton Vlaie Wildlife Management Area includes two fishing access sites and two docks. Boating and fishing facilities as well as their use and demand are discussed under Recreation.

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

The New York Power Authority's (NYPA) Gilboa/New Scotland transmission line crosses portions of three state forests in this Unit as described in Table I.H above. The state lands this line crosses fall into one of two categories. The first category is lands that were owned by the Department prior to the construction of the line. The second category is lands that the Department purchased after the construction of the line. Activities of NYPA on lands in the first category were controlled by an agreement between NYPA and the Department that was established in 1974 for the construction of the line. Since that agreement was developed specifically for line construction, it does not address maintenance activities. Therefore, the majority of NYPA's maintenance activities on these lands are carried out under Temporary Revocable Permits that are issued as needed. Activities of NYPA on lands in the second category are controlled by the easements that were already in place when the lands were purchased by the state.

Another utility that crosses state land in this Unit is a gas pipeline currently operated by Enterprise Corporation. There are no easements for this pipeline on state land, nor was there an agreement developed when the line was built. The construction of the pipeline was carried out under a Temporary Revocable Permit issued in 1963 which allowed for a 50-foot wide corridor for the construction of the line and a 30-foot wide corridor for maintenance of the line. Although the permit was "temporary", one of the conditions of the permit is that it will remain in effect until the pipeline is abandoned or discontinued. Thus, it is still considered to be in effect today and it is the document that governs Enterprise's activities on the line.

There are many other locations where utility lines cross state land on this Unit, but no easements or agreements are in place for such lines. The maintenance of these lines is generally done under Temporary Revocable Permits. Construction of a new utility easement across state land is only possible if the state conveys the right. Conveyance of this right on Reforestation Areas would require an amendment to the State Constitution. The Department only recognizes deeded utility easements or easements that pre-existed state ownership of the land.

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

##### ***Off-Highway and All-Terrain Vehicle Use***

For a comprehensive discussion of DEC's policy regarding ATV use on State Forests, please refer to page 213 of the SPSFM at [www.dec.ny.gov/lands/64567.html](http://www.dec.ny.gov/lands/64567.html).

**FORMAL AND INFORMAL PARTNERSHIPS AND AGREEMENTS**

Conservation and stewardship partnerships are increasingly important, especially for public land management agencies. Considering the fact that resources will always be limited, collaboration across political, social, organizational and professional boundaries is necessary for long-term success and sustainability. Encouraging the development of cooperative and collaborative relationships is and can be done through DEC's volunteer agreements. For more information on these and other partnerships, please see SPSFM page 181 at [www.dec.ny.gov/lands/64567.html](http://www.dec.ny.gov/lands/64567.html).

**RECREATION**

Recreation is a major component of planning for the sustainable use of state forests on this Unit. DEC accommodates diverse pursuits such as snowmobiling, horseback riding, hunting, trapping, fishing, picnicking, cross-country skiing, snowshoeing, bird watching, geocaching, mountain biking and hiking. Outdoor recreation opportunities are an important factor in quality of life. We often learn to appreciate and understand nature by participating in these activities. However, repeated use of the land for recreational purposes can have significant impacts. For further discussion of recreational issues and policies, please see SPSFM page 187 at [www.dec.ny.gov/lands/64567.html](http://www.dec.ny.gov/lands/64567.html). The following section includes an inventory of recreational opportunities available on this Unit as well as a description of use and demand for each activity. Recreational maps and geographic data are available at DEC's Mapping Gateway <http://www.dec.ny.gov/pubs/212.html> in Google format or in the State Lands Interactive Mapper.

**Wildlife-related Recreation*****Hunting***

Big game hunting, especially for white-tailed deer, is a popular activity on this Unit. The Unit and the surrounding landscape also support populations of turkey, squirrels, rabbits, grouse, and various furbearers such as beaver and coyote. Hunting opportunities vary with habitat conditions, which is why these lands are managed to provide as wide a variety of habitat conditions as possible. The state forests that comprise this Unit are relatively small and scattered and there are often residences nearby on the adjacent privately-owned lands. These factors combine to somewhat limit the hunting opportunities on the Unit.

The Franklinton Vlaie is inhabited by an assortment of wildlife, including beaver, muskrat, otter, mink, white-tailed deer, and squirrels. Hunting and trapping are encouraged on the Vlaie. For more information on the management of the Vlaie, including use restrictions, please visit <http://www.dec.ny.gov/outdoor/86040.html>.

The following table contains information about the black bear and white-tailed deer harvests in the Towns of Broome, Conesville, Fulton, Gilboa, and Middleburgh in Schoharie County and the Town of Rensselaerville in Albany County:

## INFORMATION ON THE CATSKILL CREEK UNIT

### RECREATION

**Table I.K. – Total Take for Black Bear and White-tailed Deer**

YEAR	BLACK BEAR	DEER
2001	--	1,739
2002	--	1,832
2003	1	1,572
2004	--	1,269
2005	1	1,184
2006	7	1,201
2007	16	1,436
2008	16	1,307
2009	7	1,263
2010	12	1,267

#### ***Fishing***

The best opportunities for fishing on this Unit are found on the Franklinton Vlaie, where anglers will find a variety of fish species including largemouth bass, yellow perch, chain pickerel, sunfish, brown bullhead, and black crappie. Parking areas have been developed to provide access to the area, and a non-motorized boat launch is located at the south end of the pond. For more information on the management of the Vlaie, including use restrictions, please visit <http://www.dec.ny.gov/outdoor/86040.html>.

Portions of the Catskill Creek and the Keyserkill Creek and their tributaries are present on this Unit. As these waters are primarily headwaters, fishing opportunities are limited.

#### ***Trapping***

Furbearing species such as beaver, coyote, bobcat, raccoon, mink, and others are present on this Unit. Trapping is a less popular activity on these state forests than big game hunting.

Where population levels are large enough, the Department has established hunting or trapping seasons (or both) for New York's furbearers. These seasons are strictly regulated, with specific times when hunting or trapping is allowed. The harvest of these species is carefully monitored to help understand population trends. Visit <http://www.dec.ny.gov/outdoor/355.html> or <http://www.dec.ny.gov/outdoor/45559.html> for regulations, management, seasons and license information.

The following table contains information about the fisher and bobcat harvests in the Towns of Broome, Conesville, Fulton, Gilboa, and Middleburgh in Schoharie County and the Town of Rensselaerville in Albany County:

**Table I.L. - Total Take for Fisher and Bobcat 2011-12 Season**

COUNTY	TOWN	FISHER	BOBCAT
Schoharie	Broome	3	1
Schoharie	Conesville	3	1
Schoharie	Fulton	16	2
Schoharie	Gilboa	6	1

Schoharie	Middleburgh	3	5
Albany	Rensselaerville	7	4

### **Viewing Natural Resources**

There are two developed facilities from which natural resources may be viewed on this Unit. The first is a wildlife viewing site located on the Franklinton Vlaie. The second is a small scenic vista on Leonard Hill State Forest, near the base of the Leonard Hill fire tower, from which one may enjoy the view of a good portion of the Town of Gilboa.

### **Camping**

There are two designated primitive camping sites on this Unit. Both sites are located on Keyserkill State Forest. One is accessed from Coons Den Road and the other is accessed from Keyserkill Road. The majority of the camping activities on the Unit take place at undesignated sites during big game season and on holidays.

### **Water-based Recreation**

The Franklinton Vlaie is the only water body on this Unit that is large enough to be used for recreational activities such as boating. There is a non-motorized boat launch located on the Vlaie and canoeing and kayaking on the Vlaie are encouraged. Swimming and motorized boating are prohibited activities on the Franklinton Vlaie Wildlife Management Area.

### **Trail-based Recreation**

#### ***Hiking***

Hiking on the state forests in this Unit is generally concentrated on access trails that were created during past timber harvesting activities and on Public Forest Access Roads.

#### ***Cross-Country Skiing***

As there are no maintained cross-country ski trails on this Unit, the use of the Unit for cross country skiing is somewhat limited. Cross country skiing generally takes place on roads or trails where a snowmobile has already broken trail.

#### ***Equestrian***

Equestrian use of the state forests on this Unit is concentrated on haul roads and on access trails that were created during timber harvesting activities. Current timber harvesting practices sometimes call for the tops of the harvested trees to be placed in the access trails in order to limit the impact of the harvesting machines on the ground. Access trails that have been filled in with tops in this manner are often not suitable for equestrian use until the woody debris in the trails rots down.

#### ***Mountain Biking***

The use of these state forests for mountain biking is limited. Opportunities exist for mountain biking on Public Forest Access Roads, haul roads, and access trails developed through past timber harvesting activities.

## INFORMATION ON THE CATSKILL CREEK UNIT

---

### RECREATION

#### ***Snowmobiling***

Public Forest Access Roads, haul roads, and sometimes timber harvesting access trails are used by local residents for snowmobiling. There is no formal, maintained trail system on the Unit or on the privately owned lands in the area around the Unit.

### **Other Recreational Activities**

#### ***Orienteering***

There is some opportunity for orienteering activities on these state forests, however, the state forests are relatively small in size and therefore opportunity is limited.

#### ***Dog Training / Field Trials***

As with orienteering, opportunities for dog training/field trials exist on the Unit but are limited by the relatively small size of the state forests on the Unit.

#### ***Target Shooting***

There are five shale pits on this unit that are commonly used for target shooting. Shooting at any breakable target on state forests is prohibited under 6 NYCRR 190.8(bb). This includes items such as glass bottles and clay pigeons.

### **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.

Due to the fact that the state forests that comprise this Unit are relatively small and geographically scattered, there are no plans to develop recreation trails on the Unit. The small size of each state forest prevents the development of loop trails of any appreciable length, while the lack of connectivity between the state forests prevents the development of through-trails. Despite these limitations, opportunities for a variety of trail-based recreation activities still exist on Public Forest Access Roads, haul roads, and access trails.

Target shooting is a popular recreational activity on the Catskill Creek Unit due to the presence of the five shale pits on the Unit. The environmental impacts of target shooting include large quantities of spent shells and casings left behind in the shale pit. Items used as targets such as pieces of wood, signs, cans, miscellaneous furniture, televisions, and other garbage also commonly accumulate. Although it is not legal to possess breakable targets on state land, breakable targets are often used and as a result broken glass and pieces of clay pigeons are left behind. In addition to being unsightly, the broken glass creates a hazard. Also, when shale is removed from the pits for use on state lands, the broken glass and other debris comes with it and ends up being part of Public Forest Access Roads, haul roads, and landings. This can create problems with tires being punctured when vehicles travel the roads and park on the landings.

DEC does not have the resources to periodically remove the target shooting debris that accumulates in the shale pits. Instead, DEC relies on volunteers and other concerned members of the public to remove

**UNIVERSAL ACCESS**

the debris. DEC has had some success in reducing the amount of debris that accumulates in shale pits by blocking the entrances to the pits with large rocks. As resources permit, the entrances to all of the pits on this Unit may be blocked in this manner.

**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>.

There are currently approximately 9 miles of access trails on the Unit that are designated MAPPWD routes. These trails, located on Armlin Hill State Forest, Gates Hill State Forest, Keyserkill State Forest, and South Mountain State Forest provide access to those areas for hunting and other recreational activities. There is also an accessible observation platform located on the Franklinton Vlaie Wildlife Management Area.

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

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

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

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

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

## **INFORMATION ON THE CATSKILL CREEK UNIT**

---

### **MINERAL RESOURCES**

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

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

### **MINERAL RESOURCES**

#### **Oil, Gas, and Solution Mining**

Oil and gas production from state forest lands, where the mineral rights are owned by the state, are only undertaken under the terms and conditions of an oil and gas lease. As surface managers, the Division of Lands and Forests will evaluate any concerns as they pertain to new natural gas leases on State Forest lands. Consistent with past practice, prior to any new leases, DEC will hold public meetings to discuss all possible leasing options and environmental impacts. A comprehensive tract assessment will be completed as part of this process. For more information on natural gas and other mineral resource policies, please see SPSFM page 225 at <http://www.dec.ny.gov/lands/64567.html>.

Existing leases on the unit:

- An initial title review indicates New York State owns the mineral estate under all state land areas covered by this Unit. The above statement is made with the qualification that mineral reservations may exist, and no expressed or implied warranty of title is being offered in this document. None of the state lands comprising this Unit area are currently under oil/gas lease contracts.

Active wells on the unit:

- There are no active oil, gas, or solution mining wells on the Unit.

Inactive wells on the unit:

There are no known inactive oil, gas, or solution mining wells on the Unit.

#### **Pipelines**

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

Pipelines will be located immediately adjacent to Public Forest Access Roads. The location of the roads and pipelines will be in compliance with tract assessments. Pipelines may be located in stands managed for closed canopy conditions only along pre-existing roads that intersect such area. Additional surface disturbance associated with such construction will be considered only in areas other than stands which are managed for relatively unbroken canopy conditions. Areas managed for unbroken canopy conditions

**MINERAL RESOURCES**

may be referred to using various terms such as “uneven-aged,” “uneven-aged variable retention,” “all aged,” “high canopy,” “closed canopy”, or others.

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

**Mining**

There are no mining contracts, permits or commercial operations located on state lands included in the Catskill Creek Unit. Under Article 7 of the New York consolidated Laws/Public Lands, any citizen of the United States may apply for permission to explore and /or extract any mineral on state lands. However, current NYS DEC policy is to decline any commercial mining application(s) associated with state lands.

**Gravel/shale pits and other surface mines**

- Armlin Hill State Forest shale pit
- Stone Store State Forest shale pit
- Leonard Hill State Forest shale pit
- Leonard Hill State Forest gravel pit
- Dutton Ridge State Forest shale pit
- Keyserkill State Forest shale pit
- High Knob State Forest shale pit

The shale and gravel pits within the Catskill Creek unit are commonly used by the Department when material is needed for road maintenance and improvement projects on state land. The pits are an invaluable source of material at a time when money for purchasing material from a vendor for such projects is usually unavailable. Material from the pits is also often made available to loggers working under a timber sale contract on state land to build landings or to make minor road improvements as required by the contract. Each mine is operated under the regulatory threshold as less than 750 cubic yards or 1,000 tons of material is removed within any 12-successive calendar months. Therefore, the sites are not subject to jurisdiction under the Mined Land Reclamation Law and there is no requirement for a New York State mining permit.

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



## **INFORMATION ON THE CATSKILL CREEK UNIT**

---

### **SUPPORTING LOCAL COMMUNITIES**

Five active sand and gravel mines are located approximately one-half miles southwest of High Knob and Bates State Forests in the Town of Conesville, Schoharie County. Four of the permitted mines are commercially operated sites with life of mines that range between six (6) and eighteen (18) acres. The Town of Conesville operates a 9.2-acre sand and gravel mine. Two other small sand and gravel mines located within the Town of Conesville have been reclaimed.

The Town of Broome operates an active 5-acre sand and gravel mine in the Town of Broome, Schoharie County which is located approximately one to one and one-half miles to the east of Scott Patent State Forest.

An active 16.5-acre commercial sand and gravel mine and the Town of Gilboa has an active 26-acre sand and gravel mine in the Town of Gilboa, Schoharie County. Both mines are located approximately three and one-half miles to the southeast of the Leonard Hill State Forest. Two other small sand and gravel mines located within the Town of Gilboa have been reclaimed.

An active 35-acre sand and gravel mine is located in the Town of Middleburgh, Schoharie County approximately one and one-half miles to the northwest of the Armin Hill State Forest. Hard rock quarries are not typically found in the immediate area of the Catskill Creek Unit. Bedrock may be exposed or near the surface but is not generally considered suitable for a commercial mining operation. The closest commercial hard rock quarry is a 105-acre limestone quarry located approximately five and one-half miles north of the Armin Hill State Forest in the Town of Middleburgh, Schoharie County. One small sand and gravel mine located within the Town of Middleburgh has been reclaimed.

Although there are no active mines in the area, two small sand and gravel mines existed within one-half mile to the east of the Scott Patent State Forest in the Town of Rensselaerville, Albany County. These mines have been reclaimed.

### **SUPPORTING LOCAL COMMUNITIES**

#### **Tourism**

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

#### **Taxes Paid**

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

Detailed tax information can be obtained by contacting the Townships in which the lands in question lie. The following taxes were paid on this Unit in 2012, and similar taxes are projected to be paid on state lands in the unit in future years:

<i>Table I.M. – Projected Taxes for State Lands</i>		
<b>Township</b>	<b>Total Township Tax</b>	<b>Total School Tax</b>
Broome	\$50,213	\$119,721
Conesville	\$13,462	\$29,619
Fulton	\$4,988	\$17,359
Gilboa	\$11,237	\$38,840
Middleburgh	\$1,794	\$8,364
Rensselaerville	\$1,770	\$6,739

## FOREST PRODUCTS

### Timber

Timber management provides a renewable supply of sustainably harvested forest products and can also enhance biodiversity. The wood harvested may be used for products such as furniture, dimension lumber, fiber for paper making, firewood, animal bedding, wood pellets, biofuel, chips for electricity production, and a host of other products. For more information, please see SPSFM page 251 at <http://www.dec.ny.gov/lands/64567.html>.

Despite the fact that timber markets fluctuate, there is a steady demand for timber from the state land in this Unit. Hardwoods from these lands are generally sent to mills in New York State and the surrounding states. There are a limited number of softwood mills in the northeast, therefore softwoods from these lands are usually (but not always) sent to mills in Canada.

The forests on this Unit are producing significantly more timber every year than can be sustainably harvested to meet local demand given current staffing levels.

Information on upcoming timber expected to be produced from timber management activities on the Unit is contained in the land management action schedules in the Management Actions and Objectives section of this plan.

The authority to sell forest products from NYSDEC administered lands is provided by the Environmental Conservation Law. To perpetuate the growth, health and quality of the forest resources, the Department has implemented a sustained yield timber management program for state forest lands.

Forest stands being considered for timber harvesting are selected based on the following criteria:

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

## INFORMATION ON THE CATSKILL CREEK UNIT

### FOREST HEALTH

- 9) Presence of rare, threatened and endangered species and unique natural communities

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

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

### Non-Timber Forest Products

There is limited potential for the production of non-forest timber products such as hay and maple sap on this Unit. As there are no hayfields on the Unit, the production of hay will not be considered. An assessment of the locations of forest stands dominated by maple on the Unit reveals that all but one of those stands are accessed by public forest access roads or town highways that are not well-drained and stable during spring thaw.

### 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 on site conditions without interrupting biodiversity. For more information on forest health, please see SPSFM page 277 at <http://www.dec.ny.gov/lands/64567.html>.

### Invasive Species

As global trade and travel have increased, so 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.N. – Invasive Species, Pests and Pathogens**

Plants	Status
Garlic mustard	Garlic mustard is present in a number of places on the unit. At some locations it is prevalent in a relatively large area.

**Table I.N. – Invasive Species, Pests and Pathogens**

Japanese knotweed	Small amounts of knotweed are present in a handful of locations on the unit.
Multiflora rose	Small amounts of multiflora rose are present in a handful of locations on the unit.
Non-native honeysuckle	Small amounts of non-native honeysuckle rose are present in a handful of locations on the unit.
Oriental bittersweet	A small amount of Oriental bittersweet has been located on Dutton Ridge State Forest. It may be present on other Forests in this unit.
<b>Insects</b>	<b>Status</b>
Hemlock Woolly Adelgid ( <i>Adelges tsugae</i> )	The presence of hemlock woolly adelgid was confirmed in the Town of Gilboa in 2011, but presently it has not affected hemlock on this unit.
Emerald ash borer	The presence of emerald ash borer has been confirmed in the Town of Broome.
<b>Diseases</b>	<b>Status</b>
Beech bark disease	Prevalent on the unit, widely dispersed

Garlic mustard is a prevalent invasive species on this Unit. There are patches of garlic mustard along public forest access roads and in forest stands throughout the Unit. The largest patch is located along Leonard Mountain Road on Leonard Hill State Forest, where it dominates the forest floor and is preventing native species from growing. It is an aggressive weed that produces large numbers of flowers. These flowers become viable seeds within a few days after flowering begins, allowing the plant to quickly take over an area. Garlic mustard seeds can remain viable in the soil for at least ten years, therefore control methods must be repeated year after year until residual seeds have germinated. Small patches can be controlled by hand-pulling the plants in late March annually until the population has been eradicated. Larger patches can be controlled by mowing or cutting before the flower buds have opened. Herbicides can also be used, preferably in the late fall when any native vegetation present on the site will not be affected.

Current resource levels prevent the DEC from addressing the presence of garlic mustard on this Unit. Small patches are occasionally hand-pulled as time permits, but a more concentrated effort is necessary to address the issue.

Japanese knotweed is present in two small patches on Scott Patent State Forest along Teter Road. Another small patch is located on private land directly adjacent to High Knob State Forest at the end of Lake of Seven Birches Road. Knotweed is aggressive and rapidly forms dense monocultures with massive root systems that exclude native species. It spreads from the roots and will also sprout from fragments of root and stem material dispersed by water and by the movement of fill material. Knotweed is often spread when roadside mowing equipment disperses fragments of the plant along roads and when homeowners dump landscape waste on public lands. Numerous populations of this plant have been established in Schoharie County along roads and streams when municipalities moved fill material

## INFORMATION ON THE CATSKILL CREEK UNIT

---

### FOREST HEALTH

containing pieces of knotweed from one location to another. Depositing landscape waste on state land is prohibited and DEC does not allow municipalities to place fill material on state land. However, enforcement of the prohibition against dumping on state land is difficult and municipalities are often unaware that they should not be placing fill on state land. Unless the existing populations around the unit are eradicated, knotweed will continue to spread along the streams and roads and will likely end up being an issue on state land.

Mechanical control methods such as cutting and digging are not preferred for knotweed because they can spread pieces of the plants and they do not destroy the massive root system. Herbicide application is the preferred control method because it destroys the roots, however, even with herbicides knotweed is difficult to eradicate. Effective control often requires repeating a combination of mechanical control methods and herbicide application. These control methods are labor intensive and expensive and therefore are not often employed. DEC currently has limited resources to control the existing populations of knotweed on this Unit. Even if the resources were available, unless nearby populations on private lands are also removed knotweed would likely eventually spread back onto state land.

Multiflora rose and non-native honeysuckle are present on this Unit in small, scattered patches or as isolated individual plants. These species form dense populations that outcompete and suppress the growth of native species. Multiflora rose was formerly used for erosion control and to benefit wildlife. It has recently been recognized as a pest of natural ecosystems due to its tenacious growth habit. For more information on multiflora rose, please visit

[http://www.nyis.info/index.php?action=invasive\\_detail&id=33](http://www.nyis.info/index.php?action=invasive_detail&id=33).

Non-native honeysuckle was formerly widely distributed as a garden plant and was also used for erosion control until it was recognized as an invasive species. For more information on non-native honeysuckle, please visit [http://www.nyis.info/index.php?action=invasive\\_detail&id=44](http://www.nyis.info/index.php?action=invasive_detail&id=44).

Oriental bittersweet has been located in one area on Dutton Ridge State Forest. Its presence has not yet been confirmed on other forests in this Unit, but it is likely to be found on more state forests in the future. This plant is a vigorously growing vine that climbs other vegetation, which may then die due to smothering or breakage. It is commonly used as an ornamental vine and its seeds are readily dispersed by birds. While it prefers forest edges and recently disturbed areas, it is tolerant of shade and will invade forested areas. For more information on Oriental bittersweet, please visit

<http://www.nps.gov/plants/alien/fact/ceor1.htm>.

The presence of emerald ash borer has been confirmed near Livingstonville in the Town of Broome. The Department's Emerald Ash Borer Management Response Plan calls for salvaging ash and promoting the regeneration of non-host tree species in forests that are located within five miles of where the presence of the borer has been confirmed. Much of this Unit is located within five miles of Livingstonville, however, ash is not a prevalent tree species on the Unit. White ash is the primary species on only 78 acres of the 10,169-acre Unit. Of those 78 acres, only 12 acres consist of trees large enough to be considered merchantable (12 inches in diameter and larger). White ash is more common as a secondary species on the Unit, but again, on much of that acreage the trees are smaller than 12 inches in diameter. Given the relatively small amount of merchantable ash on the Unit, there is no basis for a concentrated effort to remove it through timber sales. However, in accordance with the Departments Response Plan,

**LOCAL LANDSCAPE CONDITIONS**

where timber sales are carried out in stands containing white ash, special attention will be given to the removal of ash from the treated stands.

**Managing Deer Impacts**

There is limited ability to manage deer impacts using silvicultural systems. The most effective method of keeping deer impacts in line with management objectives is to monitor impacts while working with the Division of Fish, Wildlife and Marine Resources to observe and manage the herd. On properties where deer are suspected of impacting values and objectives associated with biodiversity and timber management, such impacts must be inventoried and assessed. For more information on managing deer impacts, please see SPSFM page 291 at <http://www.dec.ny.gov/lands/64567.html>.

In the past the deer population has had a moderate impact on the biodiversity on this unit. Currently it is difficult but not entirely impossible to regenerate hardwood species such as hard maple, black cherry, and oak. Deer browse damage will be monitored over time and its impacts on biodiversity evaluated.

**SUMMARY OF ECO-REGION ASSESSMENTS**

To practice ecosystem management, foresters must assess the natural landscape in and around the management unit. Local landscape conditions were taken into consideration. In addition, state forest managers utilized The Nature Conservancy Eco-Region Assessments to evaluate the landscape in and around the Catskill Creek Unit, which falls within the High Allegheny Plateau Eco-region.

**LOCAL LANDSCAPE CONDITIONS**

The local landscape for the purpose of this Unit Management Plan is considered to be an approximately 80,716 acre area roughly bounded by the Schoharie Creek on the west, County Route 21 in Schoharie County on the north, the Schoharie County boundary on the east, and the Manor Kill on the south.

The landscape information in the table below is based on a national land use and land cover assessment done by the US Geological Survey (USGS). As the assessment was done on a national level, it was not ground-truthed and therefore there are discrepancies between the information contained in the USGS assessment and the inventory data collected on state forests by the DEC (see Table I.E. - Vegetative Types and Stages within the Unit). The data collected by the DEC on state forests is much more accurate because it is carried out on a smaller scale and requires on-the-ground data collection. The data in the table below is included as a means of providing a very broad, generalized look at the landscape.

***Table II.A. Land Use and Land Cover for the Landscape Surrounding the Catskill Creek Unit\****

<b>Land Use and Land Cover</b>	<b>Approximate Acreage</b>	<b>Percent of Landscape</b>
Deciduous Forest	29,641	36.721%
Mixed Forest	18,258	22.62%

## SUMMARY OF ECO-REGION ASSESSMENTS

### ECO-REGION SUMMARY

**Table II.A. Land Use and Land Cover for the Landscape Surrounding the Catskill Creek Unit\***

Land Use and Land Cover	Approximate Acreage	Percent of Landscape
Conifer Forest	14,256	17.66%
Crop Land and Pasture	9,258	11.47%
Forested Wetland	4,535	5.62%
Developed	2,836	3.51%
Shrub and Brush Range Land (includes seedling/sapling type)	959	1.19%
Open Water	721	0.89%
Non-forested Wetlands	189	0.23%
Barren Land (rock, sand, clay)	63	0.08%
<b>Total</b>	<b>80,716</b>	<b>100%</b>
<b>*Information contained in this table is very broadly approximate</b>		

The topography of the landscape is characterized by hilly terrain cut by drainages and streams. Much of the higher-elevation areas and steeper slopes are forested. Cropland and pastures are located in both the higher- and lower-elevation areas and are generally in close proximity to roads. The state forests in the Catskill Creek Unit are located on the high elevation portions of the landscape.

Development on the landscape is primarily rural residential, with small areas of more concentrated residential development such as Gilboa, Franklinton, and Broome Center.

The majority of the local landscape is forested. Most of these forests are deciduous or mixed forest, with a smaller conifer (evergreen) forest component. The evergreen forest is primarily comprised of naturally occurring species such as hemlock and white pine, but it also includes the evergreen plantations on the Catskill Creek Unit. These plantations are mainly comprised of evergreens such as Norway spruce, red pine, and larch and they make up approximately 4% of the evergreen cover on the landscape.

### ECO-REGION SUMMARY

The High Allegheny Plateau (HAP) Ecoregion is located along the southern tier of New York and the northern tier of Pennsylvania (Zaremba and Anderson et. al. 2003). It includes a small portion of New Jersey. Well known features in HAP include the Catskills, The Shawangunks, The Kittatinny Ridge, The Poconos, Allegany State Park, Allegheny National Forest, and a large mass of Pennsylvania state-owned land.

### ECO-REGION ASSESSMENT

The HAP ecoregion is defined by high elevation features at the northern end of the Appalachian Plateau. Most of the ecoregion is above 1,200 feet. The general land form of the area is mid elevation hills separated by numerous narrow stream-cut valleys.

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

The northern and eastern portions of the ecoregion were glaciated; the southwest portion was not. Many northern species and communities reach their southern limit in HAP, while many southern species extend into the ecoregion but not beyond. Species and communities associated with glaciated landforms occur in the north and east; biodiversity associated with older substrate and deeper erosional soils occurs in the southwest.

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

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

### ECO-REGION ASSESSMENT

#### Statewide Habitat Gaps

The SPSFM indicated a statewide lack of the following habitats: early successional forest and shrub, late successional, and evergreen. The SPSFM also states that a statewide lack of evergreen habitat indicates a need to develop, conserve, enhance, and sustain evergreen cover where possible in order to promote habitat diversity. The same is true for early successional forest and shrub habitat. This habitat is lacking statewide and therefore should be deliberately created, enhanced, and sustained where possible.

#### High Allegheny Plateau (HAP) Eco-Region Habitat Gaps

A landscape assessment of the HAP eco-region indicated that wooded wetlands are needed in the HAP eco-region and that late successional habitat is sufficiently represented in the eastern portion of the eco-region, where this Unit is located. Otherwise, no specific habitat gaps were identified in the SPSFM for the HAP eco-region.

### HABITAT RELATED NEEDS AND DEMANDS

Based on the habitat gaps identified on both the statewide and eco-regional level, the cover types that should be promoted on this unit include early successional forest and shrub, evergreen, and wooded wetland.



## SUMMARY OF ECO-REGION ASSESSMENTS

---

### HABITAT RELATED NEEDS AND DEMANDS

#### **Early Successional Forest and Shrub**

The information in Table I.E. - Vegetative Types and Stages within the Unit shows that 10% of the forests on the Catskill Creek Unit are in the early successional stage (0-5 inch diameter size class and open/brush) while 84% of the forests are in the mid-successional stage (6-12 inch diameter and greater size class). The presence of mature softwood plantations on the Unit provides opportunities to create early successional habitat when it becomes necessary to convert the plantations to early successional coverts through regeneration harvests such as clear cuts. In addition, hardwood stands managed for even-aged structure will also provide early successional habitat through regeneration harvests such as clear cuts and patch clear cuts.

#### ***Avian Species Habitat Needs and Demands***

Sixty seven percent of the avian species that prefer and utilize early successional habitats are declining in NYS, while only 17% of the species that prefer mature forests are declining in NYS. Breeding Bird Survey (BBS) data for NYS and the northeast show widespread and sometimes dramatic declines in species that prefer early successional habitats. According to the BBS data for New York, the following species which utilize early successional habitats are declining (average annual % decline from 1966-2002): eastern towhee (- 4%), olive-sided flycatcher (- 7.3%), brown thrasher (- 6%), Canada warbler (- 4.8%), golden-winged warbler (- 5.95%), black and white warbler (- 1.82 %), field sparrow (- 4%), veery (- 1.24%), Nashville warbler (- 1.05%), American redstart (- 1.7%), chestnut-sided warbler (- 0.9%), and blackpoll warbler (- 21.2%). In addition, ruffed grouse have declined (- 5.88%), and also American woodcock (BBS - 4.2, singing ground surveys - 2.5%). A 1% decline per year during this time frame (1966 to 2002) results in a loss of over 30% of the population.

A few older avian studies suggested that even-aged forest management activities such as clear cutting, which create early successional habitat, have negative impacts on forest songbirds. However, some recent avian studies have indicated that non-breeding and post breeding forest songbirds utilize early successional habitats extensively for foraging and escape cover. They appear to be drawn to clear cuts due to the increased forage (insects, soft mast) and the dense growth that shields them from predators. Often thought of as “forest interior” species that avoid early successional habitats, these species are often cited in arguments against even-aged silvicultural practices.

In 2010 DEC Wildlife Biologists began an initial trial effort to study the use of clear cuts by “interior” forest songbirds. A total of nine clear cuts on State Forests in Rensselaer and Schoharie Counties were included in this effort. These included two at Capital District Wildlife Management Area (Rensselaer County), one at Berlin State Forest (Rensselaer County), three at Scott Patent State Forest (Schoharie County, Catskill Creek Unit), and three at Dutton Ridge State Forest (Schoharie County, Catskill Creek Unit). Point counts were completed on a single morning in late July at the three clear cuts in Rensselaer County and one morning of subsequent mist netting was completed at the two Capital District Wildlife Management Area clear cuts in early August. “Wandering” transects were completed at the six clear cuts in Schoharie County, three each on each of two mornings, and two mornings of mist netting were completed at one of the clear cuts on Dutton Ridge State Forest in late August. The age of the clear cuts varied from 6 to 15 years old and clear-cut size varied from 1 to 21.4 acres. Some of the Schoharie County clear cuts are characterized as “salvage” cuts. While hardwoods were the harvested species in some of the stands, conifers were cut in others.

### HABITAT RELATED NEEDS AND DEMANDS

Relatively few species were recorded within the clear cuts during the point counts and wandering transect surveys and nearly all of these were common, widespread species typically associated with early successional habitats. The most frequently recorded species included common yellowthroat, chestnut-sided warbler and song sparrow in the Rensselaer County sites and common yellowthroat, chestnut-sided warbler, eastern towhee, American robin, gray catbird, American goldfinch, and prairie warbler in the Schoharie County sites. A slate colored junco was the only typical forest-inhabiting species identified in the Rensselaer County sites during point counts. Typical forest-inhabiting species recorded in the Schoharie County sites included black-throated blue warbler, slate colored junco, American redstart, hermit thrush, veery (three individuals), and ruffed grouse (three individuals).

In contrast, much longer species lists were recorded during mist netting efforts, particularly at the Dutton Ridge State Forest site. The mist netting efforts showed clear cut use by both early successional and forest species. The mist netting was clearly picking up early migrants as surprisingly, Tennessee warbler, Wilson's warbler, and Cape May warbler - species whose nearest potential breeding locations would be in the Adirondacks in northern New York - were all captured. Typical forest species captured within clear cuts during mist netting in the Rensselaer County sites included veery, hermit thrush, black-throated blue warbler, ovenbird, and slate colored junco. Typical forest species captured in the Schoharie County sites included red eyed vireo, veery, black throated blue warbler, black and white warbler, magnolia warbler, and the aforementioned Tennessee, Wilson's, and Cape May warblers.

This study was proposed to run for three years with each site sampled at least once during prime breeding season and once during post breeding season each year. Unfortunately, the loss of the Land Bird Specialist position within DEC's Wildlife Diversity Unit led to this project not being initiated beyond the trial effort and thus further study has not been carried out. However, based on the results of the initial trial effort, it would appear that the management of early successional habitats benefits a wide variety of birds.

### Evergreen

Table I.E. - Vegetative Types and Stages within the Unit shows that 39% of the forests on the Catskill Creek Unit are plantation softwoods. An additional 13% are natural forest conifer, which are those stands whose primary tree species is a naturally occurring conifer such as hemlock or white pine. The secondary tree species in these stands are hardwood species, which makes these stands a mixed forest cover type rather than a pure evergreen type like the plantation softwoods.

The SPSFM indicates that stressors such as climate change, hemlock woolly adelgid, and the gradual loss of maturing softwood plantations on state forests will gradually reduce the amount of evergreen land cover statewide. However, the impact of this loss can be reduced by re-establishing plantations on sites that are currently in plantation where it's appropriate to do so.

The softwood plantations established in the 1930's on state land in DEC Region 4 have been highly successful in making otherwise marginal sites very productive. Species such as Norway spruce and red pine have grown very well on these sites and have been successfully managed through selective thinning harvests to supply high-quality timber products such as utility poles and dimension lumber. These management activities have had the desired result of increasing the quality and rate of growth of the

## SUMMARY OF ECO-REGION ASSESSMENTS

---

### HABITAT RELATED NEEDS AND DEMANDS

plantations. For an in-depth discussion of the establishment and management of softwood plantations on state land, please see SPSFM page 263 at [www.dec.ny.gov/lands/64567.html](http://www.dec.ny.gov/lands/64567.html)

Currently, seventy-two percent of the plantation softwoods on this unit are in the 12-inch diameter and greater size class. An increase in the frequency of weather damage to softwood plantations has been observed throughout DEC Region 4 over the last ten to fifteen years, indicating that the plantations have reached maturity. Weather damaged plantations and plantations that are susceptible to weather damage are being removed through regeneration harvests such as overstory removals and clear cuts. Many factors are involved in making the decision to remove a softwood plantation. The extent and frequency of weather damage, elevation, aspect, the size of the plantation, the tree species present in the plantation, the presence or absence of advance regeneration and its quality, accessibility for harvesting, and the presence or absence and condition of other softwood plantations in close proximity are all examined and weighed in the decision-making process. The process of removing the mature and damage-prone plantations on this Unit will continue where it's appropriate to do so in accordance with the Department's clear-cutting and plantation management policies.

Good forest management always takes into consideration the future forest. As mentioned above, when a plantation is removed an assessment of the quantity and quality of advance regeneration is part of the decision-making process. This is done in order to determine if artificial regeneration through replanting is required. In many mature softwood plantations on this unit, natural advance regeneration is either absent, inadequate, or is comprised of undesirable species such as American beech and striped maple. If it is determined that it is necessary to remove a mature plantation that does not have adequate or desirable advance regeneration, the site will usually be replanted with tree seedlings after the harvest. However, if the removal of a mature plantation results in an opening that is five contiguous acres or smaller and site conditions do not pose a risk of erosion, the site may be left to seed in naturally from the surrounding forest. Past experience has shown that openings five acres and smaller will successfully return to young forest cover without intervention within a few years.

When these plantations are removed, the resulting clear cuts are replanted with seedling-sized trees. Replanting with larger trees such as saplings is not practical due to the large number of trees that are required to reforest a clear cut and the tremendous amount of money that would be required to plant trees that size. Replanting clear cuts with hardwood species is not practical because the ever-present, ever-browsing white-tailed deer would prevent the hardwood seedlings from growing properly. Tree shelters are often used to protect hardwood seedlings from deer browse, but using tree shelters on the large scale required to reforest a clear cut is cost-prohibitive. Attempts have been made on other state forests in DEC Region 4 to establish hardwood plantations utilizing tree shelters and deer exclosure fencing. Despite these trials being carried out on a small scale (all areas were 6 acres or smaller), an extensive amount of labor was required every year to maintain the tree shelters and fencing. None of these trials have met with more than marginal success.

Due to these limitations, clear cuts on this unit are typically replanted with softwoods such as Norway spruce, red spruce, and larch. The seedlings are obtained from the Saratoga Tree Nursery and are planted as a post-harvest requirement under the timber sale contract for the removal of the plantation. While it may seem counter-intuitive to establish new plantations on sites where they will eventually be susceptible to weather damage, softwoods are resistant to deer browse and have proven to be good

### OBJECTIVES

performers on these marginal sites. Softwoods produce large volumes of timber compared to hardwoods and a steady source of income through intermediate thinnings. They also provide habitat that is valuable to many wildlife species and is likely to decline statewide over time. On sites where desirable advance regeneration is not present or not adequate, the choice essentially comes down to either re-establishing a productive, beneficial softwood plantation that will eventually mature and potentially be susceptible to weather damage, or allowing the site to revert to species that won't provide sufficient economic or biological value as the next forest stand. While re-establishing softwood plantations requires an initial investment and may result in an eventual weather damage problem, the benefits outweigh the costs.

Softwood species such as white pine, red pine, hemlock, and cedar cannot be successfully established in a clear cut under the current state contract requirements due to insect pests such as the white pine weevil and pales weevil. Hemlock is highly susceptible to deer browse and thus is also an inappropriate choice for reforestation. In keeping with the goal of promoting evergreen cover, clear cuts will be replanted with softwood species as described above where it's appropriate to do so in accordance with the Department's clear-cutting and plantation management policies.

#### Wooded Wetland

Approximately 33 acres of the Catskill Creek Unit is wooded wetland. Since the ability to create or restore wooded wetlands on a large scale is very limited, no attempts will be made to create wooded wetlands on this unit. Where wooded wetlands exist, they will not be converted to another forest type.

#### Even Age/Uneven Age

For an in-depth discussion of even age and uneven age management, please see SPSFM page 81 at [www.dec.ny.gov/lands/64567.html](http://www.dec.ny.gov/lands/64567.html). Approximately 20% of the forests on the Catskill Creek Unit are classified as having uneven-aged structure. This is roughly in keeping with the statewide average of less than 25% of state forests being comprised of uneven-aged stands. Where appropriate, even-aged stands having a site class of I and primary species of hard maple and/or hemlock will be managed to convert them from an even-aged structure to an uneven-aged structure. The final decision to attempt to convert any such stand will be made at the time the stand is to be treated. American beech is another species that theoretically is long-lived and therefore a candidate for conversion to uneven-aged structure, however, beech bark disease is so prevalent on the Unit that most beech trees do not live long enough for a successful conversion.

## MANAGEMENT OBJECTIVES AND ACTIONS

### OBJECTIVES

#### Ecosystem Management

<i>Table III.A. –Ecosystem Management Objectives and Actions</i>	
Objective	Actions
Statewide Management	

## MANAGEMENT OBJECTIVES AND ACTIONS

### OBJECTIVES

<b>Table III.A. –Ecosystem Management Objectives and Actions</b>	
<b>Objective</b>	<b>Actions</b>
<b>SM I</b> – Implement SPSFM in UMPs	Utilized template developed for UMPs; SEQR analysis thresholds applied; public comment will be solicited on this UMP
<b>Active Forest Management</b>	
<b>AFM I</b> – Apply sound silvicultural practices	Silvicultural stocking guides combined with professional experience will be used in making forest management decisions.
<b>AFM II</b> – Use harvesting plans to enhance diversity of species, habitats & structure	A cutting schedule has been developed and is included in this plan.
<b>AFM III</b> – Fill ecoregional gaps to maintain and enhance landscape-level biodiversity	Early successional habitat and evergreen cover will be created through forest management activities
<b>AFM IV</b> – Enhance matrix forest blocks and connectivity corridors where applicable	There are no identified matrix forest blocks on this Unit. Where connectivity corridor maintenance is chosen as a priority, management activities will enhance closed canopy conditions.
<b>AFM V</b> – Practice forest and tree retention on stands managed for timber	Department policies will be followed.

### Resource Protection

<b>Table III.B. –Resource Protection Objectives and Actions</b>	
<b>Objective</b>	<b>Actions</b>
<b>Soil and Water Protection</b>	
<b>SW I</b> – Prevent erosion, compaction and nutrient depletion	BMPs are utilized on State Forest lands.
<b>SW II</b> – Identify and map SMZ's and highly-erodible soils	These areas have been identified as part of this UMP process. Further identification will take place at the time specific management activities for an area are considered.
<b>At-Risk Species and Natural Communities</b>	
<b>ARS I</b> – Protect ARS&C ranked S1, S2, S2-3, G1, G2 or G2-3 where present	Species confirmed to be present will be protected.
<b>ARS II</b> – Conduct habitat restoration and promote recovery of declining species	Habitat restoration will be encouraged where species are confirmed to be present.
<b>ARS III</b> - Consider protection and management of Species of Greatest Conservation Need	Protection and management of Species of Greatest Conservation Need will be considered for individual management activities
<b>Visual Resources and Aesthetics</b>	

<b>Table III.B. –Resource Protection Objectives and Actions</b>	
<b>Objective</b>	<b>Actions</b>
<b>VR I</b> – Maintain or improve overall quality of visual resources	Aesthetic impact of management activities will be considered.
<b>VR II</b> – Use natural materials where feasible	Large rocks will be the preferred method of semi-permanently closing trails and landings to public access.
<b>VR III</b> – Lay out any new roads/trails to highlight vistas and unique natural features	No new roads/trails are proposed.
<b>VR IV</b> – Develop kiosks to provide education and reduce sign pollution	No kiosks are proposed.
<b>Historic and Cultural Resources</b>	
<b>HC I</b> – Preserve and protect historic and cultural resources wherever they occur	Old home sites and other cultural features will be protected as much as possible during management activities.
<b>HC II</b> – Inventory resources in GIS and with OPRHP	Significant cultural features will be mapped and added to existing databases for future reference and protection when found.

## Infrastructure and Real Property

<b>Table III.C. –Infrastructure and Real Property Objectives and Actions</b>	
<b>Objective</b>	<b>Actions</b>
<b>Boundary Line Maintenance</b>	
<b>BL I</b> – Maintain boundary lines	Boundary lines are maintained as resources permit.
<b>BL II</b> – Address encroachments and other real property problems	Encroachments are addressed as resources permit.
<b>Infrastructure</b>	
<b>INF I</b> – Provide and maintain public forest access roads, access trails, haul roads, parking areas, and associated appurtenances	Infrastructure is maintained as resources permit.
<b>INF II</b> – Upgrade, replace or relocate infrastructure out of riparian areas where feasible	As resources permit.
<b>INF III</b> – Resolve issues of uncertain legal status or jurisdiction	These are resolved on a case-by-case basis as necessary.
<b>INF IV</b> – Prevent over-development	No development is proposed.

## MANAGEMENT OBJECTIVES AND ACTIONS

### OBJECTIVES

#### Public/Permitted Use

<i>Table III.D –Public / Permitted Use Objectives and Actions</i>	
Objective	Actions
<b>Universal Access</b>	
<b>UA I</b> – Use minimum tool approach to provide universal access to programs	There are no universally accessible trails within the Unit but there are approximately nine miles of mobility-impaired access trails on this Unit. The mobility-impaired access trails will be maintained as resources permit.
<b>Formal and Informal Partnerships and Agreements</b>	
<b>PRT I</b> – Collaborate with local organizations and governments to reach mutual goals	TRPs and Volunteer Stewardship Agreements are issued as needed.
<b>PRT II</b> – Consider full range of impacts associated with AANRs and recurring TRPs	Impacts are minimal on this Unit.
<b>Recreation</b>	
<b>REC I</b> – Accommodate public use while preventing illegal activity, reducing impacts and enhancing public safety	Public use is only minimally restricted on this Unit. Local Forest Rangers and Environmental Conservation Officers help prevent any illegal activity on this Unit.
<b>REC II</b> – Provide public recreation information	Information is provided through this UMP; information on the state forests in this Unit will be made available on DEC's website.
<b>REC III</b> – Inventory recreational amenities and schedule recreation management actions	Inventory completed as part of the development of this plan.
<b>REC IV</b> – Enhance fish & game species habitat	Habitat will be enhanced primarily through forest management activities.
<b>Off-Highway and All-Terrain Vehicle Use</b>	
<b>ATV I</b> – Enhance recreational access by people with disabilities under the MAPPWD program	Maintain nine miles of trails on this Unit designated under the MAPPWD.
<b>ATV II</b> – Consider requests for ATV connector routes across the unit	No requests have been made.
<b>Mineral Resources</b>	
<b>MR I</b> – Provide for mineral exploration and development while protecting natural resources and recreation	No requests for mineral exploration and development have been made.
<b>Supporting Local Communities</b>	
<b>LC I</b> – Provide revenue to New York State and economic stimulus for local communities	Revenue and economic stimulus will be provided through timber harvests as resources permit.
<b>LC II</b> – Improve local economies through forest-based tourism	State Forests are managed to improve game species habitat.

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

Objective	Actions
<b>LC III</b> – Protect rural character and provide ecosystem services to local communities.	Keeping State Forests as forests will provide several ecosystem services such as watershed protection, timber and non-timber forest products, forest-based recreation, visual aesthetics, wildlife habitat and open space.

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

Objective	Actions
<b>Forest Products</b>	
<b>FP I</b> – Sustainably manage for forest products	Any management the Department does will be done sustainably.
<b>FP II</b> – Educate the public about the benefits of silviculture	Informational signs will be placed near timber harvests.
<b>Plantation Management</b>	
<b>PM I</b> – Convert plantation stands to natural forest conditions where appropriate	Plantations with adequate, desirable advance regeneration will be converted to natural stands where possible.
<b>PM II</b> – Artificially regenerate plantations where appropriate	Plantations without adequate, desirable advance regeneration will be artificially regenerated where possible.
<b>Forest Health</b>	
<b>FH I</b> – Use timber sales to improve forest health and the diversity of species	All timber sales are carried out with improvement of forest health and diversification of species in view.
<b>FH II</b> – Protect the unit and surrounding lands from introduced diseases and invasive plant and animal species	Invasives will be managed as resources permit. Dumping of waste material on State Land will not be allowed and will be prosecuted as resources permit.
<b>Managing Deer Impacts</b>	
<b>DM I</b> – Monitor impacts of deer browsing on forest health and regeneration	Advance regeneration analysis will be carried out when stands are inventoried.
<b>DM II</b> – Address issues of over-browsing	As resources permit.
<b>Fire Management</b>	
<b>FM I</b> – Support Forest Rangers in controlling the ignition and spread of wildfires	As resources permit.



## MANAGEMENT OBJECTIVES AND ACTIONS

### TEN-YEAR LIST OF MANAGEMENT ACTIONS

<b>Table III.E. –Forest Management and Health Objectives and Actions</b>	
<b>Objective</b>	<b>Actions</b>
<b>FM II</b> – Maintain naturally occurring fire-dependent communities	There are no naturally occurring fire-dependent communities on this Unit.
<b>Carbon Sequestration</b>	
<b>CS I</b> – Keep forests as forests, where appropriate	No conversion of forested land to other uses is proposed.
<b>CS II</b> – Enhance carbon storage in existing stands	Afforestation will continue on State Lands where possible. Forests will be actively managed as resources permit.
<b>CS III</b> – Keep forests vigorous and improve forest growth rates	Proper forest management will help keep forests vigorous and growth rates high.
<b>CS IV</b> – Sequester carbon in forest products	Forest products will be produced and sold from State Land as resources permit.

### TEN-YEAR LIST OF MANAGEMENT ACTIONS

See Figure 4 for Forest Stand ID number maps.

The tables below contain information about various management activities planned for this Unit in the next ten years. These plans are subject to change due to storm events, resource availability, staffing levels, and a variety of other factors.

<b>Table III.F. – Unit-Wide Action Schedule</b>	
<b>Action</b>	<b>Year</b>
Develop and subsequently adopt this UMP with future amendments as needed and periodic updates at least every ten years.	2020
Create/update the web page for each State Forest in this unit, including an electronic, printable map showing the location of recreational amenities.	2020
Update forest inventory for entire unit in preparation for anticipated 2022 plan update.	2021
Maintain and survey boundary lines of the Unit.	As needed
Maintain existing facility ID signs and kiosks and install facility ID signs and kiosks on the Unit.	As needed

## MANAGEMENT OBJECTIVES AND ACTIONS

### TEN-YEAR LIST OF MANAGEMENT ACTIONS

<b>Table III.G. - Public Access Management Action Schedule (by State Forest)</b>		
<b>State Forest</b>	<b>Action</b>	<b>Year</b>
Entire Unit	Mow, grade, and rake 20.1 miles of Public Forest Access Roads (PFARs).	As resources permit
Entire Unit	Assess conditions of existing MAPPWD Trails.	2022
Entire Unit	Replace/install new culverts as needed.	As resources permit
Leonard Hill, Dutton Ridge, Keyserkill, and High Knob State Forests	Install large rocks to block entrances to shale pits.	As resources permit
Leonard Hill State Forest	Assess feasibility and cost of rehabilitating the Leonard Hill Fire Tower.	2022
Leonard Hill State Forest	Maintain existing scenic vistas on the Unit.	As resources permit
Keyserkill State Forest	Maintain primitive camping sites on the Unit.	As resources permit
Scott Patent State Forest	Assess feasibility of removing the dike and control box of shallow water impoundment on Teter Road.	2022

## MANAGEMENT OBJECTIVES AND ACTIONS

---

### FOREST TYPE CODES

#### FOREST TYPE CODES

##### Natural Forest Types

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

##### MANAGEMENT STRATEGY

- Wildlife (WL) Experimental (EXP)
- Recreation (REC)
- Protection (PRO)
- Non-Management (NM)
- Sale Stand (SS)
- Timber Management:
  - Even Age (T-EA)
  - Un-Even Age (T-UE)
  - Non-Silvicultural (T-NS)

##### Plantation Types

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

##### TREATMENT TYPE

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

# MANAGEMENT OBJECTIVES AND ACTIONS

## LAND MANAGEMENT ACTION SCHEDULES

### LAND MANAGEMENT ACTION SCHEDULES

<b>Table III.H. - Land Management Action Schedule for First Five-Year Period (by State Forest)</b>									
	Stand		Acres	Forest Type			Management Category		Treatment Type
State Forests	Compartment	Number		Current	Post Treatment	Objective	Current Structure	Future Structure	
<b>ARMLIN HILL STATE FOREST</b>									
Sch RA #8	A	13.00	7.7	45	45	45	EA	EA	TH
Sch RA #8	A	16.00	11.3	45	45	45	EA	EA	SL/TH
Sch RA #8	A	18.00	14.0	45	45	45	EA	EA	TH
Sch RA #8	A	21.00	4.5	45	45	45	EA	EA	TH
Sch RA #8	A	22.00	2.6	45	45	45	EA	EA	SL/TH
Sch RA #8	A	32.10	19.7	61	61	61	EA	EA	TH
Sch RA #8	A	43.00	17.3	98	71	71	EA	EA	RL
<b>STONE STORE STATE FOREST</b>									
Sch RA #10	A	2.00	27.2	40	98	98	EA	EA	RG
Sch RA #10	A	3.10	8.6	40	98	98	EA	EA	RG
Sch RA #10	A	6.00	9.9	45	45	45	EA	EA	HV
Sch RA #10	A	7.00	12.1	45	45	45	EA	EA	HV
Sch RA #10	A	15.00	4.7	40	98	98	EA	EA	RG
Sch RA #10	A	16.00	5.3	32	32	32	EA	UA	TH
Sch RA #10	A	17.00	13.3	31	31	31	EA	UA	TH
Sch RA #10	A	21.10	31.8	61	61	61	EA	EA	HV
Sch RA #10	A	23.00	14.7	61	61	61	EA	EA	HV
Sch RA #10	A	26.00	35.1	61	61	61	EA	EA	HV
Sch RA #10	A	27.00	3.2	32	32	32	EA	UA	TH
Sch RA #10	A	31.00	10.0	11	11	11	EA	UA	TH
Sch RA #10	A	32.10	4.5	40	98	98	EA	EA	RG
Sch RA #10	A	35.00	10.2	32	32	32	EA	UA	TH
Sch RA #10	A	36.00	7.4	32	32	32	EA	UA	TH
Sch RA #10	A	37.00	8.4	42	97	97	EA	EA	RL
Sch RA #10	A	38.00	7.6	65	97	97	EA	EA	RL
Sch RA #10	A	39.00	43.0	32	32	32	EA	UA	TH
Sch RA #10	A	41.00	46.4	32	32	32	EA	UA	TH
Sch RA #10	B	2.00	3.7	11	11	11	EA	UA	TH
<b>LEONARD HILL STATE FOREST</b>									
Sch RA #12	A	1.00	10.4	61	45	45	EA	EA	RG
Sch RA #12	A	2.00	9.4	32	32	32	EA	UA	TH
Sch RA #12	A	6.00	3.5	32	32	32	EA	EA	TH
Sch RA #12	A	7.00	10.4	32	32	32	UA	EA	TH
Sch RA #12	A	11.00	32.7	10	10	10	UA	UA	TH
Sch RA #12	A	12.00	2.0	32	32	32	EA	EA	TH
Sch RA #12	A	13.00	7.9	11	11	11	UA	EA	TH

# MANAGEMENT OBJECTIVES AND ACTIONS

## LAND MANAGEMENT ACTION SCHEDULES

<b>Table III.H. - Land Management Action Schedule for First Five-Year Period (by State Forest)</b>									
	Stand		Acres	Forest Type			Management Category		Treatment Type
State Forests	Compartment	Number		Current	Post Treatment	Objective	Current Structure	Future Structure	
Sch RA #12	A	14.00	2.4	32	32	32	EA	EA	TH
Sch RA #12	A	15.00	9.6	11	11	11	UA	UA	TH
Sch RA #12	A	16.00	11.6	11	11	11	UA	EA	TH
Sch RA #12	A	18.00	22.8	10	10	10	EA	EA	TH
Sch RA #12	A	20.00	10.6	10	10	10	UA	UA	TH
Sch RA #12	A	23.00	4.4	40	45	45	EA	EA	HV
Sch RA #12	A	24.00	2.4	41	41	41	EA	EA	HV
Sch RA #12	A	25.00	8.6	41	41	41	EA	EA	HV
Sch RA #12	A	26.00	2.9	45	45	45	EA	EA	HV
Sch RA #12	A	28.00	6.6	40	45	45	EA	EA	HV
Sch RA #12	A	30.00	9.8	32	32	32	EA	UA	TH
Sch RA #12	A	31.00	2.8	32	32	32	EA	EA	TH
Sch RA #12	A	34.00	23.5	10	10	10	EA	UA	TH
Sch RA #12	A	37.00	10.0	10	10	10	EA	UA	TH
Sch RA #12	A	39.00	2.6	40	45	45	EA	EA	HV
Sch RA #12	A	40.00	2.1	32	32	32	EA	EA	TH
Sch RA #12	A	41.00	10.3	40	45	45	EA	EA	HV
Sch RA #12	A	42.00	7.0	11	11	11	EA	EA	TH
Sch RA #12	A	44.00	11.3	11	11	11	EA	EA	TH
Sch RA #12	A	45.00	2.4	32	32	32	EA	UA	TH
Sch RA #12	A	49.00	4.4	32	32	32	EA	EA	TH
Sch RA #12	A	50.00	24.3	11	11	11	UA	EA	TH
Sch RA #12	A	51.00	8.8	10	10	10	EA	UA	TH
Sch RA #12	A	52.00	17.2	40	45	45	EA	EA	HV
Sch RA #12	A	54.00	2.0	32	32	32	EA	EA	TH
Sch RA #12	A	55.00	4.9	45	45	45	EA	EA	HV
Sch RA #12	A	56.10	2.1	40	45	45	EA	EA	HV
Sch RA #12	A	57.00	2.5	32	32	32	EA	EA	TH
Sch RA #12	A	58.00	10.2	61	45	45	EA	EA	RG
Sch RA #12	A	60.00	2.0	45	45	45	EA	EA	HV
Sch RA #12	A	62.00	3.4	20	20	20	EA	EA	TH
Sch RA #12	A	64.00	22.7	40	45	45	EA	EA	HV
Sch RA #12	A	66.00	16.6	11	11	11	EA	EA	TH
Sch RA #12	A	67.00	2.9	20	20	20	UA	EA	TH
Sch RA #12	B	1.00	9.2	32	32	32	EA	EA	TH
Sch RA #12	B	2.00	7.4	32	32	32	EA	UA	TH
Sch RA #12	B	3.00	8.2	48	98	98	EA	EA	RG
Sch RA #12	B	5.00	5.1	48	97	97	EA	EA	RL
Sch RA #12	B	6.00	12.9	40	45	45	EA	EA	HV
Sch RA #12	B	7.00	5.2	32	32	32	EA	UA	TH
Sch RA #12	B	8.00	8.7	32	32	32	UA	EA	TH

# MANAGEMENT OBJECTIVES AND ACTIONS

## LAND MANAGEMENT ACTION SCHEDULES

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

State Forests	Stand		Acres	Forest Type			Management Category		Treatment Type
	Compartment	Number		Current	Post Treatment	Objective	Current Structure	Future Structure	
Sch RA #12	B	9.00	24.3	32	32	32	EA	UA	TH
Sch RA #12	B	10.10	23.8	32	32	32	UA	EA	TH
Sch RA #12	B	10.20	6.7	32	32	32	EA	EA	TH
Sch RA #12	B	10.40	3.2	32	32	32	UA	EA	TH
Sch RA #12	B	10.50	7.6	32	32	32	EA	EA	TH
Sch RA #12	B	11.00	2.5	48	97	97	EA	EA	HV
Sch RA #12	B	12.00	2.0	40	45	45	EA	EA	HV
Sch RA #12	B	14.00	9.6	32	32	32	EA	UA	TH
Sch RA #12	B	15.10	9.7	32	32	32	EA	UA	TH
Sch RA #12	B	15.20	6.0	32	32	32	EA	EA	TH
Sch RA #12	B	15.30	3.0	32	32	32	EA	EA	TH
Sch RA #12	B	15.40	2.6	32	32	32	EA	EA	TH
Sch RA #12	B	15.50	4.4	32	32	32	EA	EA	TH
Sch RA #12	B	15.60	20.9	32	32	32	UA	UA	TH
Sch RA #12	B	16.00	15.6	32	32	32	UA	EA	TH
Sch RA #12	B	18.00	2.9	40	45	45	EA	EA	HV
Sch RA #12	B	19.00	18.0	40	45	45	EA	EA	HV
Sch RA #12	B	20.20	7.5	32	32	32	UA	EA	TH
Sch RA #12	B	21.10	33.5	30	30	30	UA	EA	TH
Sch RA #12	B	21.20	4.1	32	32	32	UA	EA	TH
Sch RA #12	B	23.00	8.3	32	32	32	EA	EA	TH
Sch RA #12	B	24.00	2.0	32	32	32	UA	EA	TH
Sch RA #12	B	25.10	4.7	32	32	32	UA	UA	TH
Sch RA #12	B	25.20	3.3	32	32	32	EA	EA	TH
Sch RA #12	B	28.10	21.5	32	32	32	EA	UA	TH
Sch RA #12	B	28.20	4.4	32	32	32	UA	UA	TH
Sch RA #12	B	29.00	10.5	32	32	32	EA	UA	TH
Sch RA #12	B	30.00	11.1	45	45	45	EA	EA	HV
Sch RA #12	B	31.00	4.8	40	45	45	EA	EA	HV
Sch RA #12	B	33.00	11.1	40	45	45	EA	EA	HV
Sch RA #12	B	34.00	6.5	32	32	32	UA	UA	TH
Sch RA #12	B	35.00	3.4	32	32	32	UA	EA	TH
Sch RA #12	B	36.00	19.0	40	45	45	EA	EA	HV
Sch RA #12	B	37.00	12.6	32	32	32	EA	UA	TH
Sch RA #12	B	38.10	22.3	32	32	32	EA	EA	TH
Sch RA #12	B	38.20	5.3	32	32	32	UA	EA	TH
Sch RA #12	B	38.30	2.2	32	32	32	EA	EA	TH
Sch RA #12	B	38.40	5.1	32	32	32	EA	UA	TH
Sch RA #12	B	39.00	3.2	32	32	32	UA	EA	TH
Sch RA #12	B	40.00	11.8	67	67	67	EA	EA	HV
Sch RA #12	B	42.00	7.4	45	45	45	EA	EA	HV

# MANAGEMENT OBJECTIVES AND ACTIONS

## LAND MANAGEMENT ACTION SCHEDULES

<b>Table III.H. - Land Management Action Schedule for First Five-Year Period (by State Forest)</b>									
	Stand		Acres	Forest Type			Management Category		Treatment Type
State Forests	Compartment	Number		Current	Post Treatment	Objective	Current Structure	Future Structure	
Sch RA #12	B	43.00	5.3	32	32	32	EA	EA	TH
Sch RA #12	B	44.00	9.8	45	45	45	EA	EA	HV
Sch RA #12	B	45.00	6.1	32	32	32	EA	EA	TH
Sch RA #12	B	46.00	8.2	32	32	32	EA	EA	TH
Sch RA #12	B	50.10	15.6	45	45	45	EA	EA	HV
Sch RA #12	B	50.20	25.5	61	61	61	EA	EA	HV
Sch RA #12	C	1.00	2.0	45	45	45	EA	EA	HV
Sch RA #12	C	2.00	7.0	47	97	97	EA	EA	RG
Sch RA #12	C	3.00	2.5	40	45	45	EA	EA	HV
Sch RA #12	C	5.00	15.1	47	97	97	EA	EA	RG
Sch RA #12	C	7.00	9.9	32	32	32	EA	EA	TH
Sch RA #12	C	8.00	2.0	20	20	20	EA	EA	TH
Sch RA #12	C	9.00	5.5	20	20	20	UA	EA	TH
Sch RA #12	C	10.00	19.7	32	32	32	UA	UA	TH
Sch RA #12	C	11.00	2.5	41	97	97	EA	EA	RL
Sch RA #12	C	14.00	10.3	11	11	11	UA	EA	TH
Sch RA #12	C	15.00	2.0	32	32	32	EA	EA	TH
Sch RA #12	C	17.00	7.3	32	32	32	UA	UA	TH
Sch RA #12	C	18.00	10.3	45	45	45	EA	EA	HV
Sch RA #12	C	19.00	23.6	45	45	45	EA	EA	HV
Sch RA #12	C	20.00	26.9	45	45	45	EA	EA	HV
Sch RA #12	C	21.00	72.0	61	61	61	EA	EA	HV
Sch RA #12	C	22.00	4.5	40	45	45	EA	EA	HV
Sch RA #12	C	23.00	26.7	12	12	12	EA	EA	TH
Sch RA #12	C	25.20	2.0	32	32	32	EA	EA	TH
Sch RA #12	C	27.00	15.5	45	45	45	EA	EA	HV
Sch RA #12	C	28.00	5.0	46	45	45	EA	EA	RG
Sch RA #12	C	30.00	11.3	40	45	45	EA	EA	HV
Sch RA #12	C	31.00	2.0	32	32	32	UA	EA	TH
Sch RA #12	D	1.10	15.8	32	32	32	UA	UA	TH
Sch RA #12	D	1.20	6.9	32	32	32	UA	EA	TH
Sch RA #12	D	2.00	10.7	32	32	32	EA	UA	TH
Sch RA #12	D	3.00	7.7	45	45	45	EA	EA	HV
Sch RA #12	D	4.10	12.0	32	32	32	EA	EA	TH
Sch RA #12	D	4.20	14.0	32	32	32	EA	UA	TH
Sch RA #12	E	1.00	9.0	32	32	32	EA	EA	TH
DUTTON RIDGE STATE FOREST									
Sch RA#14	A	2.20	5.7	11	11	11	UA	EA	TH
Sch RA#14	A	2.40	3.2	32	32	32	EA	EA	TH
Sch RA#14	A	7.00	3.1	45	45	45	EA	EA	HV
Sch RA#14	A	8.00	13.9	32	32	32	UA	UA	TH

# MANAGEMENT OBJECTIVES AND ACTIONS

## LAND MANAGEMENT ACTION SCHEDULES

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

State Forests	Stand		Acres	Forest Type			Management Category		Treatment Type
	Compartment	Number		Current	Post Treatment	Objective	Current Structure	Future Structure	
Sch RA#14	A	11.10	5.0	11	11	11	EA	EA	TH
Sch RA#14	A	14.20	4.2	11	11	11	UA	EA	TH
Sch RA#14	A	15.00	11.6	12	12	12	UA	EA	HV
Sch RA#14	A	17.00	6.7	32	32	32	EA	EA	TH
Sch RA#14	A	19.00	6.0	32	32	32	EA	EA	TH
Sch RA#14	A	20.00	10.7	11	11	11	UA	EA	TH
Sch RA#14	A	22.00	21.2	40	97	97	EA	EA	RL
Sch RA#14	A	23.00	18.3	11	11	11	UA	EA	TH
Sch RA#14	A	26.00	16.0	40	97	97	EA	EA	RL
Sch RA#14	A	28.00	2.7	32	32	32	EA	UA	TH
Sch RA#14	A	29.00	6.3	11	11	11	EA	UA	TH
Sch RA#14	A	30.00	17.5	63	63	63	EA	EA	TH
Sch RA#14	A	32.00	27.0	67	67	67	EA	EA	TH
Sch RA#14	A	33.00	14.7	62	45	45	EA	EA	HV
Sch RA#14	A	35.00	22.4	45	45	45	EA	EA	HV
Sch RA#14	A	38.00	19.8	12	12	12	EA	EA	HV
Sch RA#14	A	39.00	4.4	42	97	97	EA	EA	RG
Sch RA#14	A	41.00	6.3	40	97	97	EA	EA	RL
Sch RA#14	A	44.00	13.3	12	12	12	EA	UA	TH
Sch RA#14	A	45.00	4.7	32	32	32	UA	EA	TH
Sch RA#14	A	47.00	4.7	46	45	45	EA	EA	HV
Sch RA#14	A	48.00	8.1	12	12	12	UA	EA	HV
Sch RA#14	A	49.00	3.6	45	45	45	EA	EA	HV
Sch RA#14	A	51.00	30.7	11	11	11	EA	EA	TH
Sch RA#14	A	52.00	6.4	45	45	45	EA	EA	HV
Sch RA#14	A	55.00	11.3	45	45	45	EA	EA	HV
Sch RA#14	A	56.00	8.8	11	11	11	EA	UA	TH
Sch RA#14	A	57.00	2.4	41	97	97	EA	EA	RL
Sch RA#14	A	58.00	13.8	12	12	12	EA	UA	TH
Sch RA#14	A	59.00	2.0	32	32	32	UA	EA	TH
Sch RA#14	A	60.00	49.6	63	63	63	EA	EA	HV
Sch RA#14	A	61.00	25.3	60	45	45	EA	EA	HV
Sch RA#14	A	62.10	26.9	12	12	12	EA	EA	HV
Sch RA#14	A	65.00	27.3	11	11	11	EA	EA	TH
Sch RA#14	A	66.00	34.1	12	12	12	EA	EA	HV
Sch RA#14	A	67.00	5.3	20	20	20	UA	EA	TH
Sch RA#14	A	68.00	13.6	40	45	45	EA	EA	RG
Sch RA#14	A	74.10	18.1	61	45	45	EA	EA	HV
Sch RA#14	A	75.00	2.0	46	45	45	EA	EA	HV
Sch RA#14	A	76.00	6.1	63	45	45	EA	EA	HV
Sch RA#14	A	77.00	3.7	42	97	97	EA	EA	RL



# MANAGEMENT OBJECTIVES AND ACTIONS

## LAND MANAGEMENT ACTION SCHEDULES

<b>Table III.H. - Land Management Action Schedule for First Five-Year Period (by State Forest)</b>									
	Stand		Acres	Forest Type			Management Category		Treatment Type
State Forests	Compartment	Number		Current	Post Treatment	Objective	Current Structure	Future Structure	
Sch RA#14	A	78.00	6.1	41	41	41	EA	EA	HV
Sch RA#14	A	79.00	8.8	20	20	20	EA	EA	TH
Sch RA#14	A	80.00	5.8	46	45	45	EA	EA	HV
Sch RA#14	A	81.00	15.3	45	45	45	EA	EA	HV
Sch RA#14	A	82.00	4.1	45	45	45	EA	EA	HV
Sch RA#14	A	83.00	4.0	11	11	11	EA	EA	TH
Sch RA#14	A	85.00	5.0	40	45	45	EA	EA	RG
Sch RA#14	A	87.00	21.7	11	11	11	EA	EA	TH
Sch RA#14	A	90.00	13.0	11	11	11	EA	EA	TH
Sch RA#14	A	92.00	11.5	32	32	32	EA	UA	TH
Sch RA#14	A	94.00	27.6	11	11	11	UA	EA	TH
Sch RA#14	B	2.00	6.1	63	45	45	EA	EA	HV
Sch RA#14	B	3.00	6.2	21	21	21	UA	EA	HV
Sch RA#14	B	4.00	12.0	41	41	41	EA	EA	HV
Sch RA#14	B	5.00	12.6	30	30	30	UA	EA	TH
Sch RA#14	B	6.00	2.5	21	21	21	EA	EA	HV
Sch RA#14	B	8.00	3.2	32	32	32	UA	EA	TH
Sch RA#14	B	9.00	3.9	32	32	32	UA	EA	TH
Sch RA#14	B	11.00	6.1	32	32	32	UA	UA	TH
KEYSERKILL STATE FOREST									
Sch RA #15	B	5.60	4.5	40	12	12	EA	UE	SL/HV
Sch RA #15	B	7.10	3.0	45	45	45	EA	EA	TH
Sch RA #15	B	21.20	2.0	48	97	97	EA	EA	HV
Sch RA #15	B	26.00	10.2	61	97	97	EA	EA	SL/HV
Sch RA #15	B	33.30	4.1	40	97	97	EA	UE	SL/HV
Sch RA #15	B	44.00	8.6	46	97	10	EA	UE	SL/HV
Sch RA #15	D	4.00	13.0	47	97	97	EA	UE	SL/HV
HIGH KNOB STATE FOREST									
Sch RA#16	A	1.00	9.9	40	45	45	EA	EA	RG
Sch RA#16	A	4.00	2.7	45	45	45	EA	EA	HV
Sch RA#16	A	7.00	10.8	40	97	97	EA	EA	RL
Sch RA#16	A	8.00	7.6	32	32	32	EA	UA	TH
Sch RA#16	A	9.00	11.7	45	45	45	EA	EA	TH
Sch RA#16	A	12.00	4.1	32	32	32	EA	UA	TH
Sch RA#16	A	13.00	3.9	50	50	50	EA	EA	TH
Sch RA#16	A	15.00	21.1	61	61	61	EA	EA	TH
Sch RA#16	A	16.00	4.4	32	32	32	EA	EA	TH
Sch RA#16	A	17.00	11.9	62	62	62	EA	EA	TH
Sch RA#16	A	18.00	3.5	45	45	45	EA	EA	TH
Sch RA#16	A	19.00	7.9	61	97	97	EA	EA	RL
Sch RA#16	A	21.00	11.2	45	45	45	EA	EA	HV

# MANAGEMENT OBJECTIVES AND ACTIONS

## LAND MANAGEMENT ACTION SCHEDULES

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

State Forests	Stand		Acres	Forest Type			Management Category		Treatment Type
	Compartment	Number		Current	Post Treatment	Objective	Current Structure	Future Structure	
Sch RA#16	A	22.00	3.3	45	45	45	EA	EA	HV
Sch RA#16	A	24.00	4.1	32	32	32	UA	UA	TH
Sch RA#16	A	25.00	17.3	32	32	32	EA	UA	TH
Sch RA#16	A	26.00	10.4	40	97	97	EA	EA	RL
Sch RA#16	A	27.00	5.3	40	97	97	EA	UA	RL
Sch RA#16	A	28.00	13.0	45	45	45	EA	EA	TH
Sch RA#16	A	30.00	20.4	40	45	45	EA	EA	RG
Sch RA#16	A	31.00	2.9	32	32	32	EA	EA	TH
Sch RA#16	A	32.00	9.0	45	45	45	EA	EA	RG
Sch RA#16	A	34.00	29.4	31	31	31	EA	EA	TH
Sch RA#16	A	37.00	2.6	32	32	32	EA	EA	TH
Sch RA#16	A	41.00	22.0	10	10	10	EA	UA	TH
Sch RA#16	A	42.00	2.1	46	97	97	EA	EA	RL
Sch RA#16	A	44.00	6.2	47	45	45	EA	EA	HV
Sch RA#16	A	45.00	8.6	32	32	32	EA	EA	TH
Sch RA#16	A	47.00	2.0	45	45	45	EA	EA	HV
Sch RA#16	A	48.00	5.3	45	45	45	EA	EA	HV
Sch RA#16	A	50.00	5.7	45	97	97	EA	EA	RL
Sch RA#16	A	51.00	111.8	10	10	10	EA	UA	TH
Sch RA#16	A	52.00	5.7	32	32	32	EA	UA	TH
Sch RA#16	A	53.00	16.9	32	32	32	UA	UA	TH
Sch RA#16	A	54.00	38.1	32	32	32	EA	EA	TH
Sch RA#16	A	55.00	28.8	32	32	32	UA	EA	TH
Sch RA#16	A	56.00	9.9	16	16	16	EA	EA	TH
Sch RA#16	A	58.00	14.8	32	32	32	EA	EA	TH
Sch RA#16	A	60.00	5.3	32	32	32	UA	EA	TH
Sch RA#16	A	62.00	8.8	61	45	45	EA	EA	HV
Sch RA#16	A	65.00	16.8	46	46	46	EA	EA	HV
Sch RA#16	A	66.00	10.6	46	46	46	EA	EA	HV
Sch RA#16	A	67.00	6.0	32	32	32	EA	EA	TH
Sch RA#16	B	1.00	4.7	32	32	32	UA	UA	TH
Sch RA#16	B	7.00	21.0	32	32	32	EA	UA	TH
Sch RA#16	B	8.00	2.3	32	32	32	UA	EA	TH
Sch RA#16	B	9.00	6.9	12	12	12	UA	EA	TH
Sch RA#16	B	13.10	12.4	45	45	45	EA	EA	HV
Sch RA#16	B	13.20	2.7	32	32	32	UA	UA	TH
Sch RA#16	B	15.00	32.0	32	32	32	EA	EA	TH
Sch RA#16	B	17.00	6.1	32	32	32	EA	EA	TH
Sch RA#16	B	20.00	2.6	40	97	97	EA	EA	RL
Sch RA#16	B	24.00	47.6	40	40	40	EA	EA	HV
Sch RA#16	B	25.00	25.3	45	45	45	EA	EA	HV

# MANAGEMENT OBJECTIVES AND ACTIONS

## LAND MANAGEMENT ACTION SCHEDULES

<b>Table III.H. - Land Management Action Schedule for First Five-Year Period (by State Forest)</b>									
	Stand		Acres	Forest Type			Management Category		Treatment Type
State Forests	Compartment	Number		Current	Post Treatment	Objective	Current Structure	Future Structure	
Sch RA#16	B	29.00	8.2	46	46	46	EA	EA	HV
Sch RA#16	B	30.00	4.7	32	32	32	UA	UA	TH
Sch RA#16	B	31.00	5.6	32	32	32	UA	EA	TH
Sch RA#16	B	32.00	9.0	45	45	45	EA	EA	HV
Sch RA#16	B	36.00	9.0	45	45	45	EA	EA	HV
Sch RA#16	B	38.00	22.0	45	45	45	EA	EA	HV
Sch RA#16	B	39.00	6.0	40	97	97	EA	EA	RL
Sch RA#16	B	42.00	22.0	40	45	45	EA	EA	RG
Sch RA#16	B	43.00	9.1	11	11	11	UA	UA	TH
Sch RA#16	B	44.00	12.0	45	45	45	EA	EA	HV
<b>BATES STATE FOREST</b>									
Sch RA#17	A	1.00	45.6	11	11	11	EA	UA	TH
Sch RA#17	A	2.00	8.9	45	45	45	EA	EA	HV
Sch RA#17	A	3.00	5.5	47	45	45	EA	EA	HV
Sch RA#17	A	4.00	4.8	32	32	32	EA	UA	TH
Sch RA#17	A	11.00	13.9	70	97	97	EA	UA	RL
Sch RA#17	A	12.00	10.4	65	45	45	EA	EA	HV
Sch RA#17	A	17.00	10.0	70	45	45	EA	EA	HV
Sch RA#17	A	19.00	21.0	45	45	45	EA	EA	HV
Sch RA#17	A	20.00	5.0	42	97	97	EA	UNK	RL
Sch RA#17	A	23.00	21.7	32	32	32	EA	UA	TH
Sch RA#17	A	24.00	15.5	45	45	45	EA	EA	HV
Sch RA#17	A	25.00	11.7	42	45	45	EA	EA	HV
Sch RA#17	A	29.00	3.5	42	97	97	EA	UNK	RL
Sch RA#17	A	30.00	7.8	45	45	45	EA	EA	HV
Sch RA#17	A	31.00	9.5	32	32	32	UA	UA	TH
Sch RA#17	A	34.00	20.2	45	45	45	EA	EA	HV
Sch RA#17	A	35.10	25.6	40	45	45	EA	EA	HV
Sch RA#17	A	36.00	8.4	40	45	45	EA	EA	HV
Sch RA#17	A	38.00	15.6	18	18	18	EA	UA	TH
Sch RA#17	A	39.00	61.0	11	11	11	EA	EA	TH
Sch RA#17	A	40.10	27.8	11	11	11	UA	EA	TH
Sch RA#17	A	40.20	29.4	19	19	19	UA	EA	TH
Sch RA#17	A	41.00	13.0	32	32	32	EA	UA	TH
Sch RA#17	A	42.00	81.2	11	11	11	UA	UA	TH
Sch RA#17	A	43.00	12.8	32	32	32	EA	UA	TH
Sch RA#17	A	44.00	14.8	45	45	45	EA	EA	HV
Sch RA#17	A	45.00	16.7	32	32	32	EA	UA	TH
Sch RA#17	A	46.00	18.9	11	11	11	EA	UA	TH
Sch RA#17	A	48.00	28.6	11	11	11	EA	UA	TH
Sch RA#17	A	49.00	2.7	46	45	45	EA	EA	HV

# MANAGEMENT OBJECTIVES AND ACTIONS

## LAND MANAGEMENT ACTION SCHEDULES

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

	Stand		Acres	Forest Type			Management Category		Treatment Type
State Forests	Compartment	Number		Current	Post Treatment	Objective	Current Structure	Future Structure	
Sch RA#17	A	50.00	3.5	32	32	32	EA	UA	TH
Sch RA#17	A	51.00	6.8	46	45	45	EA	EA	HV
Sch RA#17	A	52.00	2.6	70	97	97	EA	UNK	RL
Sch RA#17	A	55.00	10.0	40	45	45	EA	EA	HV
Sch RA#17	A	57.00	8.4	45	45	45	EA	EA	HV
Sch RA#17	A	58.00	43.0	10	10	10	EA	UA	TH
Sch RA#17	A	61.00	3.9	32	32	32	EA	UA	TH
Sch RA#17	A	62.00	5.4	45	45	45	EA	EA	HV
Sch RA#17	A	64.00	7.8	32	32	32	EA	UA	TH
Sch RA#17	A	65.00	14.4	61	45	45	EA	EA	HV
Sch RA#17	A	66.00	7.5	12	12	12	UA	UA	TH
Sch RA#17	A	68.00	14.7	41	45	45	EA	EA	HV
Sch RA#17	A	71.00	24.7	32	32	32	EA	EA	TH
Sch RA#17	A	72.00	6.2	32	32	32	EA	EA	TH
Sch RA#17	B	2.00	6.2	32	32	32	EA	EA	TH
Sch RA#17	B	5.00	12.8	12	12	12	UA	EA	TH
Sch RA#17	B	6.00	65.3	12	12	12	EA	UA	TH
Sch RA#17	B	7.00	10.8	32	32	32	EA	UA	TH
GATES HILL STATE FOREST									
Sch RA #22	A	30.10	3.2	98	71	71	EA	EA	RL
Sch RA #22	A	44.00	15.4	40	40	40	EA	EA	TH
Sch RA #22	A	44.00	3.0	40	98	48	EA	EA	SL/HV
Sch RA #22	A	45.10	11.7	40	98	48	EA	EA	SL/HV
Sch RA #22	A	54.00	21.1	45	98	98	EA	EA	HV
Sch RA #22	A	60.10	6.8	40	97	10	EA	UE	HV
Sch RA #22	A	60.10	6.0	40	98	48	EA	EA	SL/HV
Sch RA #22	A	75.00	3.2	41	10	10	EA	UE	HV
Sch RA #22	A	76.00	2.7	46	97	12	EA	UE	SL/HV
SCOTT PATENT STATE FOREST									
Alb-Sch RA#2	A	6.00	4.7	12	12	12	EA	EA	TH
Alb-Sch RA#2	A	8.00	4.3	20	20	20	EA	EA	TH
Alb-Sch RA#2	A	10.00	8.9	40	98	98	EA	EA	RG
Alb-Sch RA#2	A	12.00	8.0	48	98	98	EA	EA	RG
Alb-Sch RA#2	A	13.00	11.4	61	98	98	EA	EA	RG
Alb-Sch RA#2	A	20.00	12.7	45	45	45	EA	EA	HV
Alb-Sch RA#2	A	21.00	3.3	12	12	12	EA	EA	TH
Alb-Sch RA#2	A	22.00	23.2	11	11	11	EA	EA	TH
Alb-Sch RA#2	A	23.00	19.7	40	98	98	EA	EA	RG
Alb-Sch RA#2	A	24.00	6.7	67	97	97	EA	EA	RG
Alb-Sch RA#2	A	29.00	3.6	45	45	45	EA	EA	HV
Alb-Sch RA#2	A	30.00	4.3	45	45	45	EA	EA	HV

# MANAGEMENT OBJECTIVES AND ACTIONS

## LAND MANAGEMENT ACTION SCHEDULES

<b>Table III.H. - Land Management Action Schedule for First Five-Year Period (by State Forest)</b>									
	Stand		Acres	Forest Type			Management Category		Treatment Type
State Forests	Compartment	Number		Current	Post Treatment	Objective	Current Structure	Future Structure	
Alb-Sch RA#2	A	34.00	9.4	48	98	98	EA	EA	RG
Alb-Sch RA#2	A	35.00	11.3	32	32	32	EA	UA	TH
Alb-Sch RA#2	A	37.00	2.7	45	45	45	EA	EA	HV
Alb-Sch RA#2	A	42.00	3.2	32	32	32	UA	EA	TH
Alb-Sch RA#2	A	51.00	12.0	11	11	11	EA	EA	TH
Alb-Sch RA#2	A	57.10	63.9	10	10	10	UA	UA	TH
Alb-Sch RA#2	A	59.00	2.0	32	32	32	EA	UA	TH
Alb-Sch RA#2	A	62.00	34.1	11	11	11	UA	UA	TH
Alb-Sch RA#2	A	64.00	38.1	32	32	32	EA	EA	TH
Alb-Sch RA#2	A	66.00	2.4	32	32	32	EA	UA	TH
Alb-Sch RA#2	A	68.00	30.0	32	32	32	EA	UA	TH
Alb-Sch RA#2	A	69.00	27.2	11	11	11	EA	EA	TH
Alb-Sch RA#2	A	75.00	14.2	11	11	11	EA	EA	TH
Alb-Sch RA#2	A	77.00	14.4	63	98	98	EA	EA	RG
Alb-Sch RA#2	A	81.00	11.0	32	32	32	UA	EA	TH
Alb-Sch RA#2	A	82.00	44.2	32	32	32	EA	UA	TH
Alb-Sch RA#2	B	2.00	25.3	32	32	32	EA	EA	TH
Alb-Sch RA#2	B	5.00	16.8	12	12	12	EA	UA	TH
Alb-Sch RA#2	B	13.00	2.0	40	97	97	EA	EA	RL
Alb-Sch RA#2	B	15.00	5.2	32	32	32	EA	UA	TH
Alb-Sch RA#2	B	20.00	3.3	45	45	45	EA	EA	HV
Alb-Sch RA#2	B	21.00	18.4	61	98	98	EA	EA	RG
Alb-Sch RA#2	B	22.00	8.7	61	98	98	EA	EA	RG
Alb-Sch RA#2	B	23.00	15.5	48	98	98	EA	EA	RG
Alb-Sch RA#2	B	24.00	11.9	61	98	98	EA	EA	RG
Alb-Sch RA#2	B	25.00	8.7	32	32	32	EA	UA	TH
Alb-Sch RA#2	B	27.00	23.0	11	11	11	EA	UA	TH
Alb-Sch RA#2	B	29.00	18.8	32	32	32	EA	UA	TH
Alb-Sch RA#2	B	30.00	11.9	32	32	32	EA	UA	TH

# MANAGEMENT OBJECTIVES AND ACTIONS

## LAND MANAGEMENT ACTION SCHEDULES

<b>Table III.I. - Land Management Action Schedule for Second Five-Year Period (by State Forest)</b>									
State Forests	Stand		Acres	Forest Type			Management Category		Treatment Type
	Compartment	Number		Current	Post Treatment	Objective	Current	Future	
Sch RA #8	A	2.00	17.8	40	97	31	EA	UE	HV
Sch RA #8	A	3.00	5.8	40	40	40	EA	EA	TH
Sch RA #8	A	4.00	4.9	61	61	61	EA	EA	TH
Sch RA #8	A	5.00	5.5	45	45	45	EA	EA	TH
Sch RA #8	A	6.00	5.8	45	45	45	EA	EA	TH
STONE STORE STATE FOREST									
Sch RA #10	A	4.00	18.0	32	32	32	UA	UA	TH
Sch RA #10	A	8.00	15.0	32	32	32	EA	UA	TH
Sch RA #10	A	10.00	9.0	32	32	32	EA	UA	TH
Sch RA #10	A	13.00	28.5	45	45	45	EA	EA	HV
Sch RA #10	A	18.00	7.4	32	32	32	EA	UA	TH
Sch RA #10	A	19.00	8.4	32	32	32	UA	UA	TH
Sch RA #10	A	24.00	2.0	32	32	32	EA	UA	TH
Sch RA #10	A	25.00	3.0	32	32	32	EA	UA	TH
Sch RA #10	A	28.00	17.7	32	32	32	EA	UA	TH
Sch RA #10	A	33.00	32.1	45	45	45	EA	EA	HV
Sch RA #10	A	34.00	2.1	32	32	32	EA	UA	TH
Sch RA #10	A	40.00	18.3	11	11	11	EA	UA	TH
Sch RA #10	B	1.00	4.9	32	32	32	EA	UA	TH
LEONARD HILL STATE FOREST									
Sch RA #12	A	4.00	3.4	32	32	32	UA	EA	TH
Sch RA #12	A	5.00	2.5	40	45	45	EA	EA	HV
Sch RA #12	A	21.00	15.4	10	10	10	EA	UA	TH
Sch RA #12	A	27.00	10.4	12	12	12	EA	UA	TH
Sch RA #12	A	29.00	10.1	32	32	32	EA	UA	TH
Sch RA #12	A	35.00	16.1	60	10	10	EA	EA	RL
Sch RA #12	A	48.00	3.6	32	32	32	EA	EA	TH
Sch RA #12	A	65.00	2.0	32	32	32	UA	EA	TH
Sch RA #12	B	10.30	10.4	32	32	32	EA	EA	TH
Sch RA #12	B	10.60	3.6	47	97	97	EA	EA	HV
Sch RA #12	B	13.00	15.5	32	32	32	EA	EA	TH
Sch RA #12	B	17.00	17.9	32	32	32	EA	EA	TH
Sch RA #12	B	32.00	4.1	32	32	32	EA	UA	TH
Sch RA #12	B	48.00	2.8	32	32	32	UA	EA	TH

# MANAGEMENT OBJECTIVES AND ACTIONS

## LAND MANAGEMENT ACTION SCHEDULES

<b>Table III.I. - Land Management Action Schedule for Second Five-Year Period (by State Forest)</b>									
State Forests	Stand		Acres	Forest Type			Management Category		Treatment Type
	Compartment	Number		Current	Post Treatment	Objective	Current	Future	
Sch RA #12	B	49.00	2.0	32	32	32	UA	EA	TH
Sch RA #12	B	51.00	15.2	32	32	32	EA	EA	TH
Sch RA #12	C	6.00	4.7	32	32	32	EA	EA	TH
DUTTON RIDGE STATE FOREST									
Sch RA #14	A	2.10	16.6	32	32	32	EA	EA	TH
Sch RA #14	A	3.00	6.1	32	32	32	UA	UA	TH
Sch RA #14	A	10.00	4.2	32	32	32	UA	UA	TH
Sch RA #14	A	13.00	3.3	45	45	45	EA	EA	HV
Sch RA #14	A	27.00	4.3	32	32	32	EA	UA	TH
Sch RA #14	A	36.00	3.8	32	32	32	EA	UA	TH
Sch RA #14	A	84.00	12.2	60	45	45	EA	EA	HV
Sch RA #14	A	86.00	9.5	40	45	45	EA	EA	RG
Sch RA #14	B	7.00	2.0	40	97	97	EA	EA	RL
KEYSERKILL STATE FOREST									
Sch RA #15	B	17.10	17.5	45	45	45	EA	EA	TH
Sch RA #15	B	17.20	5.3	45	45	45	EA	EA	TH
Sch RA #15	B	29.00	20.5	45	45	45	EA	EA	TH
Sch RA #15	B	33.40	14.3	45	45	45	EA	EA	TH
Sch RA #15	C	6.00	9.9	40	40	40	EA	EA	TH
Sch RA #15	C	12.00	15.7	45	45	45	EA	EA	TH
Sch RA #15	C	17.00	6.6	40	40	40	EA	EA	TH
HIGH KNOB STATE FOREST									
Sch RA #16	A	2.00	5.1	42	97	97	EA	EA	RL
Sch RA #16	A	3.00	4.1	32	32	32	EA	EA	TH
Sch RA #16	A	6.00	29.8	32	32	32	EA	EA	TH
Sch RA #16	A	14.00	4.2	32	32	32	EA	EA	TH
Sch RA #16	A	40.00	30.6	32	32	32	EA	EA	TH
Sch RA #16	A	43.00	11.8	70	70	70	EA	EA	TH
Sch RA #16	A	49.00	15.2	45	45	45	EA	EA	HV
Sch RA #16	A	69.00	11.0	45	45	45	EA	EA	HV
Sch RA #16	B	4.00	10.5	32	32	32	UA	UA	TH
Sch RA #16	B	10.00	9.0	45	45	45	EA	EA	HV
Sch RA #16	B	14.00	12.0	45	45	45	EA	EA	HV
Sch RA #16	B	18.00	21.1	40	40	40	EA	EA	HV
Sch RA #16	B	21.00	28.7	16	16	16	EA	EA	TH

# MANAGEMENT OBJECTIVES AND ACTIONS

## LAND MANAGEMENT ACTION SCHEDULES

<b>Table III.I. - Land Management Action Schedule for Second Five-Year Period (by State Forest)</b>									
State Forests	Stand		Acres	Forest Type			Management Category		Treatment Type
	Compartment	Number		Current	Post Treatment	Objective	Current	Future	
Sch RA #16	B	22.00	67.6	10	10	10	EA	UA	TH
Sch RA #16	B	27.00	12.9	32	32	32	EA	UA	TH
Sch RA #16	B	28.00	7.8	32	32	32	UA	EA	TH
Sch RA #16	B	35.00	4.9	32	32	32	EA	EA	TH
Sch RA #16	B	40.00	10.8	32	32	32	EA	UA	TH
<b>BATES STATE FOREST</b>									
Sch RA #17	A	5.00	6.7	32	32	32	EA	EA	TH
Sch RA #17	A	9.00	14.1	32	32	32	EA	EA	TH
Sch RA #17	A	10.00	3.5	32	32	32	EA	UA	TH
Sch RA #17	A	13.00	8.0	45	45	45	EA	EA	HV
Sch RA #17	A	15.00	11.0	61	45	45	EA	EA	HV
Sch RA #17	A	27.00	2.4	32	32	32	EA	EA	TH
Sch RA #17	A	33.00	3.1	32	32	32	EA	UA	TH
Sch RA #17	A	47.00	4.7	32	32	32	EA	UA	TH
Sch RA #17	A	53.00	2.0	32	32	32	EA	EA	TH
Sch RA #17	A	56.00	11.5	32	32	32	EA	UA	TH
Sch RA #17	A	60.00	61.0	32	32	32	EA	EA	TH
Sch RA #17	A	69.00	3.6	32	32	32	EA	EA	TH
Sch RA #17	B	3.00	8.6	11	11	11	EA	EA	TH
Sch RA #17	B	4.00	19.4	41	41	41	EA	EA	TH
Sch RA #17	B	9.00	2.0	32	32	32	EA	EA	TH
<b>GATES HILL STATE FOREST</b>									
Sch RA #22	A	52.00	3.2	42	10	10	EA	UE	HV
Sch RA #22	A	53.00	4.4	42	10	10	EA	UE	HV
Sch RA #22	A	57.00	7.9	46	46	46	EA	EA	TH
Sch RA #22	A	72.00	14.9	65	71	71	EA	EA	TH
Sch RA #22	A	73.00	18.4	45	45	45	EA	EA	TH
<b>SCOTT PATENT STATE FOREST</b>									
Alb-Sch RA #2	A	1.00	5.0	48	98	98	EA	EA	RG
Alb-Sch RA #2	A	7.00	28.0	10	10	10	EA	UA	TH
Alb-Sch RA #2	A	27.00	12.0	45	45	45	EA	EA	HV
Alb-Sch RA #2	A	33.00	7.8	61	98	98	EA	EA	RG
Alb-Sch RA #2	A	36.00	12.6	32	32	32	EA	EA	TH
Alb-Sch RA #2	A	47.10	10.9	40	98	98	EA	EA	RG
Alb-Sch RA #2	A	52.00	6.2	54	98	98	EA	EA	RG



# MANAGEMENT OBJECTIVES AND ACTIONS

## LAND MANAGEMENT ACTION SCHEDULES

<b>Table III.I. - Land Management Action Schedule for Second Five-Year Period (by State Forest)</b>									
State Forests	Stand		Acres	Forest Type			Management Category		Treatment Type
	Compartment	Number		Current	Post Treatment	Objective	Current	Future	
Alb-Sch RA #2	A	53.00	7.0	61	98	98	EA	EA	RG
Alb-Sch RA #2	A	55.00	4.7	46	98	98	EA	EA	RG
Alb-Sch RA #2	A	58.00	17.6	10	10	10	EA	UA	TH
Alb-Sch RA #2	A	61.00	12.1	32	32	32	EA	UA	TH
Alb-Sch RA #2	A	63.00	7.8	60	98	98	EA	EA	RG
Alb-Sch RA #2	A	67.00	14.6	16	16	16	EA	EA	TH
Alb-Sch RA #2	A	70.00	5.3	11	11	11	EA	EA	TH
Alb-Sch RA #2	A	71.00	5.0	32	32	32	EA	EA	TH
Alb-Sch RA #2	A	74.00	6.5	32	32	32	EA	UA	TH
Alb-Sch RA #2	A	79.00	6.3	45	45	45	EA	EA	HV
Alb-Sch RA #2	B	1.00	45.0	11	11	11	EA	EA	TH
Alb-Sch RA #2	B	4.00	5.9	32	32	32	EA	EA	TH
Alb-Sch RA #2	B	6.00	102.1	11	11	11	EA	EA	TH
Alb-Sch RA #2	B	7.00	11.1	11	11	11	EA	EA	TH
Alb-Sch RA #2	B	8.00	5.9	11	11	11	EA	EA	TH
Alb-Sch RA #2	B	9.00	20.0	32	32	32	EA	UA	TH
Alb-Sch RA #2	B	18.00	13.8	32	32	32	EA	UA	TH
Alb-Sch RA #2	B	19.00	27.0	32	32	32	UA	UA	TH
Alb-Sch RA #2	B	31.00	4.0	32	32	32	EA	EA	TH
Alb-Sch RA #2	B	32.00	22.1	32	32	32	EA	EA	TH

Table III.J. - Stands without Scheduled Management within 10 Years (by State Forest)					
State Forests	Stand		Acres	Forest Type	
	Compartment	Number		Current	Objective
ARMLIN HILL STATE FOREST					
Sch RA #8	A	1.00	19.2	32	32
Sch RA #8	A	7.00	6.7	70	70
Sch RA #8	A	8.00	17.0	11	11
Sch RA #8	A	9.00	5.8	70	70
Sch RA #8	A	10.00	4.8	44	44
Sch RA #8	A	11.00	6.3	11	11
Sch RA #8	A	12.00	15.4	11	11
Sch RA #8	A	14.00	1.8	32	32

# MANAGEMENT OBJECTIVES AND ACTIONS

## LAND MANAGEMENT ACTION SCHEDULES

<b>Table III.J. - Stands without Scheduled Management within 10 Years (by State Forest)</b>					
State Forests	Stand		Acres	Forest Type	
	Compartment	Number		Current	Objective
Sch RA #8	A	15.00	20.4	40	40
Sch RA #8	A	17.00	22.4	11	11
Sch RA #8	A	19.00	15.6	45	45
Sch RA #8	A	20.00	20.7	45	45
Sch RA #8	A	23.00	5.0	61	61
Sch RA #8	A	24.00	2.0	40	40
Sch RA #8	A	25.00	5.3	32	32
Sch RA #8	A	26.11	5.1	32	32
Sch RA #8	A	26.12	1.5	32	32
Sch RA #8	A	26.20	6.3	99	99
Sch RA #8	A	27.00	23.4	11	11
Sch RA #8	A	28.00	1.6	32	32
Sch RA #8	A	29.00	9.6	40	40
Sch RA #8	A	30.00	12.1	70	70
Sch RA #8	A	31.00	25.9	54	54
Sch RA #8	A	32.20	11.9	61	61
Sch RA #8	A	32.30	11.1	61	61
Sch RA #8	A	33.00	2.1	61	61
Sch RA #8	A	34.00	25.8	61	61
Sch RA #8	A	35.00	6.8	40	40
Sch RA #8	A	36.10	2.9	32	32
Sch RA #8	A	36.20	1.4	32	32
Sch RA #8	A	37.00	1.1	42	42
Sch RA #8	A	38.00	21.0	11	11
Sch RA #8	A	39.00	5.8	11	11
Sch RA #8	A	40.00	5.9	19	19
Sch RA #8	A	41.00	8.1	45	45
Sch RA #8	A	42.00	7.3	65	65
Sch RA #8	A	44.00	10.6	32	32
Sch RA #8	A	45.00	1.1	32	32
Sch RA #8	A	46.00	5.4	45	45
Sch RA #8	A	47.00	6.5	45	45
STONE STORE STATE FOREST					
Sch RA #10	A	1.00	3.0	99	99
Sch RA #10	A	3.20	23.0	98	98
Sch RA #10	A	5.00	35.0	98	98
Sch RA #10	A	11.00	34.6	18	18

# MANAGEMENT OBJECTIVES AND ACTIONS

## LAND MANAGEMENT ACTION SCHEDULES

<b>Table III.J. - Stands without Scheduled Management within 10 Years (by State Forest)</b>					
State Forests	Stand		Acres	Forest Type	
	Compartment	Number		Current	Objective
Sch RA #10	A	14.00	15.4	32	32
Sch RA #10	A	20.00	12.0	11	11
Sch RA #10	A	21.20	12.0	97	33
Sch RA #10	A	22.00	4.0	32	32
Sch RA #10	A	29.00	4.7	32	32
Sch RA #10	A	30.00	2.8	32	10
Sch RA #10	A	32.20	15.0	97	10
Sch RA #10	A	32.30	10.8	97	10
Sch RA #10	A	44.00	6.6	32	10
Sch RA #10	B	3.00	4.7	32	32
LEONARD HILL STATE FOREST					
Sch RA #12	A	17.00	7.2	99	99
Sch RA #12	C	24.00	3.6	99	99
Sch RA #12	A	46.00	3.8	20	20
Sch RA #12	C	26.00	15.7	10	10
Sch RA #12	A	19.00	6.7	32	32
Sch RA #12	B	4.00	2.8	32	32
Sch RA #12	B	20.10	5.1	32	32
Sch RA #12	B	41.00	2.7	32	32
Sch RA #12	C	32.00	2.0	32	32
Sch RA #12	B	47.20	5.0	97	97
Sch RA #12	C	25.10	2.0	97	97
Sch RA #12	C	29.00	6.5	97	97
Sch RA #12	A	43.00	2.0	98	98
Sch RA #12	A	47.00	9.9	98	98
Sch RA #12	A	69.00	11.8	98	98
Sch RA #12	B	47.10	15.9	98	98
Sch RA #12	C	16.00	3.9	98	98
Sch RA #12	B	52.00	5.3	99	99
Sch RA #12	A	56.20	8.0	40	45
Sch RA #12	A	22.00	2.0	45	45
Sch RA #12	A	36.00	2.6	70	10
Sch RA #12	B	26.00	30.0	45	45
DUTTON RIDGE STATE FOREST					
Sch RA #14	A	1.00	55.0	97	97
Sch RA #14	A	2.30	9.3	99	99
Sch RA #14	A	4.00	11.5	45	45

# MANAGEMENT OBJECTIVES AND ACTIONS

## LAND MANAGEMENT ACTION SCHEDULES

<b>Table III.J. - Stands without Scheduled Management within 10 Years (by State Forest)</b>					
State Forests	Stand		Acres	Forest Type	
	Compartment	Number		Current	Objective
Sch RA #14	A	5.00	2.0	54	54
Sch RA #14	A	6.00	3.6	97	97
Sch RA #14	A	11.20	2.3	32	32
Sch RA #14	A	14.10	11.8	99	99
Sch RA #14	A	14.30	5.7	11	11
Sch RA #14	A	16.00	18.0	98	98
Sch RA #14	A	18.00	2.1	32	32
Sch RA #14	A	21.00	10.5	32	32
Sch RA #14	A	24.00	7.0	98	98
Sch RA #14	A	25.00	3.0	97	97
Sch RA #14	A	31.00	2.0	32	32
Sch RA #14	A	34.00	4.6	45	45
Sch RA #14	A	37.00	20.5	46	45
Sch RA #14	A	40.00	8.0	97	97
Sch RA #14	A	42.00	16.0	11	11
Sch RA #14	A	43.00	2.5	32	32
Sch RA #14	A	46.00	29.0	98	98
Sch RA #14	A	50.00	2.7	32	32
Sch RA #14	A	53.00	5.4	42	45
Sch RA #14	A	62.20	5.6	97	97
Sch RA #14	A	64.00	11.0	97	97
Sch RA #14	A	69.00	4.0	98	98
Sch RA #14	A	70.00	4.0	97	97
Sch RA #14	A	71.00	12.8	97	97
Sch RA #14	A	72.00	14.0	98	98
Sch RA #14	A	73.00	3.5	32	32
Sch RA #14	A	74.20	2.7	99	99
Sch RA #14	A	88.00	34.0	98	98
Sch RA #14	A	89.00	10.0	12	12
Sch RA #14	A	91.00	2.8	32	32
Sch RA #14	A	95.00	33.8	97	97
Sch RA #14	A	96.00	2.1	97	97
Sch RA #14	A	97.00	17.6	98	98
Sch RA #14	A	98.00	2.0	97	97
Sch RA #14	B	1.00	2.0	32	32
KEYSERKILL STATE FOREST					
Sch RA #15	A	1.00	5.1	21	21

## MANAGEMENT OBJECTIVES AND ACTIONS

### LAND MANAGEMENT ACTION SCHEDULES

<b>Table III.J. - Stands without Scheduled Management within 10 Years (by State Forest)</b>					
State Forests	Stand		Acres	Forest Type	
	Compartment	Number		Current	Objective
Sch RA #15	A	2.00	3.0	21	21
Sch RA #15	A	3.10	2.4	12	12
Sch RA #15	A	3.20	5.5	12	12
Sch RA #15	A	3.30	4.4	12	12
Sch RA #15	A	4.00	2.5	21	21
Sch RA #15	A	5.00	17.2	11	11
Sch RA #15	A	6.00	9.0	11	11
Sch RA #15	B	1.00	3.5	32	32
Sch RA #15	B	2.00	15.1	45	45
Sch RA #15	B	3.10	5.9	21	21
Sch RA #15	B	3.20	5.0	32	32
Sch RA #15	B	4.10	5.8	11	11
Sch RA #15	B	4.20	14.5	11	11
Sch RA #15	B	5.10	2.5	32	32
Sch RA #15	B	5.20	3.5	40	40
Sch RA #15	B	5.30	17.4	40	40
Sch RA #15	B	5.40	2.2	32	32
Sch RA #15	B	5.50	11.1	61	61
Sch RA #15	B	6.10	3.1	32	32
Sch RA #15	B	6.20	6.9	12	12
Sch RA #15	B	6.30	5.4	11	11
Sch RA #15	B	6.40	3.5	32	32
Sch RA #15	B	6.50	2.5	20	20
Sch RA #15	B	7.20	3.5	54	54
Sch RA #15	B	8.00	3.0	32	32
Sch RA #15	B	9.10	2.6	21	21
Sch RA #15	B	9.20	9.8	32	32
Sch RA #15	B	9.30	20.7	11	11
Sch RA #15	B	9.40	2.0	32	32
Sch RA #15	B	10.00	12.2	45	45
Sch RA #15	B	11.00	12.7	11	11
Sch RA #15	B	12.00	8.3	40	40
Sch RA #15	B	13.00	3.8	32	32
Sch RA #15	B	14.00	5.0	11	11
Sch RA #15	B	15.00	4.4	11	11
Sch RA #15	B	16.00	19.2	11	11
Sch RA #15	B	18.10	7.4	11	11

# MANAGEMENT OBJECTIVES AND ACTIONS

## LAND MANAGEMENT ACTION SCHEDULES

<b>Table III.J. - Stands without Scheduled Management within 10 Years (by State Forest)</b>					
State Forests	Stand		Acres	Forest Type	
	Compartment	Number		Current	Objective
Sch RA #15	B	18.20	3.9	32	32
Sch RA #15	B	18.30	2.6	32	32
Sch RA #15	B	19.10	6.2	32	32
Sch RA #15	B	19.20	20.4	32	32
Sch RA #15	B	20.00	2.8	32	32
Sch RA #15	B	21.10	2.0	32	32
Sch RA #15	B	22.10	3.8	32	32
Sch RA #15	B	22.20	21.4	32	32
Sch RA #15	B	22.30	5.3	32	32
Sch RA #15	B	22.40	5.0	32	32
Sch RA #15	B	23.00	9.0	11	11
Sch RA #15	B	24.10	3.3	32	32
Sch RA #15	B	24.20	2.2	32	32
Sch RA #15	B	25.10	4.7	32	32
Sch RA #15	B	25.20	3.7	45	45
Sch RA #15	B	27.10	22.8	32	32
Sch RA #15	B	27.20	9.9	11	11
Sch RA #15	B	27.30	3.1	32	32
Sch RA #15	B	27.40	4.5	46	46
Sch RA #15	B	27.50	2.4	54	54
Sch RA #15	B	28.00	2.2	32	32
Sch RA #15	B	30.00	7.6	11	11
Sch RA #15	B	31.10	2.5	32	32
Sch RA #15	B	31.20	8.3	97	97
Sch RA #15	B	31.30	3.5	32	32
Sch RA #15	B	32.00	13.4	98	98
Sch RA #15	B	33.10	1.7	32	32
Sch RA #15	B	33.20	3.9	40	40
Sch RA #15	B	35.00	4.3	32	32
Sch RA #15	B	36.00	5.1	32	32
Sch RA #15	B	37.00	5.4	45	45
Sch RA #15	B	38.10	3.7	32	32
Sch RA #15	B	38.20	4.1	32	32
Sch RA #15	B	39.10	6.8	11	11
Sch RA #15	B	39.20	3.0	32	32
Sch RA #15	B	40.10	2.1	32	32
Sch RA #15	B	40.20	4.8	11	11

## MANAGEMENT OBJECTIVES AND ACTIONS

### LAND MANAGEMENT ACTION SCHEDULES

<b>Table III.J. - Stands without Scheduled Management within 10 Years (by State Forest)</b>					
State Forests	Stand		Acres	Forest Type	
	Compartment	Number		Current	Objective
Sch RA #15	B	41.00	5.7	97	97
Sch RA #15	B	42.00	2.4	32	32
Sch RA #15	B	43.00	5.2	32	32
Sch RA #15	B	45.00	6.6	32	32
Sch RA #15	B	46.10	2.1	20	20
Sch RA #15	B	46.20	2.9	32	32
Sch RA #15	B	46.30	7.1	11	11
Sch RA #15	B	47.00	9.0	32	32
Sch RA #15	B	48.00	3.1	45	45
Sch RA #15	B	49.00	5.8	67	67
Sch RA #15	B	50.10	2.7	32	32
Sch RA #15	B	50.20	3.7	45	45
Sch RA #15	B	50.30	2.1	32	32
Sch RA #15	B	51.00	7.5	45	45
Sch RA #15	B	52.10	2.3	20	20
Sch RA #15	B	52.20	7.6	11	11
Sch RA #15	B	52.30	3.7	32	32
Sch RA #15	B	53.00	11.0	61	61
Sch RA #15	B	54.10	3.8	32	32
Sch RA #15	B	54.20	8.6	98	98
Sch RA #15	B	54.30	2.5	32	32
Sch RA #15	B	54.40	3.0	40	40
Sch RA #15	B	55.00	6.3	98	98
Sch RA #15	B	56.00	8.6	45	45
Sch RA #15	B	57.00	3.4	32	32
Sch RA #15	B	58.00	3.6	45	45
Sch RA #15	B	59.00	15.2	45	45
Sch RA #15	B	60.00	3.9	98	98
Sch RA #15	B	63.00	2.7	98	98
Sch RA #15	C	1.10	16.7	11	11
Sch RA #15	C	1.20	15.1	11	11
Sch RA #15	C	2.00	11.0	11	11
Sch RA #15	C	3.10	11.1	32	32
Sch RA #15	C	3.20	2.2	32	32
Sch RA #15	C	3.30	2.6	32	32
Sch RA #15	C	4.00	5.0	32	32
Sch RA #15	C	5.00	2.5	40	40

# MANAGEMENT OBJECTIVES AND ACTIONS

## LAND MANAGEMENT ACTION SCHEDULES

<b>Table III.J. - Stands without Scheduled Management within 10 Years (by State Forest)</b>					
State Forests	Stand		Acres	Forest Type	
	Compartment	Number		Current	Objective
Sch RA #15	C	8.10	2.1	26	26
Sch RA #15	C	8.20	2.9	99	99
Sch RA #15	C	9.00	3.5	40	40
Sch RA #15	C	10.10	4.4	32	32
Sch RA #15	C	10.20	2.3	32	32
Sch RA #15	C	11.00	2.0	42	42
Sch RA #15	C	13.10	7.3	45	45
Sch RA #15	C	13.20	12.0	67	67
Sch RA #15	C	14.00	3.6	11	11
Sch RA #15	C	15.00	6.0	67	67
Sch RA #15	C	16.10	3.7	40	40
Sch RA #15	C	16.20	7.7	40	40
Sch RA #15	C	18.00	8.8	45	45
Sch RA #15	C	19.10	2.1	32	32
Sch RA #15	C	19.20	2.0	54	54
Sch RA #15	C	20.10	24.3	40	40
Sch RA #15	C	20.20	10.6	98	98
Sch RA #15	C	20.30	11.3	40	40
Sch RA #15	C	21.00	3.0	32	32
Sch RA #15	C	22.10	2.5	32	32
Sch RA #15	C	22.20	2.0	32	32
Sch RA #15	C	22.30	2.3	32	32
Sch RA #15	C	23.00	13.4	45	45
Sch RA #15	C	24.00	2.9	32	32
Sch RA #15	C	25.00	5.8	40	40
Sch RA #15	C	26.00	4.8	40	40
Sch RA #15	C	27.10	11.0	61	61
Sch RA #15	C	27.20	7.8	61	61
Sch RA #15	C	27.30	2.7	40	40
Sch RA #15	C	27.40	6.3	61	61
Sch RA #15	C	28.10	2.9	32	32
Sch RA #15	C	28.20	7.9	32	32
Sch RA #15	C	28.30	11.1	32	32
Sch RA #15	C	29.10	5.5	32	32
Sch RA #15	C	29.20	9.7	12	12
Sch RA #15	C	30.00	2.7	45	45
Sch RA #15	C	31.00	4.6	32	32



# MANAGEMENT OBJECTIVES AND ACTIONS

## LAND MANAGEMENT ACTION SCHEDULES

<b>Table III.J. - Stands without Scheduled Management within 10 Years (by State Forest)</b>					
State Forests	Stand		Acres	Forest Type	
	Compartment	Number		Current	Objective
Sch RA #15	C	32.10	13.6	11	11
Sch RA #15	C	32.20	11.4	11	11
Sch RA #15	D	1.00	12.6	45	45
Sch RA #15	D	2.00	13.0	47	47
Sch RA #15	D	3.00	5.4	11	11
Sch RA #15	D	5.00	18.4	32	32
HIGH KNOB STATE FOREST					
Sch RA #16	A	5.00	2.7	99	99
Sch RA #16	A	10.00	10.6	10	10
Sch RA #16	A	11.00	6.1	42	97
Sch RA #16	A	20.00	2.0	99	99
Sch RA #16	A	23.00	7.4	40	97
Sch RA #16	A	29.00	3.0	98	98
Sch RA #16	A	33.00	7.5	97	97
Sch RA #16	A	35.00	10.5	97	97
Sch RA #16	A	36.00	2.2	97	97
Sch RA #16	A	38.00	6.8	98	98
Sch RA #16	A	39.00	2.2	32	32
Sch RA #16	A	46.10	2.5	97	97
Sch RA #16	A	46.20	3.9	32	32
Sch RA #16	A	57.00	8.2	97	97
Sch RA #16	A	59.00	5.0	97	97
Sch RA #16	A	61.00	3.1	45	45
Sch RA #16	A	63.00	8.0	98	98
Sch RA #16	A	64.00	2.0	98	98
Sch RA #16	A	68.00	8.0	32	32
Sch RA #16	B	2.00	7.1	97	97
Sch RA #16	B	3.00	9.1	97	97
Sch RA #16	B	5.00	6.0	97	97
Sch RA #16	B	6.00	2.0	42	97
Sch RA #16	B	11.00	2.0	98	98
Sch RA #16	B	12.00	11.5	32	32
Sch RA #16	B	16.00	7.4	98	98
Sch RA #16	B	19.00	5.7	98	98
Sch RA #16	B	33.00	9.4	42	97
Sch RA #16	B	34.00	14.0	97	97
Sch RA #16	B	37.00	3.0	44	97

# MANAGEMENT OBJECTIVES AND ACTIONS

## LAND MANAGEMENT ACTION SCHEDULES

<b>Table III.J. - Stands without Scheduled Management within 10 Years (by State Forest)</b>					
State Forests	Stand		Acres	Forest Type	
	Compartment	Number		Current	Objective
Sch RA #16	B	41.00	16.0	44	97
Sch RA #16	B	45.00	3.0	20	20
Sch RA #16	B	46.00	13.0	61	61
BATES STATE FOREST					
Sch RA #17	A	6.00	6.1	66	45
Sch RA #17	A	7.00	9.0	45	45
Sch RA #17	A	8.00	3.4	45	45
Sch RA #17	A	14.00	12.0	32	32
Sch RA #17	A	16.00	18.0	67	45
Sch RA #17	A	18.00	2.0	32	32
Sch RA #17	A	21.00	8.0	32	32
Sch RA #17	A	22.00	4.0	32	32
Sch RA #17	A	26.00	3.4	40	97
Sch RA #17	A	28.00	6.0	32	32
Sch RA #17	A	32.00	2.0	99	99
Sch RA #17	A	35.20	10.1	98	98
Sch RA #17	A	54.00	20.3	71	97
Sch RA #17	A	59.00	6.5	32	32
Sch RA #17	A	63.00	2.6	32	32
Sch RA #17	A	67.00	4.3	32	32
Sch RA #17	A	70.00	8.5	98	98
Sch RA #17	B	1.00	4.9	40	40
Sch RA #17	B	8.00	10.0	98	98
GATES HILL STATE FOREST					
Sch RA #22	A	1.00	4.7	32	32
Sch RA #22	A	2.00	2.1	40	40
Sch RA #22	A	3.00	2.4	40	40
Sch RA #22	A	4.00	9.1	32	32
Sch RA #22	A	5.00	6.3	11	11
Sch RA #22	A	6.00	3.3	32	32
Sch RA #22	A	7.00	10.4	32	32
Sch RA #22	A	8.00	3.6	41	41
Sch RA #22	A	9.10	18.7	11	11
Sch RA #22	A	9.20	32.5	32	32
Sch RA #22	A	10.00	29.0	11	11
Sch RA #22	A	11.00	18.0	13	13
Sch RA #22	A	12.00	11.1	97	97

## MANAGEMENT OBJECTIVES AND ACTIONS

### LAND MANAGEMENT ACTION SCHEDULES

<i>Table III.J. - Stands without Scheduled Management within 10 Years (by State Forest)</i>					
State Forests	Stand		Acres	Forest Type	
	Compartment	Number		Current	Objective
Sch RA #22	A	13.00	24.8	11	11
Sch RA #22	A	14.00	3.6	21	21
Sch RA #22	A	15.00	2.9	32	32
Sch RA #22	A	16.00	2.3	40	40
Sch RA #22	A	17.00	13.8	41	41
Sch RA #22	A	18.00	2.2	32	32
Sch RA #22	A	19.00	6.1	11	11
Sch RA #22	A	20.00	10.1	42	42
Sch RA #22	A	21.10	6.7	97	97
Sch RA #22	A	21.20	7.4	97	97
Sch RA #22	A	22.00	1.3	45	45
Sch RA #22	A	23.00	4.0	20	20
Sch RA #22	A	24.00	6.8	11	11
Sch RA #22	A	25.00	15.7	40	40
Sch RA #22	A	26.00	8.1	63	63
Sch RA #22	A	27.00	6.7	12	12
Sch RA #22	A	28.00	11.5	12	12
Sch RA #22	A	29.00	3.7	32	32
Sch RA #22	A	30.20	10.3	97	97
Sch RA #22	A	31.00	2.0	32	32
Sch RA #22	A	32.00	25.2	11	11
Sch RA #22	A	33.00	5.8	45	45
Sch RA #22	A	34.00	34.5	11	11
Sch RA #22	A	35.00	5.0	41	41
Sch RA #22	A	36.00	8.1	32	32
Sch RA #22	A	37.00	7.0	26	26
Sch RA #22	A	38.00	4.5	45	45
Sch RA #22	A	39.00	4.7	32	32
Sch RA #22	A	40.00	5.4	32	32
Sch RA #22	A	41.00	7.1	40	40
Sch RA #22	A	42.00	12.8	11	11
Sch RA #22	A	43.00	10.1	11	11
Sch RA #22	A	45.20	8.8	98	98
Sch RA #22	A	45.30	6.0	97	97
Sch RA #22	A	47.00	3.0	20	20
Sch RA #22	A	48.00	10.4	12	12
Sch RA #22	A	49.00	4.9	42	42

# MANAGEMENT OBJECTIVES AND ACTIONS

## LAND MANAGEMENT ACTION SCHEDULES

<b>Table III.J. - Stands without Scheduled Management within 10 Years (by State Forest)</b>					
State Forests	Stand		Acres	Forest Type	
	Compartment	Number		Current	Objective
Sch RA #22	A	50.00	6.0	45	45
Sch RA #22	A	51.00	3.5	99	99
Sch RA #22	A	55.00	11.0	45	45
Sch RA #22	A	56.00	3.3	45	45
Sch RA #22	A	58.00	3.5	32	32
Sch RA #22	A	59.00	23.2	61	61
Sch RA #22	A	60.20	16.0	98	98
Sch RA #22	A	61.00	4.0	45	45
Sch RA #22	A	62.00	4.1	41	41
Sch RA #22	A	63.00	2.7	41	41
Sch RA #22	A	64.00	5.9	21	21
Sch RA #22	A	65.00	18.3	40	40
Sch RA #22	A	66.00	4.3	20	20
Sch RA #22	A	67.00	7.4	11	11
Sch RA #22	A	68.00	4.4	12	12
Sch RA #22	A	69.00	3.5	45	45
Sch RA #22	A	70.00	1.0	32	32
Sch RA #22	A	71.00	10.1	42	42
Sch RA #22	A	74.00	3.1	32	32
Sch RA #22	A	77.00	7.8	12	12
Sch RA #22	A	78.00	13.5	31	31
SCOTT PATENT STATE FOREST					
Alb-Sch RA #2	A	2.00	7.0	32	32
Alb-Sch RA #2	A	3.00	18.1	40	98
Alb-Sch RA #2	A	4.00	6.0	97	97
Alb-Sch RA #2	A	5.00	5.0	48	98
Alb-Sch RA #2	A	9.00	6.1	48	98
Alb-Sch RA #2	A	14.00	8.2	32	32
Alb-Sch RA #2	A	15.00	8.2	62	98
Alb-Sch RA #2	A	16.00	10.3	32	32
Alb-Sch RA #2	A	17.00	12.0	45	45
Alb-Sch RA #2	A	18.00	3.9	99	99
Alb-Sch RA #2	A	19.00	2.0	98	98
Alb-Sch RA #2	A	25.00	14.5	47	98
Alb-Sch RA #2	A	26.00	1.5	97	97
Alb-Sch RA #2	A	28.00	6.0	99	99
Alb-Sch RA #2	A	32.00	9.3	12	12

## MANAGEMENT OBJECTIVES AND ACTIONS

### LAND MANAGEMENT ACTION SCHEDULES

<b>Table III.J. - Stands without Scheduled Management within 10 Years (by State Forest)</b>					
State Forests	Stand		Acres	Forest Type	
	Compartment	Number		Current	Objective
Alb-Sch RA #2	A	38.00	2.6	98	98
Alb-Sch RA #2	A	39.00	2.6	97	97
Alb-Sch RA #2	A	40.00	10.9	97	97
Alb-Sch RA #2	A	41.00	5.0	32	32
Alb-Sch RA #2	A	43.00	12.2	97	97
SCOTT PATENT STATE FOREST					
Alb-Sch RA #2	A	44.00	3.0	99	99
Alb-Sch RA #2	A	45.00	10.6	45	98
Alb-Sch RA #2	A	46.00	2.0	32	32
Alb-Sch RA #2	A	47.20	11.2	97	97
Alb-Sch RA #2	A	48.00	14.0	40	40
Alb-Sch RA #2	A	49.00	8.4	62	98
Alb-Sch RA #2	A	50.00	12.6	97	97
Alb-Sch RA #2	A	54.00	2.0	46	98
Alb-Sch RA #2	A	57.20	4.0	97	97
Alb-Sch RA #2	A	60.00	6.9	98	98
Alb-Sch RA #2	A	65.00	4.3	40	98
Alb-Sch RA #2	A	72.00	5.4	99	99
Alb-Sch RA #2	A	73.00	6.0	61	98
Alb-Sch RA #2	A	76.00	5.0	97	97
Alb-Sch RA #2	A	78.00	9.0	41	98
Alb-Sch RA #2	A	80.00	6.3	12	12
Alb-Sch RA #2	B	3.00	28.4	70	10
Alb-Sch RA #2	B	10.00	7.8	46	97
Alb-Sch RA #2	B	11.00	29.0	32	32
Alb-Sch RA #2	B	12.00	13.0	48	98
Alb-Sch RA #2	B	14.00	33.0	40	98
Alb-Sch RA #2	B	16.00	2.0	99	99
Alb-Sch RA #2	B	17.00	4.8	70	10
Alb-Sch RA #2	B	26.00	3.7	98	98
Alb-Sch RA #2	B	28.00	7.7	98	98

<b>Table III.K.- Natural Areas (by State Forest)</b>				
State Forest	Stand		Acres	Forest Type
	Compartment	Number		
Alb-Sch RA #2	A	910.00	5.7	Ponds

<b>Table III.K.- Natural Areas (by State Forest)</b>				
<b>State Forest</b>	<b>Stand</b>		<b>Acres</b>	<b>Forest Type</b>
	<b>Compartment</b>	<b>Number</b>		
Alb-Sch RA #2	A	920.00	3.1	Wetlands (Open)
Alb-Sch RA #2	A	920.00	5.1	Wetlands (Open)
Alb-Sch RA #2	A	920.00	5.4	Wetlands (Open)
<b>LEONARD HILL STATE FOREST</b>				
Sch RA #12	A	910.00	5.2	Ponds
Sch RA #12	A	910.00	3.8	Ponds
Sch RA #12	A	910.00	9.6	Ponds
Sch RA #12	A	910.00	11.9	Ponds
Sch RA #12	A	910.00	2.3	Ponds
Sch RA #12	A	910.00	4.2	Ponds
Sch RA #12	A	920.00	2.5	Wetlands (Open)
Sch RA #12	B	920.00	5.3	Wetlands (Open)
Sch RA #12	B	920.00	1.3	Wetlands (Open)
Sch RA #12	B	920.00	1.7	Wetlands (Open)
Sch RA #12	B	920.00	0.9	Wetlands (Open)
Sch RA #12	C	910.00	4.8	Ponds
Sch RA #12	C	920.00	6.4	Wetlands (Open)
Sch RA #12	C	920.00	5.9	Wetlands (Open)
Sch RA #12	C	920.00	5.1	Wetlands (Open)
Sch RA #12	C	920.00	1.6	Wetlands (Open)
Sch RA #12	C	920.00	1.2	Wetlands (Open)
<b>DUTTON RIDGE STATE FOREST</b>				
Sch RA #14	A	920.00	2.1	Wetlands (Open)
Sch RA #14	A	920.00	3.4	Wetlands (Open)
Sch RA #14	B	910.00	13.7	Ponds
<b>HIGH KNOB STATE FOREST</b>				
Sch RA #16	B	910.00	0.7	Ponds
Sch RA #16	B	920.00	0.7	Wetlands (Open)

### **BIBLIOGRAPHY**

Zaremba, R. E., and M. G. Anderson et. al. "High Allegheny Plateau Ecoregional Plan; First Iteration, Edited." The Nature Conservancy, Northeast and Caribbean Division, Boston, MA, 2003.

**APPENDIX A - SUMMARY OF COMMENTS DURING PUBLIC SCOPING SESSIONS**

**APPENDICES & FIGURES**

**APPENDIX A - SUMMARY OF COMMENTS DURING PUBLIC SCOPING SESSIONS**



## **APPENDICES & FIGURES**

---

### APPENDIX B - RESPONSIVENESS SUMMARY TO PUBLIC COMMENTS

### **APPENDIX B - RESPONSIVENESS SUMMARY TO PUBLIC COMMENTS**

## APPENDIX C - STATE ENVIRONMENTAL QUALITY REVIEW (SEQR)

**APPENDIX C - STATE ENVIRONMENTAL QUALITY REVIEW (SEQR)****State Environmental Quality Review (SEQR)**

This Plan, and the activities it, recommends will be in compliance with State Environmental Quality Review (SEQR), 6NYCRR Part 617. The State Environmental Quality Review Act (SEQRA) requires the consideration of environmental factors early in the planning stages of any proposed action(s) that are undertaken, funded or approved by a local, regional or state agency. The Strategic Plan for State Forest Management (SPSFM) serves as the Generic Environmental Impact Statement (GEIS), regarding management activity on State Forests. To address potential impacts, the SPSFM establishes SEQR analysis thresholds for each category of management activity.

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 wastewater 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]).

Any actions 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.

## APPENDICES & FIGURES

FIGURE 1. – SOILS MAP

FIGURE 1. – SOILS MAP

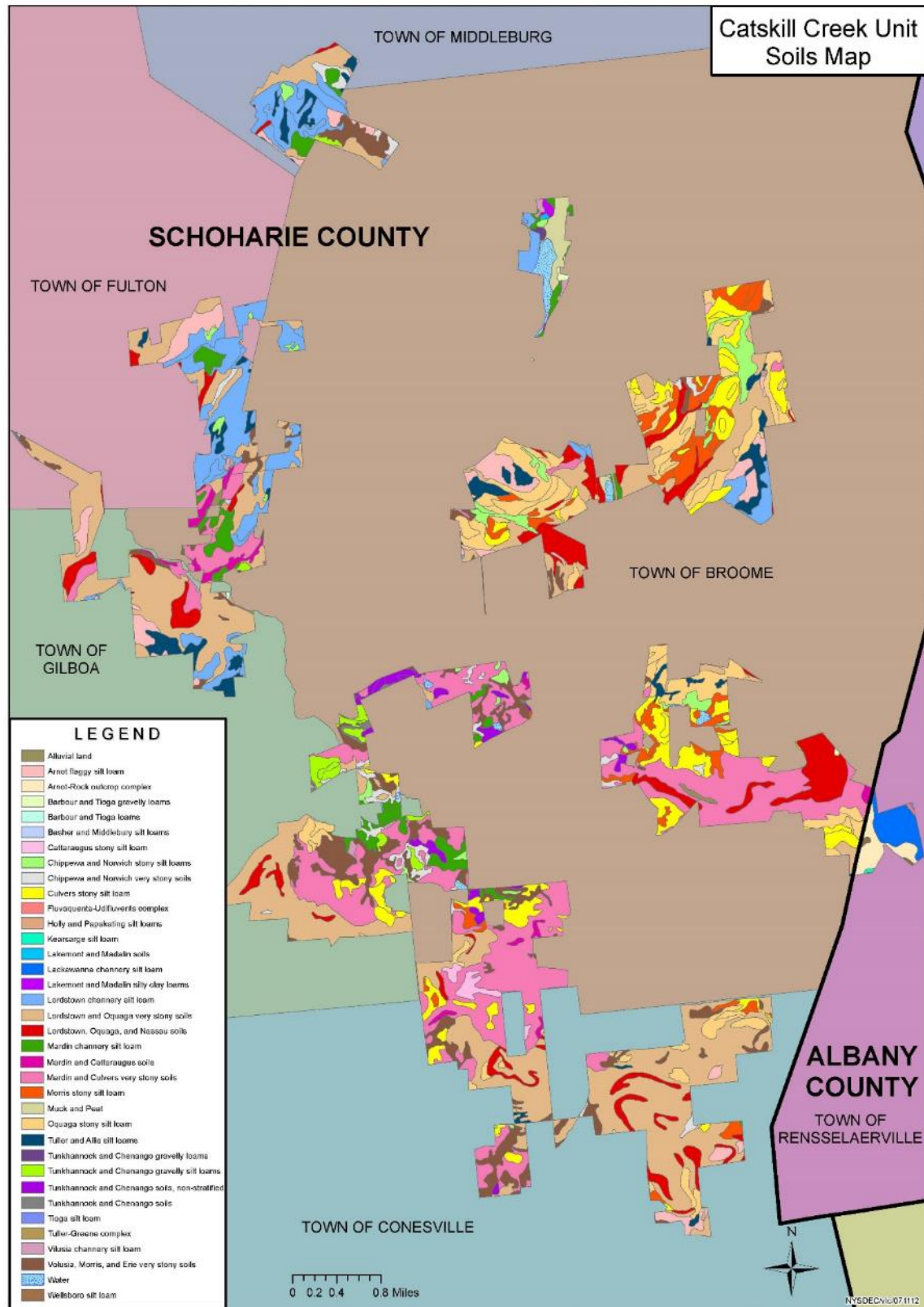
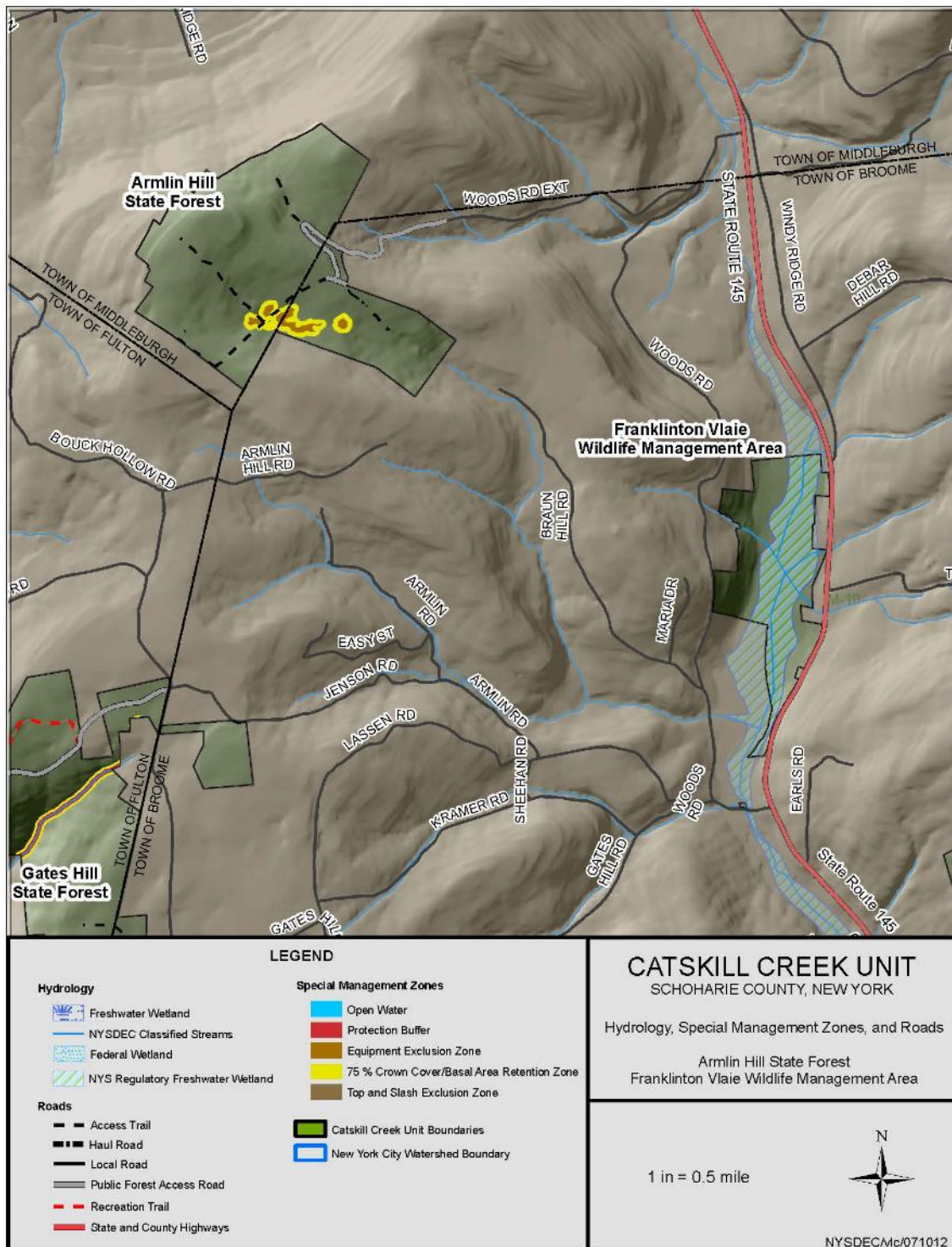


FIGURE 2 – WATER RESOURCES, SPECIAL MANAGEMENT ZONES AND TRANSPORTATION MAPS  
**FIGURE 2 – WATER RESOURCES, SPECIAL MANAGEMENT ZONES AND TRANSPORTATION MAPS**





## APPENDICES & FIGURES

FIGURE 2 – WATER RESOURCES, SPECIAL MANAGEMENT ZONES AND TRANSPORTATION MAPS

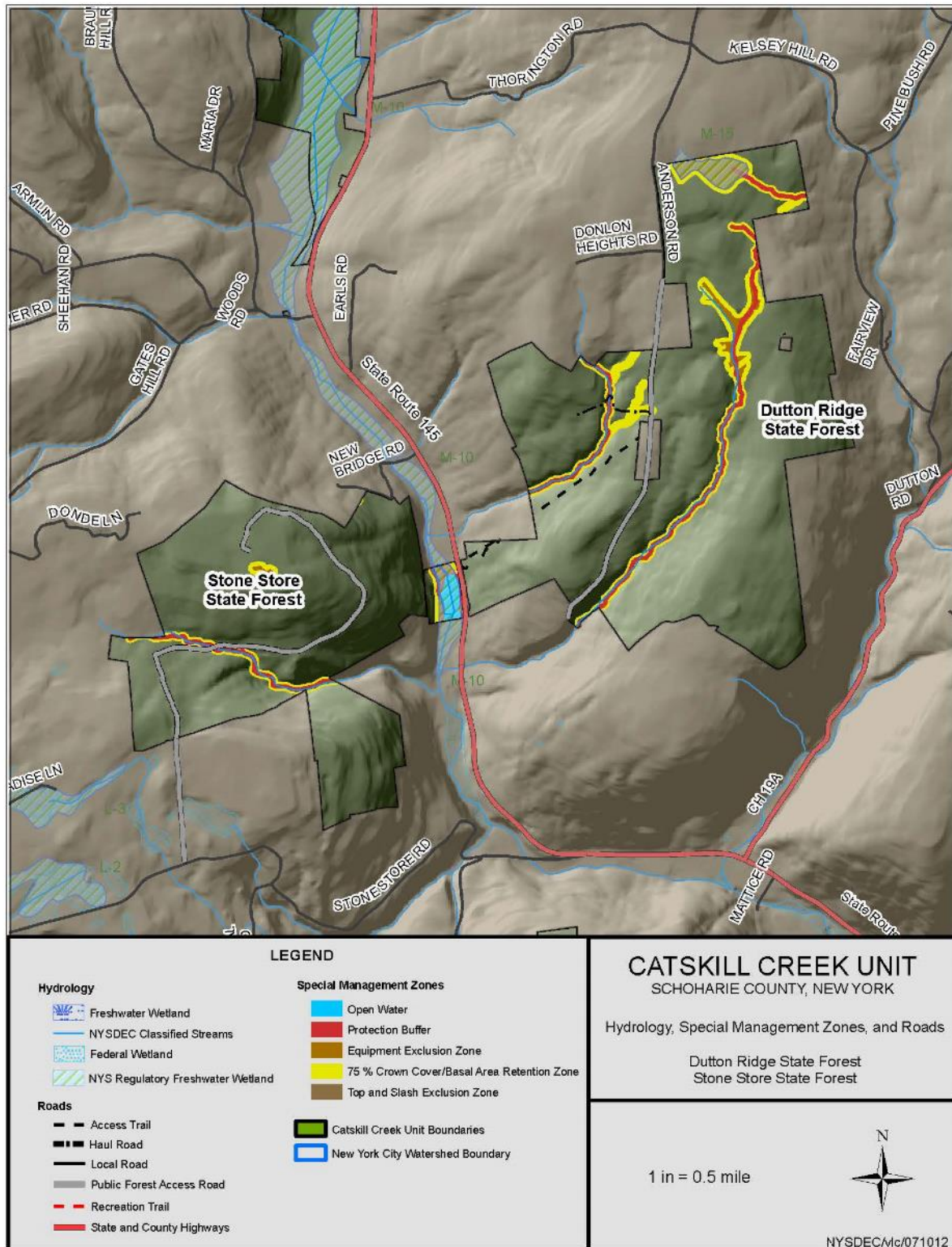
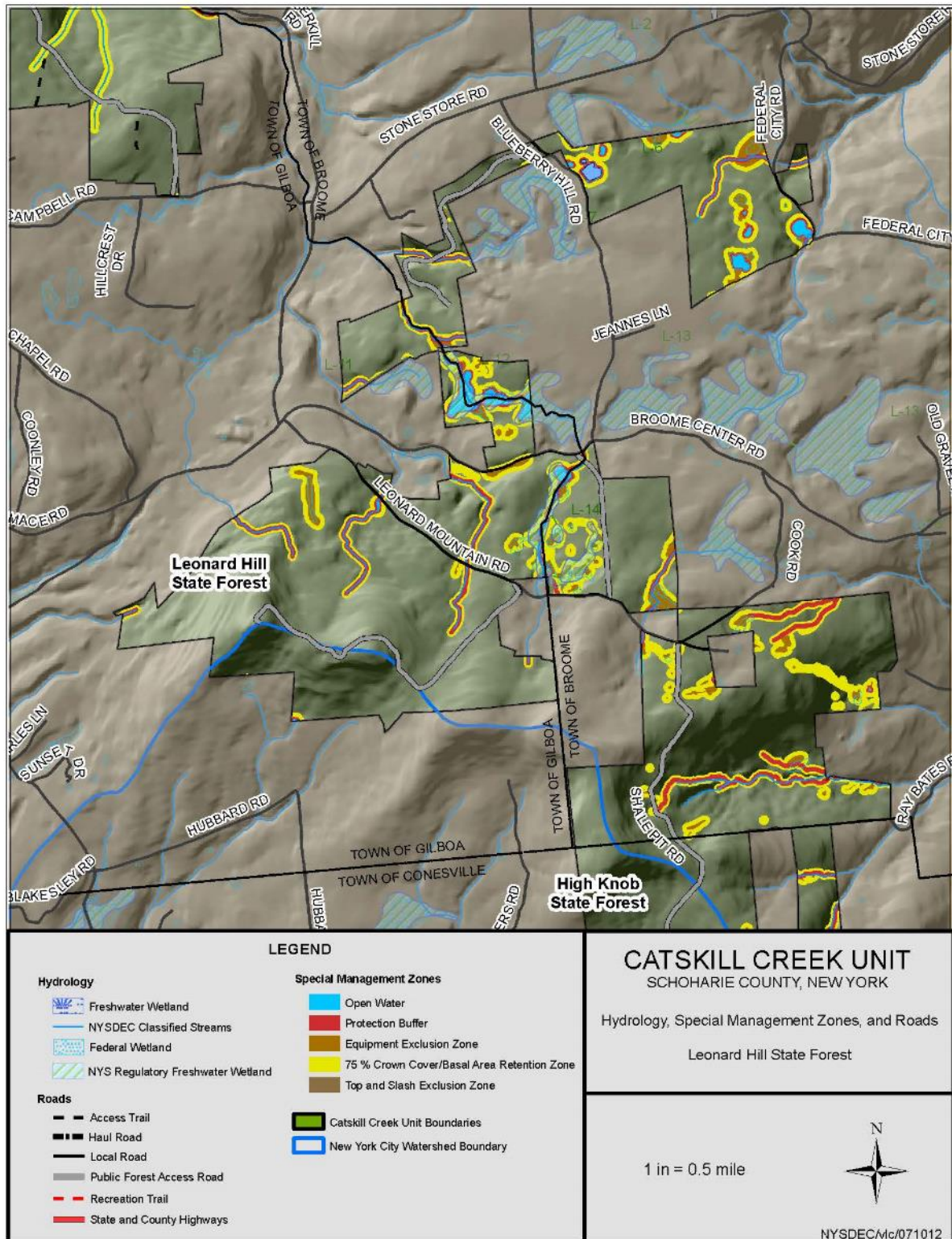


FIGURE 2 – WATER RESOURCES, SPECIAL MANAGEMENT ZONES AND TRANSPORTATION MAPS





## APPENDICES & FIGURES

FIGURE 2 – WATER RESOURCES, SPECIAL MANAGEMENT ZONES AND TRANSPORTATION MAPS

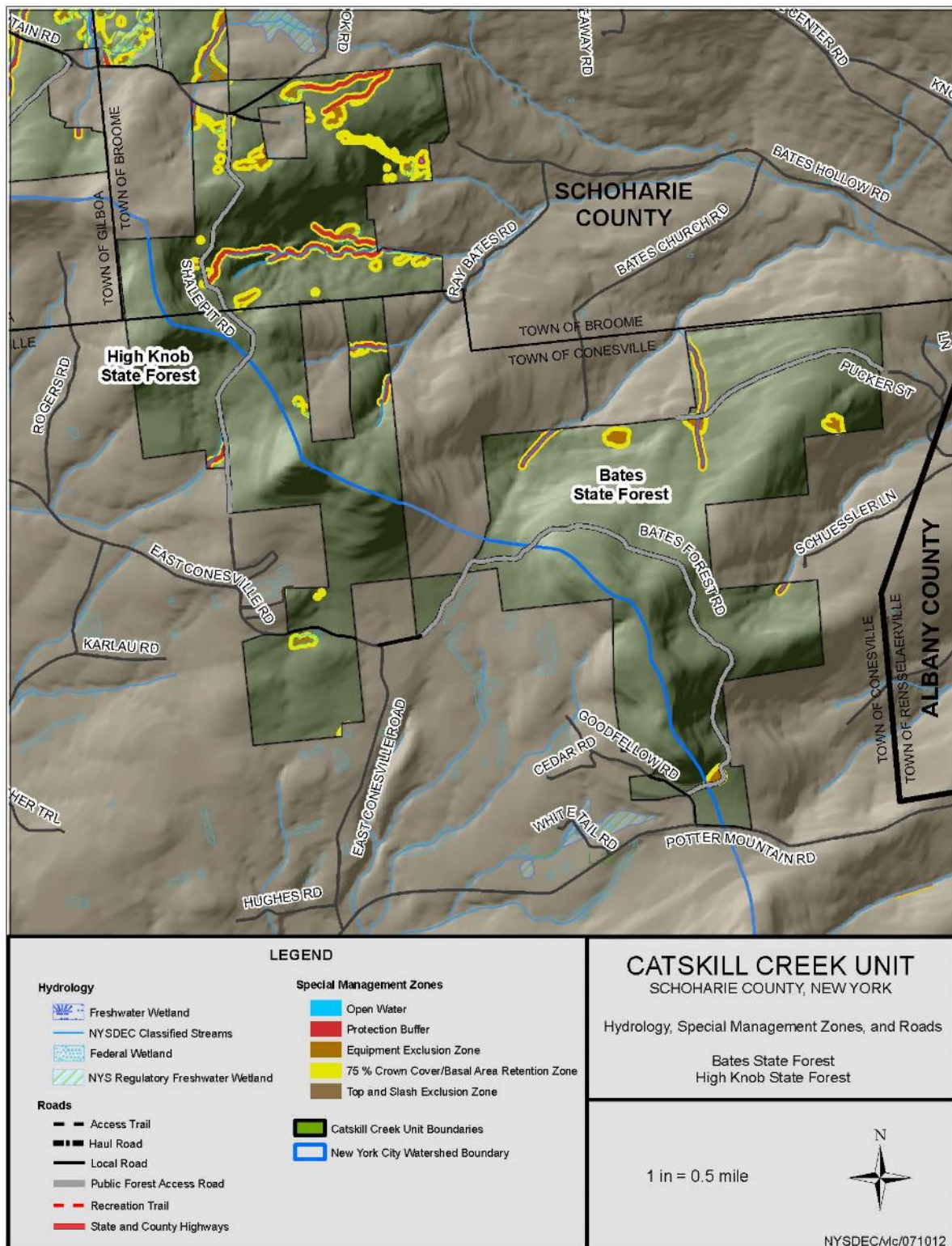
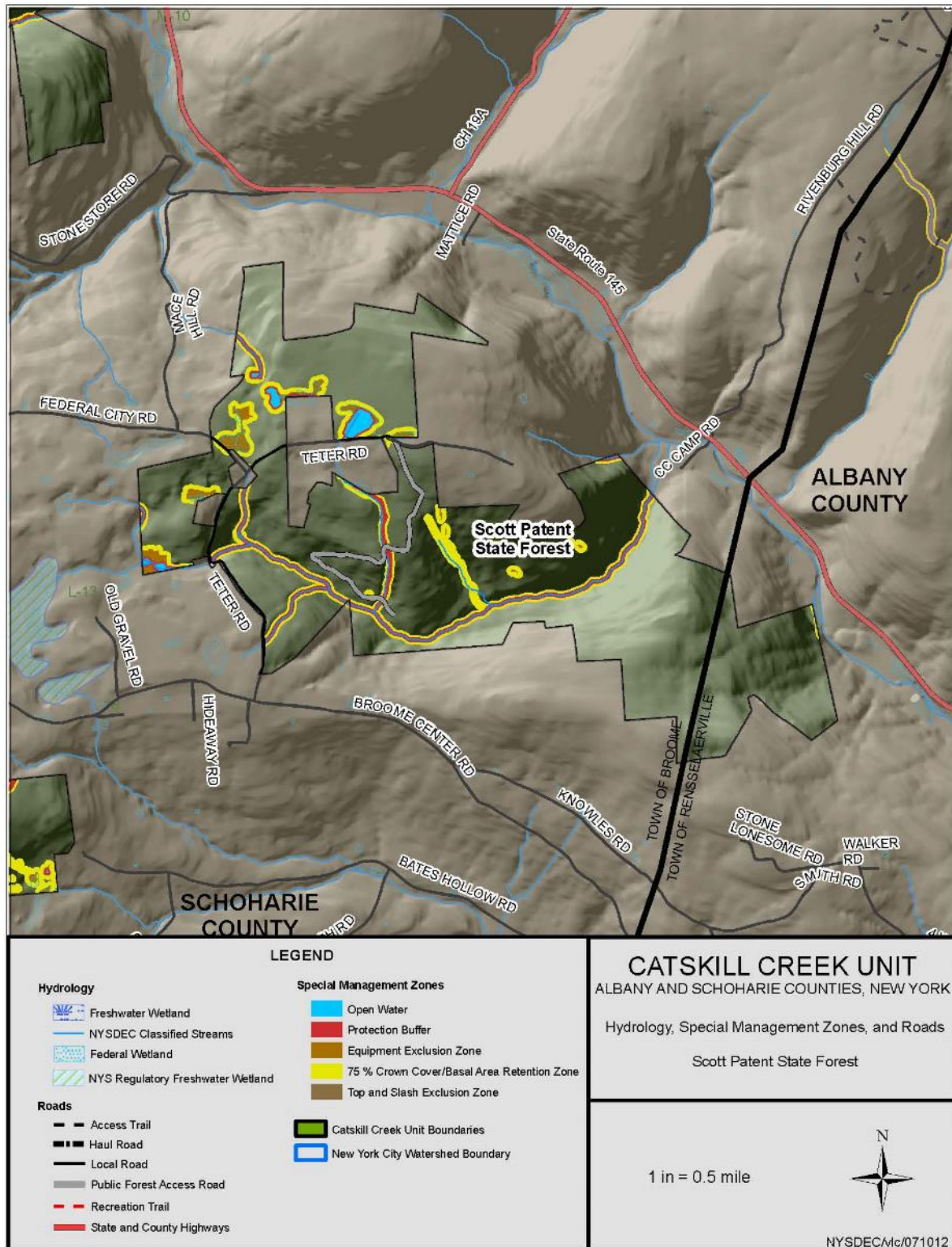


FIGURE 2 – WATER RESOURCES, SPECIAL MANAGEMENT ZONES AND TRANSPORTATION MAPS





## APPENDICES & FIGURES

FIGURE 3. – ASSET MAPS

FIGURE 3. – ASSET MAPS

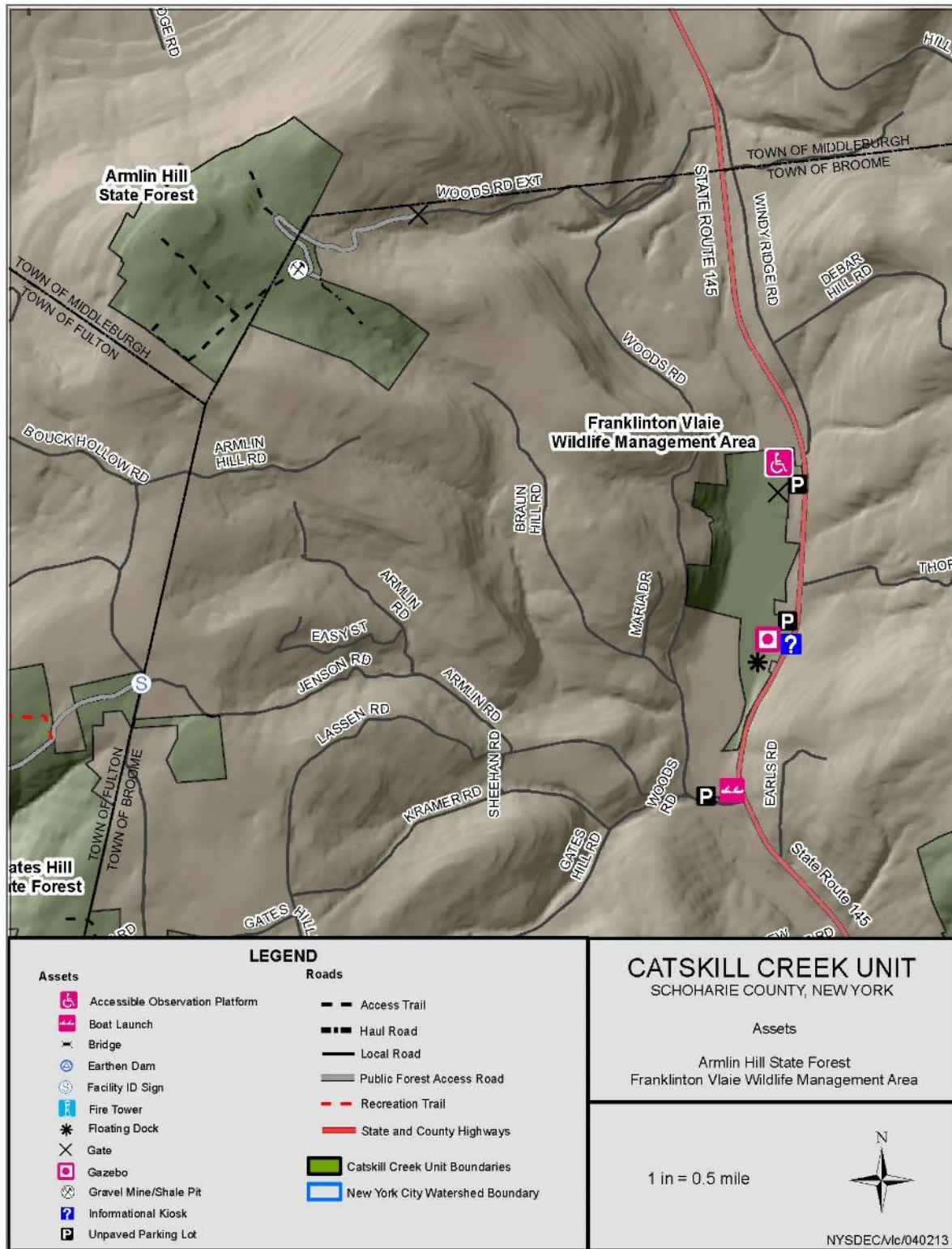
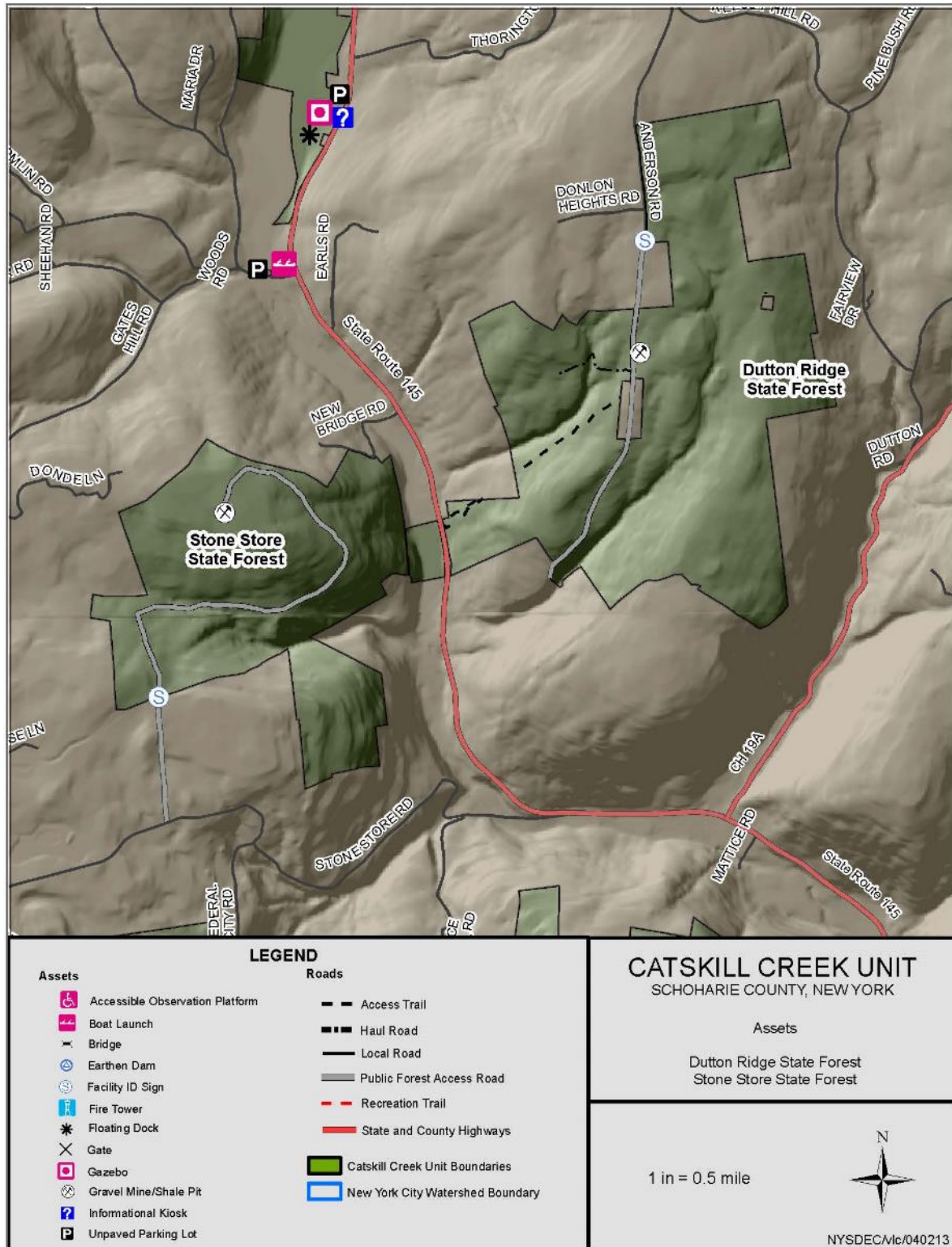


FIGURE 3. – ASSET MAPS





## APPENDICES & FIGURES

FIGURE 3. – ASSET MAPS

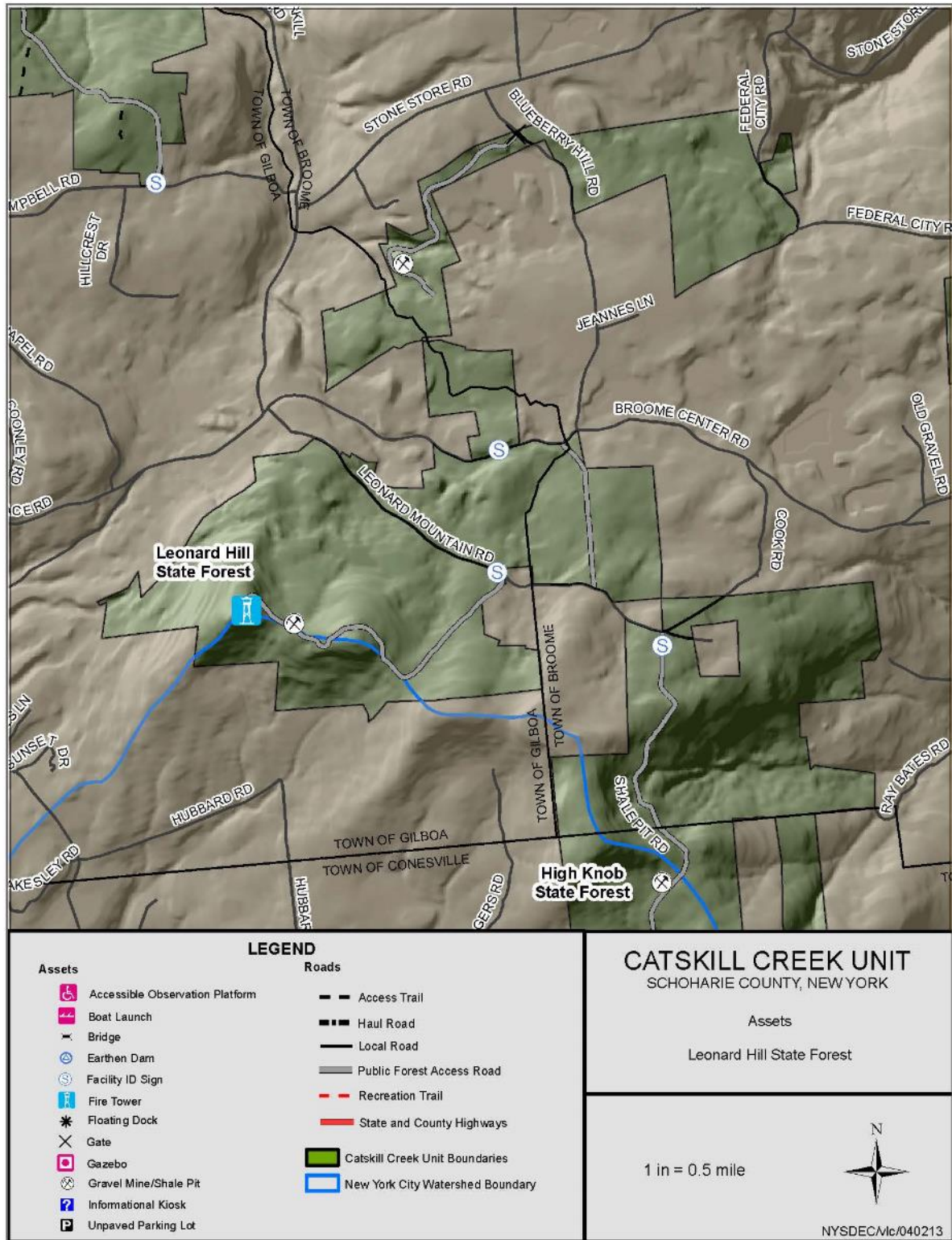
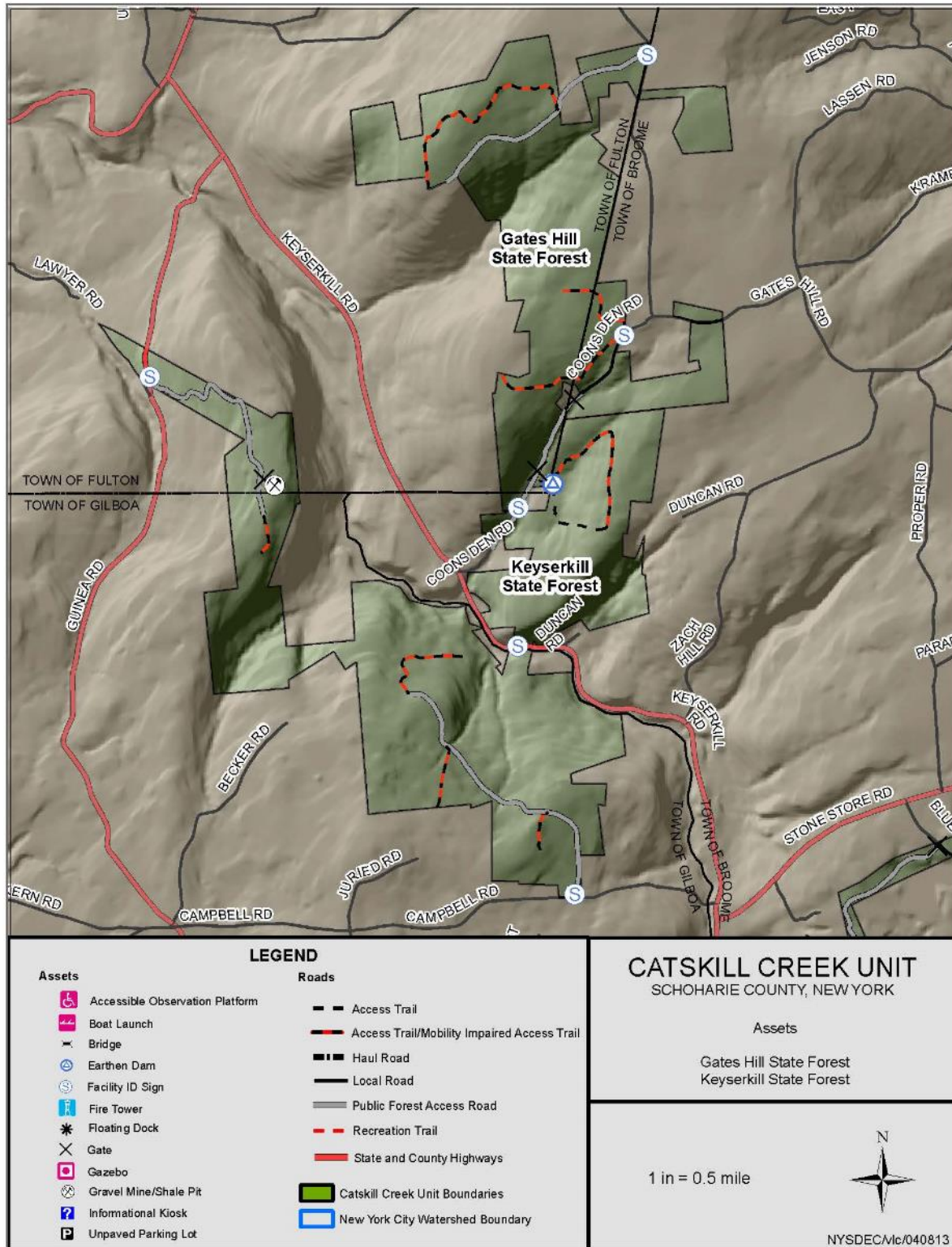


FIGURE 3. – ASSET MAPS





## APPENDICES & FIGURES

FIGURE 3. – ASSET MAPS

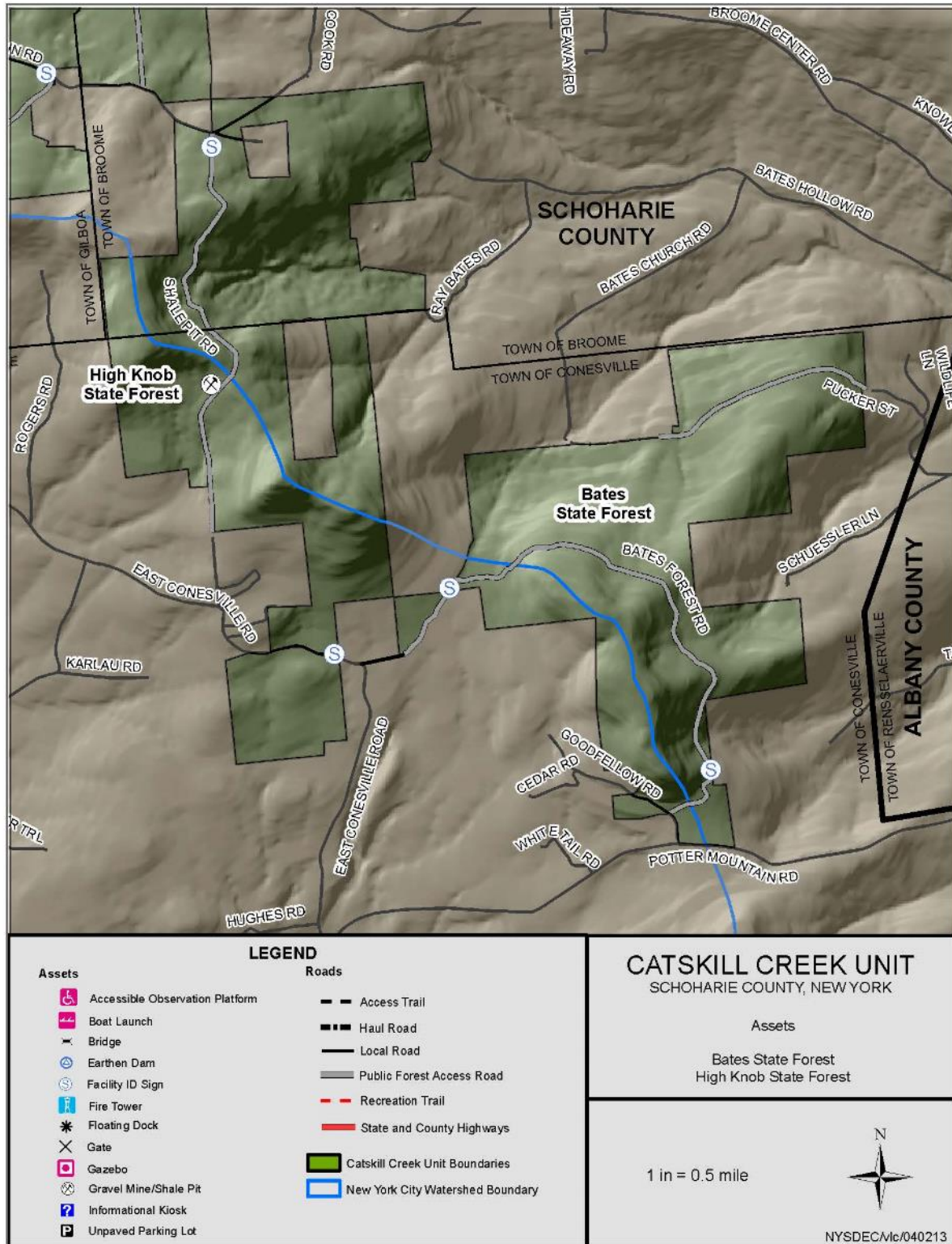
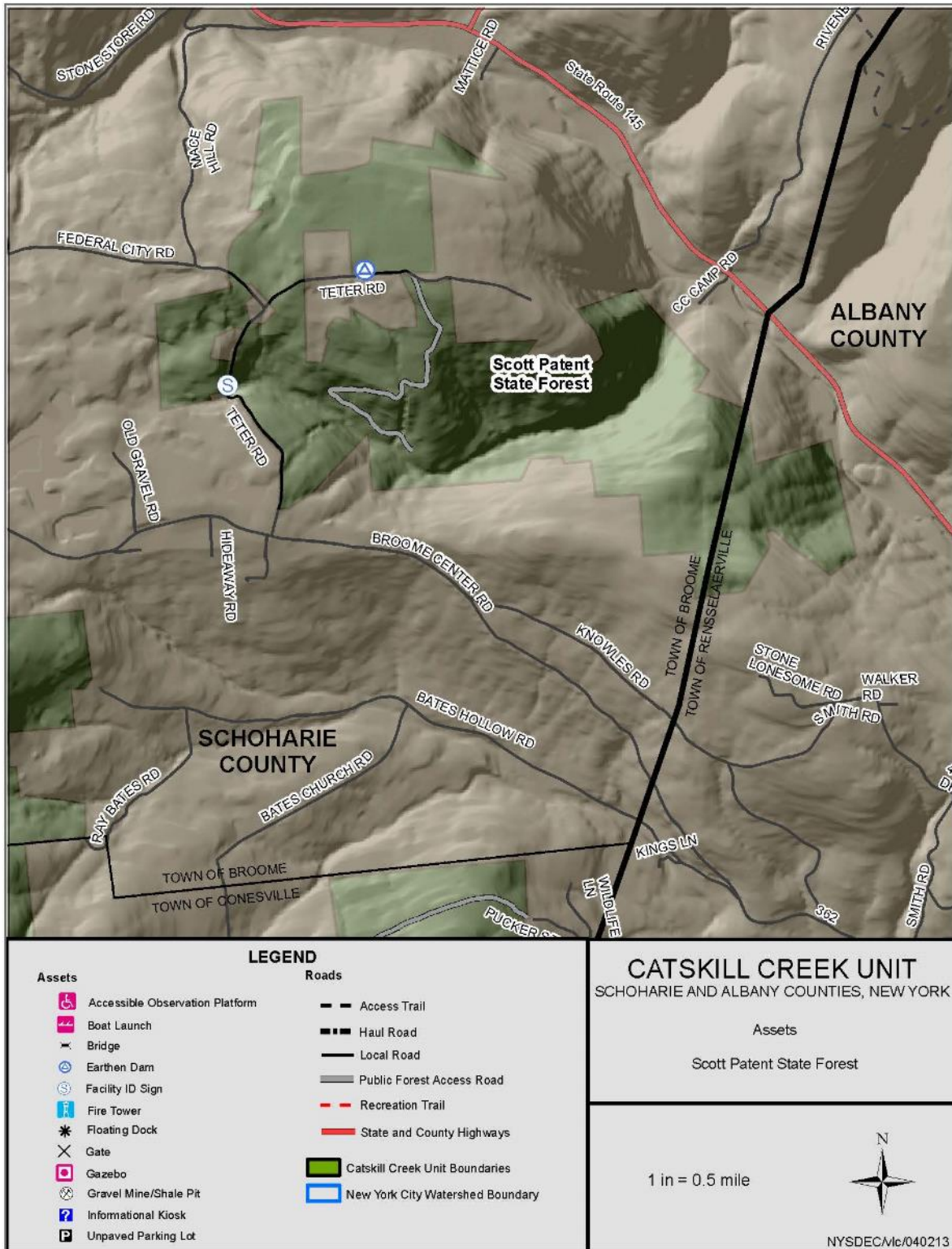


FIGURE 3. – ASSET MAPS





## APPENDICES & FIGURES

FIGURE 4. – CURRENT FOREST TYPE, MANAGEMENT DIRECTION, AND FOREST STAND IDENTIFICATION NUMBER MAPS

**FIGURE 4. – CURRENT FOREST TYPE, MANAGEMENT DIRECTION, AND FOREST STAND IDENTIFICATION NUMBER MAPS**

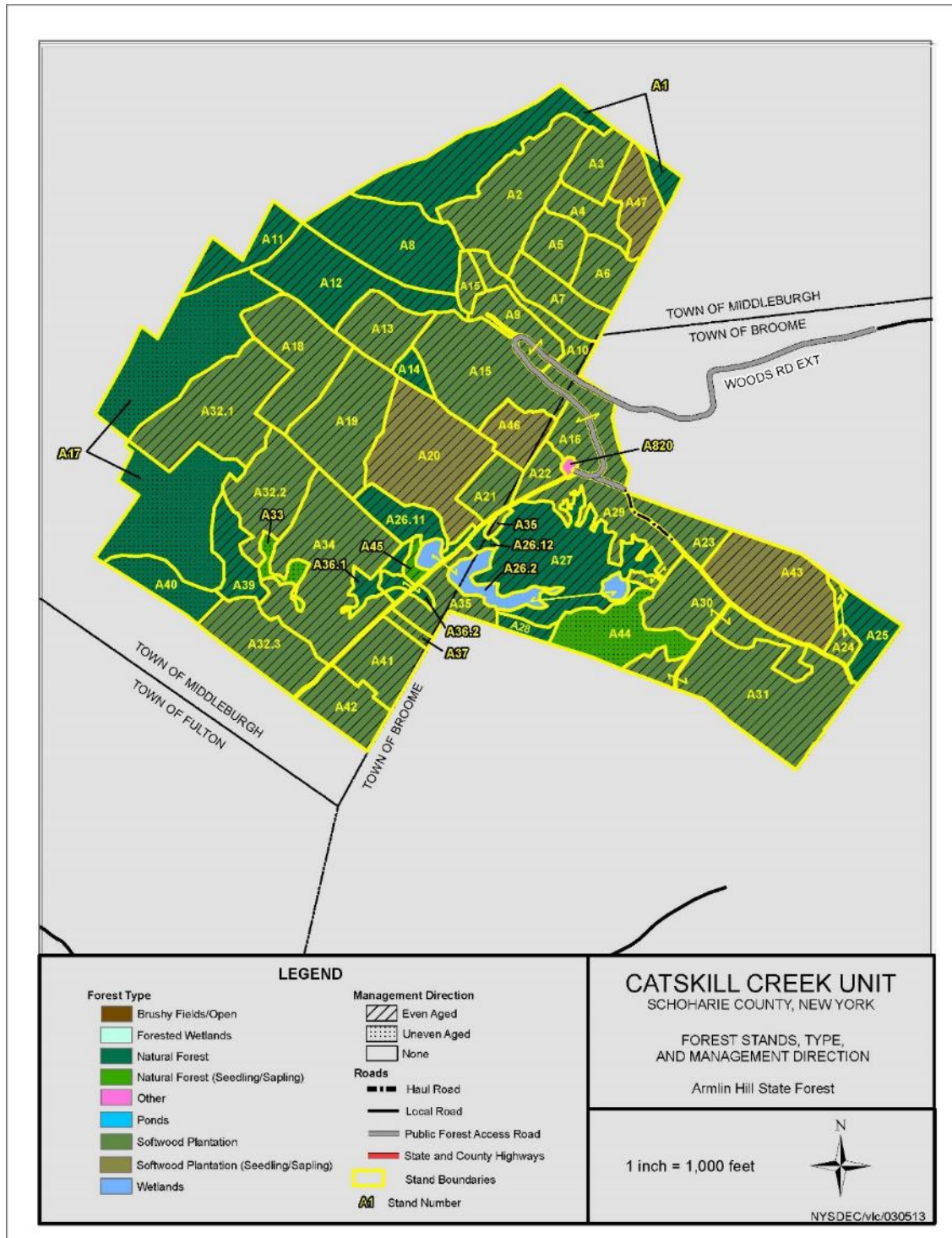
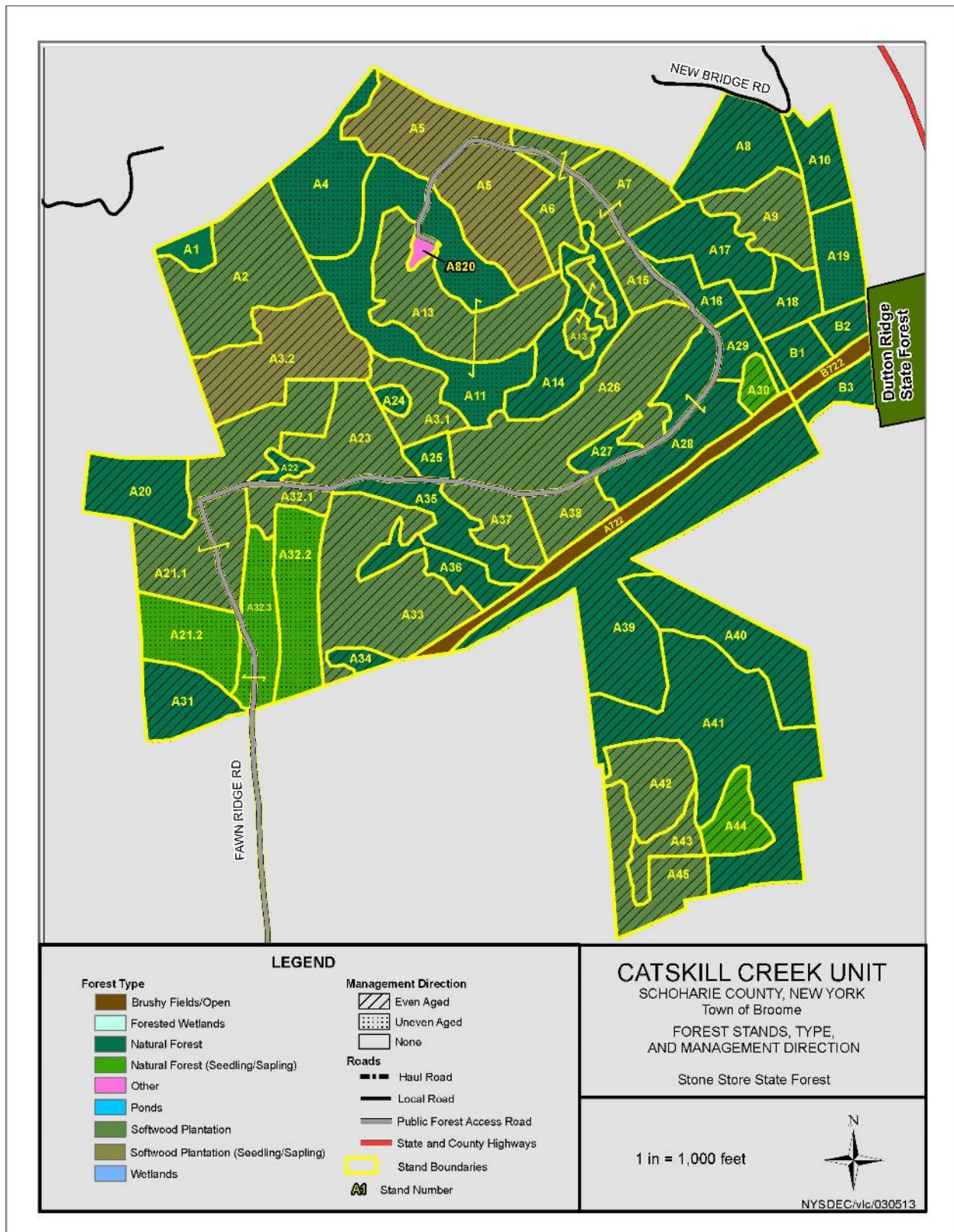


FIGURE 4. – CURRENT FOREST TYPE, MANAGEMENT DIRECTION, AND FOREST STAND IDENTIFICATION NUMBER MAPS





## APPENDICES & FIGURES

FIGURE 4. – CURRENT FOREST TYPE, MANAGEMENT DIRECTION, AND FOREST STAND IDENTIFICATION NUMBER MAPS

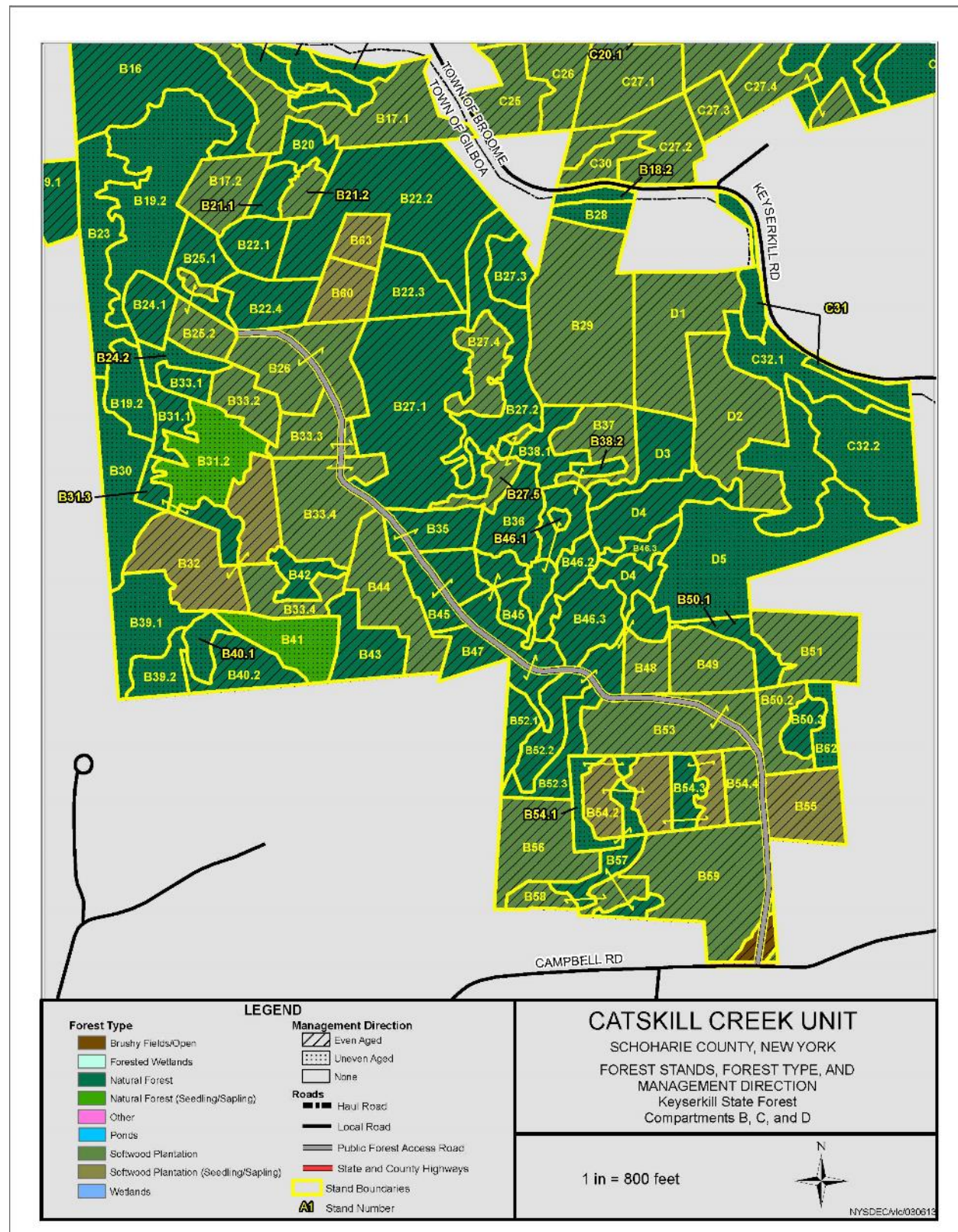
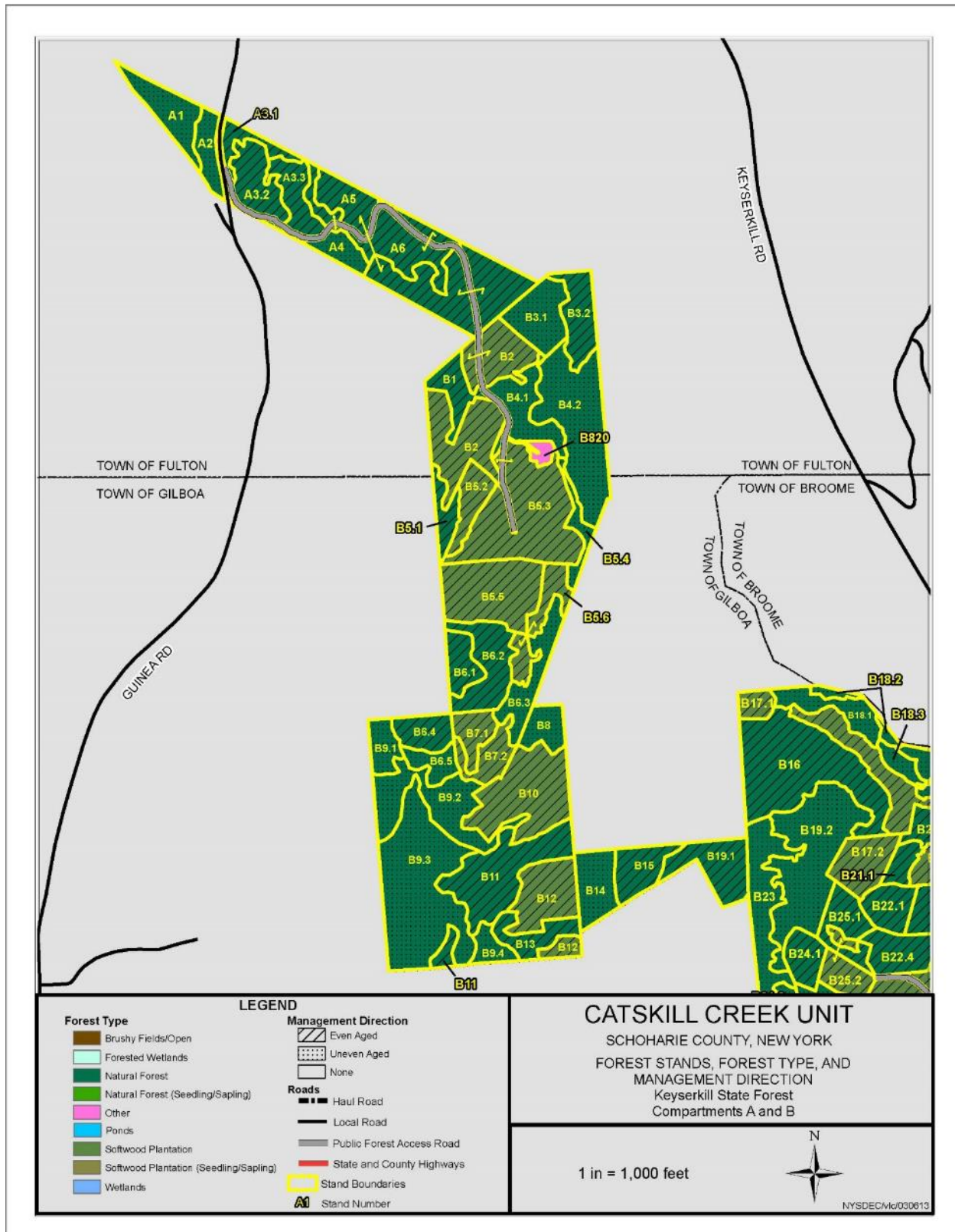


FIGURE 4. – CURRENT FOREST TYPE, MANAGEMENT DIRECTION, AND FOREST STAND IDENTIFICATION NUMBER MAPS





## APPENDICES & FIGURES

FIGURE 4. – CURRENT FOREST TYPE, MANAGEMENT DIRECTION, AND FOREST STAND IDENTIFICATION NUMBER MAPS

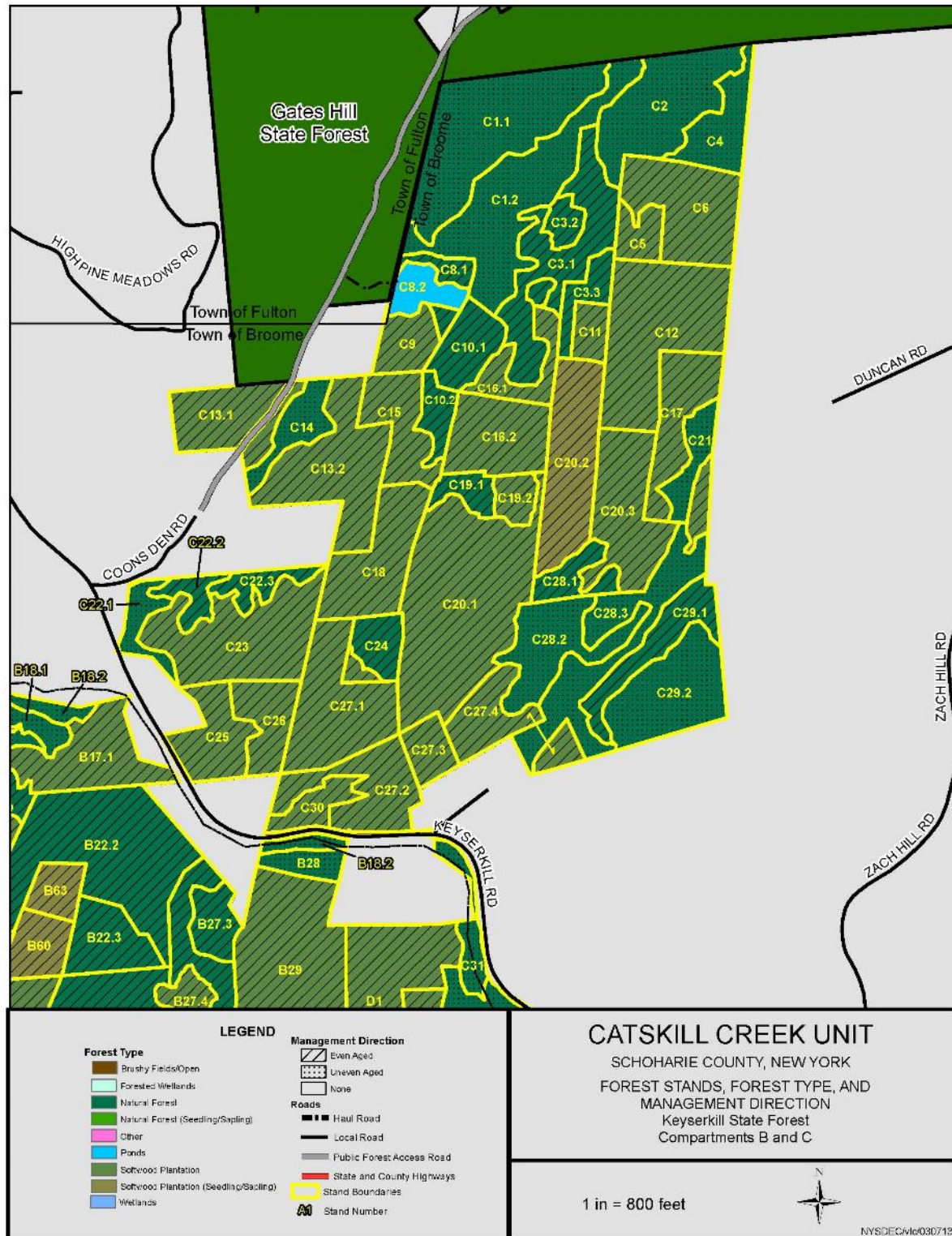
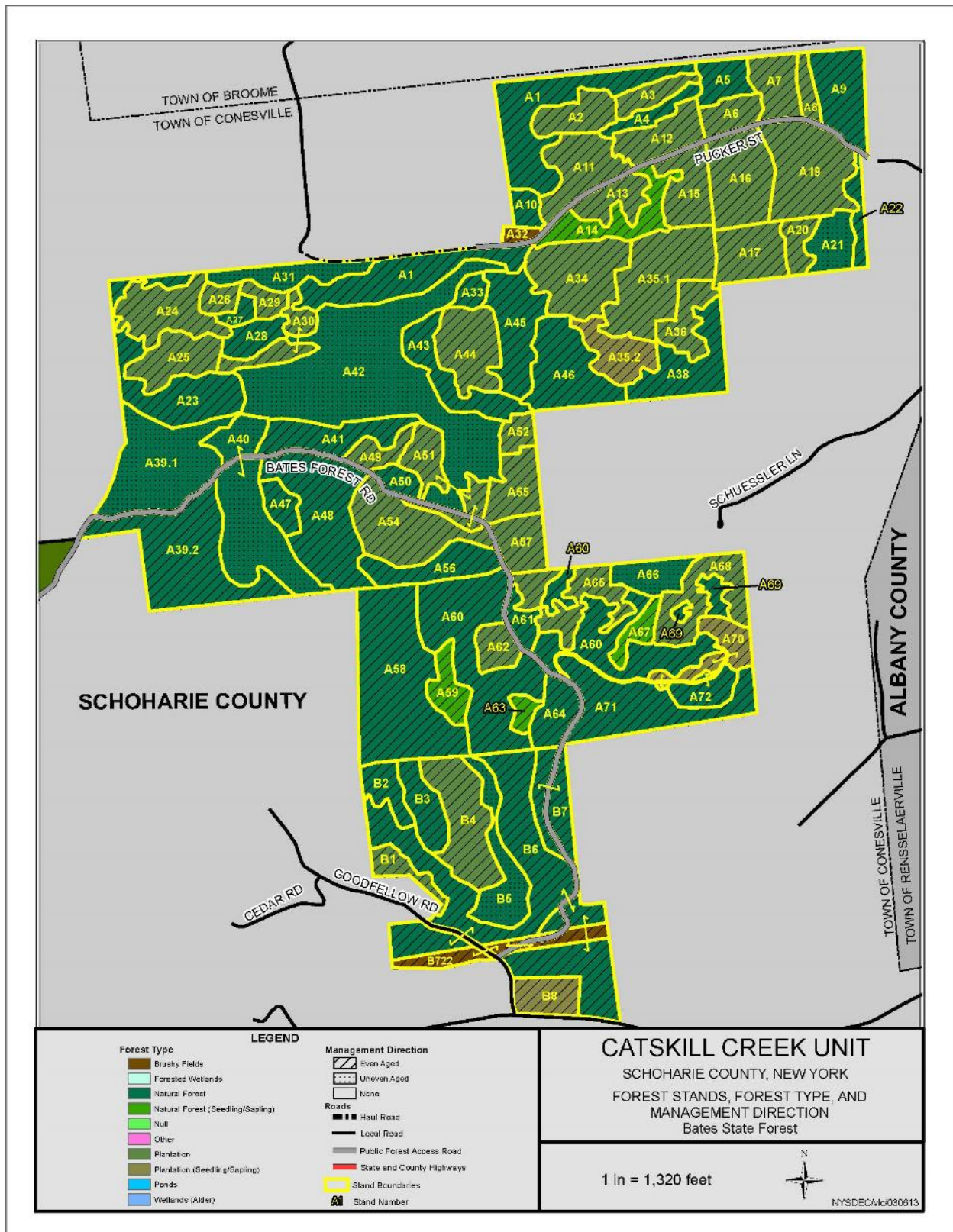


FIGURE 4. – CURRENT FOREST TYPE, MANAGEMENT DIRECTION, AND FOREST STAND IDENTIFICATION NUMBER MAPS





## APPENDICES & FIGURES

FIGURE 4. – CURRENT FOREST TYPE, MANAGEMENT DIRECTION, AND FOREST STAND IDENTIFICATION NUMBER MAPS

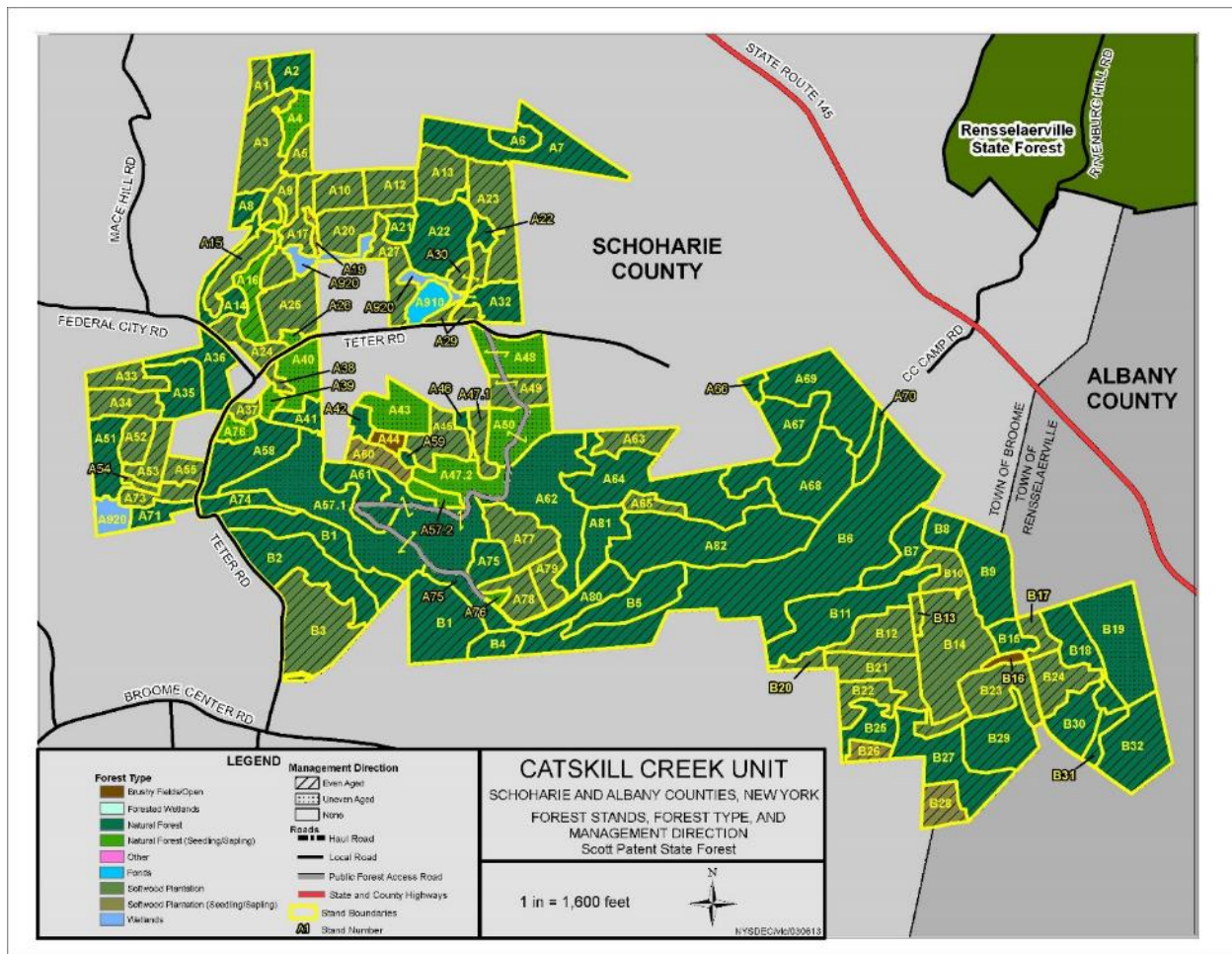
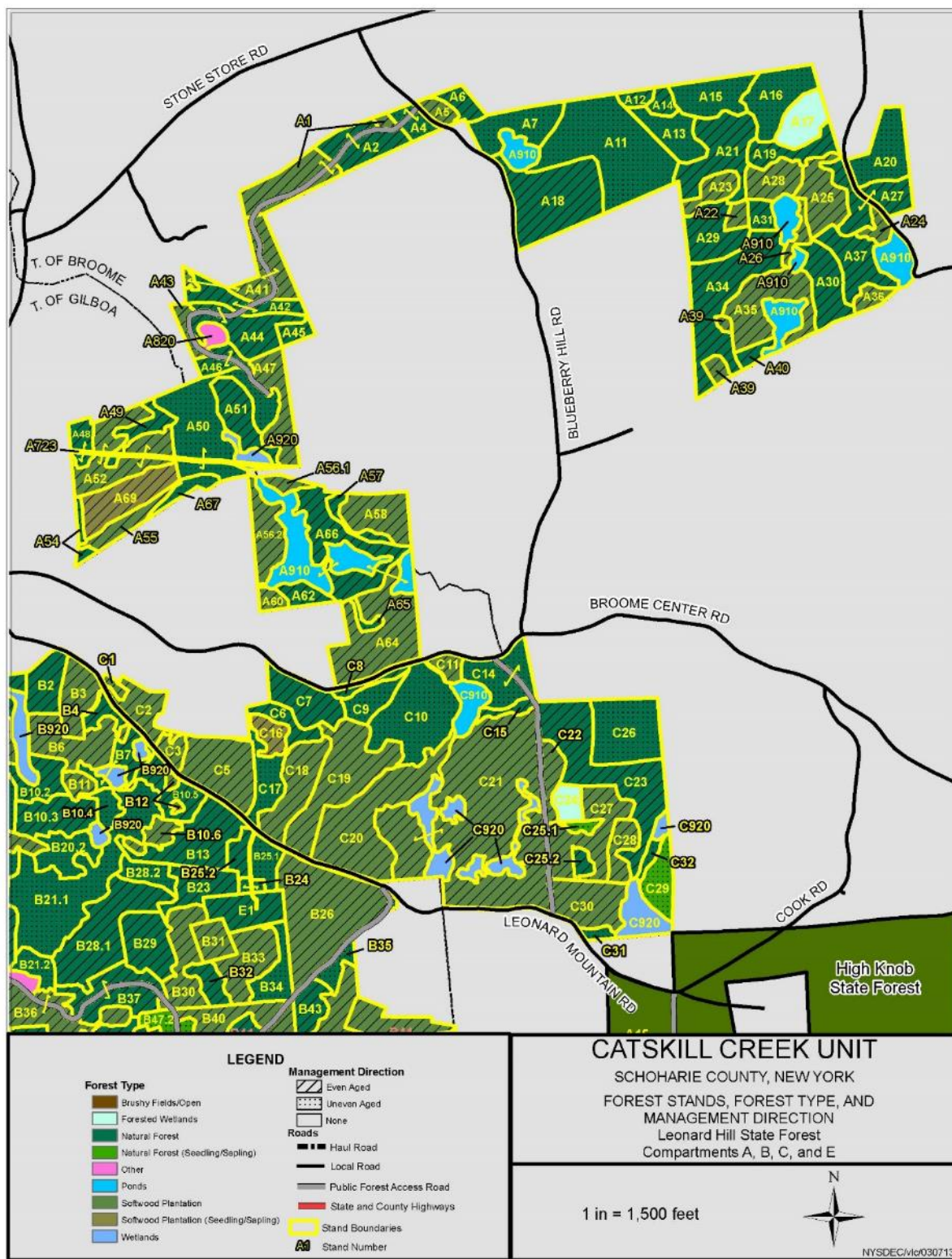


FIGURE 4. – CURRENT FOREST TYPE, MANAGEMENT DIRECTION, AND FOREST STAND IDENTIFICATION NUMBER MAPS





## APPENDICES & FIGURES

FIGURE 4. – CURRENT FOREST TYPE, MANAGEMENT DIRECTION, AND FOREST STAND IDENTIFICATION NUMBER MAPS

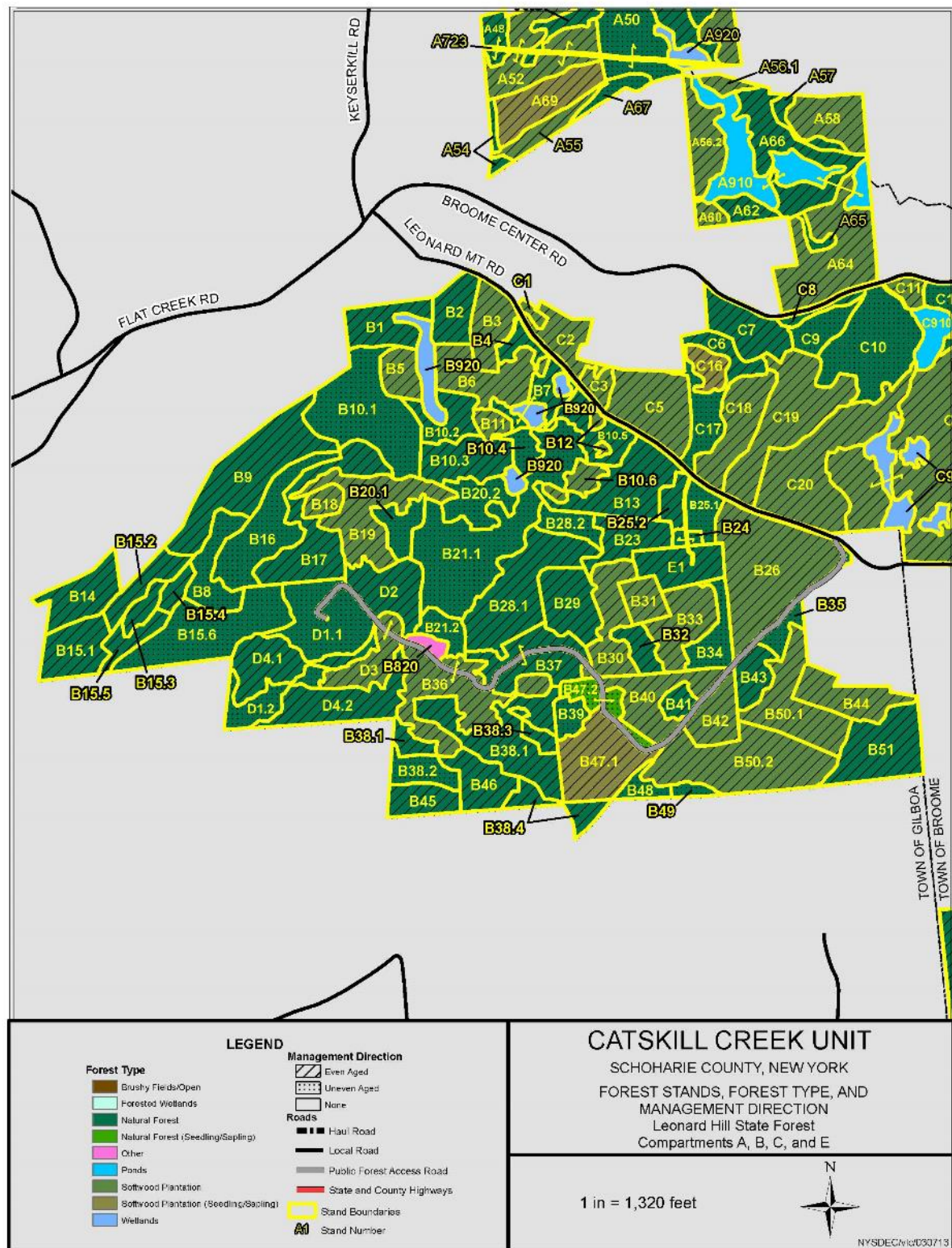


FIGURE 4. – CURRENT FOREST TYPE, MANAGEMENT DIRECTION, AND FOREST STAND IDENTIFICATION NUMBER MAPS

