



Department of
Environmental
Conservation

Chenango Trail

UNIT MANAGEMENT PLAN

DRAFT

Town of Colesville, Broome County and Towns of
Afton, Bainbridge, Coventry, Greene, and Oxford,
Chenango County, NY

April 2023

DIVISION OF LANDS AND FORESTS

Bureau of State Land Management, Region 7

2715 State Highway 80

Sherburne, NY 13460

Chenango Trail

Unit Management Plan

A planning unit consisting of the Beaver Flow, Bobell Hill, Bumps Creek, Coventry, and Oak Ridge State Forests, in Broome and Chenango Counties, NY.

April 2023

Prepared by the Chenango Trail Unit Management Planning Team:

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<https://www.dec.ny.gov/lands/4979.html>

Web addresses are provided throughout the document for additional reference. If a DEC URL should become outdated, please try the search engine on the Department homepage, www.dec.ny.gov.

DEC's Mission

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

Vision Statement

State Forests on the Chenango Trail 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

CHENANGO TRAIL	1
DEC'S MISSION.....	2
VISION STATEMENT.....	2
TABLE OF CONTENTS	3
PREFACE.....	6
STATE FOREST OVERVIEW	6
<i>Legal Considerations</i>	6
MANAGEMENT PLANNING OVERVIEW	6
<i>Contact Cooperation, and Consultation with Indian Nations</i>	6
<i>Public Participation</i>	7
<i>Strategic Plan for State Forest Management</i>	7
DEC'S MANAGEMENT APPROACH AND GOALS	7
<i>Forest Certification of State Forests</i>	7
<i>Ecosystem Management Approach</i>	8
<i>Ecosystem Management Strategies</i>	9
<i>State Forest Management Goals</i>	10
LOCATION MAP	11
INFORMATION ON THE CHENANGO TRAIL UNIT.....	12
STATE LANDS IN THE UNIT.....	12
<i>Facilities Not Included in this UMP</i>	12
HIGH CONSERVATION VALUE FORESTS	12
SOILS.....	13
WATER RESOURCES.....	14
<i>Major Streams, Rivers and Water Bodies</i>	15
BIODIVERSITY	15
<i>Common Species</i>	15
<i>Habitat</i>	16
<i>Representative Sample Areas</i>	16
<i>At-Risk Species</i>	18
VISUAL RESOURCES.....	21
HISTORIC AND CULTURAL RESOURCES.....	21
<i>State Forest History</i>	21
<i>History of the Unit</i>	21
<i>Inventory of Resources</i>	24
<i>Historic and Archaeological Site Protection</i>	26
<i>Archaeological Research</i>	26
REAL PROPERTY.....	26
<i>Boundary Lines</i>	26
<i>Exceptions and Deeded Restrictions</i>	27
<i>Encroachments</i>	28
<i>Land Acquisition</i>	28
INFRASTRUCTURE	28
<i>Roads and Trails</i>	29
<i>Signs / Kiosks</i>	30
<i>Boating and Fishing Facilities</i>	30
<i>Designated Campsites and Lean-tos</i>	30
<i>Communications Facilities</i>	30
<i>Utility Transmission and Collection Facilities</i>	30
<i>Non-recreational Uses</i>	30
FORMAL AND INFORMAL PARTNERSHIPS AND AGREEMENTS.....	30
RECREATION.....	31
<i>Wildlife-related Recreation</i>	31
<i>Camping</i>	32

Table of Contents

STATE FOREST OVERVIEW

<i>Water-based Recreation</i>	32
<i>Trail-based Recreation</i>	33
<i>Motorized Access</i>	33
<i>Other Trail-based Activities</i>	33
<i>Other Recreational Activities</i>	34
<i>Overall Assessment of the Level of Recreational Development</i>	34
ACCESSIBILITY	34
<i>Application of the Americans with Disabilities Act (ADA)</i>	34
MINERAL RESOURCES.....	35
<i>Oil, Gas and Solution Exploration and Development</i>	35
<i>Pipelines</i>	35
<i>Mining</i>	36
SUPPORTING LOCAL COMMUNITIES	36
<i>Tourism</i>	36
<i>Taxes Paid</i>	36
FOREST PRODUCTS.....	37
<i>Timber</i>	37
<i>Non-Timber Forest Products</i>	39
FOREST HEALTH.....	40
<i>Invasive Species</i>	40
<i>Managing Deer Impacts</i>	47
SUMMARY OF ECOREGION ASSESSMENTS	49
ECOREGION SUMMARY.....	49
ECOREGION ASSESSMENT	50
LOCAL LANDSCAPE CONDITIONS.....	50
HABITAT RELATED DEMANDS.....	51
MANAGEMENT OBJECTIVES AND ACTIONS.....	53
OBJECTIVES	53
<i>Ecosystem Management</i>	53
<i>Resource Protection</i>	54
<i>Infrastructure and Real Property</i>	56
<i>Public/Permitted Use</i>	57
<i>Forest Management and Health</i>	60
TEN-YEAR LIST OF MANAGEMENT ACTIONS.....	64
<i>Unit-wide Actions</i>	64
<i>Bobell Hill State Forest Actions</i>	64
<i>Beaver Flow State Forest Actions</i>	64
<i>Bumps Creek State Forest Actions</i>	64
<i>Coventry State Forest Actions</i>	65
<i>Oak Ridge State Forest Actions</i>	65
LIST OF PREVIOUS MANAGEMENT ACTIONS COMPLETED	66
<i>Unit Actions</i>	66
FOREST TYPE CODES.....	69
NH - NORTHERN HARDWOOD.....	69
MANAGEMENT DIRECTION CODE.....	69
TREATMENT TYPE CODES.....	69
LAND MANAGEMENT ACTION SCHEDULES	70
<i>Table III.F. -Land Management Action Schedule (by State Forest)</i>	70
<i>Table III.G. -Land Management Action Schedule 2022-2030 (by Year)</i>	80
<i>Table III.H. -Stands without Scheduled Management within 10 Years (by State Forest)</i>	84
<i>Table III.I. -Resource Protection and Non-Management Areas (by State Forest)</i>	86
BIBLIOGRAPHY	91
GLOSSARY.....	92
APPENDICES & FIGURES.....	99
APPENDIX A - SUMMARY OF COMMENTS DURING PUBLIC COMMENT PERIOD.....	99

APPENDIX B - RESPONSIVENESS SUMMARY TO PUBLIC COMMENTS..... 100

APPENDIX C - STATE ENVIRONMENTAL QUALITY REVIEW (SEQR) 101

FIGURES 1 – ASSETS, INFRASTRUCTURE, TOPOGRAPHY, AND WATER RESOURCES..... 103

FIGURE 2 – FOREST STAND ID MAPS..... 111

FIGURE 3 – COVER TYPE & MANAGEMENT DIRECTION MAPS..... 119

Preface

STATE FOREST OVERVIEW

Preface

State Forest Overview

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

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

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

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

Legal Considerations

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

For additional information on DEC's legal rights and responsibilities, please review the statewide Strategic Plan for State Forest Management (SPSFM) pages 37 and 336 at <http://www.dec.ny.gov/lands/64567.html>.

Management Planning Overview

The Chenango Trail Unit Management Plan (UMP) is based on a long-range vision for the management of the Beaver Flow, Bobell Hill, Bumps Creek, Coventry, and Oak Ridge 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.

Contact Cooperation, and Consultation with Indian Nations

The Commissioner's Policy (CP-42), available at <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

DEC'S MANAGEMENT APPROACH and Goals

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 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 considered 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.

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 60 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 23 at <http://www.dec.ny.gov/lands/64567.html>.

DEC's Management Approach and Goals

Forest Certification of State Forests

In 2000, New York State DEC-Bureau of State Land Management received Forest Stewardship Council® (FSC®) certification under an independent audit conducted by the National Wildlife Federation - SmartWood Program. This certification included 720,000 acres of State Forests in DEC Regions 3 through 9 managed for water quality protection, recreation, wildlife habitat,

Preface

DEC'S MANAGEMENT APPROACH and Goals

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

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

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

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

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



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Ecosystem Management Approach

State Forests on this Unit will be managed using an ecosystem management approach which will holistically integrate principles of landscape ecology and multiple use management to promote habitat biodiversity, while enhancing the overall health and resiliency of the State Forests.

Ecosystem management is a process that considers the total environment - including all non-living and living components from soil micro-organisms to large mammals, their complex

DEC'S MANAGEMENT APPROACH and Goals

interrelationships and habitat requirements and all social, cultural, and economic factors. For more information on ecosystem management, see SPSFM page 43 at <http://www.dec.ny.gov/lands/64567.html>.

Multiple-use Management

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

Landscape Ecology

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



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

Ecosystem Management Strategies

The following strategies are the tools at DEC's disposal, which will be carefully employed to practice landscape ecology and multiple-use management on the Unit. The management strategy will affect species composition and habitat in both the short and long term. For more information on these management strategies, please see SPSFM page 93 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.

Preface

DEC'S MANAGEMENT APPROACH and Goals

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 continue 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. DEC will manage State Forests so that they demonstrate a high degree of health as measured by multiple criteria, including the biodiversity that they support.

Goal 2 – Maintain Man-made State Forest Assets

Man-made assets on State Forests include structures, boundary lines, trails, roads and any other object or infrastructure that exists because it was put there by people. Many of these items need no more than a periodic check to make sure they are still in working order. Others need regular maintenance to counteract the wear of regular use. It is the Agency'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 each individual State Forest, DEC will endeavor to provide recreational opportunities to all those who wish to experience the outdoors in a relatively undeveloped setting.

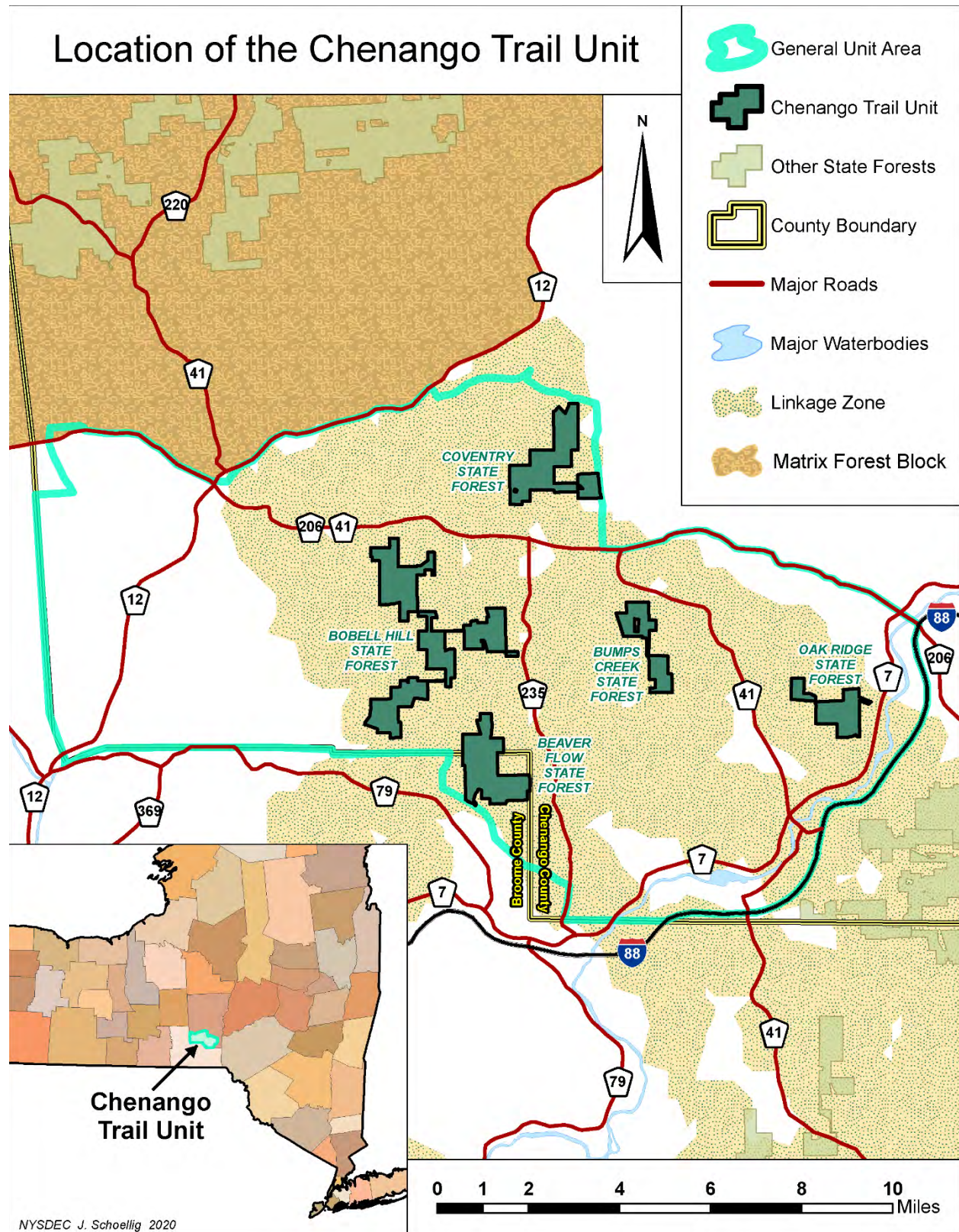
Goal 4 – Provide Economic Benefits to the People of the State

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." In considering all proposed actions, DEC 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. Agency 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 CHENANGO TRAIL UNIT

STATE LANDS IN THE UNIT

Information on the Chenango Trail 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. Individual web pages feature a map of the State Forest with recreational information and natural features.

<i>Table I.A. – State Lands in the Unit</i>	
Facility Name and Webpage	Acreage
Beaver Flow State Forest – http://www.dec.ny.gov/lands/8252.html	1,028 ac.
Bobell Hill State Forest – http://www.dec.ny.gov/lands/8246.html	2,156 ac.
Bumps Creek State Forest – http://www.dec.ny.gov/lands/8234.html	527 ac.
Coventry State Forest – http://www.dec.ny.gov/lands/8222.html	1,168 ac.
Oak Ridge State Forest – http://www.dec.ny.gov/lands/8141.html	576 ac.
Unit Total	5,455 ac.

Facilities Not Included in this UMP

A DEC boat launch site located adjacent to State Highway 41 within the Village of Afton provides public access to the Susquehanna River.

High Conservation Value Forests

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

1. Rare Community - Forest areas that are in or contain rare, threatened or endangered ecosystems.
2. Special Treatment - Forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g., endemism, endangered species, and refugia).

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

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

The Chenango Trail Unit has one area identified as having high conservation value on the Beaver Flow State Forest under the watershed classification. This HCVF consists of the southern two thirds of the Beaver Flow State Forest falling within Broome County, and totaling 727 acres. More information on HCVFs is available at <http://www.dec.ny.gov/lands/42947.html>.

Soils

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

Mardin, Volusia, and Lordstown soils are the overriding dominant soil types underlying the unit. Lordstown/Oquaga, Volusia/Morris, and Chippewa/Norwich complexes are much less abundant but noteworthy soil types occurring. Many the unit soils are classified as channery silt loams, with lesser quantities classified as silt loams. A significant number of soils are also described as being stony. Drainage is highly variable, both over the unit and within each forest, though totals for each class are similarly abundant overall when compared over the entire unit. None of the soils on the unit are classified as highly erodible, though many of the poorly drained Volusia and Mardin soils are potentially susceptible to rutting.

In rough terms, nearly 90% of the Beaver Flow State Forest is underlain by Volusia or Mardin soil types. The two Bobell Hill State Forests contain primarily three soil types Volusia, Mardin and Lordstown. Bumps Creek State Forest has the same three main soil types, but Mardin soils are more common than Volusia. Coventry State Forest contains more than 80% Volusia and Mardin soil types, though some Chippewa/Norwich and Volusia/Norwich complexes are also significant. The Oak Ridge State Forest is unique within the unit as the vast majority of soils located there are Lordstown or Lordstown/Oquaga complexes, though Volusia and Mardin soil types are also extant.

INFORMATION ON THE CHENANGO TRAIL UNIT

WATER RESOURCES

Table I.B. - Soils

Facility Name	Predominant Soil Type(s)
Beaver Flow State Forest Broome-Chenango 1	Volusia and Mardin
Bobell Hill State Forest Chenango 10	Volusia, Mardin, and Lordstown
Oak Ridge State Forest Chenango 13	Lordstown and Lordstown/Oquaga complexes
Coventry State Forest Chenango 27	Volusia and Mardin Chippewa/Norwich and Volusia/Morris complexes
Bobell Hill State Forest Chenango 30	Volusia, Mardin, and Lordstown
Bumps Creek State Forest Chenango 33	Mardin, Volusia, and Lordstown

Water Resources

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

Table I.C. – Water Resources (see maps also)

Watersheds		
Hydrologic unit(s)	Wheeler Brook-Chenango River, Page Brook, Wiley Brook, Kelsey Brook, Yaleville Brook-Susquehanna River, and Cornell Creek-Susquehanna River	
Watershed HCVF		727 ac.
Wetlands		
New York State Regulated Freshwater Wetlands		45 ac.
All Wetlands		324 ac.
Streams/Rivers*		
Perennial streams/rivers	AA or A	0 mi.

	B	0 mi.
	C	11.6 mi.
	D	0 mi.
Trout streams/rivers	AA (T), A (T), B (T), or C (T)	1.7 mi.
Water Bodies		
Water bodies (open-water ponds and lakes)		20 ac.

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

Major Streams, Rivers and Water Bodies

Although both the Chenango and Susquehanna Rivers provide fishing and boating opportunities as they flow through outer portions of the unit, neither cross any of the State Forests on the unit. There are portions of two moderate sized (10-12 acre) ponds located on the Coventry State Forest providing some opportunity for recreational fishing.

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: 4367D, 4467A, 4467B, 4368D, 4468A, 4468C, 4468D, and 4567A.

Blocks listed are those containing all or portions of the State Forests on the unit. Species listings, breeding status, state and global species rankings, and locations for the Breeding Bird Atlas blocks are available at <http://www.dec.ny.gov/animals/7312.html>.

- Herp Atlas Block Names: Brisben, West Bainbridge, Belden, and Sidney.

Block names and the area they cover correspond to the USGS 7.5' topographic quadrangles of the same name. Herp Atlas information on herpetofauna including amphibians, toads, frogs, turtles, lizards, and snakes can be found at <http://www.dec.ny.gov/animals/7140.html>.

INFORMATION ON THE CHENANGO TRAIL UNIT

BIODIVERSITY

- Game Species Harvest Levels WMU Number: 7P

Hunting regulations, Wildlife Management Unit (WMU) maps, and harvest information (deer take, bear take, turkey harvest, etc.) is available at

<http://www.dec.ny.gov/outdoor/hunting.html>.

Habitat

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

Vegetative Types and Stages

<i>Table I.D. - Vegetative Types and Stages within the Unit (see maps also)</i>					
Vegetative Type	Acres by Size Class				% of Total
	0 -5 in	6 - 11 in	12+ in	Other	
Natural Forest Hardwood	142	279	2049		45.3
Natural Forest Conifer	15	350	998		25.0
Plantation Softwoods	27	0	1447		27.0
Wetland				40	0.7
Ponds/Small Waterbodies				37	0.7
Open/Brush				33	0.6
Other (Roads, Parking lots, etc.)				38	0.7
Total (Acres)	184	629	4494	148	100%

Representative Sample Areas

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

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

RSAs can simply be viewed as an effort to keep high quality examples of common ecosystems or assemblages from becoming rare in the landscape. An RSA designation does not prevent future management and in certain cases might require silvicultural treatment to achieve site conditions that will perpetuate the representative community. In addition, treatment of an RSA to mitigate unfavorable conditions that threaten the continuation of the target community will be

allowed (e.g., fire, natural pests or pathogens). Although allowed, silvicultural treatment or infrastructure development should not impact the RSA in a way that will degrade or eliminate the viability of the specific assemblage or community. For more information on RSAs please go to <http://www.dec.ny.gov/lands/42947.html>.

<i>Table I.F. – RSAs and Rare Community HCFVs within the Unit</i>				
Community Name	Vegetative Type	Facility Name / Stand Numbers	NYNHP Rank	Acreage
Representative Sample Areas of Commonly Occurring Natural Communities				
Rare Community HCVF				

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 97 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. For more information regarding Special Management Zones please see www.dec.ny.gov/sfsmzbuffers.pdf

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

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

INFORMATION ON THE CHENANGO TRAIL UNIT

BIODIVERSITY

- Matrix Forest Blocks 0 acres
- Forest Landscape Connectivity Corridors 5,455 acres

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

At-Risk Species

The presence of at-risk species and communities on the Chenango Trail 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 133 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 Natural Heritage Program species guides.
- Consultation of the NYS Comprehensive Wildlife Conservation Strategy.

No endangered, or threatened species are known to exist within the state forests of the unit at this time. However, predicted suitable habitat exists on the unit for two species of dragonfly and one species of butterfly. At the larger landscape level, the presence of several at-risk species has been recorded.

Several species of forest raptor including the Cooper's Hawk, Northern Goshawk, Red-shouldered Hawk, and Sharp-shinned Hawk, along with the American Bittern (a member of the heron family) and are listed as Species of Special Concern and have been reported within the unit. Department research is being conducted on the presence and behavior of nesting raptors and the effects management practices have upon fledgling survival on State Forests within the unit and across the wider region.

Table I.F. lists the predicted and confirmed at-risk species on the landscape and the unit, their protective status in New York State, and a short description of their required habitats. The table divides species into two groups, those predicted as possible on the unit, and those currently existing on the surrounding landscape and that may be affected by State Forest management.

Table I.F. - At-Risk Species*

INFORMATION ON THE CHENANGO TRAIL UNIT

BIODIVERSITY

Species Name	Habitat	Record Source	State Rank	NYS Status
<i>Predicted on the Unit</i>				
Arrowhead Spiketail (<i>Cordulegaster obliqua</i>)	Clean and stable, very small, sluggish, seep fed forest streams, often temporary, mulch bottomed with silty substrate and vegetated banks, sometimes seeps with muddy bottoms, nearby sunny clearings are utilized for hunting.	Predicted (PRO)	S3	Not Listed
Comet Darner (<i>Anax longipes</i>)	Shallow, sunny, vegetated ponds with forested edges, tending to have extensive beds with an abundance of floating vegetation and grasses in nutrient-rich conditions, waters must be fishless.	Predicted (PRO)	S2S3	Not Listed
West Virginia White (<i>Pieris virginiensis</i>)	Relatively undisturbed, rich, moist deciduous woodlands primarily with beech and sugar maple, nectar from toothworts, spring beauty and violets, very prone to confusion of usual larval host (toothworts) with exotic garlic mustard on which larva are unable to survive.	Predicted (PRO)	S3	Not Listed
Species Name	Habitat	Record Source	State Rank	NYS Status
<i>Confirmed or Predicted on the Landscape</i>				
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	The Chenango and Susquehanna Rivers, or other large water bodies supporting healthy waterfowl and fish prey populations, large upper canopy or super canopy trees for perching and nest sites.	Confirmed (SHU and NYNHP)	S2S3B, SN2	Threatened
Brook Floater (<i>Alasmidonta varicose</i>)	High relief creeks and small rivers, among rocks in gravel and sand substrates, upper portions of large watersheds but not headwaters, within intact upland forest, highly sensitive to thermal rise.	Confirmed (NYNHP)	S1	Threatened
Green Floater (<i>Lasmigona subviridis</i>)	Slow moving to calm backwaters of the Chenango and Susquehanna Rivers, in fine sand, silt, or muddy	Confirmed (NYNHP)	S1S2	Threatened

INFORMATION ON THE CHENANGO TRAIL UNIT

BIODIVERSITY

	substrates, thrives in nutrient rich environments, larval stage exploits an array of host fish species.			
Hellbender (<i>Cryptobranchus alleganiensis</i>)	Cold, and moderate to fast-flowing sections of the Susquehanna River, shallow sand and gravel bottoms with an abundance of large jumbled flat rock slabs for dens.	Confirmed (ESU)	S2	Special Concern
Northern Harrier (<i>Circus cyaneus</i>)	Migratory seasonal inhabitant of large undisturbed tracts of wetland, wide-open grasslands and marshes with low thick vegetation, ground nests require thick-stalked plants like cattails, alder, and willow with an inner lining of grasses, sedges, and rushes, prey primarily meadow voles, along with mice, some small mammals and birds.	Confirmed (BBA and NYNHP)	S3B, S3N	Threatened

Table I.F. - Key to Codes

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

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

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

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

S2S3 - Imperiled or Vulnerable in New York: Very vulnerable to disappearing from New York, or vulnerable to becoming imperiled in New York, due to rarity or other factors; typically 6 to 80 populations or locations in New York, few individuals, restricted range, few remaining acres (or miles of stream), and/or recent and widespread declines. More information is needed to assign either S2 or S3.

S3B, S3N - Typically 21 to 100 breeding occurrences in New York, or limited breeding acreage and typically 20 to 100 non-breeding (usually winter residents) are in New York.

INFORMATION ON THE CHENANGO TRAIL UNIT

HISTORIC AND CULTURAL RESOURCES

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

Record Source

BBA - Breeding Bird Atlas

ESU - Endangered Species Unit

NYNHP - New York Natural Heritage Program

PRO - Predicted Richness Overlay

SHU - Significant Habitat Unit

New York State Status

Endangered - Endangered Species (New York)

Threatened - Threatened Species (New York)

Special Concern - Protected, Special Concern Species in New York

Visual Resources

The aesthetic quality of State Forests is considered in management activity across the unit. However, some areas have better potential to preserve or create unique opportunities for public enjoyment. These especially scenic areas are listed below. For information on the protection of visual resources, please see SPSFM page 146 at <http://www.dec.ny.gov/lands/64567.html>.

The heavily forested nature of the State Forests on this Unit provide few naturally open settings or vistas for viewing, however, a few points of interest do exist. Two interesting water related visual resources are located on the Coventry State Forest. An open wetland is readily visible to travelers along the North Road as it bisects the forest. Second, just a short walk from the small parking area adjacent to Owlville Road, provides open viewing along with easy carry in canoe access to one of the forests two ponds.

Although not located in an area providing open views or ready access, a deep gorge formed by run-off at the end of the last ice age cuts through the eastern portion of the Oak Ridge State Forest. For those willing to explore off the beaten path, the steeply forested gorge provides unique scenery as Guthrie Brook flows through its bottom.

Historic and Cultural Resources

State Forest History

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

History of the Unit

The first inhabitants of these lands were Native Americans. In the middle of the fifteenth century the Iroquois Confederacy is believed to have been formed. It provided a means of maintaining

INFORMATION ON THE CHENANGO TRAIL UNIT

HISTORIC AND CULTURAL RESOURCES

peace between its original five related member nations, the Oneida, the Onondaga, the Cayuga, the Seneca, and the Mohawk. These five nations, and later the distantly related Tuscarora who were admitted as a sixth member nation having migrated from parts of Virginia and North Carolina, controlled most of the area of what is now central New York. Each member nation was allocated a designated territory. The forest lands of the unit fell under the control of the Oneida. Whereas most village settlements would have been located along waterways of the larger valleys, these hilltop forest lands were most probably utilized simply as supplemental hunting grounds.

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

The Cherry Valley Massacre occurred in November of 1778 when hundreds of British soldiers and allied Seneca Indians attacked the Village of Cherry Valley during The Revolutionary War. More than 70 American women, children, and soldiers were killed in the attack. In response, General Sullivan mobilized to move troops from present day Chenango Forks to Cherry Valley. The first leg of the journey would take him from Chenango Forks to present day Bainbridge. Their route would require opening a road through what was described as a solid wilderness. The path they choose went first to North Fenton, then along a portion of Lower Page Brook, continued on a line which is now the Wylie-Horton Road, passed near Coventryville, and then finished roughly along what is now Route 206 into the future Village of Bainbridge. This march created a new road cutting across the center of the unit and portions of future State Forest lands. Only portions of the trail still exist today, some still in use as segments of modern road while other portions are hidden by fully regrown forests and only barely discernible. Though it played an important role in the opening and future development of the area. This pathway came to be referred to as The Chenango Trail, from which the unit derives its name.

In 1785 area lands was purchased from the Oneida and Tuscarora people, with the first settlement made by Simon Jones that same year. His settlement now lies within the Town of Coventry. Only a handful of other settlers would come into the area over the next few years. The first European settlement in Afton would follow a year later in 1786, Bainbridge in 1788, Oxford in 1789, and Greene in 1792. Nearly the entirety of the townships covering the unit today were divided from the original extent of Bainbridge.

Since the vast majority of the State Forests on the unit lie within or on the immediate edges of the Town of Coventry further focus will center on the history of this township. Two books have been written providing a thorough documentation of the people who settled in the Town of Coventry between 1785 and 1975. The first book was written by Oliver Judd in 1912 covering the early period of first settlement 1785 through 1900. The second book from 1975 by Catherine Bickford covers the years 1900 to 1975. The information following has been obtained from these two references.

As mentioned earlier, the first settler to the area was Simon Jones. Jones settled on 100 acres along the newly opened Chenango Trail having come to the area from Coventry, Connecticut.

INFORMATION ON THE CHENANGO TRAIL UNIT

HISTORIC AND CULTURAL RESOURCES

This new location would later derive its name from that town of Coventry. Other early settlers also came from the Coventry area and similar locations in Connecticut including Cheshire and New Haven. Emigration of these early Puritans extended from 1785 until about 1815.

Coventry and the nearby areas are located on relatively high ground, occupying a portion of the large ridge formed between the Susquehanna River Valley to the south and east, and the Chenango River Valley to the west and north. Some of the early settlers reportedly choose this high ground out of fear of miasmatic disease and reputed sicknesses of the lowlands and river valleys.

There are many stories and quotes describing the wilderness characteristics of the area as it was first being settled. Excerpts of these descriptions follow, "...the then new Coventry was covered with dense forests, inhabited by wild beasts, and more dreaded savage foe, the red man..." and, "...the forest was dense, the trees of great size, wild game plentiful, panther, bear, wolf, deer, and small game in abundance."

The first product early area settlers could market was lumber. White pine was plentiful and here it was harvested to produce dimensional lumber and wooden shingles. Oliver Judd estimated that at one time there were 15 or more small stream run sawmills operating in the town. He also stated there were four copper shops running in the mid 1800's. The first tannery was built by John Foot in 1805, running until 1890.

Construction and expansion of The New York and Erie Railroad in the 1840's provided a new outlet for the movement of goods. Ready access to the railroad occurred once a plank road connecting Coventry to the nearest rail station located in Deposit was completed in 1852, marking a major improvement for transportation. Prior to this time most goods moved over the Erie and Chenango canals. The local Chenango Canal was operated from 1837 until 1879.

Farming was the major practice on the land by the mid 1800's. The most significant segment was the dairy business. It became the principal industry as lands became more cultivated and were also pastured for grazing. Apple production and the growing of potatoes were also prominent.

In 1855, just over 250,000 lbs. of butter and 6,500 lbs. of cheese were produced by the 2,140 cows counted within in the township. Further inventory showed there were 2,272 sheep, 1,771 oxen, 1,121 swine, and 534 horses listed as the other livestock counted. More than 31,000 bushels of apples were produced from the town's orchards and nearly 16,000 bu. of potatoes were grown the same year. Other crops produced and counted were 5,600 tons of hay, slightly over 900 bu. of winter grain, and just shy of 57,000 bu. of spring grain. While domestic cloth production yielded 1,343 yards of material.

By 1875 the population of the town was 1,345 people. Also, 21,326 of the 27,815 acres (77%) in the town were described as being improved, showing the high percentage of clearing occurring and the intensive use of the land during that time period. Stonewall fences are still an abundant reminder remaining across many state forests of past agricultural activities. Other artifacts include abandoned home and farm site foundations, cemeteries, scattered small farm quarry sites, and portions of abandoned road systems which all serve as decayed, but visible remnants of the past land use.

INFORMATION ON THE CHENANGO TRAIL UNIT

HISTORIC AND CULTURAL RESOURCES

By the early 1900's hilltop farmlands, being on the poorest soils, were becoming less productive. There was also a strong perception that the land was no longer of use because the timber had been removed. Many farms were driven into bankruptcy or abandoned altogether. After the start of The Great Depression in 1929 some of these vacant farmlands were brought into state ownership with the advent of the Hewitt Amendment. Public ownership was seen as a way to curtail erosion for watershed protection, restore nutrients to depleted soils, promote the production of timber for future utilization, and allow recreation and other kindred purposes on otherwise unproductive lands.

To quickly stabilize soils, plantations of spruce, pine, and larch were established through works performed by the Civilian Conservation Corps. These plantations, along with areas of natural regeneration, replaced a once mature forest formerly dominated by white pine, beech, hemlock, and oak. The result was a new forest with characteristics quite different from those of precolonial times.

In addition to the changed soils and altered forest types, State Forests are now experiencing relatively new threats including overabundant deer populations, introduced and invasive interfering species, and plantations that are nearing the end of their natural life expectancies. Each threat presents unique challenges for the current and future management of our State Forest lands.

Today Coventry is still a very rural township. It comprises an area of nearly 49 square miles with a population of just 1,569 people listed as of 2019, giving it a density of 32 people per square mile. In comparison, the surrounding townships of Afton, Bainbridge, Colesville, Greene, and Oxford have populations ranging from about 3,000 to 6,000 people. Resultant densities of 65 to 100 people per square mile still classify as rural, but at levels a bit higher than the area most immediate to the State Forest lands within the unit.

The names of the State Forests on the unit have generally been derived from local geographic locations or physical features. Beaver Flow State Forest takes its name from a series of beaver dams that have periodically impounded a tributary to Wylie Brook as it flows through the forest. The two connecting Bobell Hill State Forests are so named for the geographical feature of Bobell Hill as identified on the 1949 USGS topographical map. The initial reference found for the origination of the 'Bobell' spelling is from the 1901 Annual Report of the State Engineer and Surveyor of New York. It is most likely a typographic error corrupting the spelling of the nearby Bowbell Road, which passes through several parts of the two State Forests. The Bumps Creek State Forest contains portions of the headwaters of the nearby Bumps Creek. Coventry State Forest, at one time named Twin Ponds State Forest, gets its existing name from the nearby hamlet and township most of the forest is located within. The Oak Ridge State Forest is simply named for the ridgetop location and large stands of red oak covering much of the forest.

Inventory of Resources

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

INFORMATION ON THE CHENANGO TRAIL UNIT

HISTORIC AND CULTURAL RESOURCES

managed on public lands. For more information on protection of historic and cultural resources, please see SPSFM page 157 at <http://www.dec.ny.gov/lands/64567.html>.

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

- No cultural resource or historic sites were identified on the Unit by either the New York State Museum or the Office of Parks, Recreation and Historic Preservation inventory.
- No structures exist on the Unit to pose a public safety hazard.

The following generic cultural resources and archaeological site protection text will be valid only after a Structural Archaeological Assessment Form has been completed for planned site developments scheduled within the first two years of the plan or if you do not have any such developments within the first two years of the plan. Site developments include things such as roads, parking areas and the like.

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

Archaeological sites are, simply put, any location where materials (artifacts, eco-facts) or modifications to the landscape reveal evidence of past human activity. This includes a wide range of resources ranging from pre-contact Native American camps and villages to Euro-American homesteads, cemeteries and graves as well as mills and other and industrial sites. Such sites can be entirely subsurface or can contain above ground remains such as foundation walls or earthwork features. There is a single known cemetery, located on the Beaver Flow State Forest, which is a site often visited by hikers on the forest.

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

INFORMATION ON THE CHENANGO TRAIL UNIT

REAL PROPERTY

encompass a large area. Should systematic archaeological inventory be undertaken at some point in the future it is very likely that additional resources will be identified.

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

Historic and Archaeological Site Protection

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

Archaeological Research

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

Real Property

DEC's Bureau of Real Property's GIS system contains maps and some deeds for State Forest properties. Original deeds were also consulted to complete the boundary information in Table I.G. Boundary maintenance is performed by the DEC's Division of Operations.

Boundary Lines

<i>Table I.G. – Status of Boundary Lines</i>			
Facility Name	Boundary Length Miles	Maintenance Schedule	Length to be Surveyed
Beaver Flow – Broome Chenango 1	7.85	2021	0
Bobell Hill – Chenango 10	17.48	2023	0

INFORMATION ON THE CHENANGO TRAIL UNIT

REAL PROPERTY

Table I.G. – Status of Boundary Lines

Facility Name	Boundary Length Miles	Maintenance Schedule	Length to be Surveyed
Bobell Hill – Chenango 30	7.35	2023	0
Bumps Creek – Chenango 33	7.50	2024	0
Coventry – Chenango 27	10.87	2023	0
Oak Ridge – Chenango 13	6.55	2024	0

For more information on boundary line maintenance, please see SPSFM page 171 at <http://www.dec.ny.gov/lands/64567.html>.

Exceptions and Deeded Restrictions

Table I.H. – Exceptions and Deeded Restrictions

Forest	Description
Beaver Flow Broome Chenango 1	A spring and water reservation in Proposal E.
Beaver Flow Broome Chenango 1	A spring reservation in Proposal F.
Bobell Hill Chenango 10	Utility Right-of-Way – A 1968 Temporary Revocable Permit (TRP) was issued to New York State Electric & Gas for construction of an electric transmission line crossing the southern edge of Proposal F.
Bobell Hill Chenango 10	A spring and water reservation in Proposal J.

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

Other Use

A gate located at the intersection of Owlville Road and the abandoned section of Harvey Road restricts access to the abandoned section of Harvey Road. This gate is owned and maintained by the Department with shared access to the remaining inholding along the abandoned section of Harvey Road.

A second gate located at the northernmost boundary of Chenango 10, Bobell Hill State Forest, restricts access to a shared roadway which bisects the private property/State property line. The gate is privately owned and maintained. By agreement, this gate remains intentionally unlocked, and the roadway may be used by the public.

INFORMATION ON THE CHENANGO TRAIL UNIT

INFRASTRUCTURE

Encroachments

Well-marked boundary lines readily identifiable to the public reduce unintentional trespass. However, encroachments onto public lands do sometimes occur. Known instances of the use of State Lands without permit or easement are listed in the following table.

<i>Table I.I. – Encroachments</i>	
Forest	Description
Coventry Chenango 27	Telephone Line – crosses Proposal A leading to the 1.51 inholding identified as the ‘E. Stiles Reserve’ on the 1936 Proposal Map. No known record, permit, or easement exists for the installation or legal existence of this facility.

Land Acquisition

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

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

For more information on land acquisition, please see SPSFM page 165 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 175 at <http://www.dec.ny.gov/lands/64567.html>.

Roads and Trails

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

ADDITIONAL INFORMATION

DECinfo Locator – An interactive online mapper can be used to view recreational trails and assets 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

Category	Total Amount	Needing Improvement
Public Forest Access Roads	1.2 mi.	0.1 mi.
Haul Roads	0.4 mi.	0.0 mi.
Trails	9.6 mi.	0.0 mi.
Stream Crossings		
Bridges	3	0
Culverts	5	0
Related Infrastructure		
Parking Areas / Trailheads	10	0
Gates / Barriers	3	0

Use and Demand on Roads, Haul Roads and Parking Areas

The Public Forest Access Roads, open haul roads, and informal parking areas are utilized throughout the year to access State Forest lands on the unit. During the more open seasons, spring through late fall, they are used to access areas of interest for activities like hiking, birding, and mushroom hunting. A small cemetery located on the Beaver Flow State Forest is also a popular point of interest to visit. Hunters scouting for and accessing hunting areas are the most common users. During the winter months, the Public Forest Access Road is groomed as part of the statewide designated snowmobile trail system.

Following is a list of problem areas and areas for enhancement potential:

INFORMATION ON THE CHENANGO TRAIL UNIT

FORMAL AND INFORMAL PARTNERSHIPS AND AGREEMENTS

- Install a permanent gate and/or additional boulders to restrict continued unauthorized motor vehicle access via the designated snowmobile trail spur from the Davey Road kiosk and parking area on the Beaver Flow State Forest.
- Consider the installation of additional gate structures to limit unauthorized motor vehicle access at other designated snowmobile trail access points across the Unit.

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

Signs / Kiosks

There is a total of 6 State Forest identification signs and 6 information kiosks on the Unit. There is one cemetery directional sign for the cemetery located on the Beaver Flow State Forest.

Boating and Fishing Facilities

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

Designated Campsites and Lean-tos

There are no designated campsites or lean-tos on this unit. Camping is practiced as a dispersed irregular activity on the unit. Camping facilities, as well as their use and demand, are discussed under Recreation.

Communications Facilities

There are no communications facilities located on the unit.

Utility Transmission and Collection Facilities

There is an electric transmission line operated by NYSEG crossing the southern tip of the Bobell Hill State Forest, as listed earlier under Exceptions and Deed Restrictions.

Non-recreational Uses

Off-Highway and All-Terrain Vehicle Use

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

Formal and Informal Partnerships and Agreements

Conservation and stewardship partnerships are increasingly important, especially for public land management agencies. Considering the fact that resources will always be limited, collaboration across political, social, organizational and professional boundaries is necessary for long-term success and sustainability. Encouraging the development of cooperative and collaborative relationships is and can be done through a Volunteer Service Agreement (VSA) with the department. For more information on these and other partnerships, please see SPSFM page 197 at <http://www.dec.ny.gov/lands/64567.html>.

Currently, there are several VSA agreements in practice on the unit. A VSA exists between the Department and a private individual to place small fence enclosures around surviving American chestnut trees for their protection. Another provides for the maintenance of a hiking access trail and historical cemetery by a stewardship group on the Beaver Flow State Forest. The BC Sno-

Riders and the Delaware Otsego Chenango Snowriders snowmobile clubs hold VSA's for maintenance of all the designated snowmobile trails on the Unit.

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

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

Wildlife-related Recreation

Hunting

Hunting is seasonably popular on the State Forest lands within the Unit. Public lands fill an important niche for many hunters who are unable to afford the costs of owning private hunting property or otherwise have limited access to it. Most hunters fall into either of two categories, local residents from within a few miles of the forests or non-residents from the larger population centers of New York, New Jersey, and Pennsylvania. Species management via hunting occurs within Wildlife Management Units (WMU's). WMU's are divided out to offer smaller subsets for management. The State Forests on the Unit all fall within WMU 7M and are subject to season dates and bag limits within that WMU.

The most popular species pursued is deer, other common species hunted include wild turkey, grey squirrel, ruffed grouse, cottontail rabbit, and predators such as fox or coyote. In the last decade, the pursuit of coyote with dogs has become more popular.

After a period of long decline hunter numbers have stabilized, holding at between 550,000 to 600,000, since about the year 2000. Allowance of a new online hunter safety certification process in the year 2020 led to an approximately 65% (over 40,000) increase in the number of newly eligible hunters becoming certified over prior certification years. This indicates that future demand for the activity on public lands may rise significantly. Heavy use of public lands for hunting is seen during the beginning of spring turkey season and during the opening two weeks of the regular deer season. Public land use by hunters, with the exception of these two peak periods, would otherwise be considered low to moderate.

Fishing

Fishing opportunities are quite limited on the Unit with subsequent use and demand very low. This is due in large part to the hilltop location and landscape of the State Forests. The ridgetop nature of these forests limits prospective locations to mostly small headwater streams. Generally, few of these streams are large enough to fish, although some of the larger sided

INFORMATION ON THE CHENANGO TRAIL UNIT

RECREATION

streams may provide cold water trout fishing opportunities. Two ponds provide the primary open water fishing opportunities on the unit. These ponds on Coventry State Forest are each about 10 acres in size. One pond is located just to the west of Owlville Road with an associated parking area and walk in access, the second pond is located deeper into the forest and only partially on public lands.

General State Forest rules apply along with statewide fishing regulations. Contact a local DEC Regional Office for issues regarding the use of public lands and waters in NYS. Additional information on fisheries management, stocking reports, and other reports are available at <http://www.dec.ny.gov/outdoor/7730.html>.

Trapping

Trapping is allowed on all State Forest lands in the unit. Seasons occur in the fall and winter months. Species management via trapping is divided by Wildlife Management Unit (WMU). State Forest lands on the unit fall within WMU 7M and are subject to season dates and bag limits within those individual units. Common species that are trapped include coyote, beaver, muskrat, fox, mink and raccoon. A short season for fisher has been implemented in recent years as populations in the unit and region have gradually risen over time.

Trapping in general has been on the decline for several decades due to decline in fur demand and pricing. Use of public lands for trapping would be considered low at this time.

Viewing Natural Resources

The public forest access road and town roads provide the easiest viewing of natural resources, but informal hiking is the main method to observe the forests. Birding and wildlife viewing are occasional informal dispersed activities occurring on the Unit.

Camping

Camping is allowed on the unit throughout the year. Because the unit lacks in the areas of interest that typically generate camping demand, such as water features and hiking trails, there is very little demand for it. There are no designated campsites on the Unit though good opportunities to camp at informal sites exist on each of the State Forests. Large groups of ten or more people and/or persons planning to stay more than 3 consecutive nights are required to acquire a camping permit.

Water-based Recreation

Water based recreational opportunities are very limited on the unit as there are few waterbodies of significant size on the Unit. However, two approximately 10-acre ponds are located on the Coventry State Forest. Motorized or non-motorized boating, canoeing, kayaking, and swimming are all potentially allowed, though demand is considered very low. A parking area along the Owlville Road and associated short trail provide access to one of the ponds. The most likely use would be for small watercraft in conjunction with fishing activities. The necessary portage naturally limits this activity to smaller and light equipment. The plan proposes upgrading access to this pond by upgrading the trail and relocating the parking area to shorten the portage distance.

Trail-based Recreation

<i>Table I.L. – Multiple Use Trails</i>	
Use	Length
Snowmobile*	8.4 mi.
Motorized Access Program for Persons with Disabilities (MAPPWD) Routes**	1.2 mi.

* The length for snowmobile trails includes use on Public Forest Access Roads, but not municipal roads.

** All MAPPWD routes are off road on the unit. MAPPWD routes require an individual permit for motorized use, see Accessibility section for additional information.

Snowmobiling

Snowmobiling is a seasonal demand on the unit. During the winter months, the Public Forest Access Road and other designated trail sections are used for snowmobiling. The 8.4 miles of trails on the unit interconnect with the larger statewide snowmobile trail system. Two snowmobiling clubs, the BC Sno-Riders and the Delaware Otsego Chenango Snowriders (DOCS), maintain and groom all designated snowmobile trails on the unit through Volunteer Service Agreements. Though seasonal in nature this is one of the most popular recreational activities on the unit.

Motorized Access for People with Disabilities

The Motorized Access Program for Persons with Disabilities (MAPPWD) provides motor vehicle access on certain designated routes for qualified individuals with disabilities. Route use is provided by obtaining a specialized permit with doctor certification.

There are two designated MAPPWD routes for ATV's on the Unit, both are located on the Coventry State Forest. The trailheads and their associated parking areas are located along opposite sides of North Road. The eastern parking area also holds an informational kiosk and map panel of the forest. Mature red pine and spruce plantations characterize the forests along the eastern trail. In contrast, the western route is a winding loop which circles through a young developing hardwood forest.

How to obtain a permit and additional information on the MAPPWD program is at <http://www.dec.ny.gov/outdoor/2574.html>.

Other Trail-based Activities

There are no ski, bike, foot, or equestrian trails designated specifically for those individual activities on the Unit. However, these activities are allowed as forms of dispersed recreation, with most use occurring on existing forest roads or occasionally on retired harvesting trails created from forest products sales. Snowmobile trails are also sometimes utilized for these other activities, although biking and horseback riding are restricted on snow covered snowmobile trails. Use and demand for these other trail-based activities is very low.

INFORMATION ON THE CHENANGO TRAIL UNIT

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Other Recreational Activities

Target Shooting

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

Overall Assessment of the Level of Recreational Development

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

Accessibility for People with Disabilities

DEC has an essential role in providing accessibility 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 accessibility policies, please see SPSFM page 190 at <http://www.dec.ny.gov/lands/64567.html>.

Development of a new Accessible Trail and on Coventry State Forest is currently in process. An approximately 0.1 mile trail will be built to provide access to the unnamed manmade pond to the west of Owlville Road. A short access road and new parking area have already been constructed as part of this project. Once agreement on the future water level of the pond is decided, rehabilitation and maintenance work to the dam can be completed, and the Accessible Trail installed. An Accessible platform at the termination of the trail is also planned for fishing or observation purposes.

Application of the Americans with Disabilities Act (ADA)

The Americans with Disabilities Act of 1990 (ADA), along with the Architectural Barriers Act of 1968 (ABA) and the Rehabilitation Act of 1973, Title V, Section 504, has a profound effect on the manner by which people with disabilities are afforded equality in their recreational pursuits. The ADA is a comprehensive law prohibiting discrimination against people with disabilities in employment practices, use of public transportation, use of telecommunication facilities, and use of public accommodations.

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

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

In accordance with the US Department of Justice's ADA Title II regulations, all new DEC facilities, or parts of facilities, that are constructed for public use are to be accessible to people with disabilities. Full compliance is not required where DEC can demonstrate that it is structurally impracticable to meet the requirements [28 CFR § 35.151 (a)]. Compliance is still required for parts of the facility that can be made accessible to the extent that it is not structurally impracticable, and for people with various types of disabilities. In addition, all alterations to facilities, or part of facilities, that affect or could affect the usability of the facility will be made in a manner that the altered portion of the facility is readily accessible to and usable by individuals with disabilities [28 CFR § 35.151 (b:1-4)].

DEC uses the Department of Justice's 2010 Standards for Accessible Design in designing, constructing, and altering buildings and sites. For outdoor recreational facilities not covered under the current ADA standards, DEC uses the standards provided under the ABA to lend credibility to the assessment results and to offer protection to the natural resource (ABA Standards for Outdoor Developed Areas; Sections [F201.4](#), [F216.3](#), [F244](#) to [F248](#), and [1011](#) to [1019](#)).

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

For further information contact the DEC Statewide ADA Accessibility Coordinator at accessibility@dec.ny.gov.

Mineral Resources

Oil, Gas and Solution Exploration and Development

Oil and gas production from State Forest lands, where the mineral rights are owned by the state, are only undertaken under the terms and conditions of an oil and gas lease. As surface managers, the Division of Lands and Forests will evaluate any concerns as they pertain to requests for new natural gas leases on State Forest lands. Consistent with past practice, prior to establishing 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. There are currently no existing leases on the unit. For more information on natural gas and other mineral resource policies, please see SPSFM page 241 at <http://www.dec.ny.gov/lands/64567.html>.

Pipelines

DEC, 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 SPSFM, and the Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program.

INFORMATION ON THE CHENANGO TRAIL UNIT

SUPPORTING LOCAL COMMUNITIES

Pipelines would be located immediately adjacent to Public Forest Access Roads. The location of the roads and pipelines would 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 areas. Additional surface disturbance associated with such construction would not be considered in areas with stands that are managed for relatively unbroken canopy conditions. Areas managed for unbroken canopy conditions may be referred to with various terms such as “uneven-aged,” “uneven-aged variable retention,” “high canopy,” “closed canopy” or others.

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. Pipeline development on State land would not be permitted if the Agency 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.

Exceptions to the above guidance must be approved by the Division of Lands and Forests, in consultation with the Division of Mineral Resources. There are no pipelines currently located on the Unit.

Mining

There are no current or known historic gravel, shale, or other type surface mines located on the Unit.

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 259 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 and updated tax information can be obtained by contacting the Real Property Tax Service Departments within each county directly at

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

The following table provides the projected taxes on State Forest lands within the Unit for the 2020 tax year. Within each township the listed acreage and taxes paid have been proportioned to include only the State Forest lands included within the Chenango Trail management unit. It

INFORMATION ON THE CHENANGO TRAIL UNIT

FOREST PRODUCTS

therefore may not include all the State Forest lands and taxes paid in each township. The total of the taxes paid for all State Forest lands in the Unit was \$144,355.

Table I.M. – State Forest Taxes by Township

County	Town	Acres	Town Taxes	School Taxes	Special District	Total Taxes
Broome	Colesville	727	2,030	11,048	1,250	14,328
Chenango	Afton	190	694	4,021	209	4,924
Chenango	Bainbridge	386	1,812	10,551	1,250	13,613
Chenango	Coventry	3,396	15,771	68,793	4,259	88,823
Chenango	Greene	439	2,342	9,113	503	11,958
Chenango	Oxford	317	1,469	8,594	646	10,709

Forest Products

Timber

Timber management provides a renewable supply of sustainably harvested forest products and can also enhance biodiversity. The products harvested may include furniture quality hardwoods, softwoods for log cabins, fiber for paper making, firewood, animal bedding, wood pellets, biofuel, and chips for electricity production. For more information, please see SPSFM page 264 at <http://www.dec.ny.gov/lands/64567.html>.

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

The authority to sell forest products from DEC administered lands is provided by the Environmental Conservation Law. To perpetuate the growth, health and quality of the forest resources, DEC 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 in conjunction with other unit management plans,
- 7) Market conditions,

INFORMATION ON THE CHENANGO TRAIL UNIT

FOREST PRODUCTS

- 8) Potential growth response of stands to treatment, and
- 9) Presence of rare, threatened and endangered species or 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 DEC 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.

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

The demand for timber on the unit is part of the larger regional timber market and in turn the global market for wood products. The United States is a large part of the global market and has the highest per capita wood consumption of any nation on the planet. Wood products have been essential to the development of our country and continue to be an essential need of our society. As worldwide population continues to increase and the economies of other countries develop, there will be a continued long-term increase in the global timber demand.

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

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

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

The red pine market is roughly divided by timber of sufficient quality for utility poles, and the pulp or saw markets. There has been stable demand for red pine from regional industries which manufacture it into various landscaping materials, residential fencing and other lumber products.

State Forest lands are the primary source for these regional industries that utilize red pine due to the abundance of pine plantations on State Forest lands and their scarcity on private lands.

There is steady demand for quality hardwood sawtimber from regional sawmills within New York State and occasionally neighboring states. Other than local use firewood for home heating, markets for low grade hardwoods are lacking within the region.

The market for spruce is heavily dominated by saw logs shipped to Canada. Because there are no spruce sawmills in New York State, nearly all spruce is sold and trucked north to Canadian sawmills for processing. These Canadian mills also purchase a portion of the regions red pine. Canadian demand for spruce and pine logs fluctuates with the general state of the economy and on trade between the United States and Canada. Most Canadian mills are only able to get logs backhauled north after delivery of retail products into New York and other nearby states. When demand for Canadian products is low, fewer trucks are available for the timber industry to utilize. The other main factor affecting the demand for spruce logs is the housing market since spruce lumber is primarily used for wood framing construction.

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

The rise in hardwood sawtimber value has been an incentive for selective cutting or high grading on many private forest lands in the region. This is a type of cutting where the trees of highest quality and value are removed from the wood lot, leaving behind a forest of low quality with little potential for growing high quality sawtimber in the future. If this trend continues, the future demand for high quality timber from State Forest lands will rise.

Non-Timber Forest Products

Tapping for Maple Syrup production is practiced within the region and has been successful on a small scale. Some demand for maple tapping on State Forests has been expressed in nearby management areas. However, a potential contract on a nearby management unit was put out for bid numerous times without success.

An evaluation of the potential for maple taping on the unit found no suitable stands. The factors used to determine suitability were road access, general stand access, suitable direction of slope for collection, understory conditions, suitable species composition, sufficient density, existing stem quality and possible resultant timber degradation, pest or disease mortality issues, and potential interference with designated trails or public access sites. The primary reason no stands were identified as suitable for tapping was the general lack of maple trees in sufficient number and density over an area. Secondly, was the potential degradation of sawtimber value.

INFORMATION ON THE CHENANGO TRAIL UNIT

FOREST HEALTH

The demand and markets for other non-timber forest products is largely unknown. Use of medicinal plants, resins, fruits, nuts, bark, and fungi is minimal and currently limited to small scale collection for personal use on State Forests.

Forest Health

Forest health is pursued with the goal of maintaining biodiversity. Any agent that decreases biodiversity can have a deleterious effect on the forest as a whole and its ability to withstand stress. Forest health in general should favor the retention of native species and natural communities or species that can thrive in site conditions without interrupting biodiversity. For more information on forest health, please see SPSFM page 298 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 these non-native species do not always have adverse effects on the areas in which they are introduced, some become invasive in their new ranges spreading, 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, nutrient cycles, fire frequency, soil fertility, and other ecosystem processes.

For more information on invasive and nuisance species see the Invasive Species Comprehensive Management Plan available at <http://www.dec.ny.gov/animals/265.html>.

Table I.N. – Invasive Species, Pests and Pathogens on the Unit

Plants	Status on the Unit	Webpage Information
Garlic Mustard (<i>Alliaria petiolata</i>)	Present, but generally uncommon or in small numbers.	http://www.dec.ny.gov/docs/lands_forests_pdf/isprohibitedplants2.pdf
Honeysuckle (<i>Lonicera japonica</i>)	Common across the unit, often as moderately scattered individuals, occasionally in groups to larger patches and sporadically becoming widespread.	http://www.dec.ny.gov/docs/lands_forests_pdf/isprohibitedplants2.pdf
Japanese Barberry (<i>Berberis thunbergii</i>)	Intermittent as individual plants or in small patches across the unit, often located near old foundation sites.	http://www.dec.ny.gov/docs/lands_forests_pdf/isprohibitedplants2.pdf
Japanese Knotweed (<i>Fallopia japonica</i>)	Currently unconfirmed on the unit, though strongly suspected, widespread along roadsides and private lands surrounding and adjacent to the forests on the unit.	http://www.dec.ny.gov/docs/lands_forests_pdf/isprohibitedplants2.pdf
Multiflora Rose (<i>Rosa multiflora</i>)	Intermittent but widespread on the unit, scattered as individuals or occasionally in small groups. Seeds are readily eaten by wildlife and easily spread.	http://www.dec.ny.gov/docs/lands_forests_pdf/isprohibitedplants2.pdf

INFORMATION ON THE CHENANGO TRAIL UNIT

FOREST HEALTH

Table I.N. – Invasive Species, Pests and Pathogens on the Unit

Pale Swallow-wort (<i>Cynanchum rossicum</i>)	Multiple plants have been identified at a single roadside location. Complete long-term control has proven difficult.	http://www.dec.ny.gov/docs/lands_forests_pdf/isprohibitedplants2.pdf
Insects	Status on the Unit	Webpage Information
Eastern Tent Caterpillar (<i>Malacosoma americanum</i>)	Continually present at very low to moderately low levels causing relatively minor amounts of damage primarily to cherry and apple species.	http://www.dec.ny.gov/animals/7111.html
Elm Spanworm (<i>Ennomos subsignaria</i>)	This and other spanworms are prone to intermittent periodic outbreaks.	http://www.dec.ny.gov/docs/lands_forests_pdf/espanworm.pdf
Emerald Ash Borer (<i>Agilus planipennis Fairmaire</i>)	Confirmed on the Unit in 2022. Nearly all Ash will eventual succumb and be killed by the insect.	http://www.dec.ny.gov/animals/7253.html
European Pine Shoot Beetle (<i>Tomicus piniperda</i>)	Likely on the unit. No major infestations have been located.	http://www.dec.ny.gov/animals/7114.html
Forest Tent Caterpillar (<i>Malacosoma disstria</i>)	Outbreaks occur every few years, generally areas with hard maple are most often and most severely impacted as preferred vegetation.	http://www.dec.ny.gov/animals/7111.html
Gypsy Moth (<i>Lymantria dispar</i>)	Cyclic outbreaks occur every few years. Significant quantities of preferred oak species exist on the unit and have been impacted during past outbreaks.	http://www.dec.ny.gov/animals/83118.html
Hemlock Woolly Adelgid (<i>Adelges tsugae</i>)	Confirmed within four of the six townships on the unit as of 2020, threat of infestation on the unit is very high.	http://www.dec.ny.gov/animals/7250.html
Peach Bark Beetle (<i>Phloeotribus liminaris</i>)	Occasionally found on the unit.	http://www.dec.ny.gov/docs/lands_forests_pdf/peachbb.pdf
Pear Thrips (<i>Taeniothrips inconsequens</i>)	Found on the unit, current levels are generally low, though outbreaks may occur.	http://www.dec.ny.gov/docs/lands_forests_pdf/thrips.pdf
Sirex Woodwasp (<i>Sirex noctilio</i>)	Suspected on the unit, no effects have been confirmed.	http://www.dec.ny.gov/animals/7248.html
Diseases	Status on the Unit	
Beech Bark Diseases	Very common, nearly all beech eventually become infected and decline, resulting in the loss of the larger stems once capable of mast production.	

INFORMATION ON THE CHENANGO TRAIL UNIT

FOREST HEALTH

Table I.N. – Invasive Species, Pests and Pathogens on the Unit

Beech Leaf Disease	Confirmed on the Unit in 2022. Kills beech of all ages in 2 to 7 years.	https://www.dec.ny.gov/lands/120589.html
Chestnut Blight	Present on the unit, blight has almost eliminated chestnut as a segment of the forest. Occasionally root systems persist by continuously re-sprouting, though repeated reinfection results in top and stem dieback periodically, these stems rarely develop of significant size or produce mast.	
Dutch Elm Disease	Present on the unit and across the northeast. Remaining elm numbers are very limited, occasional small elms still exist on the unit.	
Animals	Status on the Unit	
Common Earthworm (<i>Lumbricus terrestris</i>)	Common and widespread on the unit, naturalized throughout North America. Alters soil and nutrient cycles, causes leaching and mineralization, increases rates of decomposition, creates drier ground conditions, and inhibits beneficial soil microorganisms, often creates soil and site conditions more favorable to undesirable invasive species.	

Although the table lists only those species currently found or likely on the Unit, the following informational descriptions include both the species listed in the table and an array of other pathogens posing an imminent threat to the forests in New York State and the Unit.

Insects

Asian Longhorned Beetle - This black & white beetle with long antennae, is a native of Asia. Though not currently found on the unit, impacts from this invasive insect are potentially devastating since it attacks a wide range of hardwood species. It prefers maple species in particular, which are major components of the northeastern forest and also important to the wood products industry. This insect was first detected in New York City in 1996. Populations of this pest have been established in central Massachusetts as well as Brooklyn and Amityville, NY. Since this pest is extremely destructive and has the potential to spread at a rapid rate, authorities are destroying all trees discovered with infestations. As of 2015, over 8,000 infested

trees had been identified and removed in New York City and Long Island alone. There are no known natural factors which will limit the spread of this insect.

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

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

Emerald Ash Borer - This metallic green beetle native to Asia poses an imminent risk to the forests on the unit. It was first discovered in Michigan in 2002. Since that time, it has killed tens of millions of ash trees in Michigan alone, with hundreds of millions more lost across the central US, the northeastern US, and on into Canada. Larva feed on the inner bark of any size ash tree, affecting all ash species. The borer usually kills the host tree within 3 years of infestation. EAB was first discovered in New York State in 2009 in Cattaraugus County. EAB will likely become established throughout the state within 10 years, unless an effective control is discovered. In 2010, the Department released the Emerald Ash Borer Management Response Plan which defines goals to slow ash mortality in New York State. Quarantine zones have been established along with general restrictions on the movement of firewood to limit the transportation and spread of infected wood. Although EAB has not been confirmed on the unit at the time of publication, it is highly likely existent.

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

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

Spongy Moth - This exotic moth from Eurasia was introduced into the United States in 1868. Populations of the insect can periodically build to outbreak levels resulting in widespread forest defoliation. Spongy moths will defoliate many species of tree in the northeast, but they greatly

INFORMATION ON THE CHENANGO TRAIL UNIT

FOREST HEALTH

favor oak species. High populations of spongy moths do not typically persist more than three years before collapse. The Nuclear Polyhedrosis Virus has traditionally caused this rapid decline in spongy moth populations. In recent years, the fungus (*Entomophaga maimaiga*) has also proven effective in reducing moth populations. This fungus was introduced to the U.S. from Japan in 1910 and again in 1985. Its presence and therefore effectiveness had been dismissed until it was confirmed in seven states in 1989. Due to the limiting presence of both the virus and the fungus, future spongy moth outbreaks may be less frequent and reduced in severity.

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

Peach Bark Beetle - This insect has recently gained increased attention from foresters in the northeast due to the amount of damage it has caused to black cherry trees. Infestations of this insect can result in large amounts of gum deposits on the trunks of black cherry which can significantly reduce the value of the timber and cause a general decline in tree health. Peach Bark Beetle populations build up in tree top material following storm damage or the harvest of timber. The beetle then readily attacks the remaining residual healthy cherry trees. So far cultural practices (e.g., reducing quantities of slash and seasonal cutting) attempted to minimize the negative impacts of peach bark beetle have not been successful.

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

Sirex Woodwasp - This exotic pest was first discovered in New York State in 2004 in Oswego County. The Sirex woodwasp is native to Europe, Asia and Northern Africa. Sirex attacks most species of pine trees, including red pine and white pine, which are common in New York. The female woodwasp carries a fungus (*Amylostereum areolatum*) that it deposits in the tree while laying eggs. Females tend to target already stressed trees. The fungus can kill the host trees in just a few weeks. It is predicted that this woodwasp will adapt to most U.S. climates. Sirex has

been confirmed in most counties of central New York including those of this unit. Localized damage to pine trees from this pest has been observed. Control methods for the woodwasp are being researched, including a biological control involving the use of parasitic nematodes. Thus far, the effects of the insect and the associated fungus have been negligible to initial predictions.

Viburnum Leaf Beetle - A non-native beetle that first appeared in NYS along Lake Ontario in 1996. It currently infests almost all of New York State except Long Island. Both the larvae and adults feed on viburnum shrubs. This insect has had a significant impact on native stands of arrowwood (*Viburnum dentatum*), though the effects on the unit have been negligible.

Diseases

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

Beech Leaf Disease - First discovered in Ohio in 2012, this disease has spread from northeast Ohio onward into Ontario, Canada and western portions of New York and Pennsylvania. The causal agent remains elusive and has not been identified. Early symptoms are raised darkened bands on the leaves between leaf veins. Later stages result in heavily shriveled, discolored, deformed leaves, clustered near the branch tips. First year mortality comprises mainly saplings, with larger trees taking several years to succumb.

Dutch Elm Disease - This disease entered North America in 1930, and it has killed most of the American elm trees in the northeastern United States. The causal agent is a fungus (*Ceratocystis ulmi*) which is spread by elm bark beetles. Although the disease has killed most elms, a few isolated individuals have survived, and it is still possible to find mature elm trees within the area.

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

INFORMATION ON THE CHENANGO TRAIL UNIT

FOREST HEALTH

Oak Wilt - Oak wilt was first discovered in Wisconsin in 1944, but where it originated is still unknown. It has spread throughout the Midwest and Texas, killing tens of thousands of trees. In New York State Oak wilt is confirmed in Glenville, Islip, Riverhead, Southold, Brooklyn and Canandaigua. The disease is caused by the fungus *Ceratocystis fagacearum*, which develops in the xylem where it blocks the flow of water and nutrients from the roots to the crown, causing leaves to wilt and fall off killing the tree. All oaks are susceptible to the fungus, but trees from the red oak group often die much faster than white oaks. Red oaks can take from a few weeks to six months to die and they spread the disease quickly. White oaks can take years to die and have a lower risk of spreading the disease.

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

Animals

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

INFORMATION ON THE CHENANGO TRAIL UNIT

POTENTIAL CLIMATE VULNERABILITY AND RESILIENCE

Invasive Species Control

Where invasive plants listed in Table I. N. occur in significant numbers, they inhibit successful forest regeneration and require control. In addition, several species of native plants, such as hay-scented and New York ferns, can become invasive under certain conditions and also inhibit regeneration. Conditions range over the unit though most of the forests and forest stands contain multiple interfering species in great enough abundance that effective regeneration of the forest is difficult to achieve. The most effective, if not only successful means of control for most of these interfering invasive species, is an herbicide application. Without such treatment, the regeneration of healthy future forests is unlikely.

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 and Wildlife 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>

Potential Climate Vulnerability and Resilience

Climate change will continue to impact tree species and forests through higher temperatures, frost and phenology changes, increased precipitation, droughts, and flooding, and more frequent and intense ice, wind, and other storm events. Some of these impacts may not become evident for decades since mature trees can be resistant to environmental stressors. In the meantime, habitat quality will decline for many tree species, impacting forest health.

Expected Change	Forest impacts	Timeframe
Higher temperatures	Higher temperatures will increase tree stress and mortality, especially in upland mesic forests (red maple, sugar maple, basswood), increase susceptibility to forest pests and diseases, and lower productivity	Already occurring
	Species compositional changes over the long-term (may be decades for changes) including an increase in warm-adapted, southern species (oak/pine, oak/hickory) and a decrease in cold-adapted, northern species (spruce/fir, boreal forests)	Longer-term
	Higher winter survival rate and range expansion of forest pests and diseases such as white-tailed deer, HWA, SPB, SLF, and oak decline will increase tree stress, mortality, and regeneration challenges	Already occurring
Frost and phenology changes	Increased spring and fall freezing damage to roots will increase tree stress and lower productivity and regeneration and planting success	Already occurring
	Increased spring and fall freezing damage to buds, flowers will lower seed and cone production and regeneration	Already occurring
	Loss of pollinator synchrony will lower seed and cone production and regeneration for pollinator-reliant species	Already occurring
	Increased competitiveness of invasive plants such as kudzu vine, honeysuckle, reed canarygrass, and common buckthorn will increase the need for treatments and lower regeneration success	Already occurring

INFORMATION ON THE CHENANGO TRAIL UNIT

POTENTIAL CLIMATE VULNERABILITY AND RESILIENCE

	Extended spring, summer, and fall recreation will increase forest impacts during spring and fall “mud seasons” and impacts from summer recreation	Already occurring
	Less snow, frost, and ice cover during winter timber harvest operations will lower the cutting window for forests traditionally harvested during the winter	Already occurring
Increased precipitation, droughts, and flooding	Altered hydrologic cycles will increase tree damage and mortality in forested wetlands, floodplain forests, and other lowland riparian forests	Already occurring
	Increased summer drought stress will increase damage and mortality, especially in upland mesic forests (red maple, sugar maple, basswood), susceptibility to forest pests and diseases and shift species compositions towards more drought-tolerant species (oak/pine, oak/hickory)	Already occurring
	Increased summer wildfire risk will increase damage and mortality, especially to non-fire adapted species	Already occurring
	Lower winter soil snowpack insulation will increase damage and mortality to fine roots and lower productivity	Already occurring
More frequent and intense ice, wind, and other storm events	Increased storm events will increase damage and mortality to residual trees following harvests	Already occurring
	Increased inundation, erosion, flooding, and saltwater intrusion from storm events will increase damage and mortality to coastal forests, forested wetlands, and floodplain forests	Longer-term
References for the information provided on this table include Wolfe et al 2011; Tetra Tech 2013; Horton et al 2015; Swanston et al 2019		

The majority of stands within these forests are dominated by American beech, black cherry, eastern hemlock, European larch, Japanese larch, Norway spruce, red maple, red oak, red pine, sugar maple, white ash, and white pine. Of these species, American beech, eastern hemlock, European larch, Japanese larch, Norway spruce, red pine, and white pine are expected to decline both near and long-term with climate change (under low and high emissions scenarios), and black cherry, red maple, sugar maple, and white ash are expected to decline in the long term. Forest stands dominated by these species are expected to be especially vulnerable to climate change.

Promoting long-term forest adaptation to climate change through resilience and transition strategies is important when incorporating climate goals and considerations – as healthy forests sequester and store the most carbon and are more likely to remain as forests. Resistance may still be considered when there is a desire to maintain resources with high economic, cultural, or ecological value as is, for forest ecosystems with low vulnerability to climate change, and areas that are expected to be buffered from severe climate change impacts (ex: refugia) however this strategy may be unrealistic to maintain in the long-term.

Specific resilience and transition strategies that should be considered for these forests include:

- Use silvicultural strategies to increase species diversity, especially in declining plantations and forests dominated by climate-vulnerable species
- Monitor regeneration and implement plantings and deer exclosures in areas showing regeneration failure 2-5 years after harvests

- Retain species more adapted to drier conditions, higher temperatures, and a wider range of growing conditions such as hickories and oaks.

Further quantifying the carbon tradeoffs and benefits of these practices will help foresters balance forest carbon considerations with the many other management objectives that are required of State lands. BFRM's newly created Carbon Forestry and Climate section will help provide the necessary resources to regional staff on forest management effects on forest carbon storage and sequestration, as well as the impacts of climate change on our forests, while providing tools to help integrate those considerations into on the ground management and planning.

Summary of Ecoregion Assessments

To practice ecosystem management, foresters, must assess the natural landscape in and around the management unit. State Forest managers utilized The Nature Conservancy Eco-Region Assessments to evaluate the landscape in and around this management unit. The Chenango Trail UMP falls entirely within the High Allegheny Plateau Eco-Region which is the northernmost extent of the Central Appalachians.

Ecoregion Summary



The High Allegheny Plateau Ecoregion is located along the southern tier of New York and the northern tier of Pennsylvania. It includes a small portion of New Jersey. Well known features within the High Allegheny Plateau include the Catskill Mountains, the Shawangunks, the Kittatinny Ridge, the Poconos, Allegany State Park, the Allegheny National Forest, and a large mass of Pennsylvania state-owned lands.

This ecoregion is defined by high elevation features at the northern end of the Appalachian Plateau with most of the ecoregion existing above 1,200 feet. The general landform of the area is mid-elevation rolling 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 while the southwest portion was not. Many northern species and communities reach their southern limit on the High Allegheny Plateau, while many southern species extend into the ecoregion but not beyond. Within the ecoregion species and communities associated with glaciated landforms occur in the north and east; biodiversity associated with older substrate and deeper erosional soils exist 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 High Allegheny Plateau (2000 census data). The largest city is Binghamton, New York with 47,000 people. Only 250,000 people on the High Allegheny Plateau live in cities with individual populations over 10,000. The overall population trend on High Allegheny Plateau indicates that

SUMMARY OF ECOREGION ASSESSMENTS

ECOREGION ASSESSMENT

people are moving out of the ecoregion with the notable exception of areas within reach of New York City and New Jersey by major highways.

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

Ecoregion Assessment

Table II.A. Land Use and Land Cover Types for the Landscape Surrounding the Chenango Trail Unit

Land Use and Land Cover	Acreage	Percent of Landscape
Open Waters	1,014	1.10 %
Emergent Wetlands	632	0.69 %
Forested Wetlands	1,656	1.81 %
Deciduous Forest	22,763	24.84 %
Mixed Forest	22,543	24.60 %
Conifer Forest	9,233	10.08 %
Shrub and Brush	968	1.06 %
Grasslands and Herbaceous	465	0.51 %
Pasture and Hay	22,978	25.08 %
Cultivated Croplands	5,031	5.49 %
Barren	72	0.08 %
Developed Open Space	3,464	3.78 %
Developed Low Intensity	628	0.68 %
Developed Moderate Intensity	154	0.17 %
Developed High Intensity	26	0.03 %
Total	91,627	100 %

Local Landscape Conditions

The landscape surrounding the unit is largely a collection of small private land holdings. More than two-thirds of these parcels are under 10 acres in size. Parcels from 10 to 49 acres cover about 20% of the area, while those in the 50 to 200 acre range make up around 10%. Less than 1% of the nearby land area consists of individual parcels of over 200 acres, with the largest individual parcel being just over 500 acres in size.

The very smallest parcels tend to be found in and around the villages toward the edges of the unit. Parcelization is however increasing adjacent to many State Forest lands. As these areas

are considered highly desirable for their proximity and ready access to the large areas of public land. The security of public State Forest lands remaining as undeveloped tracts is also influencing the increase in subdivision of the nearby private lands.

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

Habitat Related Demands

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

Currently several areas on the State Forest lands within the Unit are in early successional habitat types. These areas resulted from large conversions of plantation into naturally regenerated stands. Most were initiated by severe weather events in the early to middle 2000's. They are reaching the end of their usefulness to act as early successional habitat, however, as the forests mature.

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

On a statewide basis, late successional forests are provided for by the Adirondack and Catskill Forest Preserve lands, however, there is very little of this type on the landscape within the unit.

SUMMARY OF ECOREGION ASSESSMENTS

HABITAT RELATED DEMANDS

As the State Forest lands on the unit age forest stands not designated for harvesting, riparian buffers, and inaccessible areas will contribute significantly to this type of habitat in the future. Also, many managed stands will retain a component of reserve trees to be kept through their biological lifetimes to develop old-growth characteristics within the stand.

Management Objectives and Actions

Objectives

Ecosystem Management

<i>Table III.A. –Ecosystem Management Objectives and Actions</i>	
Objective	Actions
Active Forest Management	
AFM I – Apply sound silvicultural practices	Utilize stand data and current assessments to make active forest management decisions about ecosystem, timber harvesting, and integrated pest management.
AFM II – Use harvesting plans to enhance diversity of species, habitats & structure	Maintain a mosaic of existing natural stand types and conditions. Progressively convert plantations via natural regeneration, when possible, into a mixture of softwood and hardwood species.
AFM III – Fill ecoregional gaps to maintain and enhance landscape-level biodiversity	Buffer established natural and man-made wetlands and identify stands vulnerable to greatest impact to be removed from treatment. Maintain natural conifer stands, particularly stands adjacent to protection areas and those located the most interior within a forest to expand riparian corridors and increase interior forested conditions. Utilize moderate scale even aged regeneration harvests to create rotational blocks of early successional habitat.
AFM IV – Enhance matrix forest blocks and connectivity corridors where applicable	Retain large natural conifer stands where possible, especially along riparian corridors. Stagger even aged regeneration treatments to maintain surrounding paths of contiguous forest cover around such treatment for the connectivity of species through a forest.

MANAGEMENT OBJECTIVES AND ACTIONS

Objectives

<i>Table III.A. –Ecosystem Management Objectives and Actions</i>	
Objective	Actions
AFM V – Practice forest and tree retention on stands managed for timber	Retain existing snag, cavity, and legacy trees to the extent possible. Maintain retention trees for development into any deficient categories.
	Maintain fine woody material and course woody material to required levels in managed stands. Apply harvesting restrictions or utilize timber harvesting practices that increase levels within deficient stands.
	Maintain a level of both scattered individual and small tree groups within even aged regeneration harvests for structural diversity and the life boating of species.
HCVF- Identify and maintain HCVFs	Collaborate with the Natural Heritage Program to identify and maintain High Conservation Value Forests (HCVF).

Resource Protection

<i>Table III.B. –Resource Protection Objectives and Actions</i>	
Objective	Actions
Soil and Water Protection	
SW I – Prevent erosion, compaction and nutrient depletion	Classify appropriate stands for protection status and consider other stands susceptible to greater potential impact to be withheld from treatment.
	Utilize Best Management Practices while planning timber harvests to minimize the number of skid trails and compaction to residual stand. During periods of inactivity and upon completion of timber sales ensure that proper water control devices are installed to prevent erosion and sedimentation of soils into nearby water bodies. Institute seasonal, utilization, and other necessary harvesting restrictions within timber harvesting contracts when appropriate.

<i>Table III.B. –Resource Protection Objectives and Actions</i>	
Objective	Actions
SW II – Identify and map SMZ’s and adapt management for highly-erodible soils	Use soils mapping in conjunction with on the ground survey to identify and map Special Management Zones (SMZ). Identify stands to be removed from treatment. Adjust management actions according to SMZ type to protect areas of highly erodible soil and related resources.
At-Risk Species and Natural Communities	
ARS I – Protect ARS&C ranked S1, S2, S2-3, and G1, G2 or G2-3 where present	Consult with Natural Heritage Program and wildlife biologists about location, management and habitat needs for listed at-risk species and natural communities when encountered.
ARS II – Conduct habitat restoration and promote recovery of declining species	Buffer natural and man-made wetlands from treatment by following SMZ guidelines. Maintain cover for species in and around breeding and wintering areas. Utilize timber harvests to enhance habitat for declining species where possible and include special harvesting restriction when necessary.
ARS III - Consider protection and management of Species of Greatest Conservation Need	Coordinate with wildlife biologists, ecologists and managers to protect and manage for Species of Greatest Conservation Need.
Visual Resources and Aesthetics	
VR I – Maintain or improve overall quality of visual resources	Provide visual buffers of harvest areas and log decks where needed. Stage conversions of roadside or other visually important areas to mitigate visual impacts. Improve accessibility to the unnamed pond on Coventry State Forest.
VR II – Use natural materials where feasible	When constructing infrastructure, natural materials will be used where feasible.
VR III – Lay out any new roads/trails to highlight vistas and unique natural features	When new roads or trails are developed their relationship to natural features and vistas will be considered.
VR IV – Develop kiosks to provide education and reduce sign pollution	Each of the State Forests on the unit have an existing Kiosk installed at a relevant location. Other existing signage on the unit is minimal and necessary.
Historic and Cultural Resources	

MANAGEMENT OBJECTIVES AND ACTIONS

Objectives

<i>Table III.B. –Resource Protection Objectives and Actions</i>	
Objective	Actions
HC I – Preserve and protect historic and cultural resources wherever they occur	Cemeteries, foundations and other historic and cultural resources will be protected from timber harvesting activities wherever they occur. Stone wall crossings will be minimized or utilize pre-existing crossings when possible.
HC II – Inventory resources in GIS and with OPRHP	Inventory cemeteries, foundations and other historic and cultural resources where possible.

Infrastructure and Real Property

<i>Table III.C. –Infrastructure and Real Property Objectives and Actions</i>	
Objective	Actions
Boundary Line Maintenance	
BL I – Maintain boundary lines	Boundary lines are delineated and are scheduled to be remarked every 7 to 10 years.
BL II – Address encroachments and other real property problems	Encroachments and real property issues will be assessed and resolved as they occur.
Infrastructure	
INF I – Provide and maintain public forest access roads, access trails, haul roads, parking areas, and associated appurtenances	Public Forest Access Roads, access trails, parking areas, gates, barricades, and associated appurtenances will be established and maintained on a regular basis to insure public and administrative access to State Forest lands. In locations where unauthorized access issues develop, appropriate control measures may be installed to protect resources and ensure equal public access.
INF II – Upgrade, replace or relocate infrastructure out of riparian areas where feasible	Infrastructure will be upgraded and replaced as needed and when feasible. Infrastructure will be relocated out of riparian areas when feasible and necessary.
INF III – Resolve issues of uncertain legal status or jurisdiction	Issues will be assessed and resolved as they occur.
INF IV – Prevent over-development	State Forests provide the public with low density, open space. To maintain this condition, development of infrastructure on the unit will be kept to a minimum, except where deemed necessary.

Table III.C. –Infrastructure and Real Property Objectives and Actions

Objective	Actions
INF V – Acquisition	Pursue acquisition of parcels with willing sellers that increase accessibility to State Forests, protect significant resources, and provides for public use.

Public/Permitted Use

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

Objective	Actions
Universal Access	
UA I – Use minimum tool approach to provide universal access to programs	<p>Maintain the existing designated set of CP-3 trails on the Coventry State Forest.</p> <p>Redevelop and upgrade an existing point of access on the Coventry State Forest to ADA standards. Development will consist of the relocation of an existing parking area to an interior location, upgrade of the associated roadway access, upgrade of approximately 200' of trail for ADA access, and construction of a low viewing platform adjacent to the unnamed pond.</p>
Formal and Informal Partnerships and Agreements	
PRT I – Collaborate with local organizations and governments to reach mutual goals	Work with the local towns and recreation groups to reach mutual goals on resource and road usage.
PRT II – Consider full range of impacts associated with VSAs and recurring TRPs	Evaluate the effect VSAs and recurring TRPs have on the forest landscape on an annual basis. Meet with permit applicants prior, during and after permitted use or work to evaluate the level of associated impact. Consider methods to decrease impacts and improve outcomes.
Recreation	
REC I – Accommodate public use while preventing illegal activity, reducing impacts and enhancing public safety	<p>In locations where unauthorized use issues develop, appropriate control measures may be installed to protect resources and ensure equal public access.</p> <p>Coordinate with law enforcement to assure the safe and enjoyable use of resources on State Forest lands.</p>

MANAGEMENT OBJECTIVES AND ACTIONS

Objectives

<i>Table III.D –Public / Permitted Use Objectives and Actions</i>	
Objective	Actions
REC II – Provide public recreation information	<p>Each of the State Forests on the Unit has an existing Kiosk installed at a relevant location. The kiosks will be maintained and updated with recreation information when feasible.</p> <p>This Unit Management Plan contains public recreation information and maps, and web links to each of the individual State Forests where forest descriptions and maps are available, and individual public recreation information is maintained and updated.</p> <p>The interactive DECinfo Locator map program provides public access to information for outdoor recreational opportunities via data layers on the DEC website.</p>
REC III – Inventory recreational amenities and schedule recreation management actions	<p>Recreational trails and amenities have been inventoried into the State Land Asset and Transportation GIS data layers.</p> <p>Establish accessible trails where conditions allow for ease of access and a desirable destination.</p> <p>Collaborate with recreational user groups and the Department's Operations Division to schedule maintenance and management activities.</p>
REC IV – Enhance fish & game species habitat	<p>Riparian areas and open water will be designated as protection stands to maintain water quality, provide shaded cover for fish, and protect the habitat of riparian dependent species.</p> <p>Special Management Zones will provide buffers for protection within management stands to sensitive areas.</p> <p>Forest management actions will seek to create game species cover and habitat by producing a variety of forest and habitat conditions while regenerating and maintaining forest stands.</p>
Off-Highway and All-Terrain Vehicle Use	

<i>Table III.D –Public / Permitted Use Objectives and Actions</i>	
Objective	Actions
ATV I – Maintain existing recreational access by people with disabilities under the MAPPWD program	Continue to maintain the designated MAPPWD trail segments on the Coventry State Forest.
ATV II – Consider requests for ATV connector routes across the unit	ATV use, outside of the MAPPWD program, will only be allowed on State Forest lands under the limited circumstances described within the NYS Strategic Plan for State Forest Management.
Mineral Resources	
MR I – Provide for mineral exploration and development while protecting natural resources and recreation	Natural gas extraction, exploration or development activities, if they occur on the unit, will follow procedures described in the Generic Environmental Impact Statement (GEIS) on Oil, Gas and Solution Mining Regulatory Program and the NYS Strategic Plan for State Forest Management and no current actions are proposed on lands within the Unit.
Supporting Local Communities	
LC I – Provide revenue to New York State and economic stimulus for local communities	Continue to provide economic benefits to the People of the State through the variety of goods and services produced on State Forest lands, as well as the tax revenue provided to local communities.
LC II – Improve local economies through forest-based tourism	Develop partnerships with organizations, individuals, or communities to sustain and/or enhance forest-based tourism activities that are consistent with this plan and State Forest rules and regulations. The Volunteer Stewardship Agreement program will be used to formalize such partnerships.

MANAGEMENT OBJECTIVES AND ACTIONS

Objectives

<i>Table III.D –Public / Permitted Use Objectives and Actions</i>	
Objective	Actions
LC III – Protect rural character and provide ecosystem services to local communities.	The presence of State Forests helps maintain the rural character of much of New York State. Undeveloped State Forest lands provide many important ecosystem services to society, such as a range of wildlife habitat, buffering of downstream communities from flooding, pollination of crops, clean water, and clean air. State Forest lands also provide open space benefits, such as free public recreational opportunities and places for relaxation and escape from the disruptions and stresses associated with urban areas.

Forest Management and Health

<i>Table III.E. –Forest Management and Health Objectives and Actions</i>	
Objective	Actions
Forest Products	
FP I – Sustainably manage for forest products	Provide a sustained supply of both Timber and non-timber products. Details are provided within the land management action tables.
FP II – Educate the public about the benefits of silviculture	Where appropriate post signage with information about forest management activities adjacent to active timber harvests. Attend or deliver group presentations, provide fair and other public outreach displays. Interact with persons, anglers, campers, hikers, hunters, and other forest users while performing fieldwork activities.
Plantation Management	
PM I – Convert plantation stands to natural forest conditions where appropriate	Convert conifer plantation stands to naturally regenerated stands when adequate forest conditions allow.
PM II – Artificially regenerate plantations where appropriate	Where regeneration is not adequate and existing plantation must be removed, artificial regeneration will be utilized to regenerate a new forest.
Forest Health	

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

Objective	Actions
FH I – Use timber sales to improve forest health and the diversity of species	<p>Timber sales will be utilized to remove poorer quality growing stock in order to grant better growing conditions to residual trees.</p> <p>Species diversity, tree quality, and health will be considered in selecting trees to retain after harvest, when possible.</p> <p>Timber sales may be utilized to in part to control undesirable interfering vegetation & invasive species, and to improve the diversity and abundance of native species.</p>
FH II – Protect the unit and surrounding lands from introduced diseases and invasive plant and animal species	<p>Coordinate with the Department of Agriculture & Markets, Cooperative Extension, and other state and federal government agencies to develop and implement plans to control the spread of introduced diseases and invasive species.</p>
Managing Deer Impacts	
DM I – Monitor impacts of deer browsing on forest health and regeneration	<p>Coordinate with the Division of Fish & Wildlife to monitor deer impacts, harvests, and herd management goals.</p> <p>Conduct regularly occurring forest inventory. Prepare individual stand assessments prior to implementing a silvicultural practice or harvest.</p>
DM II – Address issues of over-browsing	<p>Consider DMAP where necessary on the State Forest lands to help maintain deer populations within their ecological carrying capacities on the Unit.</p> <p>Adjust harvesting regimes to consider the probable deer impacts when implementing regeneration harvests.</p>
Fire Management	
FM I – Support Forest Rangers in controlling the ignition and spread of wildfires	<p>Manage State Forest lands to control fuel load and limit ignition sources of wildfires. Maintain reasonable access to interior forest stands to allow for control in the spread of wildfires.</p>

MANAGEMENT OBJECTIVES AND ACTIONS

Objectives

<i>Table III.E. –Forest Management and Health Objectives and Actions</i>	
Objective	Actions
FM II – Maintain naturally occurring fire-dependent communities	Funding and staff availability levels limit the ability to acquire the permits and mobilize the additional resources and staff required to properly maintain naturally occurring fire-dependent communities on State Forest lands at this time.
Carbon Sequestration	
CS I – Keep forests as forests	Maintain a range of managed and unmanaged forests across the unit. Periodic timber management will promote a diversity of tree species, sizes, and age classes across the larger landscape. Regenerate and maintain forest stand cover according to the Schedule of Land Management Actions.
CS II – Enhance carbon storage in existing stands	Techniques that enhance carbon storage such as maintaining a longer growing rotation and managing for late successional stands will be considered in areas that have a lower risk of disturbance. Improve the growth potential of trees within forest stands by maintaining the relative density of the stand at an acceptable level to encourage tree growth and result in increased carbon storage within residual trees.
CS III – Ensure forest re-establishment following a harvest or other disturbance	The abundance of advanced regeneration will be evaluated prior to creation of large-gap openings (e.g., even-aged intermediate harvests) to help ensure re-establishment. Invasive plants will be treated and removed prior to harvests and heavily infested areas will be avoided when seed spread is likely to occur. Forests will be monitored for regeneration and establishment success within five years of a harvest or other disturbance. As needed, additional strategies will be used to help ensure re-establishment such as deer exclosures and planting to maintain forest cover.
CS III – Keep forests vigorous and improve forest growth rates	Employ silvicultural based harvest and thinning treatments to keep the forest stands vigorous and improve tree growth rates.

<i>Table III.E. –Forest Management and Health Objectives and Actions</i>	
Objective	Actions
CS IV – Sequester carbon in forest products	Within managed stands, encourage the establishment, growth, and development of forest cover which can provide viable forest products that will continue to store carbon during their subsequent use.
Climate Resilience	
CR I – Maintain and increase forest connectivity	Reforestation methods will be used on lands that have become deforested and/or not reached establishment success as it aligns with management objectives
CR II – Encourage tree species composition, structural, age, genetic, and functional diversity and complexity across the landscape	Harvests will consider biodiversity, long-lived species, permanent legacy protection, variable density thinning, gap cutting, and other techniques to increase stand complexity in retention guidelines

MANAGEMENT OBJECTIVES AND ACTIONS

Ten-Year List of Management Actions

Ten-Year List of Management Actions

Unit-wide Actions

Action 1

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

Action 2

Maintain the web page for each State Forest in this unit, including an electronic, printable map showing the location of recreational amenities.

Action 3

Maintain the State Forest boundaries in accordance with the schedule listed in Table I.G. – Status of Boundary Lines.

Action 4

Maintain regular forest inventory on a reoccurring basis so that forests are inventoried fully once per ten-year period.

Action 5

Assess current trail network for opportunities to add accessible pedestrian trails. Maintain 1.2 miles of designated trail maintained for use under the Motorized Access Program for Persons with Disabilities.

Action 6

Maintain 8.4 miles of designated snowmobile trail on the unit.

Action 7

Maintain 1.2 miles of existing Public Forest Access Roads on the unit.

Bobell Hill State Forest Actions

Bobell Hill SF Action 1

Develop and construct a new Public Forest Access Road approximately 0.26 miles long west of Bowbell Road to provide access to internal portions of the forest for scheduled forest product sales and other management activities. Construction will include an access gate to control unauthorized motor vehicle access from Bowbell Road.

Beaver Flow State Forest Actions

Beaver Flow SF Action 1

Boulders installed to prevent unauthorized access beyond the Kiosk parking area adjacent to Davey Road have been intermittently breached. Continued unauthorized access at this location may require installation of a gate.

Bumps Creek State Forest Actions

Bumps Creek SF Action 1

Relocate the existing kiosk to a new location along Sprague Road due to repeated vandalism that has occurred at the current isolated location.

MANAGEMENT OBJECTIVES AND ACTIONS

TEN-YEAR LIST OF MANAGEMENT ACTIONS

Coventry State Forest Actions

Coventry SF Action 1

Complete installation of an ADA compliant 100 -foot trail segment and observation platform from the new access road and parking area to the pond to allow universal access.

Oak Ridge State Forest Actions

Oak Ridge SF Action 1

Develop and construct an off-road parking area and Public Forest Access Road approximately 0.28 miles long west of Elm Drive to provide public access and access to internal portions of the forest for scheduled forest product sales and other management activities. Construction will include an access gate to control unauthorized motor vehicle access from Elm Drive.

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

List of Previous Management Actions Completed

This is a list of scheduled management objectives and actions that were completed during implementation of the previous unit management plan.

Unit Actions

Objective

Maintain and enhance public access and existing pull-off and parking areas.

Action Completed

Existing public access, pull-off, and parking areas have been maintained to the extent possible. A new 4 car parking area located off Cheese Factory Road Extension at the north end of the Coventry State Forest has been developed for public access use, when not utilized for forest product sales. New parking areas have been developed or upgraded at the kiosk locations on each State Forest.

Objective

Install one informational kiosk and associated parking area for each of the State Forests on the unit.

Action Completed

An informational kiosk with an associated two to three car parking area has been developed and installed on each State Forest on the unit.

Objective

Maintain existing public use facilities on the State Forests of the unit in a rustic manner.

Action Completed

The number of signs, gates, and material improvements to the forest facilities have been limited in order to

maintain the rustic appearance and relatively undeveloped nature of State Forests and complement the surrounding environment.

Objective

Encourage participation in the DEC Adopt-A-Natural Resource program.

Action Completed

The Adopt-A-Natural Resource program has been replaced with the similarly functioning Volunteer Service Agreement (VSA). A VSA allows for volunteer participation in State Land management projects and service. Currently three VSA's are in place on the unit, two for the maintenance of designated snowmobile trails, and one for maintenance of a historic cemetery and access trail.

Objective

Maintain 1.2 miles of trails open to ATV use by people with disabilities.

Action Completed

1.2 miles of trail are designated and maintained for use under the Motorized Access Program for Persons With Disabilities on the Coventry State Forest.

Objective

Prohibit recreational use of ATV's and other off-road motorized vehicles, excepting legal use of designated trails for the Motorized Access Program for Persons With Disabilities.

Action Completed

The use of ATV's and other off-road motorized vehicles is now subject to application of the ATV policy found within the Strategic Plan for State Forest Management.

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

Objective

Prohibit recreational use of ATV's and other off-road motorized vehicles, excepting legal use of designated trails for the Motorized Access Program for Persons With Disabilities.

Action Completed

The use of ATV's and other off-road motorized vehicles is now subject to application of the ATV policy found within the Strategic Plan for State Forest Management.

Objective

Enhance snowmobile opportunities on the unit.

Action Completed

As part of the New York State Snowmobile Trail System, a total of 8.4 miles are now designated for thru travel crossing four State Forests on the unit. All designated trails are fully maintained through Volunteer Service Agreements with the B.C. SnoRiders and D.O.C.S. snowmobile trail groups.

Objective

Restrict and install vehicular barriers on Beaver Flow State Forest.

Action Completed

Gates were installed at two locations along the designated snowmobile trail to prevent unauthorized access on the forest. During maintenance of the former Glendenning Road boulders were also installed to prevent use of the severely degraded southern section of the road and prevent fording of the stream. Boulders were also installed to prevent unauthorized access beyond the Kiosk parking area adjacent to Davey Road. Continued unauthorized access at this location may require the installation of a gate.

Forest Type Codes

NH - Northern Hardwood

NH/Hem - Northern Hardwood/Hemlock

NH/Oak - Northern Hardwood/Oak

Oak

Oak/WP - Oak/White Pine

Oak/Hem - Oak/Hemlock

Hem - Hemlock

Swamp H - Swamp Hardwood

Pioneer H - Pioneer Hardwood

WP - White Pine

WH/NH - White Pine/Northern Hardwood

NS - Norway Spruce

RP - Red Pine

Larch

Mixedwood - various Softwood and Harwood mixes resultant of natural stand regeneration

Non Forest - Ponds, Vernal Pools, Wetlands, Pits, Developed Assets etc.

Other

Management Direction Code

Forest Management

EA - Even Age

UA - Uneven Age

Protection and Non-Management

ZA - Protection Access

ZH - Protection Historical

ZR - Protection Riparian

ZS - Protection Slope

ZW - Protection Wet

NM - Non-Management or Passive Management

Treatment Type Codes

IT - Intermediate Thinning

RH - Regeneration Harvest

TSI - Timber Stand Improvement

FW - Firewood Harvest

IVC - Interfering and/or Invasive Vegetation Control

NA - No action scheduled during this planning horizon

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

Land Management Action Schedules

Table III.F. -Land Management Action Schedule (by State Forest)

State Forest	Stand	Acres	Forest Type		Management Direction	Treatment Type	Treatment Year
			Current	Future			
Beaver Flow State Forest							
BC 1	A-1	2	Non Forest	Non Forest	ZW		
BC 1	A-2	10	NH - Hemlock	NH/Hem	ZS/ZW		
BC 1	A-3	12	Other	Other	NM		
BC 1	A-4	11	White Pine - Larch	WP/NH	EA	IT	2026
BC 1	A-5	11	NH - White Pine	WP/NH	EA	IT	2026
BC 1	A-6	4	Northern Hardwood	NH	EA	IT	2023
BC 1	A-7	5	Non Forest	Non Forest	ZR		
BC 1	A-8	9	NH - Hemlock	NH/Hem	ZR		
BC 1	A-9	21	Pine - Natural Species	P/Natural	EA	NA	
BC 1	A-10	75	Bucket Mixes	Mixedwood	EA	NA	
BC 1	A-11	11	Northern Hardwood	NH	EA	NA	
BC 1	A-12	5	NH - Hemlock	NH/Hem	ZR		
BC 1	A-13	9	Northern Hardwood	NH	EA	IT/IVC	2029
BC 1	A-14	126	Norway Spruce	Mixedwood	EA	IT	2023
BC 1	A-15	40	White Pine -Plantation	WP/NH	EA	IT	2026
BC 1	A-16	19	Northern Hardwood	NH	EA	RH/IVC	2029
BC 1	A-17	21	NH - Hemlock	NH/Hem	UA	IT	2029
BC 1	A-18	55	White Pine -Plantation	WP/NH	EA	RH/IVC	2026
BC 1	A-19	43	Pine - Natural Species	P/Natural	EA	NA	
BC 1	A-20	18	NH - Hemlock	NH/Hem	ZR		
BC 1	A-21	22	NH - Hemlock	NH/Hem	UA	NA	
BC 1	A-22	14	NH - Hemlock	NH/Hem	UA	NA	
BC 1	A-23	13	NH - Hemlock	NH/Hem	ZR		
BC 1	A-24	5	Norway Spruce	NS	EA	NA	
BC 1	A-25	10	Northern Hardwood	NH	EA	IT	2029
BC 1	A-26	5	Northern Hardwood	NH	EA	TSI/FW	2029
BC 1	A-27	3	Red Pine - Larch	Mixedwood	ZR		
BC 1	A-28	6	NH - Hemlock	NH/Hem	EA	FW	2023
BC 1	A-29	14	NH - Hemlock	NH/Hem	ZS/ZR		
BC 1	A-30	21	Pine - Natural Species	P/Natural	ZS		
BC 1	A-31	52	White Pine - Spruce	Mixedwood	ZR		
BC 1	A-32	46	NH - Hemlock	NH/Hem	ZR		
BC 1	A-33	95	Pine - Natural Species	P/Natural	EA	NA	
BC 1	A-34	13	Red Pine -Plantation	NH	EA	NA	

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

State Forest	Stand	Acres	Forest Type		Management Direction	Treatment Type	Treatment Year
			Current	Future			
BC 1	A-35	4	Red Pine - Larch	NH	EA	NA	
BC 1	A-36	5	NH - Hemlock	NH/Hem	ZR		
BC 1	A-37	4	Northern Hardwood	NH	EA	TSI/FW	2026
BC 1	A-38	6	Transition Hard (NH-Oak)	NH/Oak	EA	IN	2026
BC 1	A-39	3	Northern Hardwood	NH	NM		
BC 1	A-40	1	Non Forest	Non Forest	ZH		
BC 1	A-41	18	NH - White Pine	Mixedwood	EA	NA	
BC 1	A-42	10	NH - Hemlock	NH/Hem	ZR		
BC 1	A-43	6	White Pine -Plantation	Mixedwood	EA	NA	
BC 1	A-44	6	NH - White Pine	Mixedwood	ZR		
BC 1	A-45	2	Transition Hard (NH-Oak)	NH/Oak	EA	TSI/FW	2029
BC 1	A-46	14	NH - Norway Spruce	Mixedwood	ZR		
BC 1	A-47	4	Northern Hardwood	NH	EA	NA	
BC 1	A-48	5	Seed/Sapling - Natural	NH	EA	NA	
BC 1	A-49	1	Northern Hardwood	NH	ZR		
BC 1	A-50	25	Seed/Sapling - Natural	NH	EA	NA	
BC 1	A-51	4	Hemlock	NH/Hem	ZR		
BC 1	A-52	3	Spruce - Natural Species	Mixedwood	ZR		
BC 1	A-53	5	Pine - Natural Species	Mixedwood	EA	NA	
BC 1	A-54	8	Northern Hardwood	NH	ZH		
BC 1	A-55	1	Non Forest	Non Forest	ZH		
BC 1	A-56	3	NH - White Pine	Mixedwood	ZR		
BC 1	A-57	1	Non Forest	Non Forest	ZW		
BC 1	A-58	7	Black Locust-Nat	NH	ZH		
BC 1	A-59	4	Northern Hardwood	NH	EA	FW	2023
BC 1	A-60	5	White Pine -Plantation	Mixedwood	NM		
BC 1	A-61	5	NH - White Pine	Mixedwood	ZR		
BC 1	A-62	5	NH - White Pine	Mixedwood	ZR		
BC 1	A-63	9	NH - Hemlock	NH/Hem	NM		
BC 1	A-64	2	NH - Hemlock	NH/Hem	EA	TSI/FW	2023
BC 1	A-65	21	White Pine -Plantation	Mixedwood	ZR		
Bobell Hill State Forest – Compartment A							
C 10	A-1	10	Red Pine -Plantation	NH	EA	IT	2028
C 10	A-2	3	Non Forest	Non Forest	ZW		
C 10	A-3	3	Non Forest	Non Forest	ZR		
C 10	A-4	16	Red Pine -Plantation	NH	EA	IT	2028
C 10	A-5	1	Norway Spruce	NS	ZR		
C 10	A-6	1	Oak	Oak	ZA		

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

State Forest	Stand	Acres	Forest Type		Management Direction	Treatment Type	Treatment Year
			Current	Future			
C 10	A-7	18	Transition Hard (NH-Oak)	NH/Oak	EA	IT	2028
C 10	A-8	10	Northern Hardwood	NH	EA	IT	2028
C 10	A-9	35	White Pine - Spruce	Mixedwood	EA	NA	
C 10	A-10	5	European Larch	NH	EA	IT	2028
C 10	A-11	5	Northern Hardwood	NH	EA	IT	2028
C 10	A-12	41	Pine - Natural Species	NH	EA	NA	
C 10	A-13	4	Transition Hard (NH-Oak)	NH/Oak	EA	FW	2022
C 10	A-13	4	Transition Hard (NH-Oak)	NH/Oak	EA	IT/IVC	2028
C 10	A-14	56	White Pine -Plantation	Mixedwood	EA	NA	
C 10	A-15	2	Northern Hardwood	NH	EA	NA	
C 10	A-16	3	Northern Hardwood	NH	EA	FW	2028
C 10	A-17	4	Oak - Hickory	Oak/Hic	EA	RH	2028
C 10	A-18	5	White Pine - Hemlock	WP/Hem	ZR		
C 10	A-19	5	White Pine -Plantation	Mixedwood	EA	NA	
C 10	A-20	3	Northern Hardwood	NH	EA	FW	2022
C 10	A-21	22	White Pine -Plantation	Mixedwood	EA	NA	
C 10	A-22	12	White Pine -Plantation	Mixedwood	EA	NA	
C 10	A-23	5	Transition Hard (NH-Oak)	NH/Oak	EA	IT	2022
C 10	A-24	3	White Pine -Plantation	Mixedwood	EA	NA	
C 10	A-25	43	Northern Hardwood	NH	EA	IT	2022
C 10	A-26	2	White Pine -Plantation	Mixedwood	EA	RH	2022
C 10	A-27	5	NH - White Pine	Mixedwood	ZR		
C 10	A-28	28	NH - White Pine	Mixedwood	EA	NA	
C 10	A-29	9	NH - Hemlock	NH/Hem	UA	IT	2022
C 10	A-30	16	NH - Hemlock	NH/Hem	EA	IT	2022
C 10	A-31	25	Red Pine - Spruce	Mixedwood	ZR		
C 10	A-32	13	Northern Hardwood	NH	EA	RH/IVC	2028
Bobell Hill State Forest – Compartment B							
C 10	B-1	4	Northern Hardwood	NH	EA	IT	2029
C 10	B-2	9	Northern Hardwood	NH	EA	IT	2029
C 10	B-3	22	Pine - Natural Species	Mixedwood	EA	RH	2026
C 10	B-4	7	Pine - Natural Species	Mixedwood	EA	TSI/FW	2023
C 10	B-5	15	Northern Hardwood	NH	EA	IT	2029
C 10	B-6	5	Norway Spruce	Mixedwood	ZR		
C 10	B-7	1	Norway Spruce	Mixedwood	ZR		
C 10	B-8	5	Northern Hardwood	NH	UA	IT/IVC	2029
C 10	B-9	1	Northern Hardwood	NH	EA	RH	2023

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

State Forest	Stand	Acres	Forest Type		Management Direction	Treatment Type	Treatment Year
			Current	Future			
C 10	B-10	6	Northern Hardwood	NH	EA	RH	2023
C 10	B-11	10	White Pine -Plantation	Mixedwood	EA	IT	2023
C 10	B-12	16	NH - Hemlock	NH/Hem	EA	IT	2023
	Discontinued Stand						
C 10	B-14	3	NH - Hemlock	NH/Hem	ZR		
C 10	B-15	5	NH - White Pine	Mixedwood	EA	RH	2023
C 10	B-16	25	Northern Hardwood	NH	EA	IT	2029
C 10	B-17	6	Northern Hardwood	NH	EA	IT	2029
C 10	B-18	10	Northern Hardwood	NH	EA	NA	
C 10	B-19	5	Northern Hardwood	NH	EA	NA	
C 10	B-20	2	Black Locust-Nat	NH	EA	NA	
C 10	B-21	17	Norway Spruce	Mixedwood	EA	IT	2023
C 10	B-22	5	Northern Hardwood	NH	EA	IT/FW	2023
C 10	B-23	63	Norway Spruce	Mixedwood	EA	IN	2023
C 10	B-24	46	Norway Spruce	Mixedwood	EA	RH/IVC	2029
C 10	B-25	3	Non Forest	Non Forest	ZW		
C 10	B-26	7	NH - Hemlock	NH/Hem	ZR		
C 10	B-27	1	Black Locust-Nat	NH	EA	NA	
C 10	B-28	3	Norway Spruce	Mixedwood	EA	IT	2023
C 10	B-29	15	Norway Spruce	Mixedwood	EA	IT	2029
C 10	B-30	1	Northern Hardwood	NH	ZH		
C 10	B-31	21	Norway Spruce	Mixedwood	EA	IT	2023
C 10	B-32	9	Northern Hardwood	NH	EA	IT	2029
C 10	B-33	7	Northern Hardwood	NH	ZS/ZR		
C 10	B-34	1	Non Forest	Non Forest	ZH		
C 10	B-35	5	Seed/Sapling - Natural	NH	EA	NA	
C 10	B-36	16	Northern Hardwood	NH	NM		
C 10	B-37	19	Northern Hardwood	NH	EA	NA	
C 10	B-38	2	Non Forest	Non Forest	ZR		
C 10	B-39	8	Northern Hardwood	NH	ZR		
C 10	B-40	2	Norway Spruce	Mixedwood	EA	RH	2023
C 10	B-41	8	NH - White Pine	WP/NH	EA	NA	
C 10	B-42	4	Swamp Hardwood	Swamp H	ZR		
C 10	B-43	10	NH - White Pine	WP/NH	ZA		
C 10	B-44	4	NH - Hemlock	NH/Hem	ZR		
C 10	B-45	5	NH - Hemlock	NH/Hem	ZA		
C 10	B-46	4	Transition Hard (NH-Oak)	NH/Oak	EA	IT	2029
C 10	B-47	1	Spruce - Natural Species	Mixedwood	ZR		

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

State Forest	Stand	Acres	Forest Type		Management Direction	Treatment Type	Treatment Year
			Current	Future			
Bobell Hill State Forest – Compartment C							
C 10	C-1	8	NH - Hemlock	NH/Hem	ZR		
C 10	C-2	12	NH - Hemlock	NH/Hem	ZR		
C 10	C-3	10	NH - White Pine	WP/NH	EA	NA	
C 10	C-4	4	Non Forest	Non Forest	ZW		
C 10	C-5	25	NH - Hemlock	NH/Hem	UA	NA	
C 10	C-6	2	NH - Hemlock	NH/Hem	EA	FW	2024
C 10	C-7	28	Oak	NH/Oak	EA	IT/IVC	2024
C 10	C-8.1	8	Seed/Sapling - Natural	NH	EA	NA	
C 10	C-8.2	9	Norway Spruce	Mixedwood	EA	IT	2028
C 10	C-8.3	5	Norway Spruce	Mixedwood	EA	TSI	2028
C 10	C-8.4	10	Norway Spruce	Mixedwood	EA	IT	2028
C 10	C-8.5	21	NH - Hemlock	NH/Hem	EA	IT	2028
C 10	C-9	17	Northern Hardwood	NH	ZR		
C 10	C-10	2	NH - Hemlock	NH/Hem	UA	IT	2024
C 10	C-11	10	NH - Hemlock	NH/Hem	EA	IT	2024
C 10	C-12	10	Red Pine -Plantation	NH	EA	RH/IVC	2028
C 10	C-13	4	Northern Hardwood	NH	EA	IT/IVC	2024
C 10	C-14	9	White Pine - Larch	Mixedwood	EA	IT	2028
C 10	C-15	9	Northern Hardwood	NH	EA	IT/IVC	2024
C 10	C-16	16	Red Pine - White Pine	Mixedwood	EA	IT	2028
C 10	C-17	4	White Pine-Nat	Mixedwood	EA	IT	2028
C 10	C-18	7	Red Pine -Plantation	Mixedwood	EA	RH	2028
C 10	C-19	4	NH - Hemlock	NH/Hem	ZR		
C 10	C-20	7	Northern Hardwood	NH	EA	RH/IVC	2024
C 10	C-21	20	Red Pine -Plantation	NH	EA	RH	2028
C 10	C-22	4	Northern Hardwood	NH	ZR		
C 10	C-23	16	Transition Hard (NH-Oak)	NH/Oak	EA	IT	2024
C 10	C-24	58	Norway Spruce	Mixedwood	EA	RH	2028
C 10	C-25	13	NH - White Pine	WP/NH	EA	IT	2024
C 10	C-26	5	Northern Hardwood	NH	EA	IT	2024
C 10	C-27	23	Pine - Natural Species	NH	EA	RH	2028
C 10	C-28	4	Pine - Natural Species	Mixedwood	ZR		
	Discontinued Stand						
C 10	C-30	21	Red Pine - Spruce	NH	EA	IT	2028
C 10	C-31	3	Pine - Natural Species	NH	EA	IT	2028
C 10	C-32	47	Transition Hard (NH-Oak)	NH/Oak	EA	IT/IVC	2024

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

State Forest	Stand	Acres	Forest Type		Management Direction	Treatment Type	Treatment Year
			Current	Future			
C 10	C-33	9	Red Pine -Plantation	Mixedwood	EA	RH	2028
C 10	C-34	8	Red Pine-Nat	Mixedwood	ZR		
C 10	C-35	2	Spruce - Natural Species	Mixedwood	EA	TSI	2028
C 10	C-36	25	Northern Hardwood	NH	EA	IT/IVC	2024
C 10	C-37	30	Northern Hardwood	NH	EA	IT/IVC	2024
C 10	C-38	8	NH - Hemlock	NH/Hem	UA	NA	
C 10	C-39	6	Non Forest	Non Forest	NM		
Oak Ridge State Forest							
C 13	A-1	27	Northern Hardwood	NH	EA	IT/IVC	2026
C 13	A-2	11	Red Pine - Spruce	NH	EA	IT	2022
C 13	A-3	35	Transition Hard (NH-Oak)	NH/Oak	EA	RH/IVC	2026
C 13	A-4	3	Larch - Spruce	NH	EA	IT	2022
C 13	A-5	8	NH - White Pine	WP/NH	ZR		
C 13	A-6	6	Larch - Spruce	Mixedwood	ZW		
C 13	A-7	13	Larch - Spruce	NH	EA	RH	2026
C 13	A-8	76	Oak	NH/Oak	ZA		
C 13	A-9	37	Transition Hard (NH-Oak)	NH/Oak	ZA		
C 13	A-10	65	White Pine - Hemlock	WP/Hem	ZS/ZR		
C 13	A-11	117	Transition Hard (NH-Oak)	NH/Oak	EA	IT/IVC	2026
C 13	A-12	2	Larch - Spruce	Mixedwood	ZA		
C 13	A-13	74	Oak	NH/Oak	ZA		
C 13	A-14	53	NH - Hemlock	NH/Hem	ZS/ZR		
C 13	A-15	13	Transition Hard (NH-Oak)	NH/Oak	EA	IT	2026
C 13	A-16	2	Non Forest	Non Forest	ZW		
C 13	A-17	3	NH - White Pine	WP/NH	ZW		
C 13	A-18	11	White Pine - Hemlock	WP/Hem	ZS/ZR		
C 13	A-19	7	Oak - Pine	NH/Oak	ZA		
C 13	A-20	9	NH - Hemlock	NH/Hem	ZA		
Coventry State Forest – Compartment A							
C 27	A-1	23	Transition Hard (NH-Oak)	NH/Oak	ZS/ZR		
C 27	A-2	56	Spruce - Natural Species	Mixedwood	EA	IT	2030
C 27	A-3	7	NH - Hemlock	NH/Hem	ZR		
C 27	A-4	1	Norway Spruce	Mixedwood	ZA		
C 27	A-5	32	Japanese Larch	Mixedwood	ZA		
C 27	A-6	9	NH - Hemlock	NH/Hem	ZA		
C 27	A-7	6	Norway Spruce	Mixedwood	ZA		
C 27	A-8	5	NH - White Pine	WP/NH	ZA		
C 27	A-9	31	Transition Hard (NH-Oak)	NH/Oak	ZA		

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

State Forest	Stand	Acres	Forest Type		Management Direction	Treatment Type	Treatment Year
			Current	Future			
C 27	A-10	50	Spruce - Natural Species	Mixedwood	EA	IT/RH	2027
C 27	A-10	50	Spruce - Natural Species	Mixedwood	EA	IT/RH	2030
C 27	A-11	42	NH - Hemlock	NH/Hem	ZA		
C 27	A-12	33	NH - Hemlock	NH/Hem	ZR		
C 27	A-13	2	Northern Hardwood	NH	EA	TSI	2030
C 27	A-14	8	Northern Hardwood	NH	ZS		
C 27	A-15	33	Northern Hardwood	NH	UA	NA	
C 27	A-16	9	Red Pine -Plantation	NH	EA	IT/IVC	2027
C 27	A-17	4	Bucket Mixes	Mixedwood	ZR	IVC	2027
C 27	A-18	25	Norway Spruce	Mixedwood	EA	IT	2027
C 27	A-19	90	Red Pine - Spruce	NH	EA	IT/IVC	2027
C 27	A-20	2	Pioneer Hardwood	Pioneer H	EA	TSI	2027
C 27	A-21	68	White Pine - Hemlock	WP/Hem	ZR		
C 27	A-22	6	Transition Hard (NH-Oak)	NH/Oak	EA	NA	
C 27	A-23	2	Seed/Sapling - Natural	NH	EA	TSI/IVC	2027
C 27	A-24	2	Non Forest	Non Forest	ZR		
Coventry State Forest – Compartment B							
C 27	B-1	12	NH - Hemlock	NH/Hem	ZR		
C 27	B-2	36	Northern Hardwood	NH	EA	NA	
C 27	B-3	5	NH - Hemlock	NH/Hem	EA	NA	
C 27	B-4	21	NH - Hemlock	NH/Hem	NM		
C 27	B-5	37	Norway Spruce	Mixedwood	EA	IN	2025
C 27	B-6	11	Non Forest	Non Forest	ZW		
C 27	B-7	28	NH - White Pine	WP/NH	UA	NA	
C 27	B-8	34	Norway Spruce	Mixedwood	EA	IN	2025
C 27	B-9	4	Non Forest	Non Forest	ZR		
C 27	B-10	28	Red Pine - Spruce	NH	EA	RH	2025
C 27	B-11	3	Norway Spruce	Mixedwood	EA	IN	2025
C 27	B-12	29	NH - Hemlock	NH/Hem	NM		
C 27	B-13	8	Hemlock	Hemlock	ZR		
C 27	B-14	16	NH - Hemlock	NH/Hem	NM		
C 27	B-15	8	NH - Hemlock	NH/Hem	ZR		
C 27	B-16	10	Non Forest	Non Forest	ZW		
C 27	B-17	31	NH - Hemlock	NH/Hem	NM		
C 27	B-18	14	Northern Hardwood	NH	ZA		
C 27	B-19	16	Non Forest	Non Forest	ZW		
C 27	B-20	13	NH - White Pine	WP/NH	EA	FW	2022

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

State Forest	Stand	Acres	Forest Type		Management Direction	Treatment Type	Treatment Year
			Current	Future			
C 27	B-21	4	Non Forest	Non Forest	ZW		
C 27	B-22	4	Norway Spruce	Mixedwood	NM		
C 27	B-23	2	Northern Hardwood	NH	NM		
C 27	B-24	3	Non Forest	Non Forest	NM		
C 27	B-25	4	Swamp Hardwood	Swamp H	ZR		
C 27	B-26	6	Pine - Natural Species	Mixedwood	NM		
C 27	B-27	3	Pine - Natural Species	Mixedwood	NM		
C 27	B-28	2	Norway Spruce	Mixedwood	NM		
C 27	B-29	4	Seed/Sap - Plantation	Mixedwood	NM		
C 27	B-30	21	NH - Norway Spruce	Mixedwood	NM		
C 27	B-31	5	NH - Hemlock	NH/Hem	NM		
C 27	B-32	2	Norway Spruce	Mixedwood	NM		
C 27	B-33	19	NH - Norway Spruce	Mixedwood	NM		
C 27	B-34	4	Northern Hardwood	NH	NM		
C 27	B-35	6	Non Forest	Non Forest	ZW		
C 27	B-36	3	Norway Spruce	Mixedwood	NM		
C 27	B-37	3	Norway Spruce	Mixedwood	NM		
C 27	B-38	14	NH - Hemlock	NH/Hem	ZR		
C 27	B-39	1	Swamp Hardwood	Swamp H	ZR		
C 27	B-40	27	Northern Hardwood	NH	EA	NA	
C 27	B-41	24	Bucket Mixes	Mixedwood	EA	NA	
C 27	B-42	3	NH - White Pine	WP/NH	EA	TSI/FW	2022
C 27	B-43	2	Non Forest	Non Forest	ZW		
C 27	B-44	3	Non Forest	Non Forest	ZR		
C 27	B-45	40	Red Pine - Spruce	Mixedwood	EA	NA	
Bobell Hill State Forest							
C 30	A-1	11	Northern Hardwood	NH	EA	TSI/IVC	2030
C 30	A-2	11	Red Pine - Larch	NH	EA	RH/IVC	2030
C 30	A-3	12	Northern Hardwood	NH	ZA		
C 30	A-4	3	Spruce - Natural Species	Mixedwood	ZA		
C 30	A-5	13	NH - Hemlock	NH/Hem	ZR		
C 30	A-6	12	Pine - Natural Species	Mixedwood	NM		
C 30	A-7	2	Pine - Natural Species	NH	ZA		
C 30	A-8	6	Spruce - Natural Species	Mixedwood	ZA		
C 30	A-9	6	Northern Hardwood	NH	ZA		
C 30	A-10	7	Red Pine - Larch	NH	EA	RH/IVC	2030
C 30	A-11	13	Northern Hardwood	NH	EA	IT/IVC	2030
C 30	A-12	5	NH - Hemlock	NH/Hem	ZW		

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

State Forest	Stand	Acres	Forest Type		Management Direction	Treatment Type	Treatment Year
			Current	Future			
C 30	A-13	10	Red Pine - Larch	Mixedwood	EA	RH/IVC	2030
C 30	A-14	15	Northern Hardwood	NH	EA	TSI/FW	2030
C 30	A-15	26	Red Pine -Plantation	NH	EA	RH/IVC	2030
C 30	A-16	3	Northern Hardwood	NH	EA	TSI/IVC	2030
C 30	A-17	27	Pine - Natural Species	NH	EA	RH/IVC	2030
C 30	A-18	37	Northern Hardwood	NH	EA	IT/IVC	2030
C 30	A-19	9	Northern Hardwood	NH	EA	IT/IVC	2030
C 30	A-20	22	NH - Hemlock	NH/Hem	ZR		
C 30	A-21	53	Transition Hard (NH-Oak)	NH/Oak	EA	IT/IVC	2022
C 30	A-22	12	Red Pine -Plantation	NH	EA	RH/IVC	2026
C 30	A-23	2	Northern Hardwood	NH	EA	FW/IVC	2022
C 30	A-24	6	Non Forest	Non Forest	NM		
C 30	A-25	4	Red Pine - Larch	NH	EA	RH/IVC	2026
C 30	A-26	4	Northern Hardwood	NH	EA	TSI/IVC	2022
C 30	A-27	5	Northern Hardwood	NH	EA	TSI/IVC	2022
C 30	A-28	55	Seed/Sapling - Natural	NH	EA	NA	
C 30	A-29	38	Bucket Mixes	Mixedwood	EA	NA	
Discontinued Stands 30-31							
C 30	A-32	10	Transition Hard (NH-Oak)	NH/Oak	EA	TSI/IVC	2022
C 30	A-33	8	Bucket Mixes	NH	EA	RH/IVC	2026
C 30	A-34	3	Northern Hardwood	NH	EA	NA	
C 30	A-35	14	Spruce - Natural Species	Mixedwood	EA	NA	
C 30	A-36	4	Red Pine - Larch	NH	EA	RH	2026
C 30	A-37	51	Red Pine - Larch	NH	EA	RH/IVC	2026
C 30	A-38	74	Bucket Mixes	Mixedwood	EA	NA	
C 30	A-39	3	Other	Other	EA	NA	
Discontinued Stand							
C 30	A-41	15	NH - Spruce - Fir	Mixedwood	EA	TSI/FW	202
C 30	A-42	1	Non Forest	Non Forest	NM		
C 30	A-43	2	Red Pine -Plantation	Mixedwood	ZA		
C 30	A-44	2	Northern Hardwood	NH	EA	TSI/FW	2022
C 30	A-45	23	Norway Spruce	Mixedwood	EA	NA	
C 30	A-46	7	Norway Spruce	Mixedwood	EA	NA	
C 30	A-47	13	Transition Hard (NH-Oak)	NH/Oak	EA	TSI/FW	2022
C 30	A-48	17	Red Pine - Spruce	NH	EA	NA	
C 30	A-49	6	NH - White Pine	WP/NH	EA	NA	
C 30	A-50	17	NH - Hemlock	NH/Hem	ZR		

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

State Forest	Stand	Acres	Forest Type		Management Direction	Treatment Type	Treatment Year
			Current	Future			
C 30	A-51	5	NH - Hemlock	NH/Hem	ZA		
C 30	A-52	7	NH - Hemlock	NH/Hem	UA	IT	2030
C 30	A-53	2	Pioneer Hardwood	Pioneer H	EA	NA	
C 30	A-54	6	Northern Hardwood	NH	EA	TSI/IVC	2022
C 30	A-55	4	Pine - Natural Species	NH	EA	NA	
C 30	A-56	1	NH - Hemlock	NH/Hem	ZR		
C 30	A-57	5	NH - Hemlock	NH/Hem	ZR		
Bumps Creek State Forest							
C 33	A-1	7	NH - White Pine	WP/NH	ZW		
C 33	A-2	14	Red Pine - Spruce	NH	EA	IT	2025
C 33	A-3	9	Bucket Mixes	Mixedwood	ZR		
C 33	A-4	7	Red Pine - Spruce	NH	EA	IT	2025
C 33	A-5	48	NH - Hemlock	NH/Hem	NM		
C 33	A-6	3	Red Pine -Plantation	NH	EA	RH	2025
C 33	A-7	4	Japanese Larch	NH	EA	NA	
C 33	A-8	103	Red Pine - Larch	NH	EA	RH	2025
C 33	A-9	4	Transition Hard (NH-Oak)	NH/Oak	EA	RH	2025
C 33	A-10	4	Norway Spruce	NH	EA	NA	
C 33	A-11	3	Pine - Natural Species	NH	ZR		
C 33	A-12	17	Red Pine -Plantation	NH	EA	NA	
C 33	A-13	26	NH - White Pine	WP/NH	EA	NA	
C 33	A-14	10	Northern Hardwood	NH	EA	NA	
C 33	A-15	6	Norway Spruce	NH	EA	NA	
C 33	A-16	7	Red Pine - Larch	NH	EA	NA	
C 33	A-17	7	Norway Spruce	NH	EA	NA	
C 33	A-18	13	NH - Hemlock	NH/Hem	ZR		
C 33	A-19	3	Northern Hardwood	NH	EA	IT	2025
C 33	A-20	13	Pine - Natural Species	NH	EA	RH	2025
C 33	A-21	27	NH - Hemlock	NH/Hem	UA	IT	2025
C 33	A-22	5	Non Forest	NH	ZW		
C 33	A-23	124	Pine - Natural Species	NH	EA	IT	2025
C 33	A-24	24	NH - Hemlock	NH/Hem	NM		
C 33	A-25	3	Norway Spruce	NH	EA	IT	2025
C 33	A-26	9	Pine - Natural Species	NH	EA	IT	2025
C 33	A-27	8	Red Pine -Plantation	NH	EA	IT	2025
C 33	A-30	6	Northern Hardwood	NH	ZH		
Discontinued Stands 31-36							
C 33	37.0	3	NH - Hemlock	NH/Hem	ZW		

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

State Forest	Stand	Acres	Forest Type		Management Direction	Treatment Type	Treatment Year
			Current	Future			
C 33	38.0	1	Hemlock	Hemlock	ZW		

Table III.G. -Land Management Action Schedule 2022-2030 (by Year)

State Forest	Stand	Acres	Forest Type		Management Direction	Treatment Type
			Current	Future		
2022						
C 10	A-13	4	Transition Hard (NH-Oak)	NH/Oak	EA	FW
C 10	A-20	3	Northern Hardwood	NH	EA	FW
C 10	A-23	5	Transition Hard (NH-Oak)	NH/Oak	EA	IT
C 10	A-25	43	Northern Hardwood	NH	EA	IT
C 10	A-26	2	White Pine -Plantation	Mixedwood	EA	RH
C 10	A-29	9	NH - Hemlock	NH/Hem	UA	IT
C 10	A-30	16	NH - Hemlock	NH/Hem	EA	IT
C 13	A-2	11	Red Pine - Spruce	NH	EA	IT
C 13	A-4	3	Larch - Spruce	NH	EA	IT
C 27	B-20	13	NH - White Pine	WP/NH	EA	FW
C 27	B-42	3	NH - White Pine	WP/NH	EA	TSI/FW
C 30	A-21	53	Transition Hard (NH-Oak)	NH/Oak	EA	IT/IVC
C 30	A-23	2	Northern Hardwood	NH	EA	FW/IVC
C 30	A-26	4	Northern Hardwood	NH	EA	TSI/IVC
C 30	A-27	5	Northern Hardwood	NH	EA	TSI/IVC
C 30	A-32	10	Transition Hard (NH-Oak)	NH/Oak	EA	TSI/IVC
C 30	A-44	2	Northern Hardwood	NH	EA	TSI/FW
C 30	A-47	13	Transition Hard (NH-Oak)	NH/Oak	EA	TSI/FW
C 30	A-54	6	Northern Hardwood	NH	EA	TSI/IVC
2023						
BC 1	A-6	4	Northern Hardwood	NH	EA	IT
BC 1	A-14	126	Norway Spruce	Mixedwood	EA	IT
BC 1	A-28	6	NH - Hemlock	NH/Hem	EA	FW
BC 1	A-59	4	Northern Hardwood	NH	EA	FW
BC 1	A-64	2	NH - Hemlock	NH/Hem	EA	TSI/FW
C 10	B-4	7	Pine - Natural Species	Mixedwood	EA	TSI/FW
C 10	B-9	1	Northern Hardwood	NH	EA	RH
C 10	B-10	6	Northern Hardwood	NH	EA	RH
C 10	B-11	10	White Pine -Plantation	Mixedwood	EA	IT

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

State Forest	Stand	Acres	Forest Type		Management Direction	Treatment Type
			Current	Future		
C 10	B-12	16	NH - Hemlock	NH/Hem	EA	IT
C 10	B-15	5	NH - White Pine	Mixedwood	EA	RH
C 10	B-21	17	Norway Spruce	Mixedwood	EA	IT
C 10	B-22	5	Northern Hardwood	NH	EA	IT/FW
C 10	B-23	63	Norway Spruce	Mixedwood	EA	IN
C 10	B-28	3	Norway Spruce	Mixedwood	EA	IT
C 10	B-31	21	Norway Spruce	Mixedwood	EA	IT
C 10	B-40	2	Norway Spruce	Mixedwood	EA	RH
C 30	A-41	15	NH - Spruce - Fir	Mixedwood	EA	TSI/FW
2024						
C 10	C-6	2	NH - Hemlock	NH/Hem	EA	FW
C 10	C-7	28	Oak	NH/Oak	EA	IT/IVC
C 10	C-10	2	NH - Hemlock	NH/Hem	UA	IT
C 10	C-11	10	NH - Hemlock	NH/Hem	EA	IT
C 10	C-13	4	Northern Hardwood	NH	EA	IT/IVC
C 10	C-15	9	Northern Hardwood	NH	EA	IT/IVC
C 10	C-20	7	Northern Hardwood	NH	EA	RH/IVC
C 10	C-23	16	Transition Hard (NH-Oak)	NH/Oak	EA	IT
C 10	C-25	13	NH - White Pine	WP/NH	EA	IT
C 10	C-26	5	Northern Hardwood	NH	EA	IT
C 10	C-32	47	Transition Hard (NH-Oak)	NH/Oak	EA	IT/IVC
C 10	C-36	25	Northern Hardwood	NH	EA	IT/IVC
C 10	C-37	30	Northern Hardwood	NH	EA	IT/IVC
2025						
C 27	B-5	37	Norway Spruce	Mixedwood	EA	IN
C 27	B-8	34	Norway Spruce	Mixedwood	EA	IN
C 27	B-10	28	Red Pine - Spruce	NH	EA	RH
C 27	B-11	3	Norway Spruce	Mixedwood	EA	IN
C 33	A-2	14	Red Pine - Spruce	NH	EA	IT
C 33	A-4	7	Red Pine - Spruce	NH	EA	IT
C 33	A-6	3	Red Pine -Plantation	NH	EA	RH
C 33	A-8	103	Red Pine - Larch	NH	EA	RH
C 33	A-9	4	Transition Hard (NH-Oak)	NH/Oak	EA	RH
C 33	A-19	3	Northern Hardwood	NH	EA	IT
C 33	A-20	13	Pine - Natural Species	NH	EA	RH
C 33	A-21	27	NH - Hemlock	NH/Hem	UA	IT
C 33	A-23	124	Pine - Natural Species	NH	EA	IT
C 33	A-25	3	Norway Spruce	NH	EA	IT

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

State Forest	Stand	Acres	Forest Type		Management Direction	Treatment Type
			Current	Future		
C 33	A-26	9	Pine - Natural Species	NH	EA	IT
C 33	A-27	8	Red Pine -Plantation	NH	EA	IT
2026						
BC 1	A-4	11	White Pine - Larch	WP/NH	EA	IT
BC 1	A-5	11	NH - White Pine	WP/NH	EA	IT
BC 1	A-15	40	White Pine -Plantation	WP/NH	EA	IT
BC 1	A-18	55	White Pine -Plantation	WP/NH	EA	RH/IVC
BC 1	A-37	4	Northern Hardwood	NH	EA	TSI/FW
BC 1	A-38	6	Transition Hard (NH-Oak)	NH/Oak	EA	IN
C 10	B-3	22	Pine - Natural Species	Mixedwood	EA	RH
C 13	A-1	27	Northern Hardwood	NH	EA	IT/IVC
C 13	A-3	35	Transition Hard (NH-Oak)	NH/Oak	EA	RH/IVC
C 13	A-7	13	Larch - Spruce	NH	EA	RH
C 13	A-11	117	Transition Hard (NH-Oak)	NH/Oak	EA	IT/IVC
C 13	A-15	13	Transition Hard (NH-Oak)	NH/Oak	EA	IT
C 30	A-22	12	Red Pine -Plantation	NH	EA	RH/IVC
C 30	A-25	4	Red Pine - Larch	NH	EA	RH/IVC
C 30	A-33	8	Bucket Mixes	NH	EA	RH/IVC
C 30	A-36	4	Red Pine - Larch	NH	EA	RH
C 30	A-37	51	Red Pine - Larch	NH	EA	RH/IVC
2027						
C 27	A-10	50	Spruce - Natural Species	Mixedwood	EA	IT/RH
C 27	A-17	4	Bucket Mixes	Mixedwood	ZR	IVC
C 27	A-16	9	Red Pine -Plantation	NH	EA	IT/IVC
C 27	A-17	4	Bucket Mixes	Mixedwood	ZR	IVC
C 27	A-18	25	Norway Spruce	Mixedwood	EA	IT
C 27	A-19	90	Red Pine - Spruce	NH	EA	IT/IVC
C 27	A-20	2	Pioneer Hardwood	Pioneer H	EA	TSI
C 27	A-23	2	Seed/Sapling - Natural	NH	EA	TSI/IVC
2028						
C 10	A-1	10	Red Pine -Plantation	NH	EA	IT
C 10	A-4	16	Red Pine -Plantation	NH	EA	IT
C 10	A-7	18	Transition Hard (NH-Oak)	NH/Oak	EA	IT
C 10	A-8	10	Northern Hardwood	NH	EA	IT
C 10	A-10	5	European Larch	NH	EA	IT
C 10	A-11	5	Northern Hardwood	NH	EA	IT
C 10	A-13	4	Transition Hard (NH-Oak)	NH/Oak	EA	IT/IVC

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

State Forest	Stand	Acres	Forest Type		Management Direction	Treatment Type
			Current	Future		
C 10	A-16	3	Northern Hardwood	NH	EA	FW
C 10	A-17	4	Oak - Hickory	Oak/Hic	EA	RH
C 10	A-32	13	Northern Hardwood	NH	EA	RH/IVC
C 10	C-8.2	9	Norway Spruce	Mixedwood	EA	IT
C 10	C-8.3	5	Norway Spruce	Mixedwood	EA	TSI
C 10	C-8.4	10	Norway Spruce	Mixedwood	EA	IT
C 10	C-8.5	21	NH - Hemlock	NH/Hem	EA	IT
C 10	C-12	10	Red Pine -Plantation	NH	EA	RH/IVC
C 10	C-14	9	White Pine - Larch	Mixedwood	EA	IT
C 10	C-16	16	Red Pine - White Pine	Mixedwood	EA	IT
C 10	C-17	4	White Pine-Nat	Mixedwood	EA	IT
C 10	C-18	7	Red Pine -Plantation	Mixedwood	EA	RH
C 10	C-21	20	Red Pine -Plantation	NH	EA	RH
C 10	C-24	58	Norway Spruce	Mixedwood	EA	RH
C 10	C-27	23	Pine - Natural Species	NH	EA	RH
C 10	C-30	21	Red Pine - Spruce	NH	EA	IT
C 10	C-31	3	Pine - Natural Species	NH	EA	IT
C 10	C-33	9	Red Pine -Plantation	Mixedwood	EA	RH
C 10	C-35	2	Spruce - Natural Species	Mixedwood	EA	TSI
2029						
BC 1	A-13	9	Northern Hardwood	NH	EA	IT/IVC
BC 1	A-16	19	Northern Hardwood	NH	EA	RH/IVC
BC 1	A-17	21	NH - Hemlock	NH/Hem	UA	IT
BC 1	A-25	10	Northern Hardwood	NH	EA	IT
BC 1	A-26	5	Northern Hardwood	NH	EA	TSI/FW
BC 1	A-45	2	Transition Hard (NH-Oak)	NH/Oak	EA	TSI/FW
C 10	B-1	4	Northern Hardwood	NH	EA	IT
C 10	B-2	9	Northern Hardwood	NH	EA	IT
C 10	B-5	15	Northern Hardwood	NH	EA	IT
C 10	B-8	5	Northern Hardwood	NH	UA	IT/IVC
C 10	B-16	25	Northern Hardwood	NH	EA	IT
C 10	B-17	6	Northern Hardwood	NH	EA	IT
C 10	B-24	46	Norway Spruce	Mixedwood	EA	RH/IVC
C 10	B-29	15	Norway Spruce	Mixedwood	EA	IT
C 10	B-32	9	Northern Hardwood	NH	EA	IT
C 10	B-46	4	Transition Hard (NH-Oak)	NH/Oak	EA	IT
2030						
C 27	A-2	56	Spruce - Natural Species	Mixedwood	EA	IT

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

State Forest	Stand	Acres	Forest Type		Management Direction	Treatment Type
			Current	Future		
C 27	A-10	50	Spruce - Natural Species	Mixedwood	EA	IT/RH
C 27	A-13	2	Northern Hardwood	NH	EA	TSI
C 30	A-1	11	Northern Hardwood	NH	EA	TSI/IVC
C 30	A-2	11	Red Pine - Larch	NH	EA	RH/IVC
C 30	A-10	7	Red Pine - Larch	NH	EA	RH/IVC
C 30	A-11	13	Northern Hardwood	NH	EA	IT/IVC
C 30	A-13	10	Red Pine - Larch	Mixedwood	EA	RH/IVC
C 30	A-14	15	Northern Hardwood	NH	EA	TSI/FW
C 30	A-15	26	Red Pine -Plantation	NH	EA	RH/IVC
C 30	A-16	3	Northern Hardwood	NH	EA	TSI/IVC
C 30	A-17	27	Pine - Natural Species	NH	EA	RH/IVC
C 30	A-18	37	Northern Hardwood	NH	EA	IT/IVC
C 30	A-19	9	Northern Hardwood	NH	EA	IT/IVC
C 30	A-52	7	NH - Hemlock	NH/Hem	UA	IT

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

State Forest	Stand	Acres	Forest Type		Management Direction
			Current	Future	
Beaver Flow State Forest					
BC 1	A-9	21	Pine - Natural Species	P/Natural	EA
BC 1	A-10	75	Bucket Mixes	Mixedwood	EA
BC 1	A-11	11	Northern Hardwood	NH	EA
BC 1	A-19	43	Pine - Natural Species	P/Natural	EA
BC 1	A-21	22	NH - Hemlock	NH/Hem	UA
BC 1	A-22	14	NH - Hemlock	NH/Hem	UA
BC 1	A-24	5	Norway Spruce	NS	EA
BC 1	A-33	95	Pine - Natural Species	P/Natural	EA
BC 1	A-34	13	Red Pine -Plantation	NH	EA
BC 1	A-35	4	Red Pine - Larch	NH	EA
BC 1	A-41	18	NH - White Pine	Mixedwood	EA
BC 1	A-43	6	White Pine -Plantation	Mixedwood	EA
BC 1	A-47	4	Northern Hardwood	NH	EA
BC 1	A-48	5	Seed/Sapling - Natural	NH	EA
BC 1	A-50	25	Seed/Sapling - Natural	NH	EA
BC 1	A-53	5	Pine - Natural Species	Mixedwood	EA

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

State Forest	Stand	Acres	Forest Type		Management Direction
			Current	Future	
Bobell Hill State Forest					
C 10	A-9	35	White Pine - Spruce	Mixedwood	EA
C 10	A-12	41	Pine - Natural Species	NH	EA
C 10	A-14	56	White Pine -Plantation	Mixedwood	EA
C 10	A-15	2	Northern Hardwood	NH	EA
C 10	A-19	5	White Pine -Plantation	Mixedwood	EA
C 10	A-21	22	White Pine -Plantation	Mixedwood	EA
C 10	A-22	12	White Pine -Plantation	Mixedwood	EA
C 10	A-24	3	White Pine -Plantation	Mixedwood	EA
C 10	A-28	28	NH - White Pine	Mixedwood	EA
C 10	B-18	10	Northern Hardwood	NH	EA
C 10	B-19	5	Northern Hardwood	NH	EA
C 10	B-20	2	Black Locust-Nat	NH	EA
C 10	B-27	1	Black Locust-Nat	NH	EA
C 10	B-35	5	Seed/Sapling - Natural	NH	EA
C 10	B-37	19	Northern Hardwood	NH	EA
C 10	B-41	8	NH - White Pine	WP/NH	EA
C 10	C-3	10	NH - White Pine	WP/NH	EA
C 10	C-5	25	NH - Hemlock	NH/Hem	UA
C 10	C-8.1	8	Seed/Sapling - Natural	NH	EA
C 10	C-38	8	NH - Hemlock	NH/Hem	UA
Coventry State Forest					
C 27	A-15	33	Northern Hardwood	NH	UA
C 27	A-22	6	Transition Hard (NH-Oak)	NH/Oak	EA
C 27	B-2	36	Northern Hardwood	NH	EA
C 27	B-3	5	NH - Hemlock	NH/Hem	EA
C 27	B-7	28	NH - White Pine	WP/NH	UA
C 27	B-40	27	Northern Hardwood	NH	EA
C 27	B-41	24	Bucket Mixes	Mixedwood	EA
C 27	B-45	40	Red Pine - Spruce	Mixedwood	EA
Bobell Hill State Forest					
C 30	A-28	55	Seed/Sapling - Natural	NH	EA
C 30	A-29	38	Bucket Mixes	Mixedwood	EA
C 30	A-34	3	Northern Hardwood	NH	EA
C 30	A-35	14	Spruce - Natural Species	Mixedwood	EA
C 30	A-38	74	Bucket Mixes	Mixedwood	EA
C 30	A-39	3	Other	Other	EA
C 30	A-45	23	Norway Spruce	Mixedwood	EA

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

State Forest	Stand	Acres	Forest Type		Management Direction
			Current	Future	
C 30	A-46	7	Norway Spruce	Mixedwood	EA
C 30	A-48	17	Red Pine - Spruce	NH	EA
C 30	A-49	6	NH - White Pine	WP/NH	EA
C 30	A-53	2	Pioneer Hardwood	Pioneer H	EA
C 30	A-55	4	Pine - Natural Species	NH	EA
Bumps Creek State Forest					
C 33	A-7	4	Japanese Larch	NH	EA
C 33	A-10	4	Norway Spruce	NH	EA
C 33	A-12	17	Red Pine - Plantation	NH	EA
C 33	A-13	26	NH - White Pine	WP/NH	EA
C 33	A-14	10	Northern Hardwood	NH	EA
C 33	A-15	6	Norway Spruce	NH	EA
C 33	A-16	7	Red Pine - Larch	NH	EA
C 33	A-17	7	Norway Spruce	NH	EA

Table III.I.–Resource Protection and Non-Management Areas (by State Forest)

State Forest	Stand	Acres	Forest Type		Management Code
			Current	Future	
Beaver Flow State Forest					
BC 1	A-1	2	Non Forest	Non Forest	ZW
BC 1	A-2	10	NH - Hemlock	NH/Hem	ZS/ZW
BC 1	A-3	12	Other	Other	NM
BC 1	A-7	5	Non Forest	Non Forest	ZR
BC 1	A-8	9	NH - Hemlock	NH/Hem	ZR
BC 1	A-12	5	NH - Hemlock	NH/Hem	ZR
BC 1	A-20	18	NH - Hemlock	NH/Hem	ZR
BC 1	A-23	13	NH - Hemlock	NH/Hem	ZR
BC 1	A-27	3	Red Pine - Larch	Mixedwood	ZR
BC 1	A-29	14	NH - Hemlock	NH/Hem	ZS/ZR
BC 1	A-30	21	Pine - Natural Species	P/Natural	ZS
BC 1	A-31	52	White Pine - Spruce	Mixedwood	ZR
BC 1	A-32	46	NH - Hemlock	NH/Hem	ZR
BC 1	A-36	5	NH - Hemlock	NH/Hem	ZR
BC 1	A-39	3	Northern Hardwood	NH	NM
BC 1	A-40	1	Non Forest	Non Forest	ZH

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

State Forest	Stand	Acres	Forest Type		Management Code
			Current	Future	
BC 1	A-42	10	NH - Hemlock	NH/Hem	ZR
BC 1	A-44	6	NH - White Pine	Mixedwood	ZR
BC 1	A-46	14	NH - Norway Spruce	Mixedwood	ZR
BC 1	A-49	1	Northern Hardwood	NH	ZR
BC 1	A-51	4	Hemlock	NH/Hem	ZR
BC 1	A-52	3	Spruce - Natural Species	Mixedwood	ZR
BC 1	A-54	8	Northern Hardwood	NH	ZH
BC 1	A-55	1	Non Forest	Non Forest	ZH
BC 1	A-56	3	NH - White Pine	Mixedwood	ZR
BC 1	A-57	1	Non Forest	Non Forest	ZW
BC 1	A-58	7	Black Locust-Nat	NH	ZH
BC 1	A-60	5	White Pine -Plantation	Mixedwood	NM
BC 1	A-61	5	NH - White Pine	Mixedwood	ZR
BC 1	A-62	5	NH - White Pine	Mixedwood	ZR
BC 1	A-63	9	NH - Hemlock	NH/Hem	NM
BC 1	A-65	21	White Pine -Plantation	Mixedwood	ZR
Bobell Hill State Forest					
C 10	A-2	3	Non Forest	Non Forest	ZW
C 10	A-3	3	Non Forest	Non Forest	ZR
C 10	A-5	1	Norway Spruce	NS	ZR
C 10	A-6	1	Oak	Oak	ZA
C 10	A-18	5	White Pine - Hemlock	WP/Hem	ZR
C 10	A-27	5	NH - White Pine	Mixedwood	ZR
C 10	A-31	25	Red Pine - Spruce	Mixedwood	ZR
C 10	B-6	5	Norway Spruce	Mixedwood	ZR
C 10	B-7	1	Norway Spruce	Mixedwood	ZR
C 10	B-14	3	NH - Hemlock	NH/Hem	ZR
C 10	B-25	3	Non Forest	Non Forest	ZW
C 10	B-26	7	NH - Hemlock	NH/Hem	ZR
C 10	B-30	1	Northern Hardwood	NH	ZH
C 10	B-33	7	Northern Hardwood	NH	ZS/ZR
C 10	B-34	1	Non Forest	Non Forest	ZH
C 10	B-36	16	Northern Hardwood	NH	NM
C 10	B-38	2	Non Forest	Non Forest	ZR
C 10	B-39	8	Northern Hardwood	NH	ZR
C 10	B-42	4	Swamp Hardwood	Swamp H	ZR
C 10	B-43	10	NH - White Pine	WP/NH	ZA
C 10	B-44	4	NH - Hemlock	NH/Hem	ZR

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

State Forest	Stand	Acres	Forest Type		Management Code
			Current	Future	
C 10	B-45	5	NH - Hemlock	NH/Hem	ZA
C 10	B-47	1	Spruce - Natural Species	Mixedwood	ZR
C 10	C-1	8	NH - Hemlock	NH/Hem	ZR
C 10	C-2	12	NH - Hemlock	NH/Hem	ZR
C 10	C-4	4	Non Forest	Non Forest	ZW
C 10	C-9	17	Northern Hardwood	NH	ZR
C 10	C-19	4	NH - Hemlock	NH/Hem	ZR
C 10	C-22	4	Northern Hardwood	NH	ZR
C 10	C-28	4	Pine - Natural Species	Mixedwood	ZR
C 10	C-34	8	Red Pine-Nat	Mixedwood	ZR
C 10	C-39	6	Non Forest	Non Forest	NM
Oak Ridge State Forest					
C 13	A-5	8	NH - White Pine	WP/NH	ZR
C 13	A-6	6	Larch - Spruce	Mixedwood	ZW
C 13	A-8	76	Oak	NH/Oak	ZA
C 13	A-9	37	Transition Hard (NH-Oak)	NH/Oak	ZA
C 13	A-10	65	White Pine - Hemlock	WP/Hem	ZS/ZR
C 13	A-12	2	Larch - Spruce	Mixedwood	ZA
C 13	A-13	74	Oak	NH/Oak	ZA
C 13	A-14	53	NH - Hemlock	NH/Hem	ZS/ZR
C 13	A-16	2	Non Forest	Non Forest	ZW
C 13	A-17	3	NH - White Pine	WP/NH	ZW
C 13	A-18	11	White Pine - Hemlock	WP/Hem	ZS/ZR
C 13	A-19	7	Oak - Pine	NH/Oak	ZA
C 13	A-20	9	NH - Hemlock	NH/Hem	ZA
Coventry State Forest					
C 27	A-1	23	Transition Hard (NH-Oak)	NH/Oak	ZS/ZR
C 27	A-3	7	NH - Hemlock	NH/Hem	ZR
C 27	A-4	1	Norway Spruce	Mixedwood	ZA
C 27	A-5	32	Japanese Larch	Mixedwood	ZA
C 27	A-6	9	NH - Hemlock	NH/Hem	ZA
C 27	A-7	6	Norway Spruce	Mixedwood	ZA
C 27	A-8	5	NH - White Pine	WP/NH	ZA
C 27	A-9	31	Transition Hard (NH-Oak)	NH/Oak	ZA
C 27	A-11	42	NH - Hemlock	NH/Hem	ZA
C 27	A-12	33	NH - Hemlock	NH/Hem	ZR
C 27	A-14	8	Northern Hardwood	NH	ZS

MANAGEMENT OBJECTIVES AND ACTIONS

LAND MANAGEMENT ACTION SCHEDULES

State Forest	Stand	Acres	Forest Type		Management Code
			Current	Future	
C 27	A-17	4	Bucket Mixes	Mixedwood	ZR
C 27	A-21	68	White Pine - Hemlock	WP/Hem	ZR
C 27	A-24	2	Non Forest	Non Forest	ZR
C 27	B-1	12	NH - Hemlock	NH/Hem	ZR
C 27	B-4	21	NH - Hemlock	NH/Hem	NM
C 27	B-6	11	Non Forest	Non Forest	ZW
C 27	B-9	4	Non Forest	Non Forest	ZR
C 27	B-12	29	NH - Hemlock	NH/Hem	NM
C 27	B-13	8	Hemlock	Hemlock	ZR
C 27	B-14	16	NH - Hemlock	NH/Hem	NM
C 27	B-15	8	NH - Hemlock	NH/Hem	ZR
C 27	B-16	10	Non Forest	Non Forest	ZW
C 27	B-17	31	NH - Hemlock	NH/Hem	NM
C 27	B-18	14	Northern Hardwood	NH	ZA
C 27	B-19	16	Non Forest	Non Forest	ZW
C 27	B-21	4	Non Forest	Non Forest	ZW
C 27	B-22	4	Norway Spruce	Mixedwood	NM
C 27	B-23	2	Northern Hardwood	NH	NM
C 27	B-24	3	Non Forest	Non Forest	NM
C 27	B-25	4	Swamp Hardwood	Swamp H	ZR
C 27	B-26	6	Pine - Natural Species	Mixedwood	NM
C 27	B-27	3	Pine - Natural Species	Mixedwood	NM
C 27	B-28	2	Norway Spruce	Mixedwood	NM
C 27	B-29	4	Seed/Sap - Plantation	Mixedwood	NM
C 27	B-30	21	NH - Norway Spruce	Mixedwood	NM
C 27	B-31	5	NH - Hemlock	NH/Hem	NM
C 27	B-32	2	Norway Spruce	Mixedwood	NM
C 27	B-33	19	NH - Norway Spruce	Mixedwood	NM
C 27	B-34	4	Northern Hardwood	NH	NM
C 27	B-35	6	Non Forest	Non Forest	ZW
C 27	B-36	3	Norway Spruce	Mixedwood	NM
C 27	B-37	3	Norway Spruce	Mixedwood	NM
C 27	B-38	14	NH - Hemlock	NH/Hem	ZR
C 27	B-39	1	Swamp Hardwood	Swamp H	ZR
C 27	B-43	2	Non Forest	Non Forest	ZW
C 27	B-44	3	Non Forest	Non Forest	ZR
Bobell Hill State Forest					
C 30	A-3	12	Northern Hardwood	NH	ZA

LAND MANAGEMENT ACTION SCHEDULES

State Forest	Stand	Acres	Forest Type		Management Code
			Current	Future	
C 30	A-4	3	Spruce - Natural Species	Mixedwood	ZA
C 30	A-5	13	NH - Hemlock	NH/Hem	ZR
C 30	A-6	12	Pine - Natural Species	Mixedwood	NM
C 30	A-7	2	Pine - Natural Species	NH	ZA
C 30	A-8	6	Spruce - Natural Species	Mixedwood	ZA
C 30	A-9	6	Northern Hardwood	NH	ZA
C 30	A-12	5	NH - Hemlock	NH/Hem	ZW
C 30	A-20	22	NH - Hemlock	NH/Hem	ZR
C 30	A-24	6	Non Forest	Non Forest	NM
C 30	A-42	1	Non Forest	Non Forest	NM
C 30	A-43	2	Red Pine -Plantation	Mixedwood	ZA
C 30	A-50	17	NH - Hemlock	NH/Hem	ZR
30	A-51	5	NH - Hemlock	NH/Hem	ZA
C 30	A-56	1	NH - Hemlock	NH/Hem	ZR
C 30	A-57	5	NH - Hemlock	NH/Hem	ZR
Bumps Creek State Forest					
C 33	A-1	7	NH - White Pine	WP/NH	ZW
C 33	A-3	9	Bucket Mixes	Mixedwood	ZR
C 33	A-5	48	NH - Hemlock	NH/Hem	NM
C 33	A-11	3	Pine - Natural Species	NH	ZR
C 33	A-18	13	NH - Hemlock	NH/Hem	ZR
C 33	A-22	5	Non Forest	NH	ZW
C 33	A-24	24	NH - Hemlock	NH/Hem	NM
C 33	A-30	6	Northern Hardwood	NH	ZH
C 33	37.0	3	NH - Hemlock	NH/Hem	ZW
C 33	38.0	1	Hemlock	Hemlock	ZW

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Glossary

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

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

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

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

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

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

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

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

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

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

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

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

Cover type - the plant specie(s) forming a majority of composition across a given area.

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

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

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

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

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

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

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

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

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

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

Edge - the more or less well-defined boundary between two or more elements of the environment; a field adjacent to a woodland or the boundary of different silvicultural treatments.

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

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

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

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

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

GLOSSARY

Forest Stewardship Council - A non-profit organization promoting the responsible management of the world's forests through standards and certification.

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

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

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

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

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

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

Haul roads - permanent, unpaved roads, not designed for all-weather travel, but are constructed primarily for the removal of wood products and provide only limited access within the Unit. As such, these roads may or may not be open for public use. The standards for these roads are those of Class C roads.

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

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

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

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

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

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

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

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

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

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

Old growth - Forests that approximate the structure, composition, and functions of native forest prior to European settlement. They vary by forest type, but generally include more large trees, canopy layers, standing snags, native species, and dead organic matter than do young or intensively managed forests.

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

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

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

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

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

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

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

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

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

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

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

Resilience - management strategy allows for some changes within the forest ecosystem and practices enhance the ability of the forest ecosystem to bounce back from disturbances and tolerate changing environmental conditions.

Resistance - management strategy that prevents changes and disturbance within the forest ecosystem to maintain relatively unchanged conditions.

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

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

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

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

Sapling - trees larger than a seedling, and less than 6 inches diameter at breast height.

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

Selection system - the removal of trees over the entire range of size classes either singly or in groups at relatively short intervals, resulting in continuous establishment of reproduction. Individual trees are chosen for removal due to their maturity because they are of poor quality or thinning is needed to improve the growth rate of the remaining trees.

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

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

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

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

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

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

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

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

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

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

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

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

Transition - management strategy that intentionally anticipates and facilitates changes within the forest ecosystem to help it adapt to changing and new conditions.

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

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

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

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

GLOSSARY

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

APPENDIX B - RESPONSIVENESS SUMMARY TO PUBLIC COMMENTS

Appendices & Figures

Appendix A - Summary of Comments During Public Comment Period

Insert Appendix A Text

APPENDICES & FIGURES

APPENDIX A - SUMMARY OF COMMENTS DURING PUBLIC COMMENT PERIOD

Appendix B - Responsiveness Summary to Public Comments

Insert Appendix B Text

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.

Management actions in this Plan are within the thresholds established in the SPSFM, therefore these actions do not require additional SEQR. Any future action that does not comply with established thresholds will require additional SEQR prior to conducting the activity.

STATE ENVIRONMENTAL QUALITY REVIEW ACT

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

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

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

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

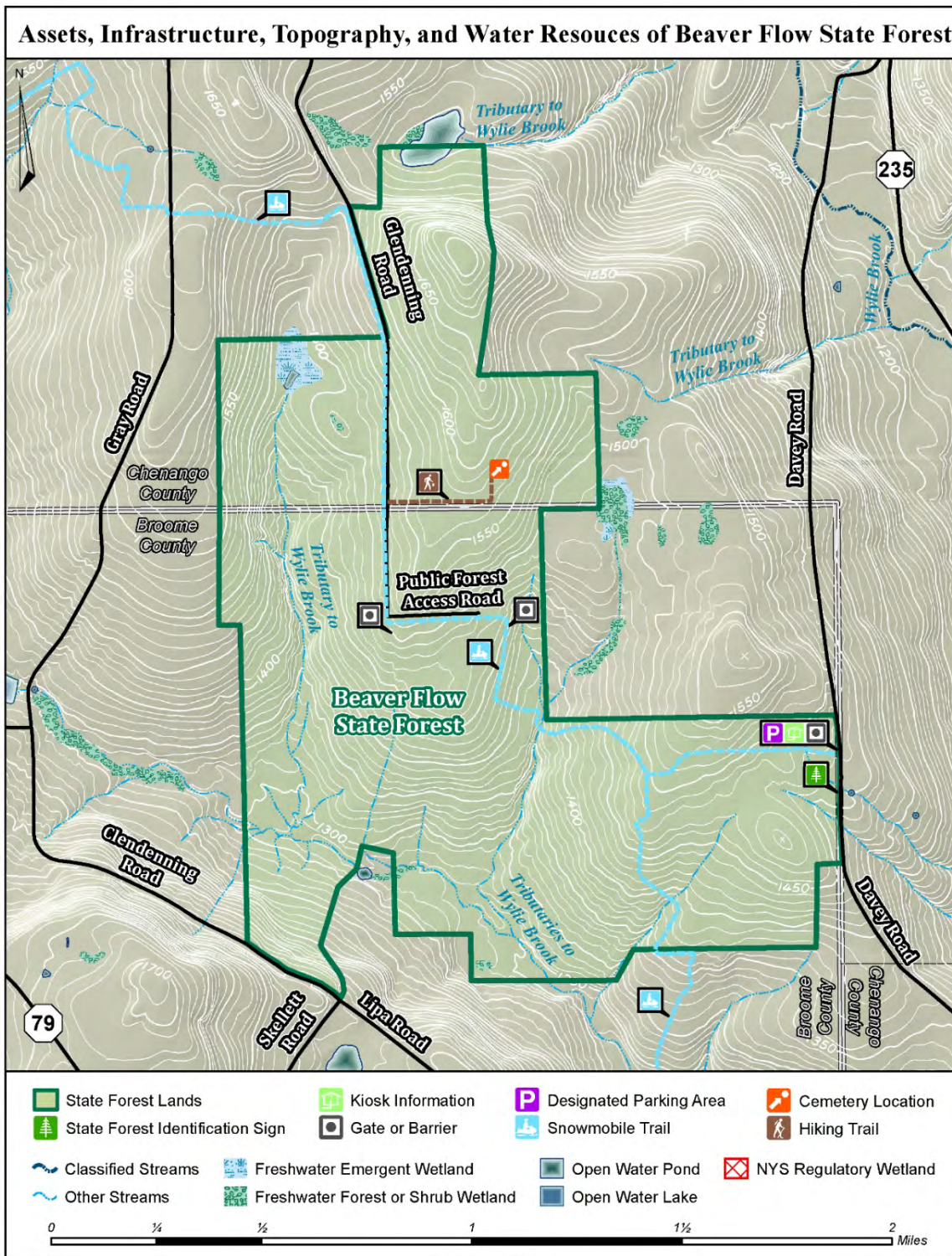
APPENDICES & FIGURES

APPENDIX C - STATE ENVIRONMENTAL QUALITY REVIEW (SEQR)

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

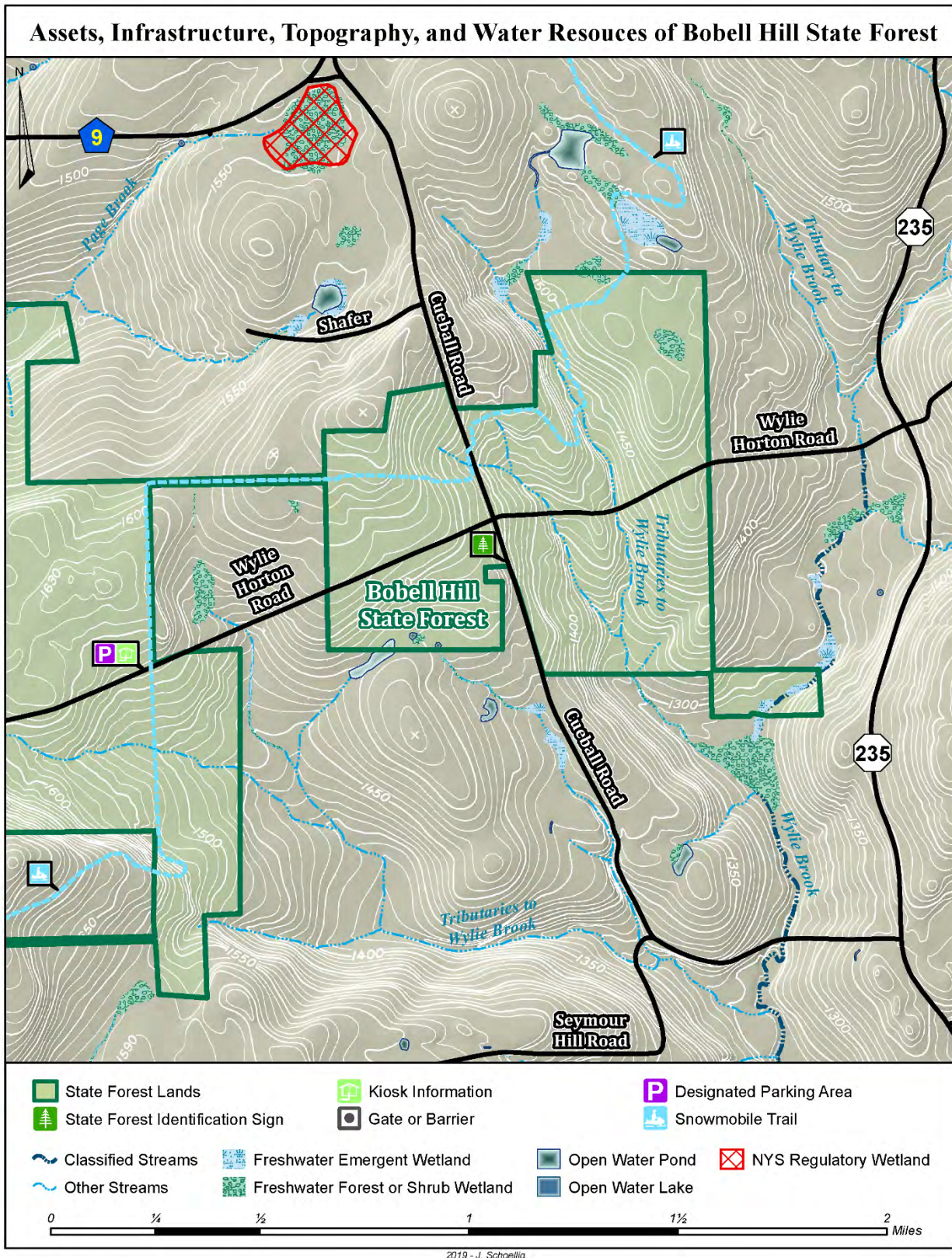
FIGURES 1 – ASSETS, INFRASTRUCTURE, TOPOGRAPHY, AND WATER RESOURCES

Figures 1 – Assets, Infrastructure, Topography, and Water Resources

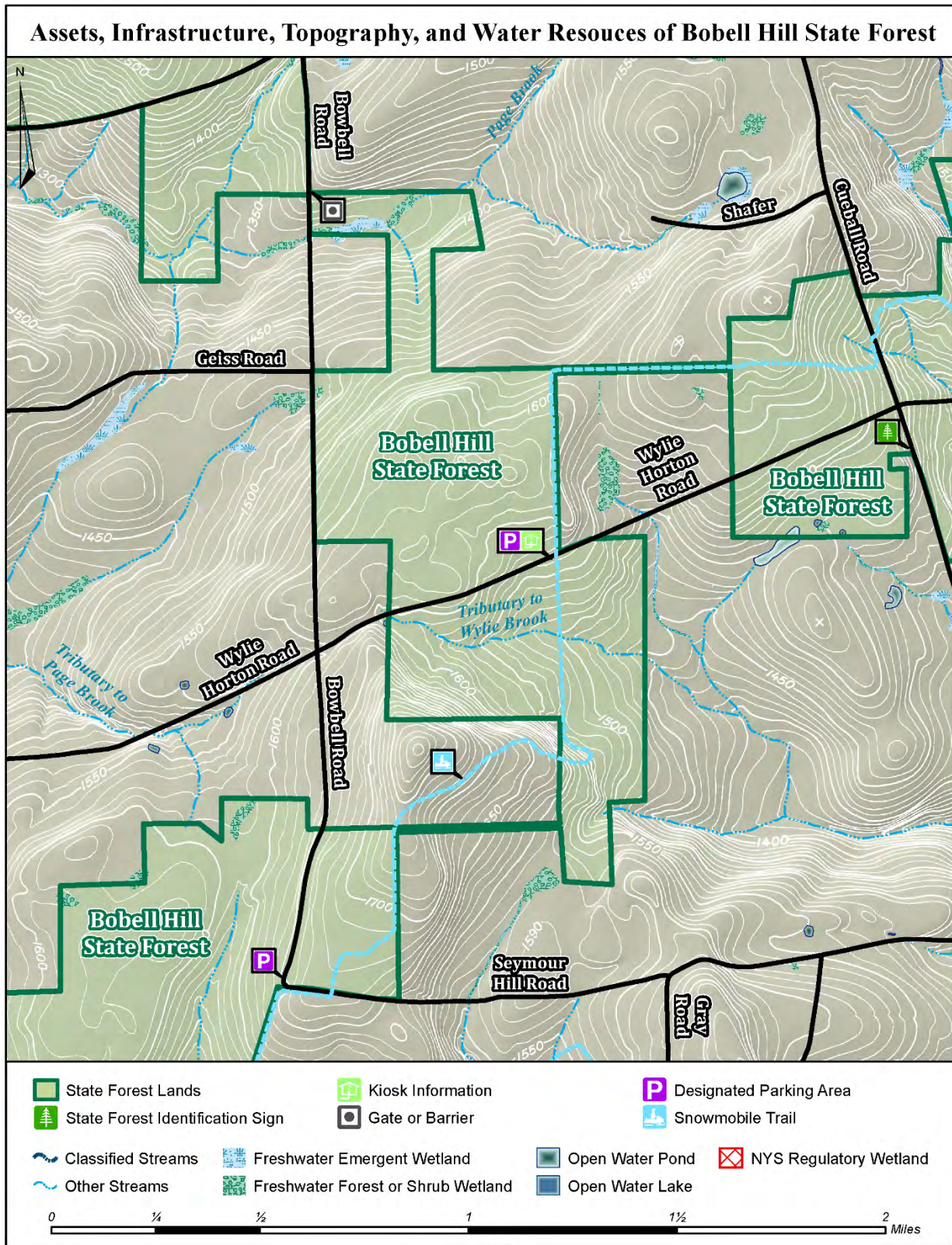


APPENDICES & FIGURES

FIGURES 1 – ASSETS, INFRASTRUCTURE, TOPOGRAPHY, AND WATER RESOURCES

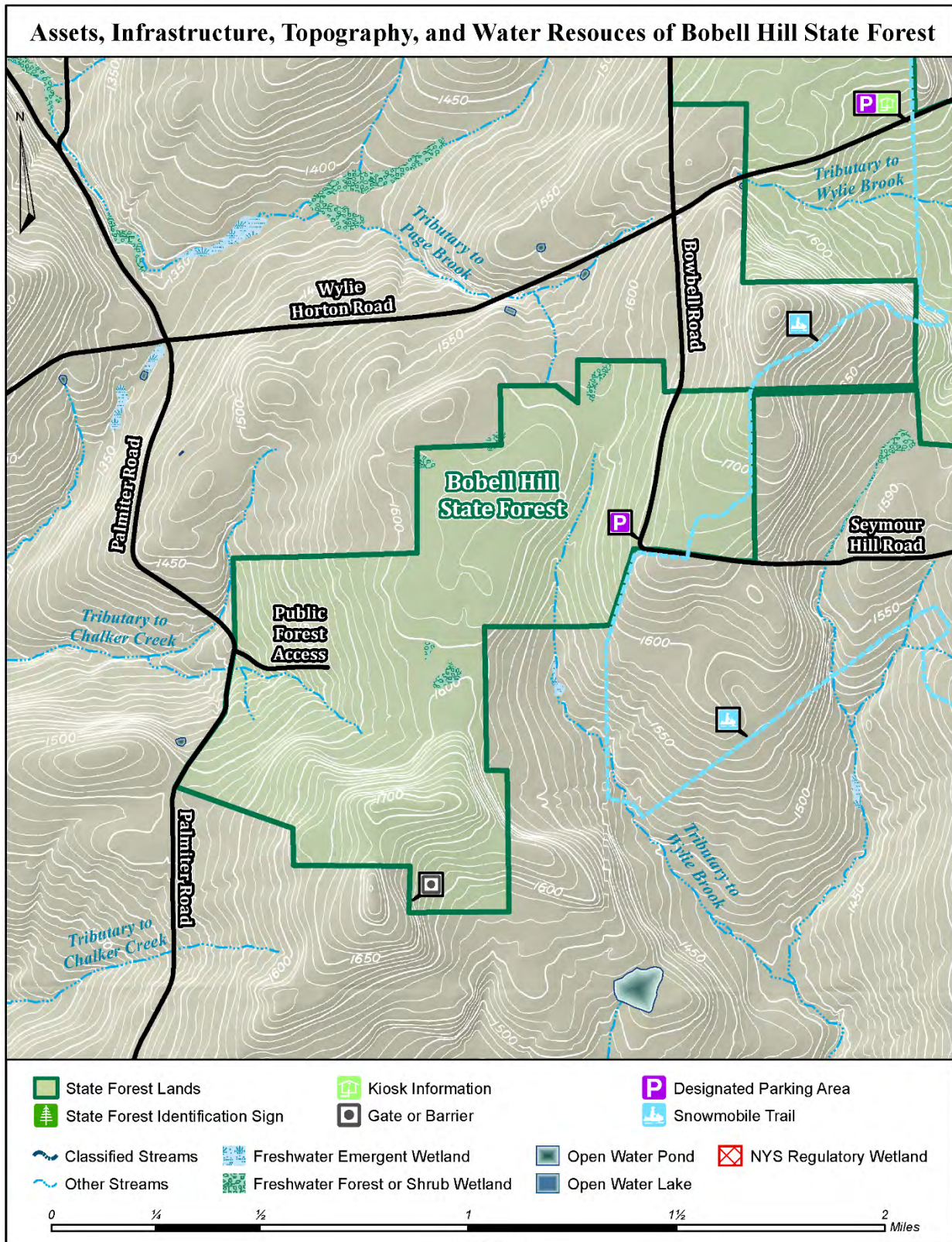


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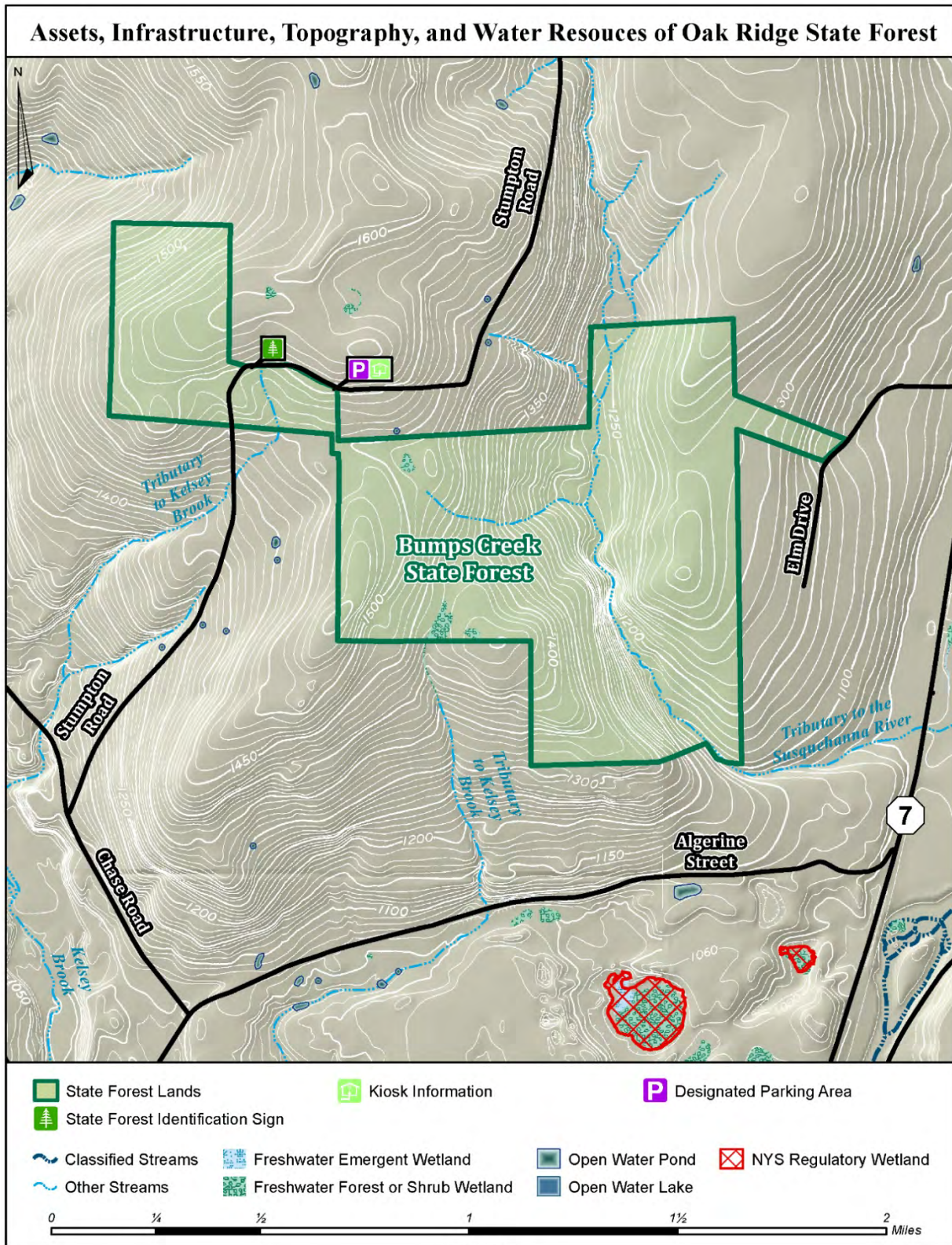


APPENDICES & FIGURES

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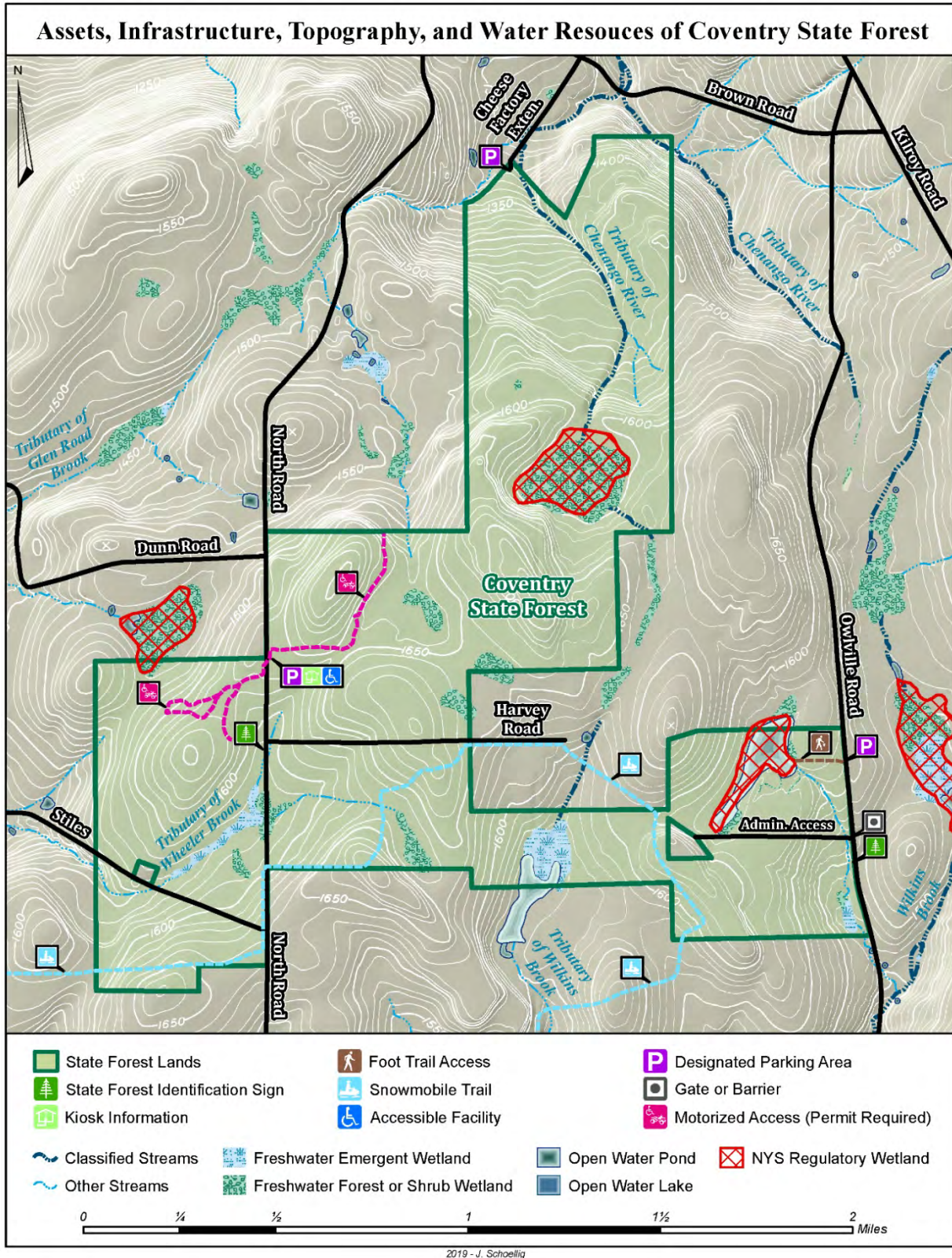


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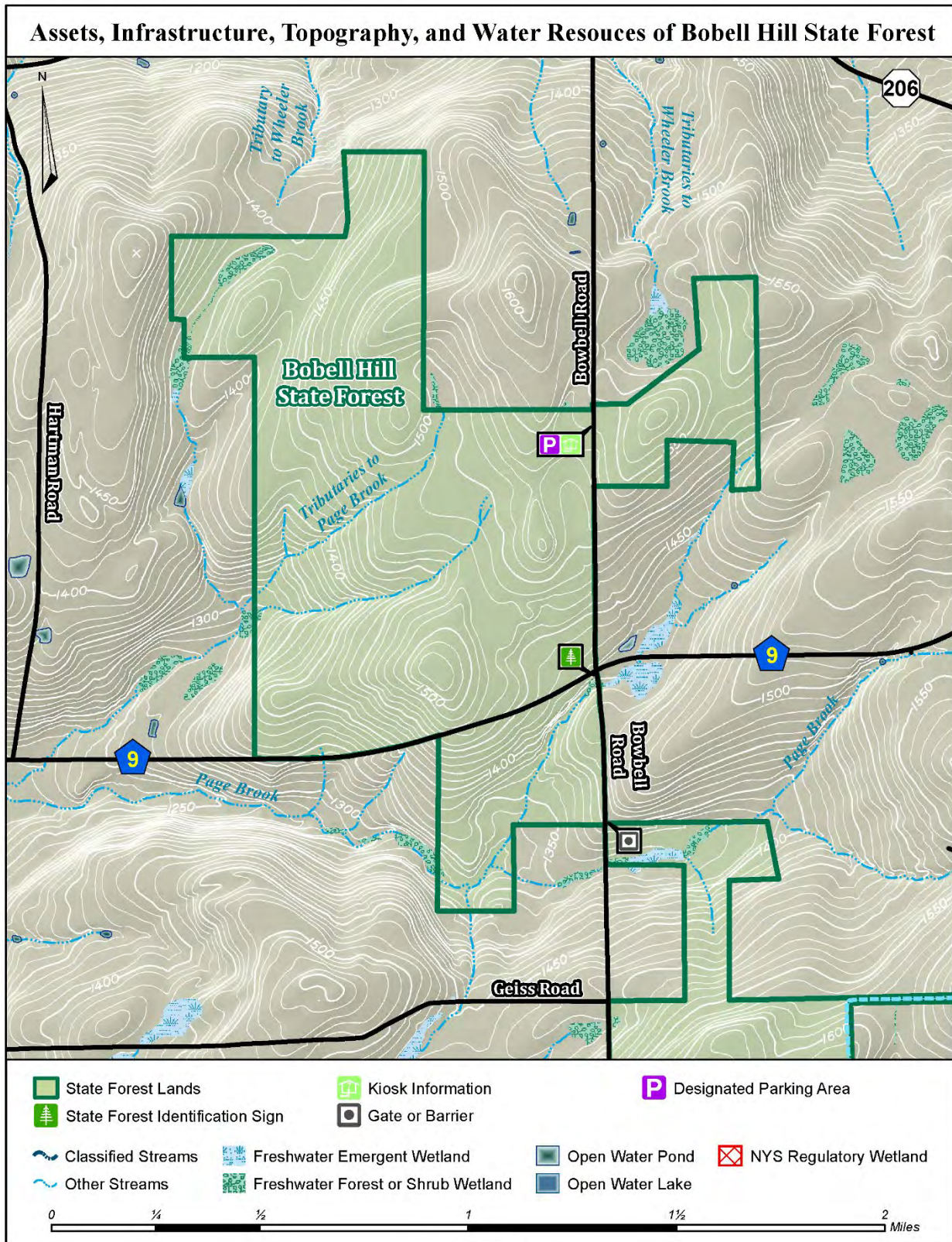


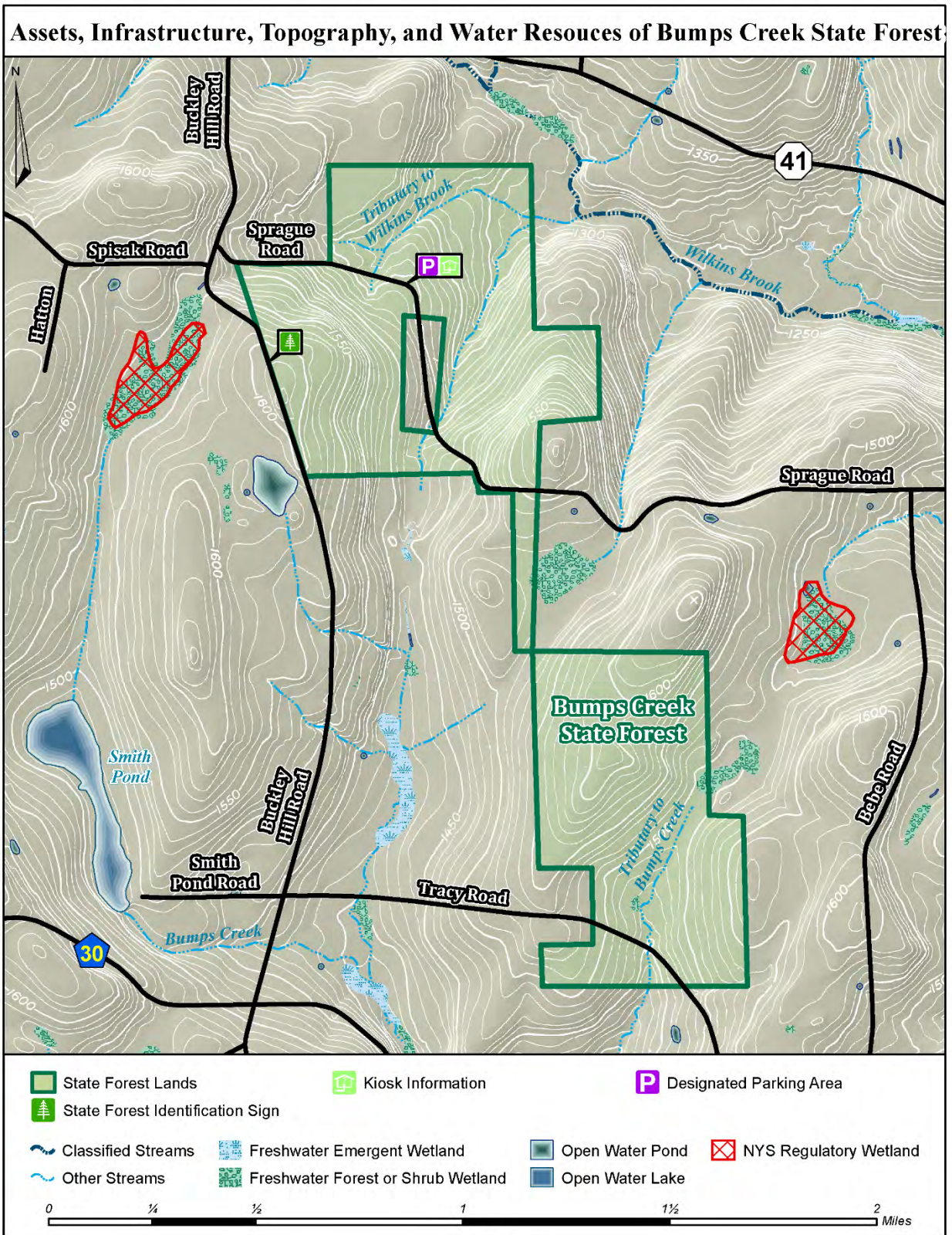
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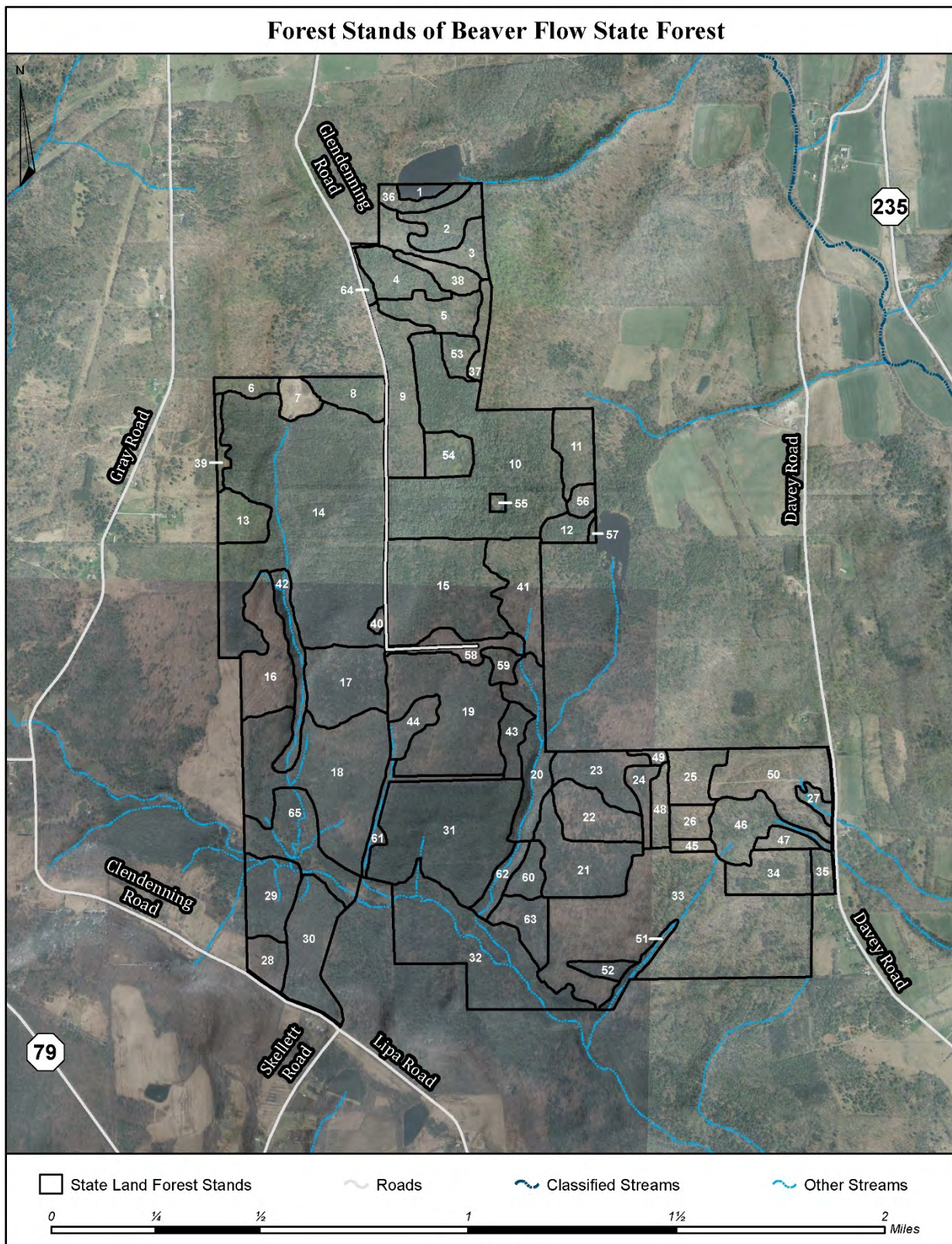




APPENDICES & FIGURES

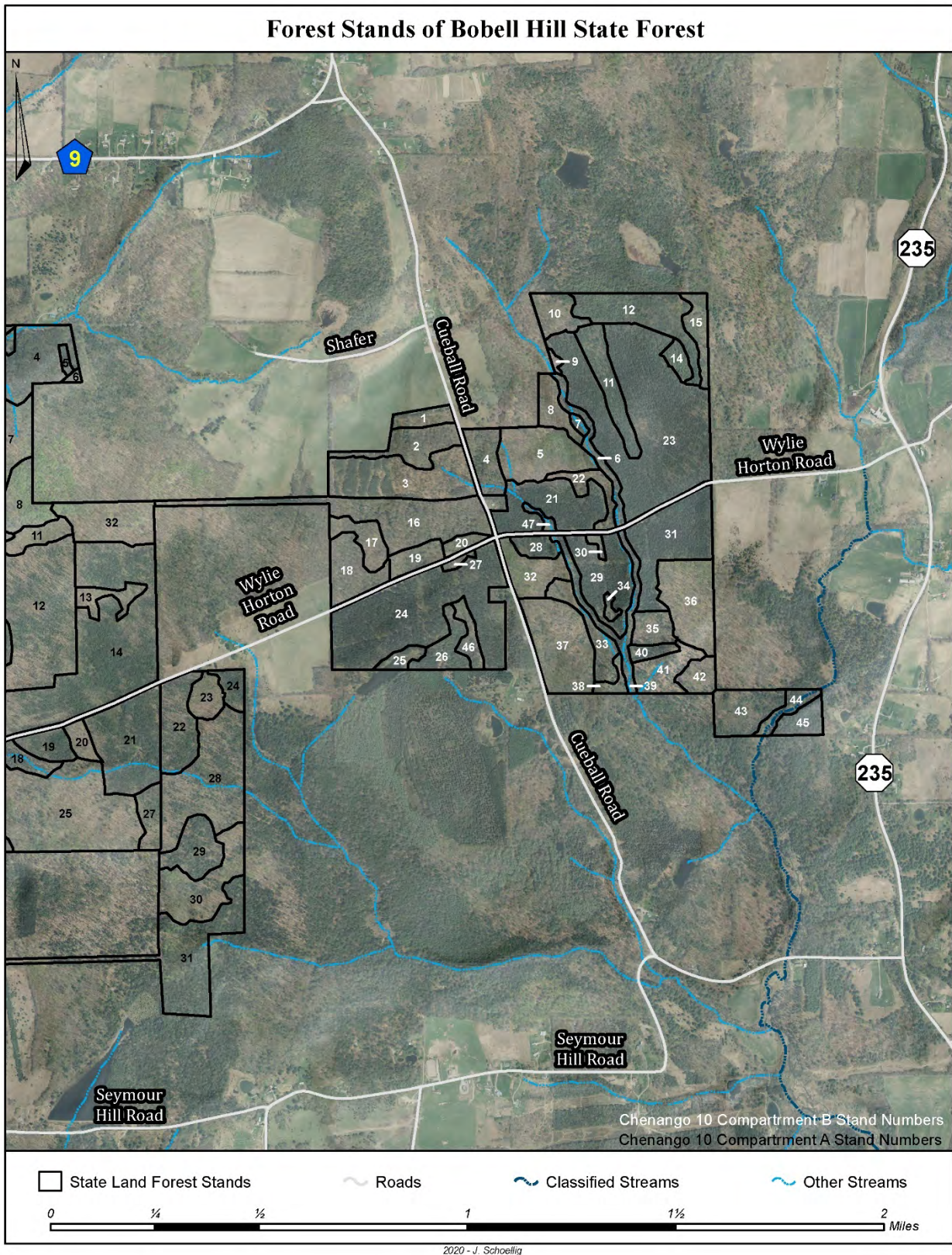
FIGURE 2 – FOREST STAND ID MAPS

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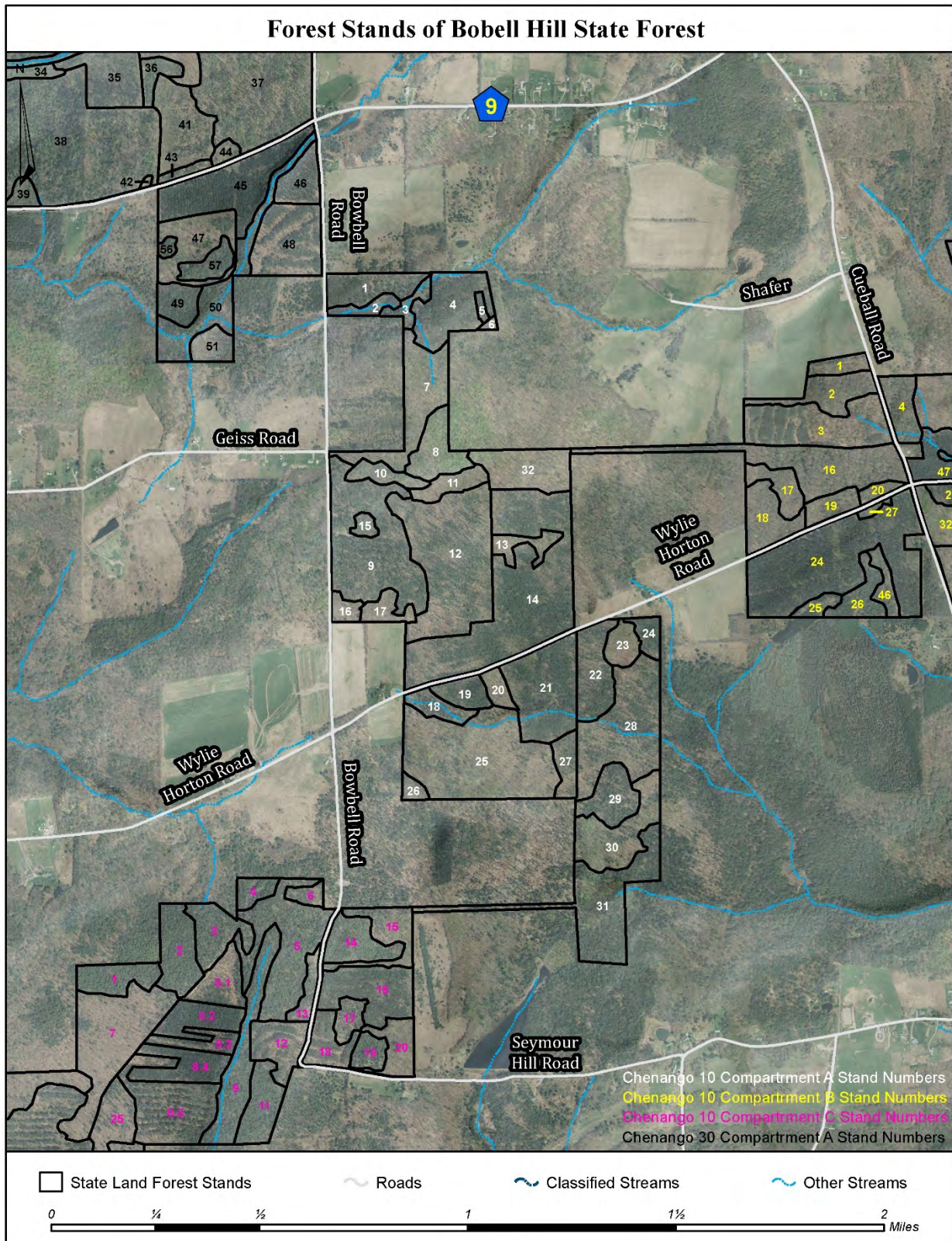
APPENDICES & FIGURES

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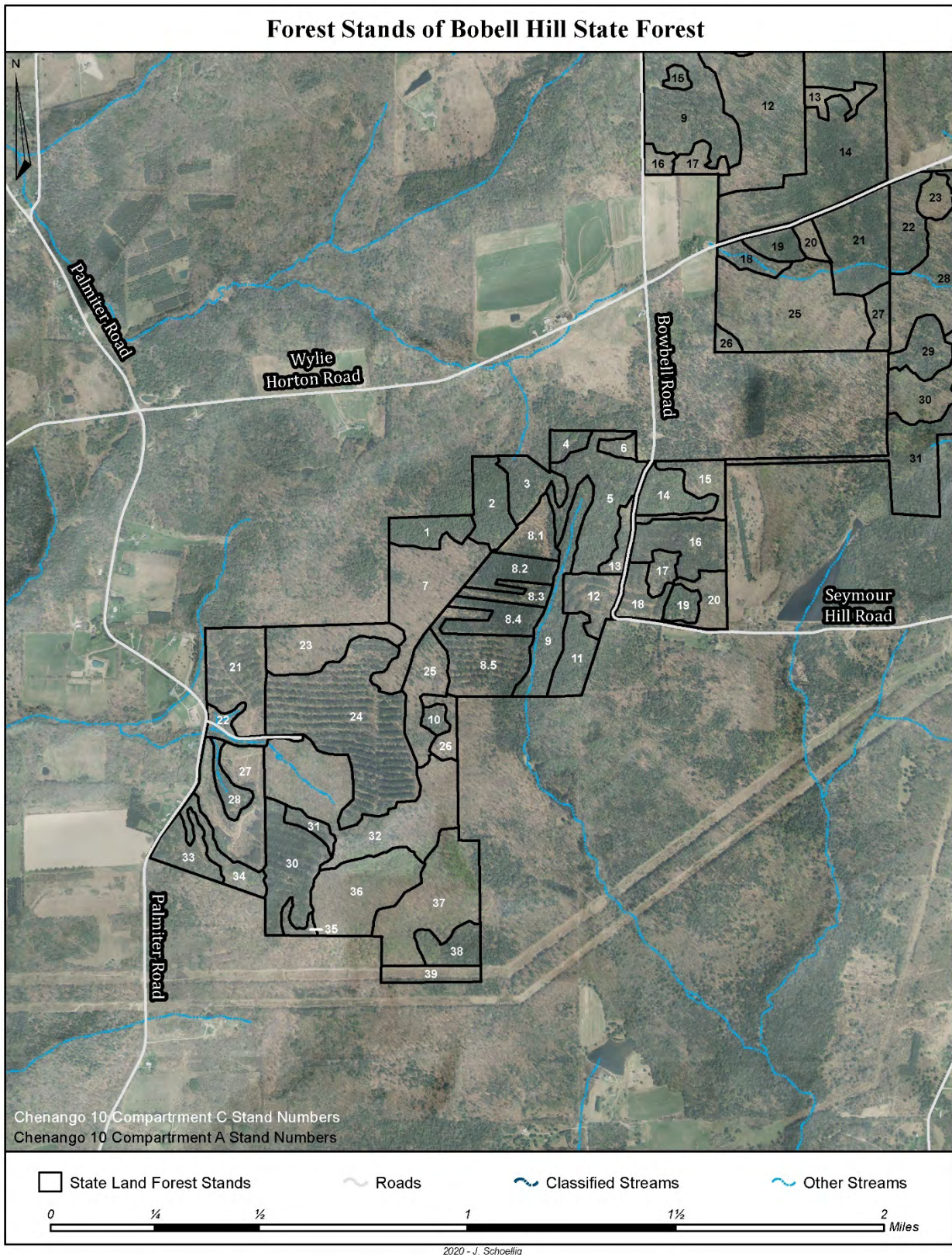
APPENDICES & FIGURES

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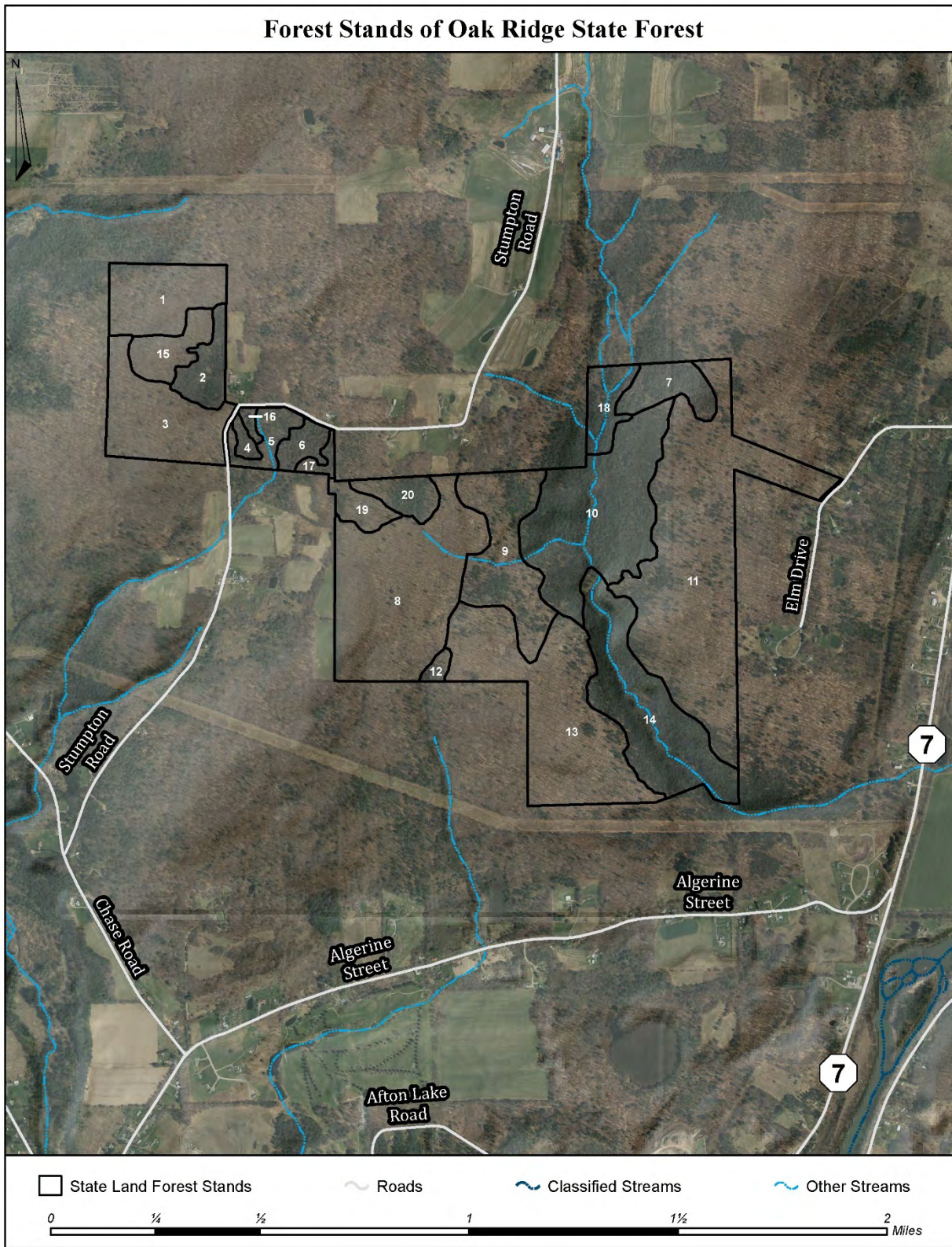
APPENDICES & FIGURES

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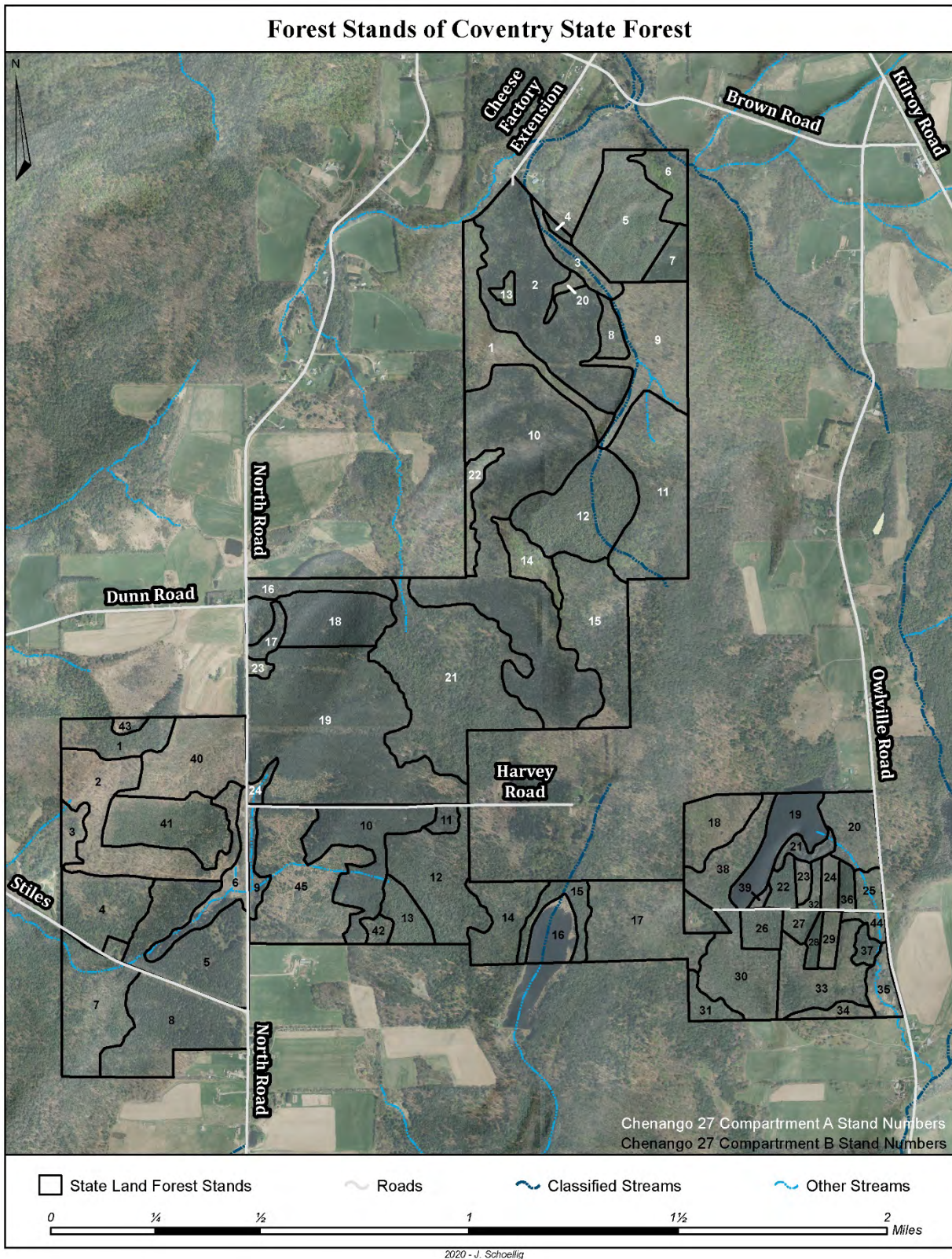
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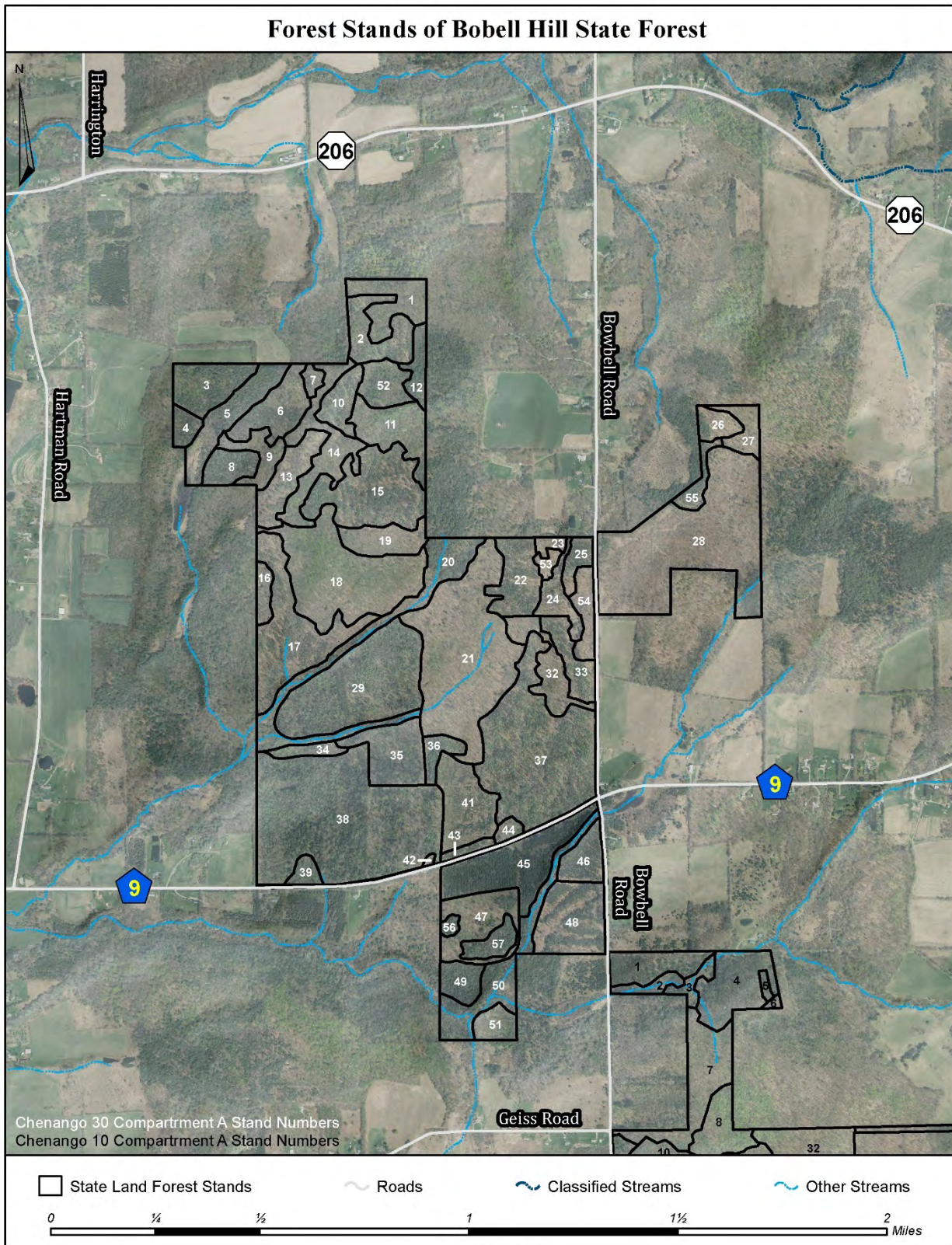
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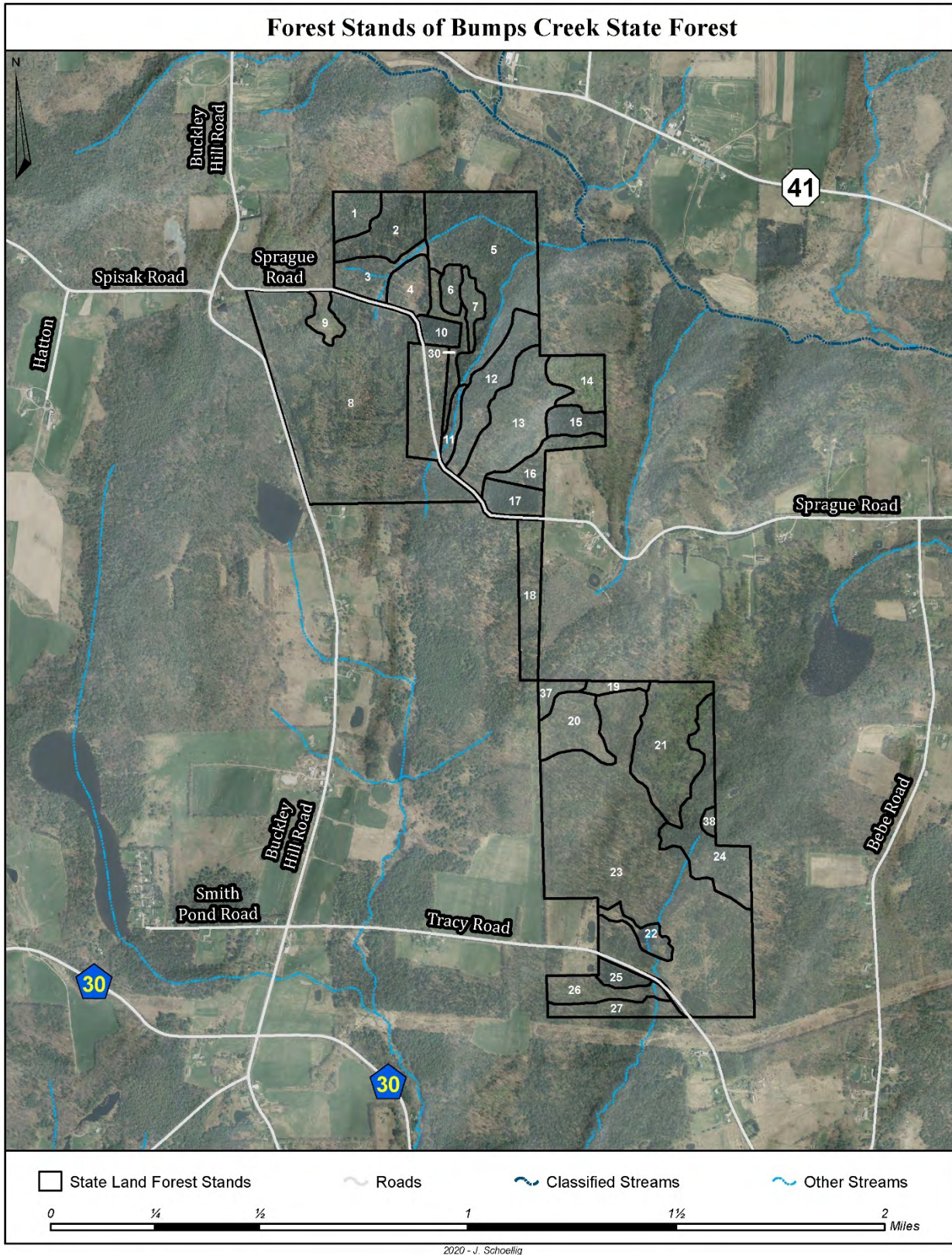
APPENDICES & FIGURES

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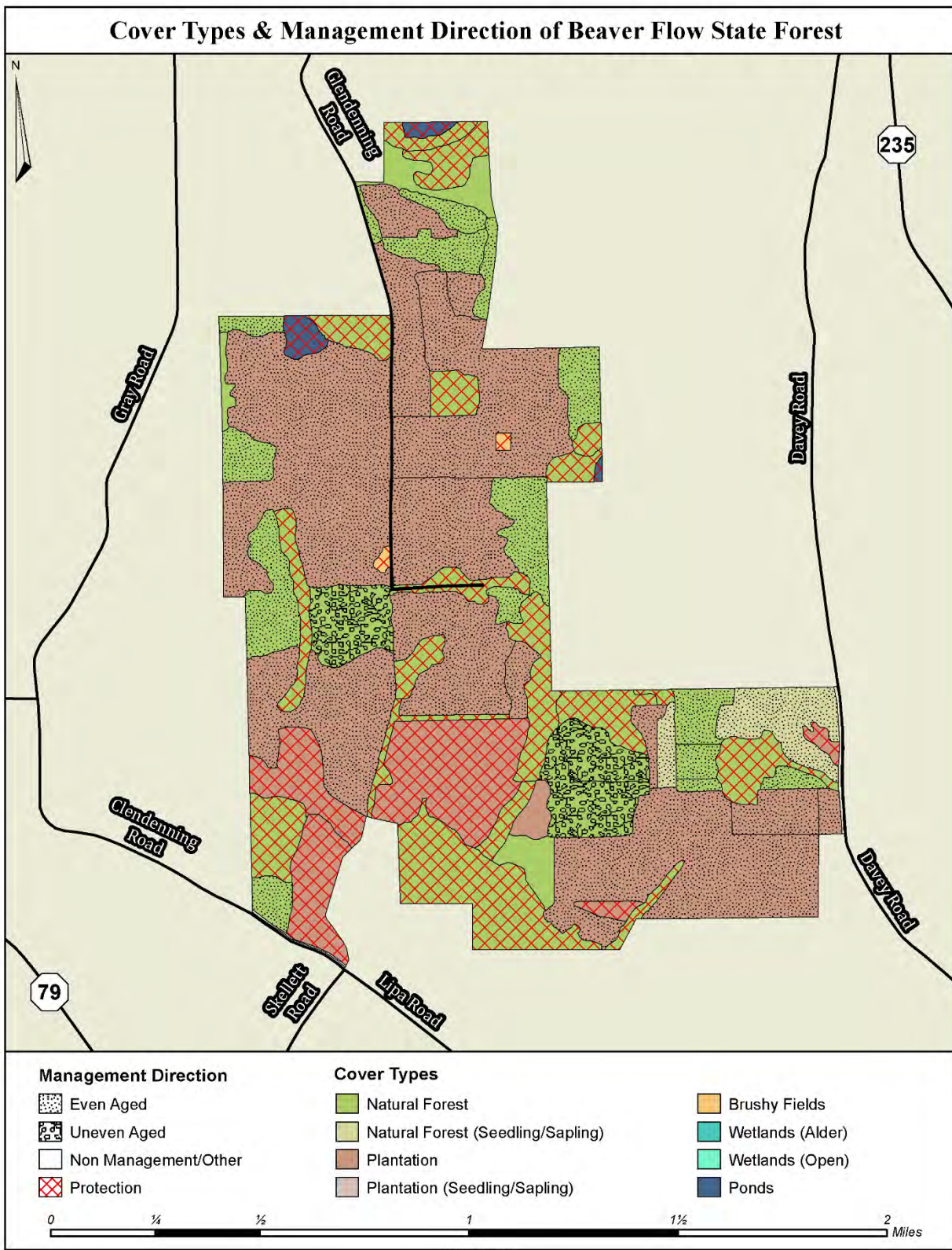
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APPENDICES & FIGURES

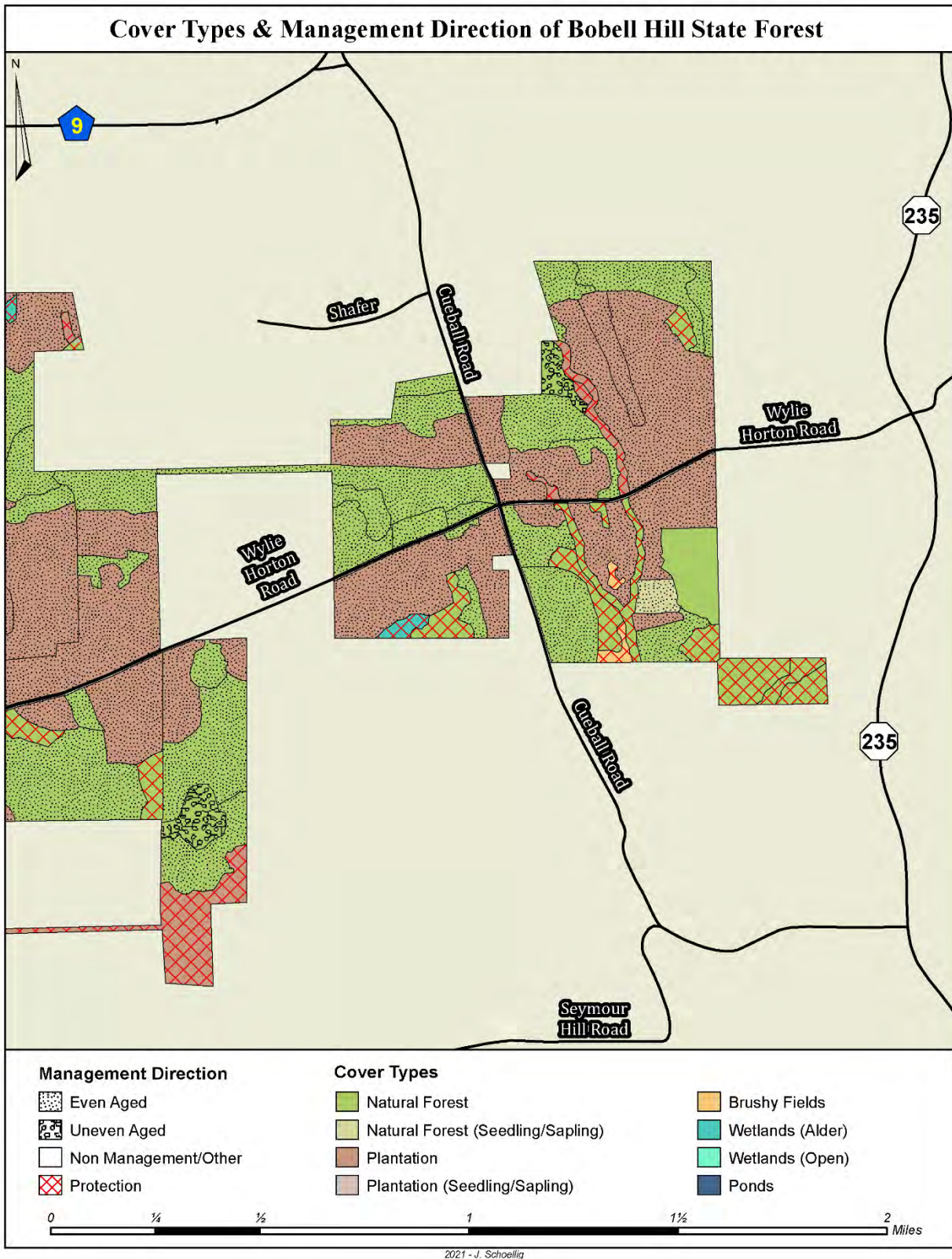
FIGURE 3 – COVER TYPE & MANAGEMENT DIRECTION MAPS

Figure 3 – Cover Type & Management Direction Maps



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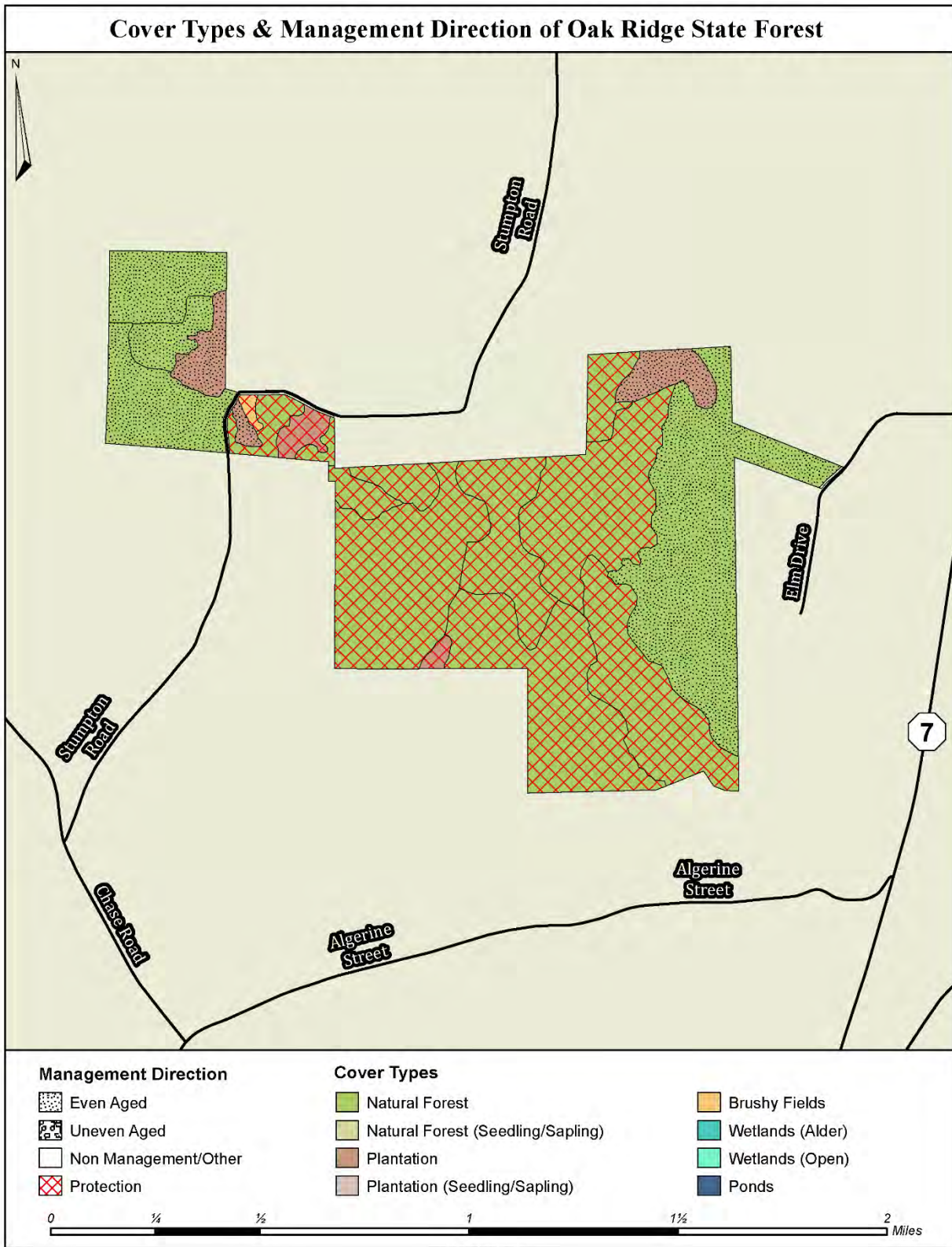
APPENDICES & FIGURES

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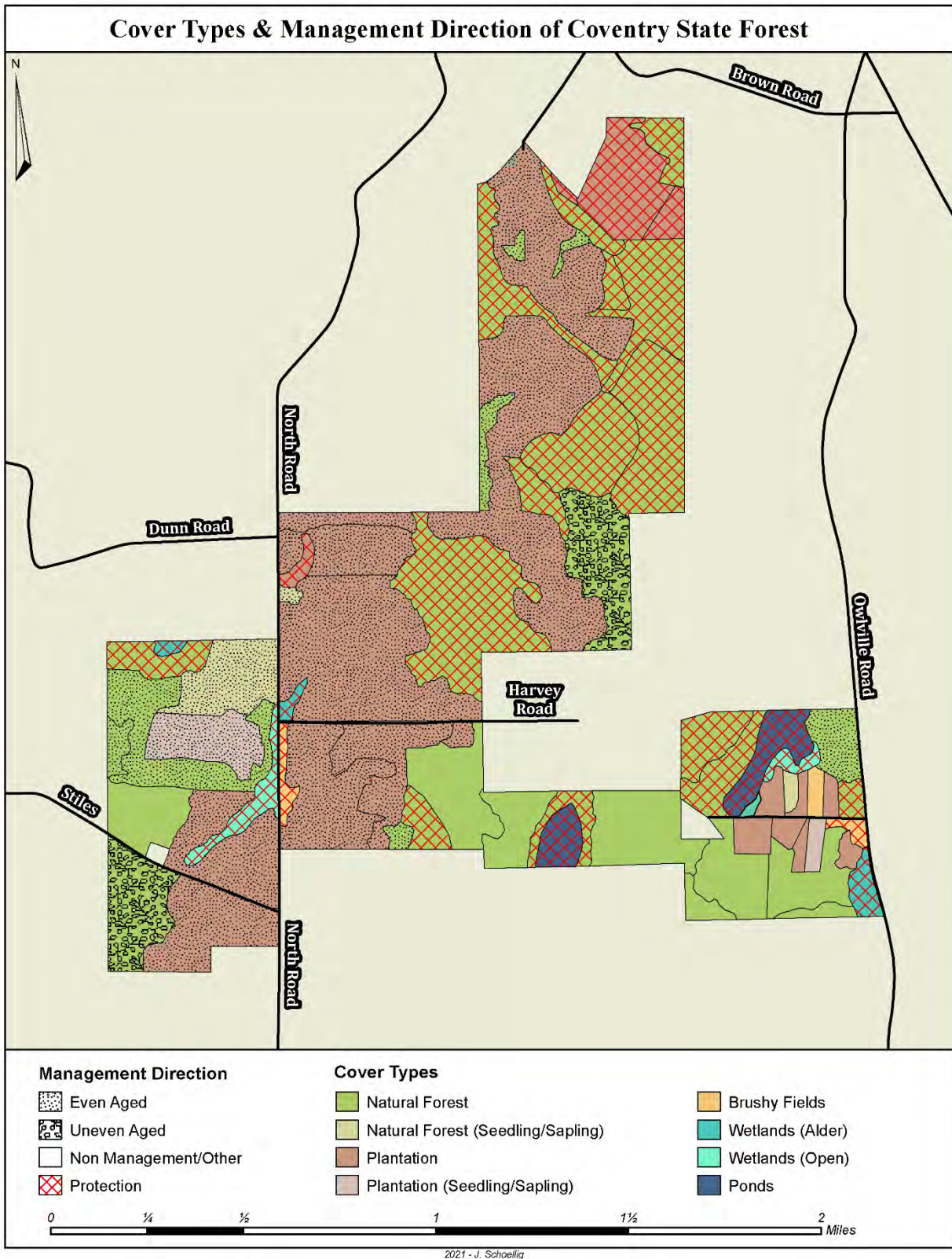
APPENDICES & FIGURES

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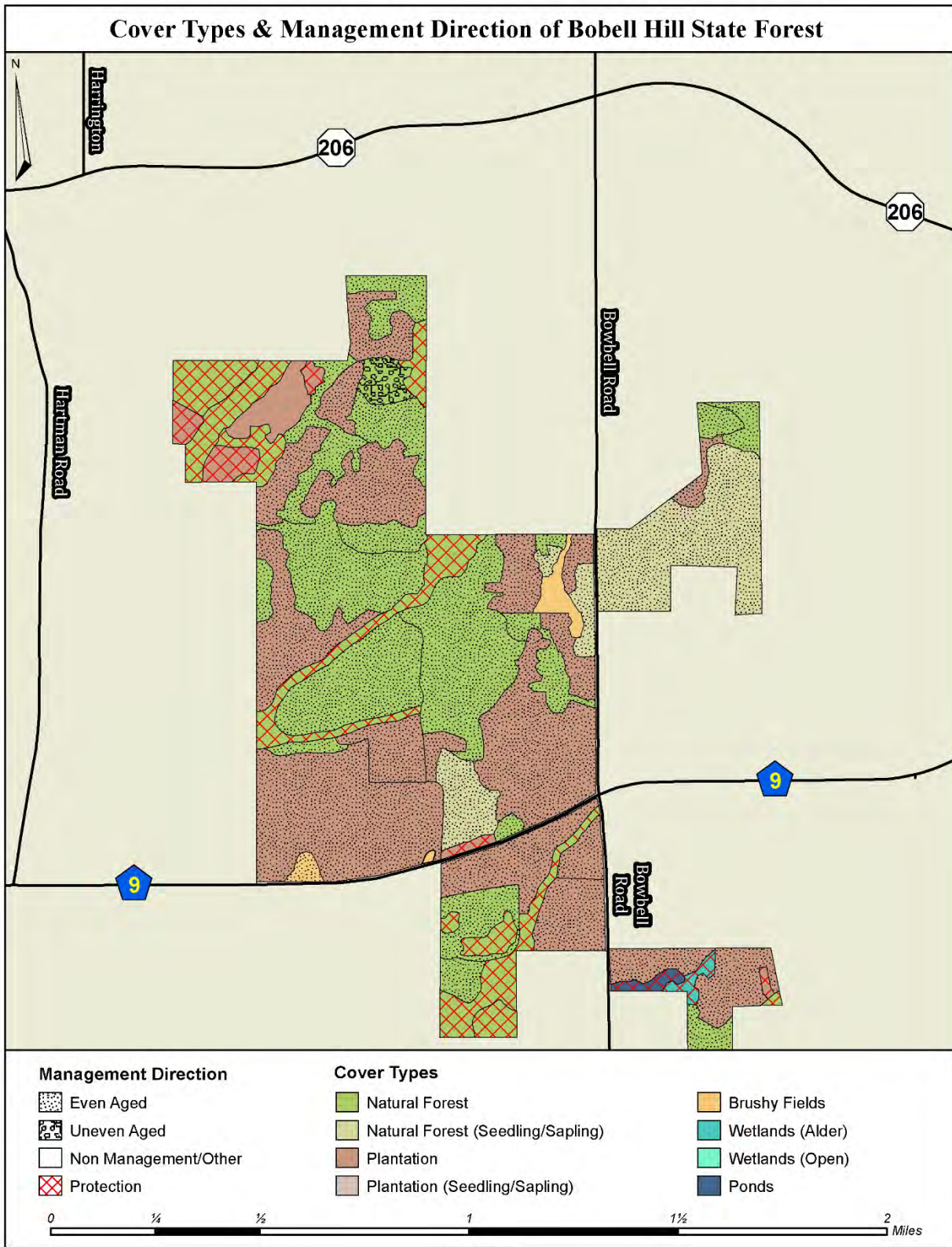
APPENDICES & FIGURES

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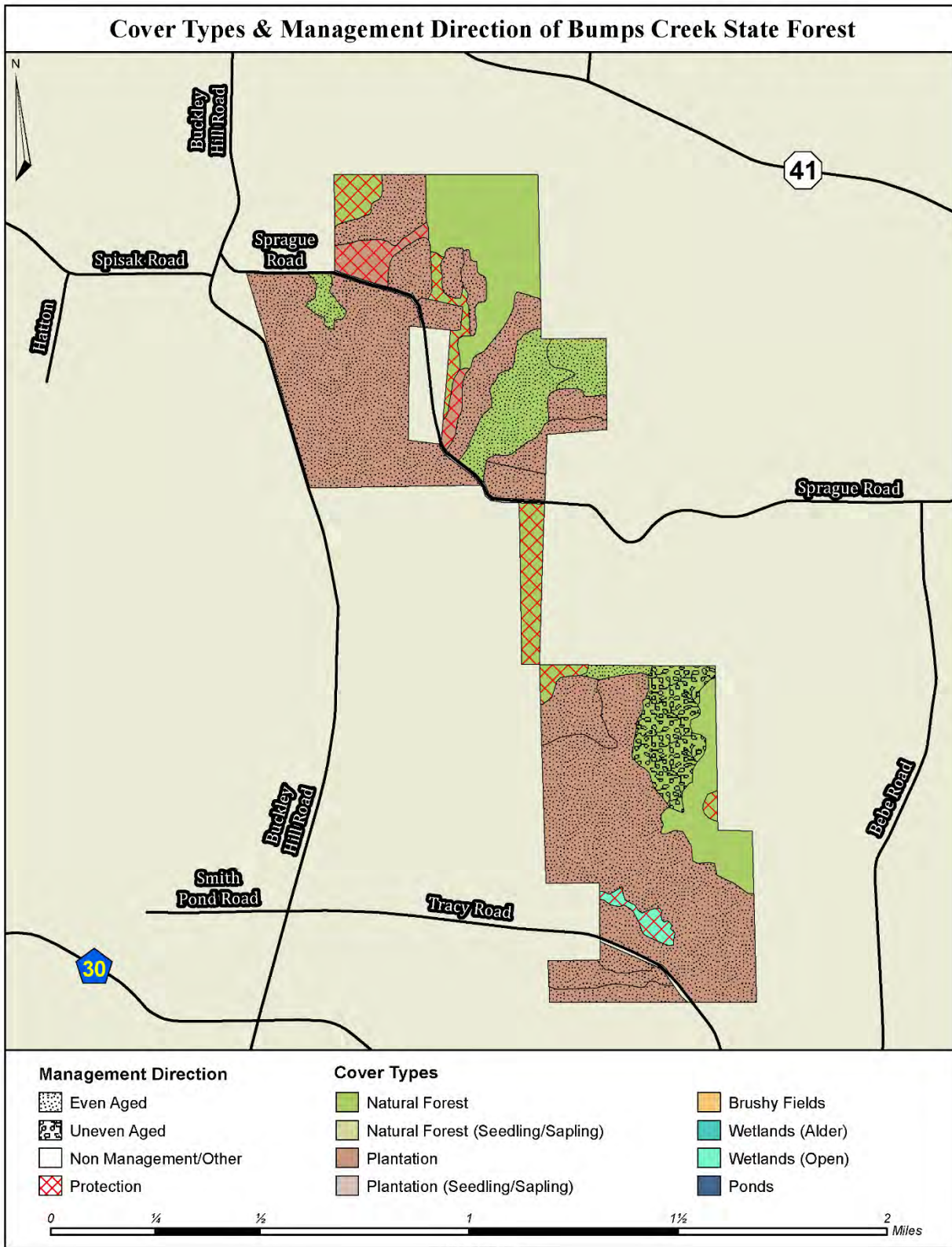
APPENDICES & FIGURES

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APPENDICES & FIGURES

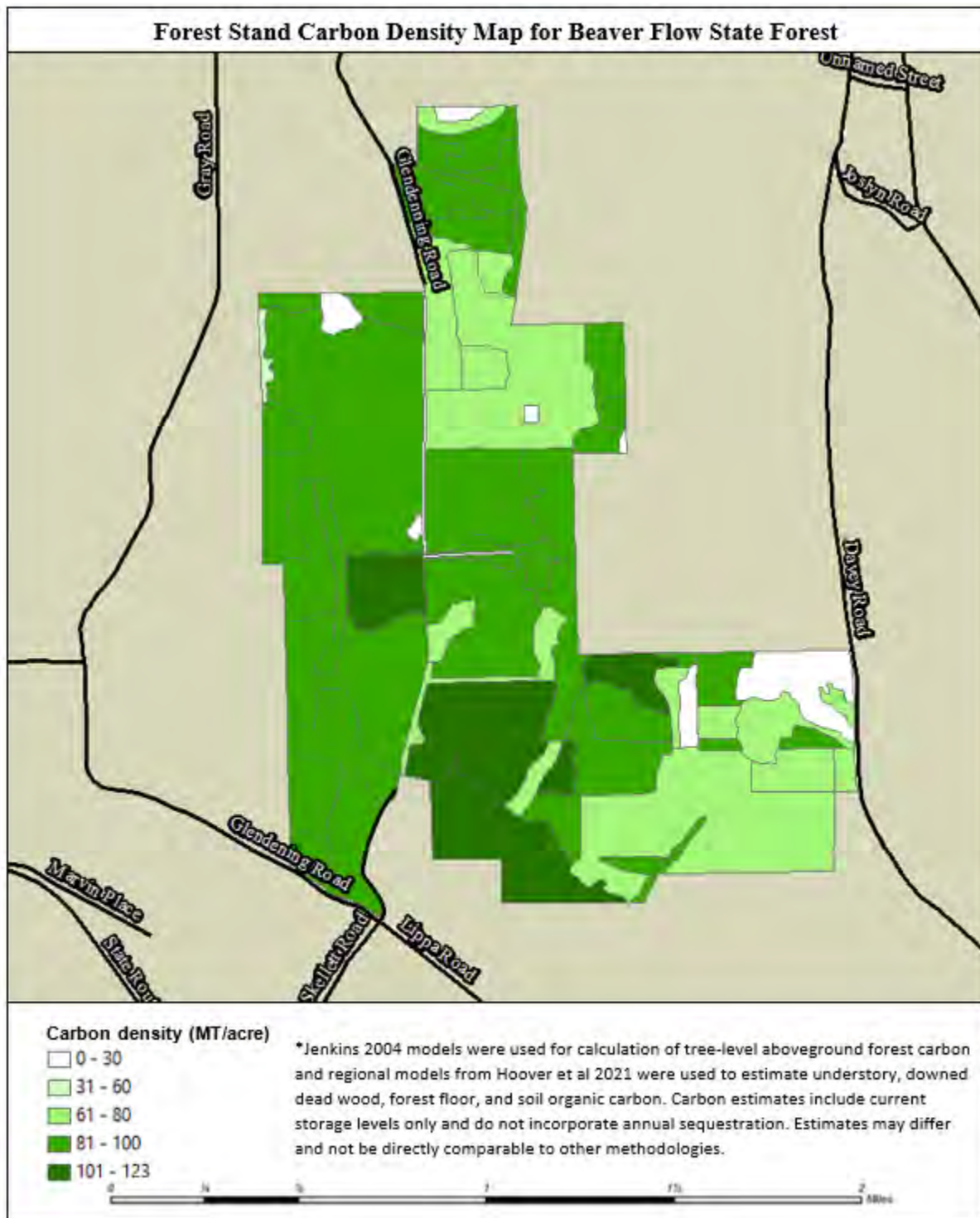
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APPENDICES & FIGURES

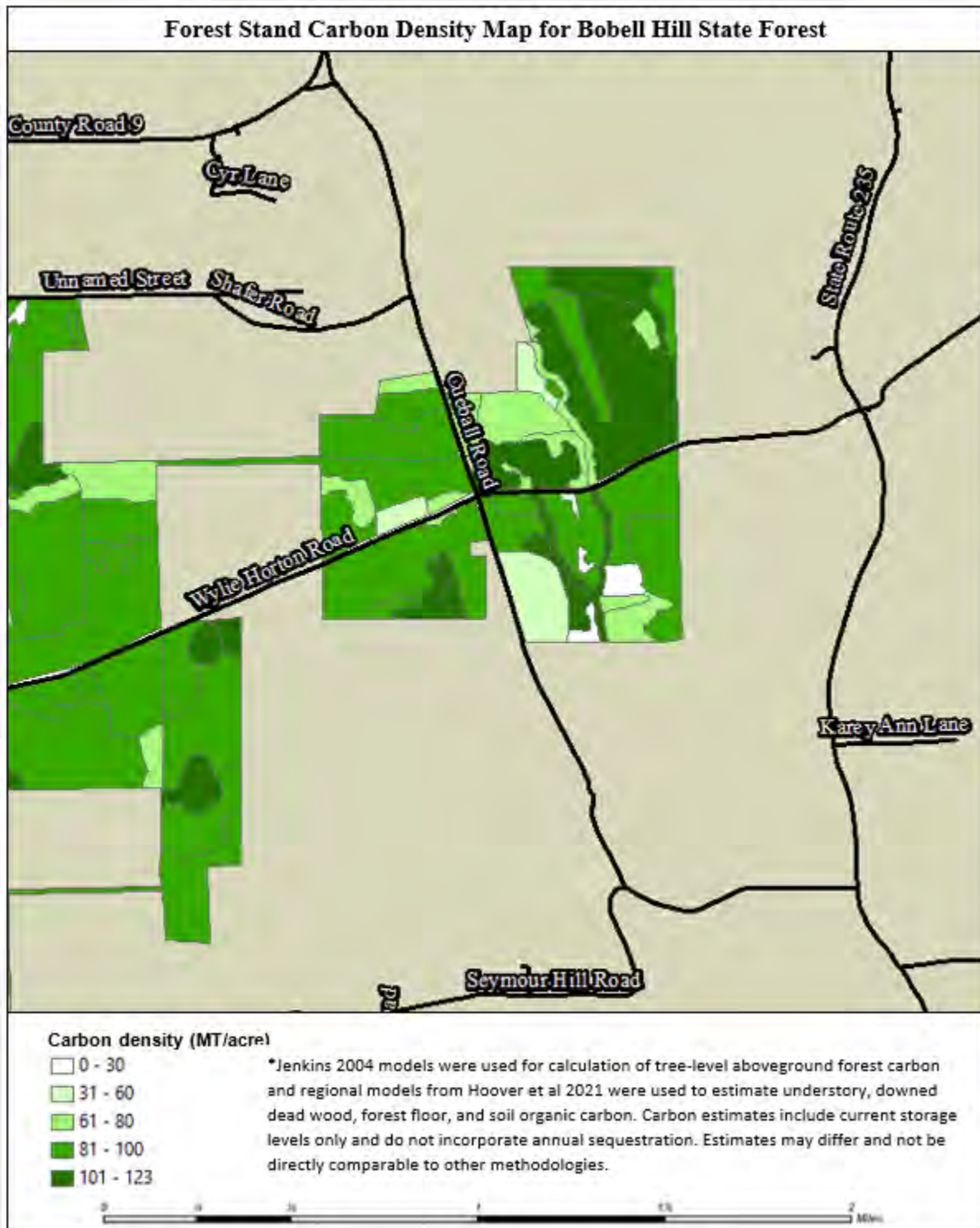
FIGURE 4 – FOREST CARBON DENSITY MAPS

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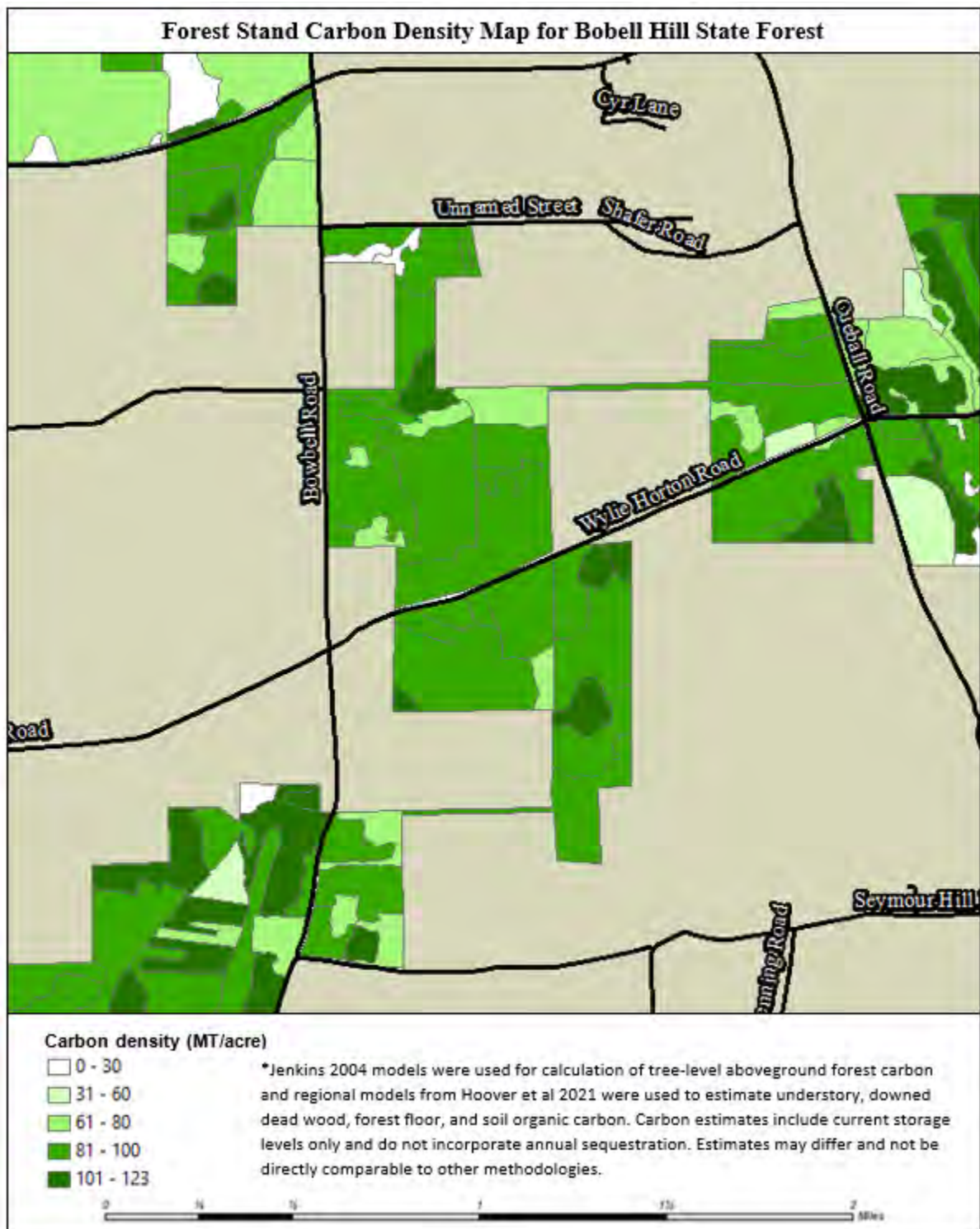
APPENDICES & FIGURES

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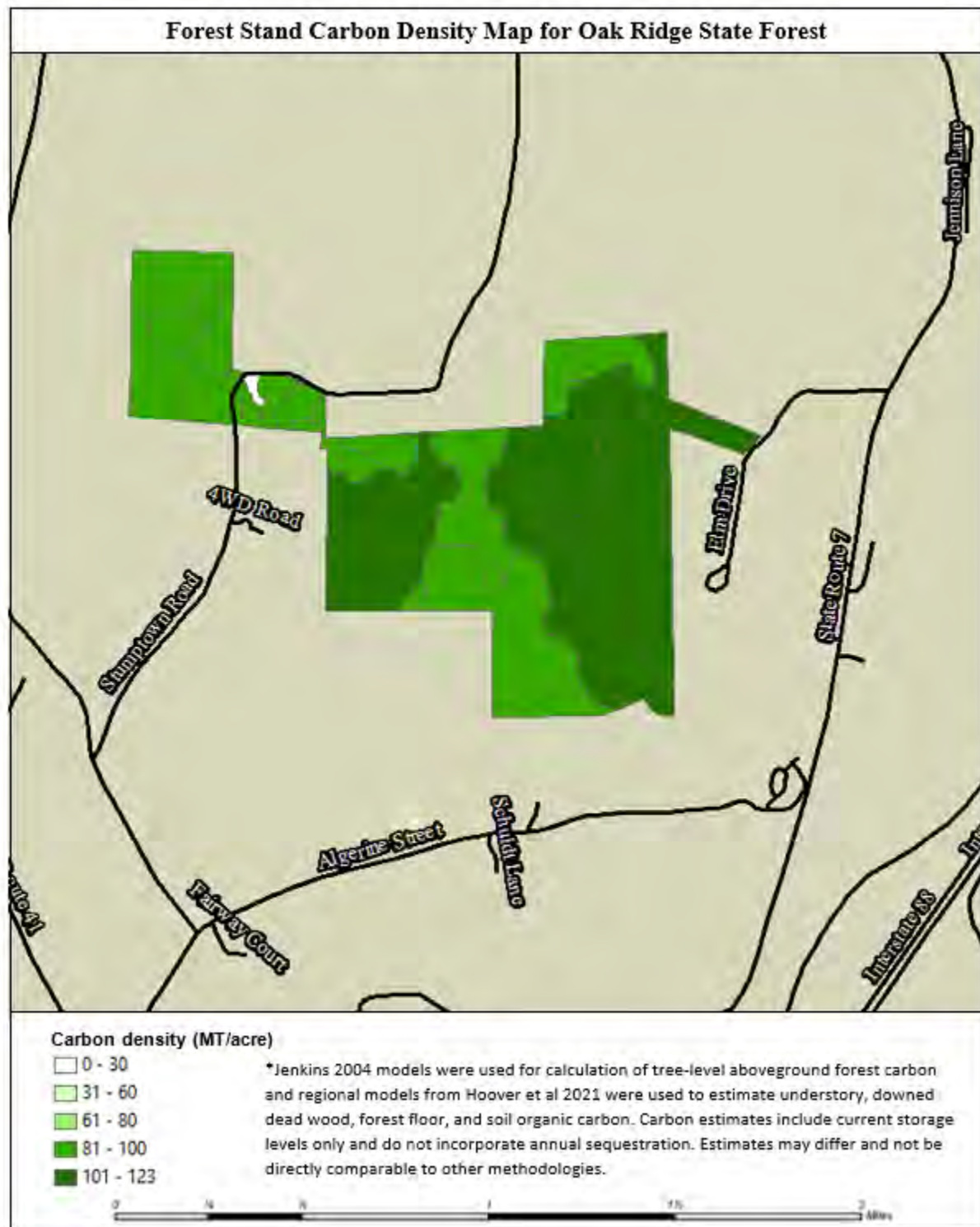
APPENDICES & FIGURES

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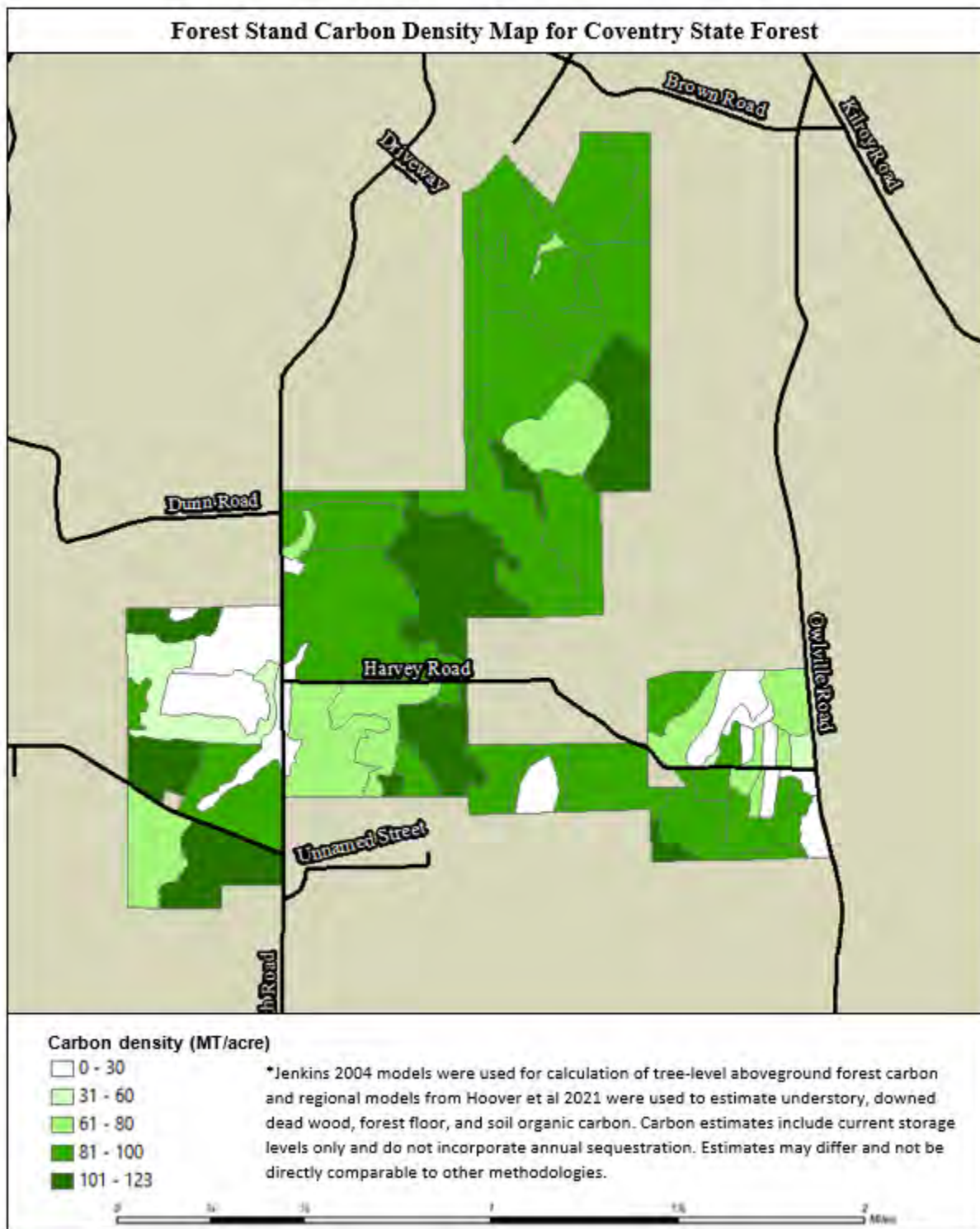
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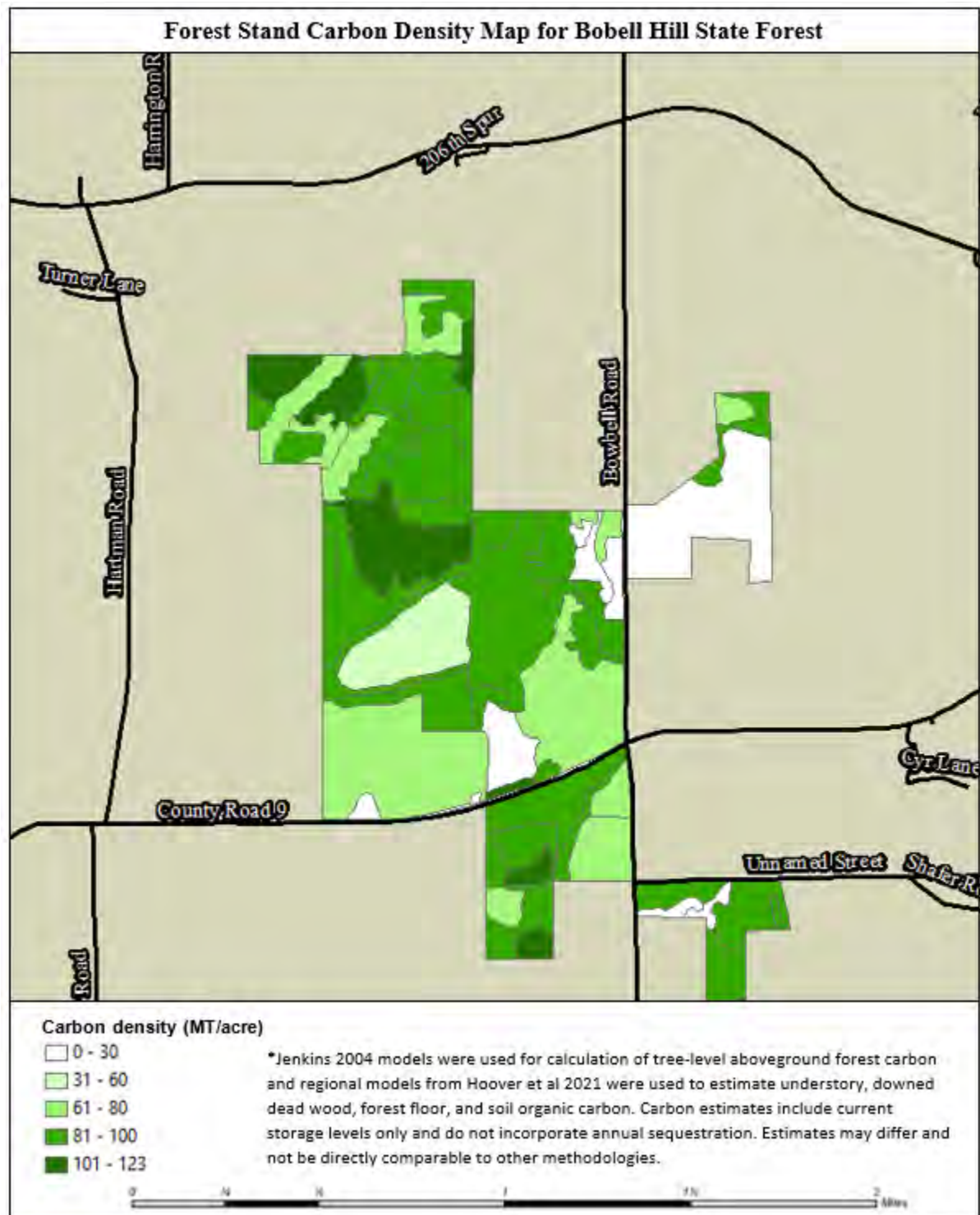
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