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St. Lawrence Flatlands

UNIT MANAGEMENT PLAN

FINAL

Towns of Bombay, Brasher, Lisbon, Louisville, Madrid, Massena, Moira, Norfolk, Stockholm, Waddington,

Counties of Franklin, St. Lawrence

November 2015

DIVISION OF LANDS AND FORESTS
Bureau of State Land Management, Region 6

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MEMORANDUM

NOV 20 2015

TO: The Record

FROM: Basil Seggos, Acting Commissioner

SUBJECT: St. Lawrence Flatlands UMP

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

St. Lawrence Flatlands

Unit Management Plan

A planning unit consisting of 10 State Forests and 6 Detached Forest Preserve Parcels, in St. Lawrence and Franklin Counties

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Acknowledgments

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

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Dedication

This Management Plan is dedicated to the hundreds of young men who served in Civilian Conservation Corps (CCC) Camp S-95 in Brasher Falls and Camp S-120 in Brushton. During the nearly eight year tenure of these camps, these men created the framework for the wonderful public resource that we have available today. It is in their names that we honor their dedicated service and the legacy they have provided for future generations.

Memoriam

In memory of the following Department employees who dedicated their careers to the stewardship of these public forests and for their contribution in protecting and enhancing the legacy passed on to them by the CCC's.

Henry Bradford
Harold Canell
George Cook
Dave Corse
Jerome Crump
Mary Ensby
Frank Farquharson
Lloyd Foster
Lawrence Garvey
Henry Beresford
Gordon Griffin
Terry Healey
Glenwood Laramay
William Lavine
James Ruff
Chester Yops
Reginald Ramsdell
Chester Lemay
Elmer Loope
Marvin Nichols
Walter Pratt
Morris Ramsdell Sr.
Morris (Gus) Ramsdell Jr.
Raymond Rivers
Patrick Sovie
Reginald Ramsdell
James Sullivan
Lyle Welch
Francis Wood
Arnold Leggue
Clarence Petty

Special Recognition:

To: Sr. Forestry Technician David G. Corse for his 32 years of dedicated service as the resident custodian and manager of Brasher State Forest.

To: The "CC Dam" Association for their rehabilitation of the picnic and camping area, especially Diane Finnie for her efforts as its first caretaker.

To: Ralph Burnell and Paul Derouchie for their countless hours of volunteer work on trails.

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DEC's Mission

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

Vision Statement

State Forests on the St. Lawrence Flatlands Unit will be managed in a sustainable manner by promoting ecosystem health, enhancing landscape biodiversity, protecting soil productivity and water quality. In addition, the State Forests on this unit will continue to provide the many recreational, social and economic benefits valued so highly by the people of New York State. DEC will continue the legacy which started more than 80 years ago, leaving these lands to the next generation in better condition than they are today.

This plan sets the stage for DEC to reach these ambitious goals by applying the latest research and science, with guidance from the public, whose land we have been entrusted to manage.

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PREFACE

STATE FOREST OVERVIEW

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

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

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

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

This unit also contains lands categorized as Detached Forest Preserve. These parcels are managed with different management priorities and are described separately in the **Detached Forest Preserve Parcels** section.

Legal Considerations

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

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

MANAGEMENT PLANNING OVERVIEW

The St. Lawrence Flatlands Unit Management Plan (UMP) is based on a long range vision for the management of Bombay State Forest, Brasher State Forest, Buckton State Forest, Fort Jackson State Forest, Grantville State Forest, Knapp Station State Forest, Lost Nation State Forest, Raymondville State Forest, Sodom State Forest, Southville State Forest, and Detached Forest Preserve parcels located in the towns of Lisbon, Louisville, Massena, and Waddington, balancing long-term ecosystem health with current and future demands. This plan addresses management activities on this unit for the next ten

years, though some management recommendations will extend beyond the ten-year period. Factors such as budget constraints, wood product markets, and forest health problems may necessitate deviations from the scheduled management activities.

Public Participation

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

A summary of public comments received during the preparation of the St. Lawrence Flatlands UMP, as well as Departmental responses, is included as Appendix A.

Strategic Plan for State Forest Management

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

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

DEC'S MANAGEMENT APPROACH AND GOALS

Forest Certification of State Forests

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

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

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

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



The mark of responsible forestry

FSC® C002027



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

Ecosystem Management Approach

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

Ecosystem management is a process that considers the total environment - including all non-living and living components; from soil micro-organisms to large mammals, their complex interrelationships and habitat requirements and all social, cultural, and economic factors. For more information on ecosystem management, see SPSFM page 39 at http://www.dec.ny.gov/lands/64567.html.

Multiple-use Management

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

Landscape Ecology

The guiding principle of multiple use management on the unit will be to provide a wide diversity of habitats that naturally occur within New York, while ensuring the protection of rare, endangered and

threatened species and perpetuation of highly ranked unique natural communities. The actions included in this plan have been developed following an analysis of habitat needs and overall landscape conditions within the planning unit (i.e. the geographical area surrounding and including the State Forests) the larger ecoregion and New York State.



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

Ecosystem Management Strategies

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

Passive Management

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

Silviculture (Active Management)

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

State Forest Management Goals

Goal 1 – Provide Healthy and Biologically Diverse Ecosystems

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

Goal 2 – Maintain Man-made State Forest Assets

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

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

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

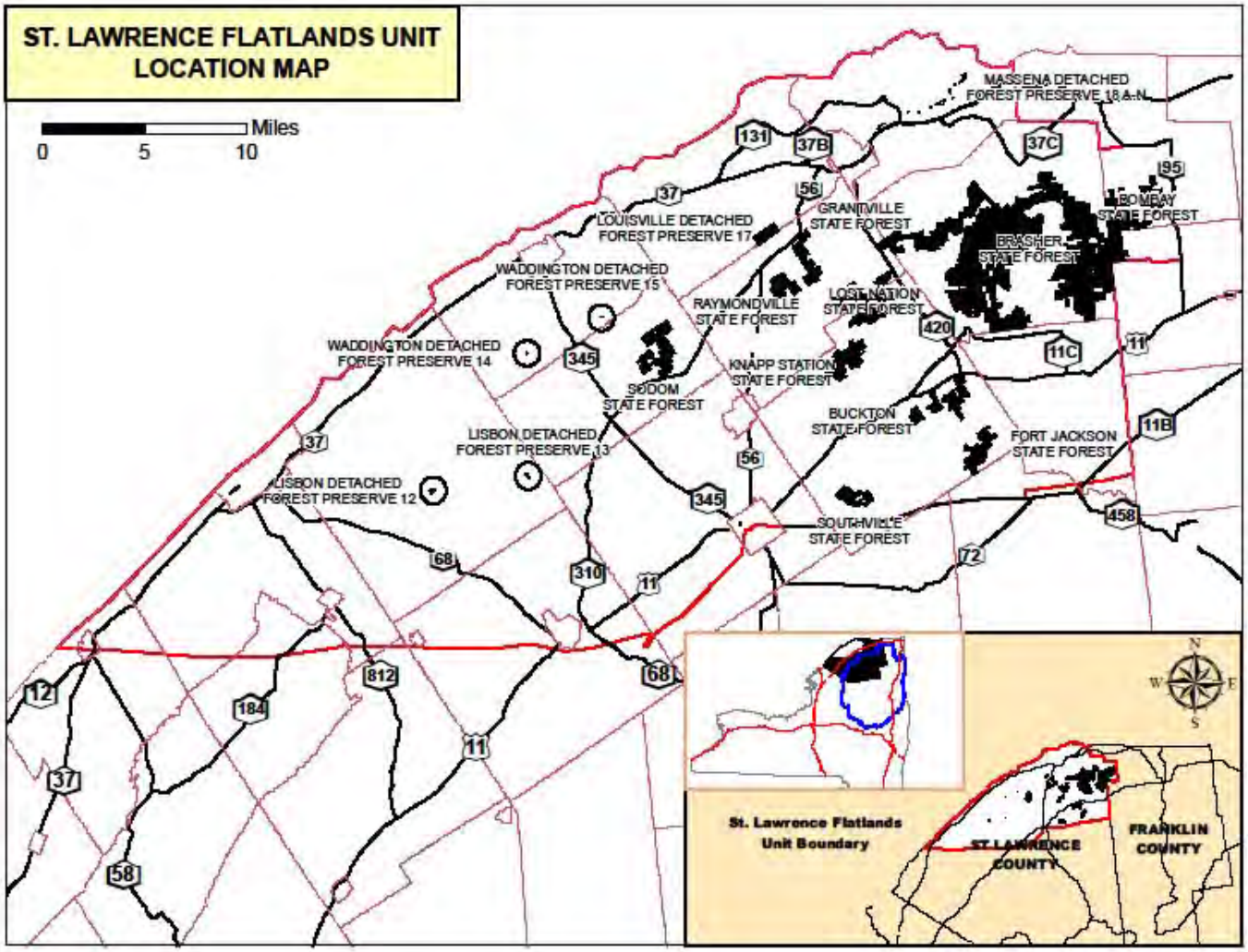
Goal 4 – Provide Economic Benefits to the People of the State

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

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

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

LOCATION MAP



INFORMATION ON THE ST. LAWRENCE FLATLANDS UNIT

STATE LANDS IN THE UNIT

Table I.A. contains the names of the state land facilities that make up this unit. A web page has been developed for each of the State Forests. Each web page features an updated map of the State Forest with recreational information and natural features.

Table I.A. – State Lands in the Unit		
Facility Name and Webpage	**Deeded Acreage***	**GIS Acreage****
Bombay State Forest–FR 2, FR 4 http://www.dec.ny.gov/lands/7999.html	2,920	2,747
Brasher State Forest–SL 1, SL5, SL6, SL 7, SL 10, SL 17 http://www.dec.ny.gov/lands/7999.html	19,782	19,751
Buckton State Forest–SL 31 http://www.dec.ny.gov/lands/80851.html	1,076	1,092
Fort Jackson State Forest–SL 22 http://www.dec.ny.gov/lands/80856.html	937	914
Grantville State Forest–SL 15 http://www.dec.ny.gov/lands/80861.html	776	775
Knapp Station State Forest–SL 11 http://www.dec.ny.gov/lands/80866.html	1,003	1,006
Lost Nation State Forest–SL 9 http://www.dec.ny.gov/lands/80872.html	1,914	1,907
Raymondville State Forest–SL 33 http://www.dec.ny.gov/lands/80835.html	643	641
Sodom State Forest–SL 25 http://www.dec.ny.gov/lands/81591.html	1,424	1,426
Southville State Forest–SL 23 http://www.dec.ny.gov/lands/81237.html	541	551
Detached Forest Preserve Parcels	436	436
Total	31,452	31,246
*Acres based on deeds and survey maps **Acres from GIS State Land Forest Stands coverage or Real Property Maps (Forest Preserve parcels) All plan analysis is based on GIS acreage		

DEC Facilities Not Included in this UMP

There are two Wildlife Management Areas (WMA's) located within the St. Lawrence Flatlands UMP area: Upper and Lower Lakes WMA (Town of Canton) and Wilson Hill WMA (Town of Louisville). They are managed by the DEC Bureau of Wildlife to promote wildlife habitat, game management, and protection of rare and threatened species. For more information about these areas, see the DEC website at http://www.dec.ny.gov/outdoor/8282.html . The DEC also maintains several boat launch sites on rivers and lakes throughout the area. For more information about these sites, see the DEC website at http://www.dec.ny.gov/outdoor/23866.html .

Adjacent Public Lands Not Managed by the Department

There are several St. Lawrence County Forests located adjacent to state forests in this unit. These include St. Lawrence Co. Forest #1 (adjacent to Sodom State Forest),SLC #11 and #22 (adjacent to Fort Jackson State Forest), SLC #18 (adjacent to Brasher State Forest), and SLC #24 (adjacent to Southville State Forest). These areas are managed by the St. Lawrence County Soil and Water Conservation District. For more information, see their website at http://www.co.st-lawrence.ny.us/Departments/SoilWater/ .

HIGH CONSERVATION VALUE FORESTS

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

1. Rare Community - Forest areas that are in or contain rare, threatened or endangered ecosystems.

2. Special Treatment - Forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, and refugia).

3. Cultural Heritage – Forest areas fundamental to meeting basic needs of local communities (e.g. subsistence, health) and are critical to their traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).

4. Watershed - Forest areas that provide safe drinking water to local municipalities.

5. Forest Preserve* - Forest areas containing globally, regionally or nationally significant large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance.

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

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

SOILS

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

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

Facility Name (Stand Type)	Predominant Soil Type(s)	Acres
Upland Hardwoods / Softwoods	Naumburg loamy fine sand	6,435
	Croghan sand	1,947
	Malone loam	1,355
Plantations	Croghan, Adams, Coveytown, and Hogansburg loamy fine sands	4,512
	Adams sand	3,966
	Hogansburg and Grenville soils	821
Lowland Swamps	Au Gres – Scarboro – Croghan association	2,454
	Deford mucky loamy fine sand	1,903
	Borosaprists and Fluvaquents, frequently flooded	950
	Dorval muck	926
	Deford loamy fine sand	737
	Other (50 less common soils)	5,240

The basement rocks of the St. Lawrence Flatlands unit were deposited as sedimentary rocks in the Precambrian period and metamorphosed during a period of mountain building known as the Greenville Orogeny some 1.1 billion years ago. The ancestral Adirondacks were eroded over a period of 585 million years until reduced to an almost flat, sea level surface. This lowland allowed a shallow sea to form. Starting 500 million years ago, the Potsdam Sea occupied the area for about 55 million years. During this time, the Potsdam Sandstone, Theresa Formation and the Beekmantown Group were deposited. These deposits resulted in a brief retreat of the Potsdam Sea before rising sea levels caused an even larger re inundation of sea levels. The Black River and Trenton Groups were deposited during this time. An unconformity exists in the rock record for the next two million years but the region was then above sea level and rather stable in terms of deposits or erosion.

Much of the present landscape is the product of the glacial process. The Laurentide Ice Sheet occupied this area during the Pleistocene Glacial Age while undergoing three major advances and retreats. In Northern New York we see only the latest advance, the Wisconsin. This advance occurred 20,000 years ago and erased evidence of prior movements. With the Laurentide finally retreating, the water from this wasting glacier resulted in the formation of Lake Iroquois somewhere between twelve and thirteen thousand years ago. The removal of the weight which had been associated with the glacier caused the land beneath it to experience isostatic rebound thus eventually draining this inland sea. This rebound is still occurring at a very slow rate. The sand formations in evidence today are the result of shoreline erosion and outflow from ancient Lake Iroquois.

The topography in this area is generally flat with an elevation range from 160 feet above sea level at the Grass River Indian Meadows in Massena, to 580 feet above sea level on Fort Jackson State Forest in the town of Stockholm. The area is best characterized as having a large number and wide disbursement of wetlands interspersed with a series of glacial tills in the forms of eskers and drumlins. Eskers are best described as relatively narrow ridge-like formations while drumlins are hill-like formations resembling the shape of an inverted spoon.

Maps of topography and slope for state forests in this unit are included as Figure 6.

While many different soil types can be found in this large block, the following listing gives the most prevalent soil types found beneath the general forest cover types.

Upland Natural Hardwood and/or Softwood Stands

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

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

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

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

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

Planted Forests

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

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

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

Coveytown loamy fine sand: Very deep, nearly level and somewhat poorly drained medium lime soil. The upper 2 to 3 feet is formed in sandy lake laid deposits and the lower part is loamy glacial till. Available water capacity is very low. Permeability is moderately rapid to rapid in the upper part and moderately slow to moderate in the lower part.

Lowland Swamps

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

Fluvaquents - Udifluvents complex, frequently flooded: Shallow to deep, nearly level, very poorly to well drained**,** sandy to clayey soils that are in flood plain areas. These areas are subject to frequent flooding from nearby streams.

Maps of soil types found in this unit are included as Figure 1.

WATER RESOURCES

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

Table I.C. – Water Resources (see Figure 2 for maps)		
Watersheds		
Hydrologic unit(s)		-Deer River -Little Salmon River - Lower Grass River -Raquette River -Robinson Creek – Frontal St. Lawrence River - St. Regis River -Salmon River -Sucker Brook-Frontal St. Lawrence River -West Branch St. Regis River
Primary source aquifer		None
		0 ac.
Municipal water supply (serving municipalities of over 5,000 people)		None
		0 ac.
Wetlands		
State Regulated wetland		9,129 ac.
Federal Regulated and Unregulated wetland (less than 12.4 acres)		665 ac.
Streams/Rivers		
Perennial streams/rivers	AA or A	0.0 mi.
	B	24.1 mi.
	C	4.0 mi.
	D	20.4 mi.
Trout streams/rivers	AA (T), A (T), B (T) or C (T)	1.5 mi.
Water Bodies		
Water bodies (open-water ponds and lakes)		9 ac.

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

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

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

Named Class B perennial streams include the Deer River, Grass River, Raquette River, Redwater Brook, St. Regis River, and the West Branch of the St. Regis River. Named Class C perennial streams include Pike Creek and Squeak Brook. Named Class D perennial streams include Allen Brook, Earls Creek, Lawrence Brook, Plumb Brook, the west branch of Squeak Brook, and Trout Brook.

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

Major Streams, Rivers and Water Bodies

There are several important river systems included in this unit. State properties include frontage on the Deer River (4.1 miles), Grass River (2.7 miles), Raquette River (1.3 miles), and St. Regis River (12.5 miles). They are used primarily for recreation including kayaking, canoeing, and fishing. Redwater Pond is popular for fishing and picnicking by users of the surrounding Walter Pratt Memorial Forest in Brasher State Forest.

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 4895B, 4896D, 4996B, 4996D, 5094A, 5094B, 5095A, 5095B, 5095D, 5096A, 5096B, 5096C, 5096D, 5195A, 5195C, 5195D, 5196A, 5196B, 5196C, 5196D, 5197C, 5197D, 5296A, 5296B, 5296C, 5297C, 5297D

  More information on the Breeding Bird Atlas can be found at http://www.dec.ny.gov/animals/7312.html .

- Herp Atlas Block Names Bombay, Brasher Falls, Brushton, Chase Mills, Hogansburg, Massena, Nicholville, Norfolk, North Lawrence, Parishville, Potsdam, Raquette River

  More information on the Herp Atlas, and lists of amphibians and reptiles and their ranges in New York State can be found at http://www.dec.ny.gov/animals/7140.html .

- Game Species Harvest Levels WMU Numbers 6A, 6C

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

Habitat

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

Vegetative Types and Stages

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

Vegetative Type	Acres by Size Class				% of Total
	0 -5 in	6 - 11 in	12+ in	Other	
Natural Forest Hardwood	1,272	7,264	790	--	30
Natural Forest Conifer	279	3,872	1,140	--	17
Plantation Softwoods	203	2,669	5,872	--	28
Plantation Hardwoods	0	0	0	--	0
Wetland	--	--	--	7,231	23
Ponds	--	--	--	91	>1
Open/Brush	--	--	--	23	>1
Other (Roads, Parking lots, etc.)	--	--	--	540	2
Total (Acres)	1,754	13,805	7,802	7,885	100%

Representative Sample Areas-

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

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

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

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

Community Name	Vegetative Type	Facility Name / Stand Numbers	NYNHP Rank	Acreage
Representative Sample Areas of Commonly Occurring Natural Communities				
Black Ash Wetland	Forested Wetland	Brasher, Bombay, and Lost Nation State Forests	Unlisted	1,470
At-Risk Natural Communities (NYNHP Rank S1, S2, G1, or G2)				
None				0
			Total (Acres):	1,470

Black Ash Wetlands

One community type that is especially important in this unit is black ash wetlands. Black ash (*Fraxinus nigra*) grows in seasonally wet swamp hardwood stands, along with red maple, green ash, elms, aspen, yellow birch, and white cedar. It has a narrow range of growing conditions in which it reaches its best form and quality, and it is sensitive to changes in hydrology such as those caused by beaver activity.

Black ash is very important to local Native American culture. Artisans in the Mohawk community use black ash for the construction of pack baskets, utilitarian and ornamental baskets, as well as other items. Basket trees must meet exacting standards, such as being very straight with no limbs on the lower bole, minimum diameter of 10-14", and a uniform growth rate. Very few black ash trees in a given stand meet all these requirements.

There has been increasing concern over the last 30 years that the health of black ash forests is declining, and the number of basket quality trees is also decreasing. In the 1990s a collaborative effort was established between the Mr. Les Benedict of the Akwesasne Taskforce on the Environment, Dr. Michael Bridgen of the New York State Ranger School at Wanakena, NY, and local forestry staff in the Potsdam DEC office to help study black ash on local state forests and improve the management of the black ash resource. Several stands in Brasher State Forest were thinned of competing hardwoods, while keeping carefully selected high quality black ash which will hopefully develop into basket quality trees over time. Better quality black ash stands were also sought out and will be monitored in the future. Seeds from black ash were also collected by Mr. Benedict and Mr. Richard David, from basket quality trees in New York and southern Canada. In partnership with DEC forester Dave Lee at the Saratoga Tree Nursery (more information at ***http://www.dec.ny.gov/animals/7127.html***), the seeds were grown into seedlings and then replanted on both state forest sites and on the Akwesasne Mohawk Reserve.

Black ash stands are grouped in the Natural Area category (see description on page 25), which means they will not undergo commercial timber harvesting, and in most cases will receive little active management. Traditional small scale harvesting practices, such as removing individual basket trees will continue, and further improvement thinnings may occur with the goal of improving black ash quality and regeneration. These will be restricted to "light on the land" techniques, such as hand falling all trees, carrying harvested trees to drier ground, and working on frozen ground whenever possible.

Black ash forests in this unit are faced with the prospect of widespread damage from the Emerald Ash Borer, an invasive insect which is located within 30 miles of the unit in southern Canada. It is likely that the insect will be found in this unit within the next 10 years, which could create widespread mortality of black and green ashes. There are currently no known practical means to remove a large Emerald Ash Borer infestation, once it has become established. Silvicultural or herbicide treatments that reduce susceptibility of black ash stands to Emerald Ash Borer damage will be considered if they appear to improve the long term quality and perpetuation of the black ash resource. A Black Ash Management Outline for this unit is included as Appendix G.

Resource Protection Areas

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

Special Management Zones (SMZs) provide continuous over-story shading of riparian areas and adjacent waters, by retaining sufficient tree cover to maintain acceptable aquatic habitat and protect riparian areas from soil compaction and other impacts. DEC's buffer guidelines also maintain corridors for movement and migration of all wildlife species, both terrestrial and aquatic. Buffers are required within SMZs extending from wetland boundaries, high-water marks on perennial and intermittent streams, vernal pool depression, spring seeps, ponds and lakes, recreational trails, campsites and other land features requiring special consideration. See Figure 2 for a map of the SMZs as applied on the unit.

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. The following areas have been identified to meet demands at the landscape level:

- Matrix Forest Block 21,896 acres
- Forest Landscape Connectivity Corridor 4352 acres

There are two Matrix Forest Blocks which include state properties in this unit. The Brasher State Forest Block includes Bombay State Forest, and most of Brasher State Forest except for the portion west of St. Lawrence County Route 53, encompassing 20,129 acres. The St. Lawrence State Forest Block includes all of Sodom State Forest and the Louisville Detached Forest Preserve parcel, a total of 1,767 acres. Landscape Connectivity Corridors are proposed as routes for wildlife to travel between the larger Matrix Forest Blocks. There are 5 corridors in this unit that cross portions of Buckton, Lost Nation, Raymondville, and Southville State Forests. See Figure 8 for a map of the Matrix Forest Blocks and Forest Landscape Connectivity Corridors in this unit.

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

access, this unit has a large acreage of stands best suited as Natural Areas. There are over 19,000 acres classified as Natural Areas in this unit, which are summarized in Table III.I.

Habitat Related Demands

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

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

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

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

There is also a shortage of late successional (>140 yrs old) forests in this unit. Many of the current state forests were cleared for agriculture before state acquisition. The oldest stands in the unit are generally

plantations ranging from 70 to 80 years old, with some scattered older native trees in less accessible areas and on marginal sites. A goal of this plan will be to increase the percentage of late successional stands over time, by removing from timber management stands which are: wet or marginally wet, inaccessible, prone to windthrow or other post-harvest deterioration, or which contain locally rare or threatened habitat types. Approximately 12,469 acres of forest has been included in the Natural Areas category, which will receive minimal timber management now or in the future.

An excellent summary of native plants that occur in this area can be found in *Plants of St. Lawrence County, NY: An Annotated Checklist of Vascular Flora* by Nancy Eldblom and Anne Johnson.

At-Risk Species

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

Investigation included the following:

- A formal plant survey was conducted on this Unit in 2007 by the New York Natural Heritage Program.
- Element Occurrence Records for the New York Natural Heritage Program's Biological and Conservation Data System were consulted for information.
- Consultation of NHP species guides.
- Consultation of the NYS Comprehensive Wildlife Conservation Strategy

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

*Table I.F. - At-Risk Species**				
Species Name	**NYNHP Rank**	**Habitat**	**Record Source**	**NYS Status**
Confirmed or Predicted within the Unit				
Animals				
Indiana Bat (*Myotis sodalis*)	S1	Forest	SF PRO (PRED)	E SGCN
Birds				
American Bittern (*Botaurus lentiginosus*)	S4	Wetland	BBA (CONF)	PSC SGCN
Bald Eagle (*Haliaeetus leucocephalus*)	S2S3B,S2N	River	NHEO (CONF)	T SGCN
Black Tern (*Chlidonias niger*)	S2B	Wetland	NHEO (CONF)	E SGCN
Common Nighthawk (*Chordeiles minor*)	S4	Forest	BBA (CONF)	PSC SGCN
Cooper's Hawk (*Accipiter cooperii*)	S4	Forest	BBA (CONF)	PSC SGCN
King Rail (*Rallus elegans*)	S2B	Wetland	SF PRO (CONF)	T SGCN
Least Bittern (*Ixobrychus exilis*)	S3B, S1N	Wetland	NHEO (CONF)	T SGCN
Northern Goshawk (*Accipiter gentilis*)	S4B, S3N	Forest	BBA (CONF)	PSC SGCN
Northern Pintail (*Anas acuta*)	S2	Wetland	BBA (CONF)	GAME SGCN
Osprey (*Pandion haliaetus*)	S4	River	BBA (CONF)	PSC SGCN
Pied-billed Grebe (*Podilymbus podiceps*)	S3B, S1N	Wetland	NHEO (CONF)	T SGCN
Red-shouldered Hawk (*Buteo lineatus*)	S4	Forest	BBA (CONF)	PSC SGCN
Sharp-shinned Hawk (*Accipiter striatus*)	S4	Forest	BBA (CONF)	PSC SGCN
Upland Sandpiper (*Bartramia longicauda*)	S3B	River	NHEO (CONF)	T SGCN
Whip-poor-will (*Caprimulgus vociferous*)	S4	Forest	BBA (CONF)	PSC SGCN

Fish				
Blackchin Shiner (*Notropis heterodon*)	S1	River	SF PRO (PRED)	U SGCN
Eastern Sand Darter (*Ammocrypta pellucida*)	S2	River	NHEO (CONF)	T SGCN
Iowa Darter (*Etheostoma exile*)	S2	River	NHEO (CONF)	U SGCN
Lake Sturgeon (*Acipenser fulvescens*)	S1S2	River	NHEO(CONF)	T SGCN
Mooneye (*Hiodon tergisus*)	S1	River	NHEO (CONF)	T SGCN
Northern Brook Lamprey (*Ichthyomyzon fossor*)	S1	Stream	NHEO (CONF)	U
Mollusks				
Black Sandshell (*Ligumia recta*)	S2S3	River	SF PRO (PRED)	U SGCN
Yellow Lampmussel (*Lampsilis cariosa*)	S3	River	NHEO (CONF)	U SGCN
Dragonflies				
Brook Snaketail (*Ophiogomorphus aspersus*)	S2	River	NHEO (CONF)	U SGCN
Extra-striped Snaketail (*Ophiogomphus anomalus*)	S1	River	NHEO (CONF)	PSC SGCN
Rapids Clubtail (*Gomphus quadricolor*)	S1S2	River	SF PRO (PRED)	U SGCN
Reptiles				
Blanding's Turtle (*Emys blandingii*)	S2S3	Wetland	NHEO (CONF)	T SGCN
Plants				
Alpine Cliff Fern (*Woodsia alpina*)	S1	Cliff	SF PRO (PRED)	E
Arctic Rush (*Juncus trifidus*)	S2	Cliff	SF PRO (PRED)	T
Auricled Twayblade (*Listera auriculata*)	S1	Wetland	SF PRO (PRED)	E
Balsam Willow (*Salix pyrifolia*)	S2S3	Wetland	NHEO (CONF)	T

Brown Bog Sedge (*Carex buxbaumii*)	S2	River	NHEO (CONF)	T
Hill's Pondweed (*Potamogeton hilli*)	S2	Wetland	SF PRO (PRED)	T
Hooker's Orchid (*Platanthera hookeri*)	S1	Forest	SF PRO (PRED)	E
Lake-cress (*Neobecki aquatica*)	S2	Wetland	NHEO (CONF)	T
Dwarf Sand-cherry (*Prunus pumila var depressa*)	S2	Grassland	SF PRO (PRED)	T
Meadow Horsetail (*Equisetum pratense*)	S2	Forest	NHEO (CONF)	T
Mingan Moonwort (*Botrychium minganense*)	S1	Forest	SF PRO (PRED)	E
Northern Reedgrass (*Calamagrostis stricta*)	S2	Wetland	SF PRO (PRED)	T
Northern Bog Aster (*Symphyotrichum boreale*)	S2	Wetland	SF PRO (PRED)	T
Pink Wintergreen (*Pyrola asarifolia ssp. Asarifolia*)	S2	Forest	NYNH (CONF)	T
Rhodora (*Rhododendron canadense*)	S2	Wetland	NHEO (CONF)	T
Riverweed (*Podostemum ceratophyllum*)	S2	River	SF PRO (PRED)	T
Roseroot (*Rhodiola rosea*)	S1	Cliff	SF PRO (PRED)	E
Sartwell's Sedge (*Carex sartwellii*)	S1	Wetland	SF PRO (PRED)	T
Scarlet Indian-paintbrush (*Castilleja coccinea*)	S1	Grassland	NHEO (CONF)	E
Slender Marsh Bluegrass (*Poa paludigena*)	S1	Wetland	SF PRO (PRED)	E
Small Bur-reed (*Sparganium natans*)	S2	Wetland	NHEO (CONF)	T

Smooth Cliff Brake (*Pellaea glabella* ssp. *glabella*)	S2	Cliff	SF PRO (PRED)	T
Southern Twayblade (*Listera australis*)	S1	Wetland	SF PRO (PRED)	E
Southern Yellow Flax (*Linum medium var. texanum)*	S2	Grassland	NYNH (CONF)	T
Virginia False Gromwell (*Onosmodium virginianum*)	S1	Grassland	SF PRO (PRED)	E
Whorled Mountain-mint (*Pycnanthemum verticillatum var. verticillatum*)	S1S2	Grassland	NHEO (CONF)	T
Confirmed or Predicted in the Landscape and May Be Affected by State Forest Management				
Birds				
Golden Winged Warbler (*Vermivora chysoptera*)	S4	Grassland	BBA (CONF)	PSC SGCN
Grasshopper Sparrow (*Ammodramus savannarum*)	S4	Grassland	BBA (CONF)	PSC SGCN
Horned Lark (*Eremophila alpestris*)	S5	Grassland	BBA (CONF)	PSC SGCN
Loggerhead Shrike (*Lanius ludovicianus*)	S1	Grassland	BBA (CONF)	E SGCN
Northern Harrier (*Circus cyaneus*)	S3	Grassland	BBA (CONF)	T SGCN
Sedge Wren (*Cistothorus platensis*)	S2	Grassland	BBA (CONF)	T SGCN

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

Key to Codes

BBA - Breeding Bird Atlas

(PRED) - Predicted Species

(CONF) - Confirmed Species

NHEO – Natural Heritage Element Occurrence GIS Layer

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

SF PRO – State Forest Predicted Richness Overlay GIS coverage

Status

E - Endangered Species (New York)

T - Threatened Species (New York)

PSC - Protected, Special Concern Species (New York)

SGCN - Species of Greatest Conservation Need

U - Unlisted (New York)

GAME - Game Species (New York)

Several species of fish listed as either State Endangered (E) or Threatened (T) have been reported in the Raquette River and St. Regis River watersheds. Eastern Sand Darter (E) and Lake Sturgeon (T) have both been reported in DEC surveys in the vicinity of the UMP. Mooneye (T) have been reported at the downstream portions of the St. Regis River. Lake Sturgeon have been stocked in the lower Raquette and St. Regis Rivers in an effort to bolster populations in an attempt to de-list the species.

American chestnut (*Castanea dentata*) was once a common and valuable tree for its rot resistant timber and chestnuts which were eaten by both wildlife and people. Unfortunately, an invasive fungal disease was introduced into North America around 1904 which quickly spread throughout the northeastern states, killing almost all mature chestnut trees by the 1930s. Fort Jackson State Forest still contains a small population of chestnut sprouts, which grow to a few inches in diameter and then succumb to the chestnut blight fungus. Another uncommon tree species in this unit is Hackberry (*Celtis occidentalis*), which has at least 1 specimen growing on Knapp Station State Forest. It is not rare on a statewide level, but it is very uncommon in this area.

Northern Goshawk (*Accipiter gentilis*) is a forest dwelling hawk which is often encountered hunting or nesting on state forests in this unit. In recent years, forestry staff have observed at least 12 active goshawk nests in this unit, primarily in sawtimber sized white pine, larch, and red pine plantations. Current management practice for protecting goshawk habitat is to survey any stands scheduled for timber harvesting before marking begins, locate any active or older inactive stick nests, place uncut buffers around each nest, and restrict harvesting to times which are outside of goshawk nesting season (August 1 to February 28th).

This unit is also known to host at least two active Great Blue Heron (*Ardea herodias*) rookeries, located on Bombay and Brasher State Forests. Both rookeries are situated in large wetland complexes which are in remote sections of these forests.

VISUAL RESOURCES

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

The most scenic part of this unit is the over 20 miles of frontage on the Deer, Grass, Raquette, and St. Regis Rivers. These areas provide tremendous opportunity for the development of recreational trails to allow the public to access and enjoy the natural beauty and wild character of these state forests.

HISTORIC AND CULTURAL RESOURCES

Prior to the first white settlements, St. Lawrence County was occupied by the Iroquois Confederacy. The St. Lawrence Flatlands unit lies within the area that was claimed and occupied by the Mohawk Nation-Keepers of the Eastern Door. Native American Settlement in this area has been documented up to 5,000 years ago. In addition to these settlements, the area was widely used by the Mohawks for hunting, fishing and travel along the St. Regis and Deer River corridors.

The State owned parcels within this management unit lie within what is referred to as the "Original Ten Townships of St. Lawrence County". This large parcel of land was purchased in 1787 by wealthy land speculator Alexander Macomb who in turn began selling off portions to secondary speculators.

The history of the town of Brasher is representative of the settlement and development of this area. Settlers began to arrive in this area following the Revolutionary War. Agricultural and lumbering activities marked the beginning of this era. In 1809, Brooklyn land speculator Philip Brasher acquired title to the land within this area. The first sawmill was built in 1815 near the mouth of the Deer River at what would later become Brasher Iron Works. Helena, the town's first settlement, was established in 1817 on land owned by Joseph Pitcairn and named for Pitcairn's daughter Helen. In 1820, Helena became the site of the first permanent home built in what was soon to become the Town of Brasher. In 1823, the first store was built in Helena which was a most welcomed relief to the inhabitants who up until then, had to trek to Cornwall Ontario in order to obtain their supplies. The town's first post office was built in Helena in 1827. Helena was also home to a grist mill, a customs house, a hotel and a tannery.

In 1825, a large forested parcel of land was removed from the Town of Massena in order to establish the Town of Brasher. The principal Hamlet of Brasher Falls was then established along a stretch of rapids near the juncture of both branches of the St. Regis River. This mile long stretch of rapids served as the water source for a number of large manufacturing ventures during the early to mid-19th Century. Beginning with a dam and sawmill which were constructed in 1826, Brasher Falls soon hosted a stone gristmill, a shingle mill, a woolen mill, a starch factory, a hotel, an additional sawmill and a farm implement factory started in 1852 by Davis & Company from Maine and subsequently taken over by P.E Kennehan in the mid 1870's. Kennehan Agricultural Works was a world known manufacturer of plows and various other farm implements up until the 1960's. At one time, the hamlet also featured a covered bridge.

The third settlement of Brasher Center was established in 1832 along the St. Regis River approximately four miles downstream from Brasher Falls.

The town of Brasher held a unique historical place in the early days of the iron making industry in New York State. Unlike the traditional sources of raw material typically found in rocks and hills, the swamps and river banks in the Brasher area were home to a slowly forming sedimentary material known as bog iron. In 1835, land owner Joseph Pitcairn persuaded well known iron maker Stillman Fuller to examine the area and construct a furnace if practical. The present hamlet of Brasher Iron Works was born, when in 1835, construction of Fullers' blast furnace was begun along the banks of the Deer River just upstream from Helena. Beginning with its startup in the fall of 1836, the furnace ran in one continuous blast for 15 months before the first stoppage. By late 1837 when the second blast was completed, Stillman Fuller sold out to an Isaac Skinner from Buffalo New York. Mr. Skinner, who was known to have a streak of bad luck when it came to fires, suffered a total loss to his Brasher operation on two separate occasions prior to 1843. An onsite accident resulting in fire also significantly destroyed the business in 1843 as did an explosion in 1856. After repeatedly rebuilding, a forest fire in May of 1857 brought an end to the furnace and iron making process at Brasher Iron Works. Although a machine shop and foundry was then constructed on this site, it too succumbed to a fire in 1887 thus bringing an end to the iron industry at this small community.

History of the Unit

Laws passed by the State of New York in 1929 and 1931 provided authorization for the Conservation Department to purchase available properties for reforestation purposes. The first purchase in Brasher was in 1932 for a 67 acre parcel located adjacent to the Redwater Dam area. The majority of purchases had been completed by the early 1940's but additional acquisitions have been made up to and including the present time. A record of land acquisitions can be found in Appendix C.

Perhaps the most significant piece of local history in terms of relevance to the present character of this forest is the Civilian Conservation Corps (CCC). Established in 1933 by President Franklin D. Roosevelt, the purpose of this program was to provide employment during the Great Depression to thousands of young men on conservation related projects throughout the nation. Camp S-95 was established in Brasher on May 15th, 1934 on government lands that had been purchased from James McNulty. This camp was situated on what is now the site of the DEC Maintenance Facility off the Vice Road.

The Brasher camp and another nearby camp in Brushton (Camp S-120), were just two of approximately 2,600 camps throughout the nation. It was the task of the U.S. Army to enroll, feed, clothe and provide medical care to the enrollees while Local/State personnel were in charge of all field projects. The Brasher work camp generally consisted of between 140 and 150 unmarried men between the ages of 17

and 28. Staff consisted of 2 Army Officers, a Project Superintendent, 5 Cooks, a Medical Officer, a dozen or more technical staff to oversee field projects and 8-10 Foremen including such occupations as Blacksmiths, Mechanics and Equipment Operators. During the nearly eight year tenure of this camp, enrollees established two tree nurseries and spent in excess of 27,000 man days planting over 8 million tree seedlings. In order to protect these and other trees within the forest, 126 water reservoirs were constructed for use in the event of a forest fire. This was a massive undertaking as each of these hand dug and rock lined water holes measured 25 feet across and 10 feet in depth. Several miles of old farm and log roads were upgraded as was the construction of new roads. Approximately 50 miles of access lanes were cleared around plantations in order to provide accessibility in the event of a fire. Nearly 150 miles of boundary line surveys were done and over 50 miles of barbed wire fencing was erected in order to prevent damage to the young forest from adjacent livestock. Improvement thinnings were carried out on about 1,200 acres of natural forests and *Ribes* eradication efforts took place on nearly 10,000 acres of land in order to prevent a deadly disease common to white pine trees. The popular camping and picnic facility presently located at Redwater Dam was constructed as a CCC building project from 1935 to 1938. DEC personnel have continued on for 60 years as stewards of this wonderful forest but there is little doubt that the present character of this area is a testimonial to the dedication and hard work of the Civilian Conservation Corps. Upon the disbanding of the CCC's, this camp was then used by the Army to house German and Italian prisoners during World War II.

In addition to the forests, other reminders of the CCC and later eras can still be found today. Most of the waterholes created during the CCC era were later filled in for safety reasons, but there are still at least 2 remaining in Brasher State Forest. There were extensive forest fires in the Brasher area and throughout northern New York in 1941. In 1950 the Sand Hill fire tower was established in the western portion of Brasher State Forest, on the present State Highway 420. This was an 80' metal tower with an accompanying observer's cabin, which were staffed periodically during times of high fire hazard and drought. The station was not used often and was officially closed in 1959, and the tower was taken down around 1961. The observer's cabin was moved to the DEC maintenance facility in Brasher Falls. All that remains at the site today are the cement footers for the tower and cabin.

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

During the CCC era, there were several important figures who worked hard to establish the state forests we have today. Walter F. Pratt (1905-1956) was a 1927 graduate of the New York State College of Forestry at Syracuse University. He was appointed forester for St. Lawrence County (District 7) of the Conservation Department In 1932. During his tenure, he oversaw the acquisition of nearly 46,000 acres of state forest throughout the county, as well as the planting of many thousand acres of plantations, construction of the major truck trails and recreation trails, and he assisted private landowners with forest management on their lands. Mr. Pratt passed away at the age of 51, and his co-workers and the surrounding community later dedicated the Walter F. Pratt Memorial Forest near North Lawrence in his honor. This area is located in Brasher State Forest, on the first Reforestation Area acquired under his leadership in 1932. This site is now home to the popular Redwater Dam picnic and camping area.

Clarence Petty (1905-2009) was appointed the first Camp Superintendent at the Brasher Falls CCC Camp in 1934. In 1935 he became the Camp Superintendent at the newly established Brushton CCC Camp located east of Dickinson Center in Franklin County. He supervised large groups of workers who surveyed the newly purchased state forests, planted trees, built roads, and conducted white pine blister rust control work to remove plants which harbor the disease. He worked extensively throughout the state forests in northern St. Lawrence and Franklin counties. In his later career he would become an important influence in the Conservation Department and later the Department of Environmental Conservation, where he was a strong advocate for conservation and protection of the Adirondack Park.

Detached Forest Preserve Parcels

Included in this unit are 6 parcels of Detached Forest Preserve, which are properties classified as Forest Preserve but located outside the Catskill or Adirondack Park boundaries. These properties range in size from 3 to 350 acres. They are not managed for timber production and have relatively poor access with no developed trails or facilities, but do provide ample wildlife habitat and watershed protection values. These detached forest preserve parcels were owned by the state before the Adirondack Park was created and were in Forest Preserve counties where forested lands acquired by the state became Forest Preserve lands. Eventually the Adirondack Park Blue Line was established, within which state lands acquired would become Forest Preserve, while outside new acquisitions would become other categories of DEC lands such as state forests or wildlife management areas. Many of these properties reverted to state ownership after tax sales, or due to foreclosure of mortgages.

The following is a list of the Detached Forest Preserve parcels in the St. Lawrence Flatlands Unit:

Parcel	Town	Acreage	Name	Deed Recorded
FP SL 12	Lisbon	20.38	Lisbon FP	3/24/1900
FP SL 13	Lisbon	11.74	Lisbon FP	1/25/1892
FP SL 14	Waddington	7.0	Waddington FP	3/24/1900
FP SL 15	Waddington	3.4	Waddington FP	3/24/1900
FP SL 17	Louisville	350.3	Louisville Swamp	Mortgage foreclosure 1907
FP SL 18	Massena	43.4	St. Regis Reservation-Grass River Indian Meadows	Conveyed by treaty 2/21/1845

FP SL 12 This property is located approximately midway between the Swamp and Hatch Roads, and is located over 3,300’ from either road. It is surrounded by private land and is inaccessible. It is recommended that this property be sold or otherwise transferred from DEC jurisdiction.

FP SL 13 This property is located approximately 2,200' north of the Fisher Road. It is surrounded by private land and is inaccessible. It is recommended that this property be sold or otherwise transferred from DEC jurisdiction.

FP SL 14 This property is located approximately 1,500' north of St. Lawrence County Route 31, northwest of the hamlet of Chipman. It is surrounded by private land and is inaccessible. It is recommended that this property be sold or otherwise transferred from DEC jurisdiction.

FP SL 15 This property is located approximately 740' west of the Hardscrabble Road. It is surrounded by private land and is inaccessible. The parcel was surveyed by the DEC and is depicted on map #8687, dated September 27, 1970. Jurisdiction of this property was transferred by executive order, dated June 30, 1971, from the Division of Lands and Forests to the Division of Fish and Wildlife, to be dedicated to wetland protection purposes.

FP SL 17 The Louisville Swamp is by far the largest of the detached forest preserve parcels at 350 acres. It is located approximately 1,800' east of St. Lawrence County Route 39. It is surrounded by private land and is inaccessible. Attempts were made in past years to acquire adjacent parcels that were for sale which would provide public access, but the acquisitions were unsuccessful. Continuing attempts should be made to improve access by acquiring adjacent land from willing sellers, or possibly by acquiring a right of way to this parcel.

FP SL 18 The Indian Meadows are a series of 24 parcels which are located along the Grass River in the town of Massena. This land was acquired by the State of New York on February 21, 1845 at a Treaty of Purchase with the St. Regis Indians. The parcels vary in size from 0.12 acre to 15 acres. The 15 acre parcel (18-N), as well as another 2.93 acre parcel (18-M), were apparently acquired at some point by the Seaway Development Corporation. It also appears that there may be utility lines crossing parcels 18-J (0.35 ac.) and 18-K (1.5 ac.). According to file record notations, the location of several parcels may be impossible to determine due to erosion and dredging work done long ago in conjunction with development of the Alcoa power canal. It is recommended that these parcels be sold or otherwise transferred from DEC jurisdiction.

Proposals have been made in the past to dispose of these parcels as provided in Article 2 Section 24 of the Public Lands Law and Article XIV, section 3(2) of the New York State Constitution. Providing the State continues to retain ownership, there are no management issues that can be addressed until such time as the locations of these parcels can be determined through survey.

The above parcels have been included in summaries of soils, habitat types, wetlands, and wildlife. They have been collectively classified as wetlands, since most of the acreage is composed of wetland shrubs or open wetlands on muck soils. There are no roads, trails, buildings, or other infrastructure on these parcels. Their best use is for wetland protection and wildlife habitat. A general location map of the Detached Forest Preserve parcels is included in Figure 3 – Infrastructure and Recreation.

The following parcel was originally managed by the Conservation Department, a predecessor of the Department of Environmental Conservation, but has since been transferred to another state agency:

Parcel	Town	Acreage	Name	Property Transferred to NYS
FP SL 9	Oswegatchie	13.1	Eel Weir State Park	12/21/1932

FP SL 9 This parcel was transferred to the Department of Parks effective September 1, 1967. It has since been developed as a recreational area featuring 28 campsites and is known as Eel Weir State Park. It is now managed by the Office of Parks, Recreation, and Historic Preservation. More information about this property can be found on the OPRHP website at http://nysparks.com/parks/ . This property is not managed by the Department of Environmental Conservation, and will not be included further in this plan.

Inventory of Resources

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

There are no known major historical sites located on state properties in this unit. There are many remnants of the agricultural past of our state forests, including cellar holes, house foundations, water wells, and stone walls. These features are identified before any timber harvesting takes place in the area, to minimize disturbance of these features and preserve them for the future.

There are potentially remnants of past Native American use of this area, such as fishing sites, village sites, or scattered artifacts such as arrowheads or pottery shards. Any such features will be protected as they become known.

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

On lands managed by the Division of Lands and Forests, the number of standing structures is generally 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, ecofacts) or modifications to the landscape reveal evidence of past human activity. This includes a wide range of resources ranging from precontact Native American camps and villages to Euroamerican homesteads, cemeteries and graves as well as mills and other and industrial sites. Such sites can be entirely subsurface or can contain above ground remains such as foundation walls or earthwork features.

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

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.

Archaeological Site Protection

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

Archaeological Research

The archaeological sites located on this land unit as well as additional unrecorded sites that may exist on the property will be made available for appropriate research. All future archaeological research to be conducted on the property will be accomplished under the auspices of all appropriate permits. Research permits will be issued only after consultation with the New York State Museum and the Office of Parks, Recreation and Historic Preservation. Extensive excavations are not contemplated as part of any

research program in order to assure that the sites are available to future researchers who are likely to have more advanced tools and techniques as well as different research questions.

REAL PROPERTY

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

Boundary Lines

Table I.G. – Status of Boundary Lines

Facility Name	Length of Boundary (mi.)	Length Needing Maintenance	Length Needing Survey
Bombay State Forest-FR 2	15.36	15.36	15.36
Bombay State Forest -FR 4	7.24	7.24	7.24
Brasher State Forest -SL 1	23.56	4.38	4.38
Brasher State Forest -SL 5	24.32	2.90	2.90
Brasher State Forest -SL 6	28.60	3.19	3.19
Brasher State Forest -SL 7	12.23	0.75	0.75
Brasher State Forest -SL 10	27.33	5.85	5.85
Brasher State Forest -SL 17	10.82	1.14	1.14
Buckton State Forest -SL 31	14.59	0.90	0.90
Fort Jackson State Forest -SL 22	10.11	0.45	0.45
Grantville State Forest -SL 15	9.36	0.26	0.26
Knapp Station State Forest -SL 11	11.88	1.07	1.07
Lost Nation State Forest -SL 9	17.85	4.77	4.77
Raymondville State Forest -SL 33	5.77	0.88	0.88
Sodom State Forest -SL 25	15.17	2.66	2.66
Southville State Forest -SL 23	7.68	0	0
Detached Forest Preserve Parcels	12.38	12.38	12.38
Totals	254.25	64.18	64.18

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

There is a large backlog of state acquisitions in this unit that are in need of boundary surveys. There was a member of the DEC Real Property staff based in St. Lawrence County for many years, but since his retirement in 1995 there has been a reduction in the amount of time available to do surveying fieldwork in this unit. The boundaries of the following parcels cannot be adequately painted or signed until they have been surveyed:

State Forest	Ref. Area	Parcel Name	Acreage	Year Acquired
Brasher SF	1	Warner	97.2	2006
Brasher SF	6	Prop G-2 / Champion	8.0	1999
Brasher SF	7	Johnston & Mitchell	50.0	2002
Brasher SF	10	Luczkiewicz	39.1	2001
Brasher SF	17	Saler & Spivak	47.0	2005
Fort Jackson SF	22	Prop H / Cree	41.5	1992
Lost Nation SF	9	Prop P/ SLC 4H Lot	16.0	1990
Lost Nation SF	9	Prop Q / SLC 4H Lot	9.0	1993
Lost Nation SF	9	Prop R / Maginn 4H Lot	1.0	1994
Lost Nation SF	9	Caza 4H Lot	1.0	2001
Lost Nation SF	9	McWilliams 4H Lot	1.0	2001

In addition, all 6 parcels of Detached Forest Preserve in this unit are in need of survey and their boundary lines cannot be marked at the present time.

A summary of the parcel acquisition history in this unit is included as Appendix C.

Exceptions and Deeded Restrictions

Table I.H. – Exceptions and Deeded Restrictions

Facility Name	RA #	Description E.g., deeded ROW, easement, access lane, water rights, cemetery, etc.	Proposal ID (Surveyor's Reference)
Bombay State Forest	FR 2	None	--
Bombay State Forest	FR 4	None	--
Brasher State Forest	SL 1	Reserved ROW over parcel 15' square, SW corner of lot 109	A
Brasher State Forest	SL 1	15' wide ROW	B
Brasher State Forest	SL 5	Reserved right to regulate water levels for water or electric power	D
Brasher State Forest	SL 5	Road ROW for People of NYS	E
Brasher State Forest	SL 5	Reserved ROW 3 rods wide	K

Table I.H. – Exceptions and Deeded Restrictions

Facility Name	RA #	Description E.g., deeded ROW, easement, access lane, water rights, cemetery, etc.	Proposal ID (Surveyor's Reference)
Brasher State Forest	SL 5	Qualified reservation of mineral rights	R
Brasher State Forest	SL 5	Reserved right to use well and parcel of land 100'x150' to water livestock	V
Brasher State Forest	SL 5	Pole line easement	Z
Brasher State Forest	SL 5	Easement for two power transmission lines 2800' along south end of Vice Rd.	Z
Brasher State Forest	SL 6	Reserved ROW 20' wide	D
Brasher State Forest	SL 6	One power transmission line 650' along County Route 53	L
Brasher State Forest	SL 6	Qualified reservation of mineral rights	Q
Brasher State Forest	SL 6	Reserved mine and minerals rights	V
Brasher State Forest	SL 7	Reserved road access to private parcel (see also L. 902 P. 86)	K
Brasher State Forest	SL 7	Mine and mineral reservation	R
Brasher State Forest	SL 10	Dry hydrant installed at St. Regis Fishing Access Site by the Helena Fire Dept. under DEC permit.	D
Brasher State Forest	SL 10	Reserved use of one rod wide winter road	G
Brasher State Forest	SL 10	One power transmission line 1700' along North end of Vice Road	H
Brasher State Forest	SL 10	Qualified reservation of mineral rights	V
Brasher State Forest	SL 10	Reserved water power rights and qualified mineral rights	W
Brasher State Forest	SL 17	Reserved use of roads on N and W sides of deeded parcel	C
Brasher State Forest	SL 17	Reserved 2 rod wide ROW along the south line of parcel	G
Buckton State Forest	SL 31	Reserved ROW across conveyed parcel	B
Buckton State Forest	SL 31	Reserved ROW across conveyed parcel	D
Buckton State Forest	SL 31	Reserved use of roads adjoining or lying within conveyed parcel	G
Fort Jackson State Forest	SL 22	Subject to easement granted to Northern Development Corp. for operation and maintenance of electric lines	H

Table I.H. – Exceptions and Deeded Restrictions			
Facility Name	**RA #**	**Description** E.g., deeded ROW, easement, access lane, water rights, cemetery, etc.	**Proposal ID (Surveyor's Reference)**
Grantville State Forest	SL 15	Easement and ROW to NY Central Railroad	A
Grantville State Forest	SL 15	Easement and ROW to St. Law. Transmission Co. for power line	B
Grantville State Forest	SL 15	Easement and ROW to St. Law. Transmission Co. for a power line. Easement to St. Law. Valley Power Co. of flow rights. ROW also reserved by Grantor.	C
Knapp Station State Forest	SL 11	Reserved mine and mineral rights	G
Knapp Station State Forest	SL 11	Excepting rights of others, if any, in and to all ponds, streams, highways, roads, public utility easements, transmission lines, telephone lines or ROWs affecting the conveyed parcel	H
Lost Nation State Forest	SL 9	Excepting a ROW as granted in a lease dated 1928 and recorded at L. 249 P. 326	F
Lost Nation State Forest	SL 9	Power line 2400' along Vankennen Road	J
Lost Nation State Forest	SL 9	People of NYS have a deeded ROW to the subject parcel	L
Lost Nation State Forest	SL 9	Easement to Niagara Mohawk Power Corp. and NY Telephone Co.	P
Lost Nation State Forest	SL 9	Reserved rights of others, if any, to all ponds, streams, highways, roads, public utility easements, transmission or telephone lines	Caza 4H lot
Raymondville State Forest	SL 33	Grantor reserved a farm road ROW across conveyed parcel. Also easement granted to St. Law. Transmission Co.	A
Raymondville State Forest	SL 33	Conveyance subject to rights of others, if any, in and to all ponds, streams, highways, roads, public utility easements, and transmission of telephone lines affecting described parcel	G
Sodom State Forest	SL 25	Reserved ROW across conveyed parcel	C

Table I.H. – Exceptions and Deeded Restrictions			
Facility Name	**RA #**	**Description** E.g., deeded ROW, easement, access lane, water rights, cemetery, etc.	**Proposal ID (Surveyor's Reference)**
Sodom State Forest	SL 25	Grantor reserved mine and mineral rights. Also subject to an existing easement for telephone and telegraph lines	D
Sodom State Forest	SL 25	Grantor reserved mine and mineral rights plus a ROW across the conveyed parcel	E
Sodom State Forest	SL 25	Grantor reserved mine and mineral rights	F
Southville State Forest	SL 23	None	--

Use and Demand Related to Exceptions and Deeded Restrictions

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

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

Encroachments

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

Table I.I. – Encroachments			
Facility Name	**RA #**	**Description**	**Proposal ID (Surveyor's Reference)**
Brasher State Forest	1	Boundary lines of private inholding do not agree with survey proposal maps.	F

Brasher State Forest	1	Boundary lines of private inholding do not agree with survey proposal maps.	S
Brasher State Forest	1	Monuments have been disturbed and boundary line appears to have been moved along private inholding.	AA
Brasher State Forest	5	Adjacent landowner is using a trail across state forest to access a camp. No deeded ROW. May have an implied ROW since the property was excepted out when the SF parcel was acquired.	R
Brasher State Forest	6	Adjacent landowner is using a trail across state forest to access a camp. No deeded ROW.	U
Brasher State Forest	6	Access to a large section of State Forest is in dispute due to a public road relocation.	W
Brasher State Forest	17	Adjacent landowner is using a trail across state forest to access a camp. No deeded ROW.	B
Buckton State Forest	31	Adjacent landowner is using a trail across state forest to access a camp. No deeded ROW.	F
Raymondville State Forest	33	Monuments disturbed and possible encroachment by adjoiner.	C
Sodom State Forest	25	Adjacent landowner is using a trail across state forest to access a camp. No deeded ROW.	F
Sodom State Forest	25	Private landowner has a deeded ROW to property, but the access trail being used is at a different location.	C

Land Acquisition

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

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

- forested lands in areas that are in need of watershed protection

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

INFRASTRUCTURE

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

Maps of infrastructure and recreational facilities in this unit are included as Figure 3.

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.

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

Category	Total Amount	Needing Improvement
Public Forest Access Roads	20.6 mi.	7.7 mi.
Haul Roads	16.4 mi.	14.5 mi.
Trails	43.2 mi.	42.0 mi.
Stream Crossings		
Bridges	5	2
Culverts	12	12
Related Infrastructure		
Parking Areas / Trailheads	3	0
Gates / Barriers	10	2

Additional Information on Roads and Trails

State Lands Interactive Mapper (SLIM) – An interactive online mapper can be used to create custom maps of recreational trails on this Unit to help people plan outdoor activities. Located at DEC's Mapping Gateway: http://www.dec.ny.gov/pubs/212.html.

Google Earth Virtual Globe Data - Some of DEC's map data, including accessible recreation destinations, boat launches, lands coverage, roads and trails on this Unit can be viewed in Google Maps or Google Earth (also located at DEC's Mapping Gateway).

Use and Demand on Roads, Haul Roads and Parking Areas

Roads open to motor vehicles in this unit are frequently used by the general public to access state properties for hunting, fishing, trapping, recreation, timber harvesting, and accessing privately owned parcels that are located near state forests. There is a need for several gates located on major Public Forest Access Roads in Bombay and Brasher State Forests, which will be closed during the spring mud season to protect DEC maintained roads from rutting.

More parking areas are needed at trailheads so that recreational users do not need to park on the edge of public roads. This is especially true of areas which currently contain few good winter parking areas located on plowed roads, such as Buckton, Fort Jackson, and Raymondville State Forests.

Road Classification

Roads are divided into the following classes, based upon intended use and standards of construction.

Public Forest Access Roads - These roads are permanent, unpaved roads which may be designed for all weather use depending upon their location, surfacing and drainage. The design standards for these roads are those of the Class A and Class B access roads as provided in the Unpaved Forest Road Handbook (8/08). For more information, see the DEC website at http://www.dec.ny.gov/docs/lands_forests_pdf/sfunpavedroad.pdf .

Haul Roads - These roads are permanent, unpaved roads that are not designed for all weather travel, but may have hardened or improved surfaces with artificial drainage. They are constructed according to best management practices primarily for the removal of forest products, providing limited access within the unit by log trucks and other heavy equipment. These roads may or may not be open for public motor vehicle use, depending upon management priorities and objective. They may serve as recreational access corridors, but are not maintained according to specific standards or schedules.

Access Trails may be permanent, unpaved, and do not provide all-weather access within the Unit. These trails are originally designed for removal of forest products and may be used to meet other management objectives such as recreational trails. These trails are constructed according to "Best Management Practices."

Town and County Roads - Town and County roads also serve as access to and through the unit. In the case of certain roads in the Town of Brasher, the question of whether they were owned by the State or the Town had been unresolved for many years. Given the uncertainty of the ownership or legal status it may at some point become necessary to petition a court for a declaratory judgment to resolve this matter. However, in the interim the Department and the Town of Brasher have developed a mutual understanding with respect to the legal status of these roads. On June 20th 2001, a Town of Brasher Board meeting was held for the purpose of finalizing a "road agreement" between the DEC and the

Town. This "road agreement" is an understanding between the DEC and the Town of Brasher as to which roads are considered to be owned by the Town and which ones are considered to be State/DEC roads. It is understood that this is an agreement only. At some point in time, a court of law may be petitioned for legal determination of ownership of these roads. The "road agreement" and list of roads indicating agreed upon jurisdictional status can be found in Appendix E.

The Town of Brasher had expressed the intention to pursue a "Qualified Abandonment" procedure on many of these roads back in 2001, but has not as yet made any progress with this issue. Qualified Abandonment status would legally enable the State to assist in or assume maintenance on any of these roads. Any revisions to Appendix E which might result from this, will be included as part of the Unit Management Plan review and update process.

Also included in Appendix E is a Certificate of Qualified Abandonment from the Town of Stockholm dated 1979 for several roads crossing state forests in this unit: Brookdale-Jenkins Corners Road (Lost Nation State Forest), Club Road (Buckton State Forest), and Sheldon Road (Fort Jackson State Forest).

There are several roads in this unit that did not exist at the time of state acquisition of these properties, and were later constructed by the Civilian Conservation Corps in the 1930s or early 1940s, or by the Conservation Department or Department of Environmental Conservation in later years. The following roads and trails (and likely others) were constructed by New York State:

Location	Name	Years of Construction
Bombay SF	Pike Brook Haul Rd	1938-39
Brasher SF	Camp / Larue PFAR	1930s
Brasher SF	Hastings Falls Haul Rd	1973-74
Brasher SF	Railroad Bed PFAR	1940
Brasher SF	Redwater / CC Dam PFAR	1938-39
Brasher SF	McCarthy PFAR	1930s?
Brasher SF	Wilson PFAR	1970s

In addition to the projects above, the CCC's and Conservation Department engaged in major re-construction and upgrades to the Bush Road in Brasher State Forest in 1940 and 1948.

On St. Lawrence Reforestation Area #6 (Brasher State Forest), there is an issue with access between the State Forest and County Highway 53. The St. Lawrence County Highway Department relocated the roadway in 1939. In 1939, the lands that the State later acquired fronted, and had access to that highway. When the highway was relocated, a gap existed between the new roadway and the lands in question. New York State acquired the bulk of the lands in question in 1942, however, one parcel

remained as private property, and this parcel was accessed via a small "woods road" which ran from the old County roadbed, through the State lands, to the private parcel. There is no legal right-of-way described in the deed which conveyed a right-of-way across State lands to anyone via this "woods road." New York State acquired this private parcel of land in 1993. Given the fact that the private owners had used the "woods road" to access their land for many years, both before and after the State acquired title, and in so doing, crossed the gap between the old and new roadway, it is safe to presume that a case can be made for a prescriptive right-of-way, which would now extend to NY State. In any case, the existing "woods road" that best provides access to all of the state land parcel, at present, does not physically extend all the way to the County Highway. This issue needs to be resolved, so that DEC can utilize the existing "woods road" roadway to access these lands for a variety of purposes, including the sale and removal of forest products. The lands in question do front upon County Highway 53 in a location approximately 850 feet northeast of the old existing "woods road". It may be possible to construct a new roadway in that location to provide road access to the parcel. The construction of a new roadway would be an expensive last resort to providing road access to the parcel; it would be more productive to resolve this issue and utilize the existing "woods road."

Any road work being done by the Town adjacent to State Land which involves work that will extend beyond the current ditch line, will require the issuance of a Temporary Revocable Permit by the DEC.

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

Signs / Kiosks

There are a total of 20 state forest signs and 0 kiosks on the unit.

There is a need for several kiosks in this unit to improve public awareness of the recreational facilities available on state forests, as well as the history and stewardship of these public lands.

This plan proposes the following new kiosks in this unit:

Brasher SF RA 5	Vice Road	Kiosk near the DEC headquarters showing a trail map of the area, sign in register, pamphlets, and a history of the CCC Camp formerly located on this site.
Brasher RA 1	Redwater PFAR	Kiosk at the CC Dam campground showing a trail map of the area, sign in register, pamphlets, and regulations for the camping and picnic area.
Southville State Forest		Kiosk at the trailhead for the hiking / ski trails showing a trail map of the area, sign in register, pamphlets, and history of the area.

Boating and Fishing Facilities

There is a car top boat launch located on the St. Regis River in Brasher State Forest, north of Brasher Center. Boating and fishing facilities as well as their use and demand are discussed under Recreation.

Designated Campsites and Lean-tos

There are three areas in Brasher State Forest that contain designated campsites. On the Camp / Larue Public Forest Access Road there is one campsite with a fire ring. On the Vice Road there are two campsites located along the St. Regis River. There are 20 campsites at the Redwater / CC Dam facility along with picnic areas and day use facilities. There are currently no lean-tos in this unit. Camping facilities, as well as their use and demand are discussed under Recreation.

Other Facilities

There is a field weather station located at the Brasher Falls Maintenance Facility which is monitored by the New York State Forest Rangers. It is used to record temperature, precipitation, humidity, and wind speed, which are important for monitoring forest fire danger, as well as tracking the long term weather patterns in the area.

Utility Transmission and Collection Facilities

The **MA1**, **MA2**, and **MSU** electric transmission lines cross the southeastern portion of Sodom State Forest. These lines occupy an easement granted to the New York Power Authority. The **Dennison Colton 4 & 5** 115,000 volt electric transmission line operated by National Grid crosses both Raymondville and Grantville State Forests. The **Bombay-Nicholville 23** 34,500 volt electric transmission line operated by National Grid crosses Reforestation Area 5 along the Vice Road in Brasher State Forest.

Operations Facilities

The Brasher Falls Maintenance Facility is located on the Vice Road in Brasher State Forest. It consists of a complex of buildings which serve as the home facility for several operations staff who maintain boundary lines, roads, signs, gates, and other infrastructure on DEC properties in this unit. It also serves as the only DEC vehicle maintenance facility for St. Lawrence County.

The following is a list of the structures located at the Brasher Falls Maintenance Facility:

Structure	Size
Shop	3,216 square feet
Fire Control Building	576 square feet
Pole Barn 1 / Storage 1	2,400 square feet
Pole Barn 2 / Storage 2	4,368 square feet
Grader Shed	816 square feet
Office / Observer's Cabin	448 square feet
Oil House	384 square feet
Pole Barn	1,800 square feet

Ranger Building	576 square feet
Weather Station	10 square feet

Non-recreational Uses

Military Field Exercises

There are currently no requests for military training on this unit. Other state forests in the county are sometimes used for training by local college Reserve Officer Training Corps (ROTC) units. The ROTC unit is typically issued a Temporary Revocable Permit for a 2 week or shorter period in which they practice orienteering and tactical training.

FORMAL AND INFORMAL PARTNERSHIPS AND AGREEMENTS

Conservation and stewardship partnerships are increasingly important, especially for public land management agencies. Considering the fact that resources will always be limited, collaboration across political, social, organizational and professional boundaries is necessary for long-term success and sustainability. Encouraging the development of cooperative and collaborative relationships is and can be done through DEC's Adopt-A- Natural Resource Program (AANR). In 2013, the Adopt-A-Natural Resource Program was succeeded by the Volunteer Stewardship Agreements Program (VSA). For more information on these and other partnerships, please see SPSFM page 181 at http://www.dec.ny.gov/lands/64567.html.

There are currently four such AANR agreements in place on this unit:

The "CC Dam Association for maintenance of the Redwater picnic and camping facility.

The Youth Conservation Corps for general conservation related actives on State Forest land.

The St. Lawrence County Snowmobile Association for maintenance and grooming of trails.

The Akwesasne Task Force on the Environment for silvicultural activities aimed at perpetuating and propagating Black Ash.

RECREATION

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

Gateway http://www.dec.ny.gov/pubs/212.html in Google format or in the State Lands Interactive Mapper.

Wildlife-related Recreation

Hunting

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

The less severe winter conditions normally encountered within the St. Lawrence Transition zone do not generally result in the winter yarding of deer to the same extent as what normally occurs in the more forested western Adirondack Foothills zone. Still, some yarding does occur and there are two known yarding areas within the Brasher Forest that exceed 200 acres in size.

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

During the public review and comment process for this UMP, several sportsmen commented that they would like to see habitat management directed toward game species such as woodcock and ruffed grouse. These species require early successional forest habitat, such as sapling and poletimber hardwood stands, which are relatively uncommon in this unit. Most forests in this unit are either coniferous or larger diameter sawtimber sized hardwoods.

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

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

One of the difficulties of managing for ruffed grouse in this unit is the relative scarcity of aspen. It typically occurs as a scattered large sawtimber tree, mixed with other hardwood species or conifers. In

July 2014, a biologist from the Ruffed Grouse Society, along with the local DEC forester toured several locations in Brasher and Fort Jackson State Forests to give recommendations for potential management for ruffed grouse and other wildlife species needing early successional habitat. The conclusions were that there is certainly the potential for forest management to promote ruffed grouse, but it may be challenging to find extensive areas of existing aspen to convert to even-aged management.

One of the recommendations of this plan will be that stands scheduled for timber harvests will be considered for management as woodcock or ruffed grouse habitat, if stand analysis indicates that aspen and other needed species are present.

Fishing

Fishing opportunities exist on the St. Regis River, Deer River, Redwater Pond and some of the tributaries. Smallmouth bass, walleye and muskellunge offer the most popular fishing in the rivers while panfish and largemouth bass attract anglers to Redwater Pond. Several access points for small boats and canoes are shown on the Figure 3 map and other informal spots are found at bridge crossings. One of the proposals in this plan is the construction of three Parking Areas, located near the St. Regis and Deer Rivers, to provide better access to the water. The locations for these proposed installations can be found in the Infrastructure and Recreation Maps included as Figure 3.

Most of the state parcels in this unit reside within 3 sub basins of the St. Lawrence watershed: the Raquette, St. Regis, and Salmon Rivers. Total area for all 3 watersheds is approximately 2,543 square miles, of which the state managed parcels occupy about 48 square miles (1.9%). In general the lower sections of these watersheds are characterized as having a low gradient and a mix of forest, agriculture and wetland. State parcels are all within 3 identified ecozones; the St. Lawrence Plains, St. Lawrence Transition, and the Malone Plains.

Aquatic resources are somewhat limited. There are several permanent ponds, lakes or impounded waters within the general UMP boundary. None of these resources however are located within state owned parcels and are therefore not intensively managed or controlled by the state.

Lotic (flowing water) resources are comprised of a range of waters from small intermittent streams to portions of major rivers. The general UMP boundary incorporates portions of two major rivers, the Raquette and St. Regis, and a portion of the Salmon River watershed. Specific state parcels tend to border small reaches of the larger rivers (Raquette, St. Regis, Deer) while some of the smaller streams are entirely contained within public lands. A total of 90 different streams bearing Fisheries Information Numbers (FIN) can be identified in or abutting state parcels in the UMP, 12 are significant enough to bear names. In general the gradient is low compared to the upper reaches of the watersheds resulting in relatively slow moving water. There are a number of impoundments in the area which are generally related to hydroelectric production.

Fishery resources are classified and managed as cool water. Primary sport fish are walleye, muskellunge, northern pike, and smallmouth bass. These fish are found in the larger streams and rivers where

summer temperatures tend to be moderate. Cold water species, brown and brook trout, have been collected during routine fisheries surveys in the vicinity of the state forest parcels making up the UMP.

There is no intensive fishery management done within the St. Lawrence Flatlands unit. Stocking of approximately 16,000 salmonids (brown, brook, and rainbow trout) occurs higher in the St. Regis watershed on an annual basis. A small percentage of these fish have been found to drop down and end up within the unit in the St. Regis River. No information is available on catch or harvest rates of fish within the region, however, it does not have a reputation as a significant fishery. In general the Statewide Angling Regulations apply to all waters of the unit, with the exception that special St. Lawrence County regulations do not allow catch and release of Black Bass during the closed season.

Relatively few fisheries surveys (19) have been completed either on or in the vicinity of state owned parcels incorporated in the unit. In general the low number of survey events is due to limited fishery resources and access. Relevant fishery resources are primarily found in the larger streams. A total of 69 fish species have been found within the watersheds at elevations below 800 feet. They are listed in Appendix F.

Trapping

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

Viewing Natural Resources

Trails in Southville State Forest are especially popular for hiking, skiing, and snowshoeing along the west branch of the St. Regis River. There are also excellent viewing opportunities along the major river corridors in Brasher State Forest (Deer and St. Regis Rivers), Buckton State Forest (West Branch of St. Regis River), Fort Jackson State Forest (West Branch of St. Regis River), and Grantville State Forest (Raquette River).

There are reports of occasional moose sightings in Brasher State Forest. Moose appear to be increasing in numbers in this unit, although the population is low and they range over a wide area.

Camping

Camping is allowed anywhere on State Forests except that, as directed under 6 NYCRR section 190.3 (b), camping is prohibited within 150 feet of any road, trail, spring, pond or other body of water except at camping areas designated by the Department. In addition, 6 NYCRR section 190.4(a), prohibits camping in one location for four nights or more except under permit and 6 NYCRR section 190.4(e), prohibits a group of 10 or more individuals from camping on State lands at any time except under permit.

The Redwater Dam facility, which is located in the Walter F. Pratt Memorial Forest off County Route 55, is a very popular camping and picnic facility which has been adopted by the CC Dam Association under

the Adopt-A-Natural Resource Program. Information on this site and other designated camping or picnic sites in the St. Lawrence Flatlands Unit are as follows:

1. Redwater Dam

   10 acre man made pond impounded by an embankment, concrete spillway, wing walls and low level outlet works.

   20 camp sites-each with a parking space, picnic table, fire place or fire ring.

   2 of the campsites are universally accessible with a parking space, picnic table, fire place or fire ring, and a shared universally accessible privy.

   6 pit privies plus an accessible Port-A-John.

   2 day use picnic areas with tables, fireplaces and parking areas.

2. Camp/Larue Public Forest Access Road

   One camping site with a fire ring. This site has a large cleared area that serves as one of the two primary parking or staging areas for incoming recreationalists and contains a register booth for users of the forest.

3. Vice Road

   Two campsites located along the St. Regis River. Both sites currently have a fire pit.

The Redwater Dam camping area is very popular for camping and picnicking from May through September. The other campsites in Brasher State Forest receive occasional use by weekend campers and hunters. There has been an increased interest from the public in establishing primitive campsites and possibly a lean-to on other state forests in this unit.

Water-based Recreation

There are several important river systems included in this unit. State properties include frontage on the Deer River (4.1 miles), Grass River (2.7 miles), Raquette River (1.3 miles), and St. Regis River (12.5 miles). They are used primarily for recreation including kayaking, canoeing, and fishing. Redwater Pond is popular for fishing and picnicking by users of the surrounding Walter Pratt Memorial Forest in Brasher State Forest. The St. Regis River is accessible from a car top boat access site located on County Route 53 north of Brasher Center on Brasher State Forest.

This plan also proposes construction of three new parking areas and Canoe Launches / Fishing Access Sites adjacent to the St. Regis River in Buckton State Forest and the Deer River in Brasher State Forest, to promote public access to these river corridors. There has been increasing interest in water based recreation in this unit, including canoeing, kayaking, and fishing.

Trail-based Recreation

*Table I.L. – Multiple Use Trails** *(See Figure 3 for maps)*	
Use	**Length (mi.)**
Foot Trail Use	80.2
Cross Country Skiing	80.2
Equestrian	80.2
Mountain Biking	80.2
Snowmobile	43.7

* Length available for each use includes use on PFAR and Haul roads; does not include municipal roads. This includes 20.6 miles of PFAR, 16.4 miles of haul roads, and 43.2 miles of trails not open to motor vehicles.

There is a large network of multiple use trails located in Brasher State Forest. These trails originated as a mixture of former public roads, roads created by the state during the CCC era, and woods roads created for timber harvesting or fire suppression. During the 1970s and 1980s, many of these roads and trails were opened for snowmobile and cross country skiing use, and were maintained in conjunction with the local snowmobile clubs. During the 1980s and 1990s, many trails were opened for horse riding, as well as ATV use. Due to maintenance concerns, ATV usage was gradually curtailed and is no longer permitted on trails or roads in this unit.

There are parking areas located along the southern portion of the Camp / Larue PFAR near the DEC Brasher Falls Maintenance Facility.

Trails in the St. Lawrence Flatlands unit receive steady usage year round, by people enjoying motorized and non-motorized recreation, as well as hunters and campers. The large trail system in Brasher State Forest is generally in poor condition, due to statewide resource constraints for trail maintenance and improvement. An effort is being made to improve the condition of the most popular trails, by improving signage, brushing and widening overgrown trails, providing trailhead parking, and providing maps and web pages to promote the trail system. New information kiosks are proposed as part of this plan, to be placed at trailheads in Brasher and Southville State Forests.

In addition to the state maintained multiple use trails in this unit, the Town of Stockholm also owns a multiple use trail along the former Rutland Railroad right-of-way which passes through Knapp Station State Forest. There are also several trails available on St. Lawrence County #18, which is located adjacent to Brasher State Forest.

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

Foot Trail Use

There are extensive multiple use trails available for hiking in Brasher, Fort Jackson, and Southville State Forests. The potential exists to create several miles of scenic hiking and mountain biking trails along river corridors in Brasher, Buckton, and Fort Jackson State Forests. Interest in non-motorized recreation has increased in the last 10 years, with many people pursuing recreational opportunities such as hiking for both exercise and to observe nature.

Cross Country Skiing

There is a large system of multiple use trails in Brasher State Forest which are open to cross country skiing. This includes 26.3 miles of PFAR's and Haul Roads, and 31.8 miles of trails. Southville State Forests contains a 2.5 mile loop trail which is popular for skiing and snowshoeing. Raymondville State Forests contains a 1.0 mile skiing trail located off the Grantville Road. In addition, all of the Public Forest Access Roads and Haul roads in the unit are available for skiing. Interest in cross country skiing has been steady through recent years, although it is generally focused on the areas mentioned above. Some users have expressed an interest in establishing ski trails on other State Forests in the unit that have little infrastructure, such as Buckton and Grantville State Forests.

Equestrian

This has been another popular activity on the St. Lawrence Flatlands Management Unit. As authorized by 6 NYCRR section 190.8(n). The riding, driving or leading of horses will be permitted anywhere on State lands under the jurisdiction of the Department of Environmental Conservation unless otherwise prohibited by law, regulation, posted notice or this subdivision. 6 NYCRR Section 190.8(n)(3) directs that no person shall ride or permit a horse on designated snowmobile trails and cross-country ski trails that are covered with ice or snow.

There is a large network of multiple use trails in Brasher State Forest that were originally created as horse, skiing, and hiking trails. These trails are still used by both individual riders and larger organized group events. Many of the trails have suffered from a lack of maintenance and poor signage in recent years, and an effort is being made to rehabilitate and improve the most popular trails to promote continued usage.

Some riders have expressed a wish to have a large horse friendly trail system established in Brasher State Forest, which would include amenities such as hitching posts, stabling facilities, and watering troughs.

Mountain Biking

This recreational activity does not currently occur to a large extent on this unit although some use has been noted on Public Forest Access Roads and Haul Roads. Mountain bikes are allowed anywhere on State Forests except where prohibited by sign.

Mountain biking in general has been increasing in popularity during the last 10 years. Riders often seek out challenging trails featuring hills, frequent elevation changes, picturesque scenery, and lengths of

several miles. The potential exists for creating several miles of mountain bike trails in this unit, especially along river corridors in Brasher, Buckton, and Fort Jackson State Forests.

Snowmobiling

Snowmobiles are allowed anywhere on State Forest roads or trails when covered by snow unless specifically posted against that use. Snowmobiles are prohibited by sign from using designated cross-country ski trails within the St. Lawrence Flatlands Management Unit (6 NYCRR Section 190.8[d]). Two state snowmobile corridor trails (7E, 7F) and several secondary trails (71, 72, 75, 75A, S75) cross properties in this management unit, including portions of Bombay, Brasher, Buckton, and Fort Jackson State Forests. Maps of designated snowmobile trails in the unit are included as Figure 9.

Most snowmobiling occurs on the main Public Forest Access Roads, Haul Roads, and various seasonal public roads that allow for many miles of uninterrupted snowmobiling throughout Brasher and Bombay State Forests. Snowmobiling is generally very popular, but recent winters have often been relatively warm with frequent thawing, which has caused shortened and unpredictable snowmobiling seasons.

Off-Highway and All-Terrain Vehicle Use

This UMP addresses possible All-Terrain Vehicle (ATV) use on state forest land. For a comprehensive history of ATV use on State Forests, please refer to page 213 of the *Strategic Plan for State Forest Management* at www.dec.ny.gov/lands/64567.html.

For more information on ATV use in this unit, see Appendix B.

Other Recreational Activities

Orienteering

There are currently no requests for this activity in this unit.

Dog Training / Field Trials

There are currently no requests for this activity in this unit.

Overall Assessment of the Level of Recreational Development

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

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

Trail placement and maintenance in this unit requires careful planning to avoid wet soils, intermittent streams, and vernal pools, which are frequently encountered across the landscape. Once established,

trails require regular maintenance and may require periodic closing during wet weather to prevent rutting. This is especially true of roads and trails open to motor vehicles.

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

UNIVERSAL ACCESS

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

The Walter F. Pratt Memorial Forest in Brasher State Forest features 2 accessible campsites designed for camper trailers, as well as an accessible privy. There are also two accessible picnic sites with tables located on nearby Redwater Pond. Information about accessible recreation facilities in Brasher State Forest can be found at http://www.dec.ny.gov/lands/7999.html#access .

Application of the Americans with Disabilities Act (ADA)

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

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

Consistent with ADA requirements, the Department incorporates accessibility for people with disabilities into the planning, construction and alteration of recreational facilities and assets supporting them. This UMP incorporates an inventory of all the recreational facilities or assets supporting the programs and services available on the unit, and an assessment of the programs, services and facilities on the unit to determine the level of accessibility provided. In conducting this assessment, DEC employs guidelines

which ensure that programs are accessible, including buildings, facilities, and vehicles, in terms of architecture and design, transportation and communication to individuals with disabilities.

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

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

For copies of any of the above mentioned laws or guidelines relating to accessibility, contact the DEC Universal Access Program Coordinator at 518-402-9428 or UniversalAccessProgram@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 new natural gas leases on State Forest lands. Consistent with past practice, prior to any new leases, DEC will hold public meetings to discuss all possible leasing options and environmental impacts. A comprehensive tract assessment will be completed as part of this process. For more information on natural gas and other mineral resource policies, please see SPSFM page 225 at http://www.dec.ny.gov/lands/64567.html.

Sand, gravel and Dolostone rock mining occur within the St. Lawrence Flatlands Unit. These mines are commercial operations that provide sand, gravel and Dolostone for construction aggregate purposes. Although no mines occur within State Forest lands within the unit there is a reclaimed sand and gravel pit (Mine # 60918) within the Brasher State Forest boundaries. This facility provided material for road maintenance within the Brasher State Forest boundary. Under Article 7 of the New York Consolidated Laws / Public Lands, any citizen of the United States may apply for permission to explore and/or extract any mineral on State lands. However, current Department policy is to decline any commercial mining application(s) associated with State Forest lands. The Department may occasionally mine small quantities of sand and gravel for use on state facilities such as access roads, parking lots or recreational trails. Should those actions be anticipated there will be an evaluation regarding the need for a permit. Further information may be found at the Department's website or with the Division of Mineral Resources.

Existing leases on the unit:

Table I.M. – Current Oil and Gas Leases

Facility Name	Contract #	Lessee	Acreage	Towns
None				

Active wells on the unit:

- None

Inactive wells on the unit:

- None

Mining

Gravel/shale pits and other surface mines

- There are no currently active gravel pits on this unit. A small gravel pit located on the Wilson Public Forest Access Road in Brasher State Forest was retired and reclaimed in 2012.
- Under Article 7 of the New York consolidated Laws/Public Lands, any citizen of the United States may apply for permission to explore and/or extract any mineral on State lands. However, current Department policy is to decline any commercial mining applications(s) associated with lands in this 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 245 at http://www.dec.ny.gov/lands/64567.html.

There is potential for partnering with local communities to promote the recreational opportunities in this unit, particularly snowmobiling, hiking, cross country skiing, horse riding, mountain biking, and canoeing / kayaking. The town of Stockholm Economic Development Committee has expressed interest in developing the St. Regis River corridor for recreational pursuits such as fishing, paddling, and mountain biking.

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 and Forest Preserve parcels are also subject to taxation for county purposes. Most unique areas and multiple use areas are exempt from taxation. All of these lands are assessed as if privately owned.

Detailed tax information can be obtained by contacting the Franklin County Department of Real Property Tax Services (http://franklincony.org/content/Departments/View/14) or the St. Lawrence County Real Property Department (http://www.co.st-lawrence.ny.us/Departments/RealProperty/). The following taxes are projected for State lands in this unit for the 2013 tax year:

- Township Tax (incl. highway, general, fire taxes) for all Towns: $71,627.11

Franklin Co.: Bombay - $4,705.72 Moira - $1,753.47

St. Lawrence Co.: Brasher - $45,894.94 Madrid - $4,972.94 Lisbon - $31.75

Louisville - $122.98 Massena - $177.50 Norfolk - $4,984.83 Stockholm - $8,964.56 Waddington - $18.42

- Total School Tax for all districts: $263,462.92 (Totals are from 2012-13 tax year)

  Franklin Co.: Brushton-Moira - $5,651.54 Salmon River - $24,510.73

  St. Lawrence Co.: Brasher Falls - $184,241.83 Lisbon - $126.27

  Madrid-Waddington - $3,209.88 Massena - $4,594.84 Norwood-Norfolk - $35,142.21

  Potsdam - $5,985.62

- Total County Tax (including charge backs): Franklin Co.- $110.56 St. Lawrence Co. - $10,548.55

FOREST PRODUCTS

Timber

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

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

This unit has a long history of producing forest products for the local community. Forestry Technician Dave Corse was based at the Brasher Falls field headquarters for over 30 years and provided the local community with sales of fire wood, cedar posts, black ash, pulpwood, and small lots of pine sawtimber. In recent years, there has been a steady demand for firewood and small pine lots, which are still offered for sale on a limited basis. There has been an increase in sales of white pine and red pine sawtimber, and red pine utility poles, due to the abundance of sawtimber sized pine stands planted during the CCC era that are now reaching maturity. There are also many plantations which are in need of improvement pulp thinnings, but the closure of most nearby pulp mills within the last 30 years has made it increasingly difficult to sell low quality pulpwood.

This plan identifies 4,360 acres of stands suitable for timber harvesting within the next 10 years, as well as 7,485 additional acres that may be suitable for harvesting more than 10 years in the future. These additional stands will be evaluated further during the next update of this management plan.

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

Non-Timber Forest Products

In addition to timber and firewood, forests are valuable for the many non-timber resources they provide. Members of the Mohawk Nation use the forest for hunting and fishing, as well as collection of medicinal plants, berries, mushrooms, and sweet grass which are all important in their traditional culture. A position letter from the St. Regis Mohawk Tribe regarding the management plan for Brasher State Forest is included as Appendix H. A memorandum from the St. Regis Mohawk Tribe regarding Brasher State Forest and Cultural Restoration is included as Appendix I.

FOREST HEALTH

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

Invasive Species

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

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

Plants	Status
Common Reed (*Phragmites australis*)	It occurs in a patchy distribution throughout wetlands in the unit.
Common Buckthorn (*Rhamnus cathartica*)	Common along roads and near houses. Difficult to eradicate once established.
Honeysuckle (*Lonicera* spp.)	Some understory infestations near old house sites and along powerlines.
Japanese Knotweed (*Fallopia japonica*)	Infrequently found near old house sites and along waterways.
Pale Swallow-wort (*Vincetoxicum rossicum*)	Currently rare but is becoming more common in disturbed areas along roads and powerlines. Spreads quickly once established.
Purple Loosestrife (*Lythrum salicaria*)	Common in wetlands and roadside ditches.
Insects	**Status**

Table I.N. – Invasive Species, Pests and Pathogens	
Emerald Ash Borer (*Agrilus planipennis*)	Currently is within 30 miles of St. Lawrence Co. in the United Counties of Leeds and Grenville, Ontario, Canada. It will likely be confirmed locally within the next several years. It has the potential to cause widespread and devastating mortality in wetlands dominated by green and black ash. Sampling using lure traps has been conducted yearly since 2009 but no Emerald Ash Borers have been found in this unit.
Pine False Webworm (*Acantholyda erythrocephala*)	This insect has caused locally significant defoliation and mortality of Scotch and White Pines in Fort Jackson State Forest and areas to the south and east. It was first reported locally in 1981 and populations have fluctuated greatly, with a particularly large outbreak between 1987 and 1996. Insect damage has been low since that time.
Pine Shoot Beetle (*Tomicus piniperda*)	This insect is native to Europe and was first discovered in New York State in 1992. It can infest all of the locally growing pine species, especially Scotch and red pines. St. Lawrence County is currently under a quarantine due to the pine shoot beetle which restricts the transport of pine trees and logs during certain times of the year.
Sirex Wood Wasp (*Sirex noctilio*)	Confirmed in nearby Jefferson Co. on the Fort Drum Military Reservation. Tends to cause mortality of low vigor pine trees in stands which are overstocked or are otherwise experiencing growing stresses. Sampling using lure traps was conducted in 2006 but no Sirex Wood Wasps were found in this unit.
White Pine Weevil (*Pissodes strobi)*	Common in both natural and planted white pine stands. Insect feeding kills the topmost leader which causes the tree to grow in a twisted and crooked manner. Less damage occurs to young pine seedlings when they are grown under conditions of partial shade during early development.
Diseases	**Status**
Beech Bark Disease	This disease is caused by the interaction of an invasive beech scale insect (*Cryptococcus fagisuga*) which feeds on the bark surface, and the fungi *Nectria coccinea* var. *faginata* and *Nectria galligena* which form cankers in the scale feeding area. Most beech trees become infected and die when they reach 6-12” DBH, resulting in large beech sprout thickets which grow for 5-20 years and then are killed back by the disease. A small number of beech trees grow to sawtimber size without becoming diseased and appear to show some resistance to infection.

Table I.N. – Invasive Species, Pests and Pathogens	
Butternut Canker (*Sirococcus clavigignenti-juglandacearum*)	This fungal disease is very common and it is rare to find sawtimber sized Butternut trees that do not show signs of injury. Butternut is uncommon on our State Forests but is present is some areas.
Dutch Elm Disease (*Ophiostoma ulmi*)	Dutch elm disease has had a severe negative impact on both American and Slippery elms which once dominated wetlands in this unit. Most trees become infected and die when they reach 8-14" DBH, with some trees infrequently reaching 20 to 30" DBH before succumbing.
Scleroderris Canker (*Gremmeniella abietina*)	This is a fungal disease affecting primarily red pine plantations. There was a high incidence of defoliation and mortality of red pine during the 1960s and 1970s, but damage has been low in recent years. The St. Lawrence Flatlands Unit is currently under a quarantine due to Sclerroderris Canker.
White Pine Blister Rust (*Cronartium ribicola*)	Common in both natural and planted white pine stands. It is often more prevalent on wetter sites where high water tables impede rooting and high atmospheric moisture promotes transmission of the fungal spores.
Animals	**Status**
Feral Swine	There have not been any reported cases of feral swine on the properties in this unit, but they are increasing in numbers and may become established in the area.

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

Natural Disturbances

There are periodic natural weather disturbances which may cause localized damage to forests and infrastructure. In this area, the most frequent disturbances in the last 100 years have been periodic ice storms and windstorms. A major ice storm which occurred during January of 1998 caused widespread damage throughout northern New York State, southern Canada, and New England. Trees were coated with several inches of ice which caused limbs to break or caused trees to snap at the main stem. Most of the forests in this unit suffered different degrees of damage due to this storm, and many hardwoods have suffered permanent damage to their quality and future timber value.

Managing Deer Impacts

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

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

SUMMARY OF ECO-REGION ASSESSMENTS

To practice ecosystem management, foresters, must assess the natural landscape in and around the management unit. State Forest managers utilized The Nature Conservancy Eco-Region Assessments to evaluate the landscape in and around this management unit. The St. Lawrence Flatlands UMP falls within the St. Lawrence – Champlain Valley Eco-Region.

ECO-REGION SUMMARY

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

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

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

ECO-REGION ASSESSMENT

Table II.A. Land Use and Land Cover for the Landscape Surrounding the St. Lawrence Flatlands Unit		
Land Use and Land Cover	**Approximate Acreage**	**Percent of Landscape**
Mixed Forest	6,977	18
Crop Land and Pasture	2	>1
Conifer Forest	5,927	15
Shrub and Brush Range Land (includes seedling/sapling type)	5,285	13
Residential	7,760	20
Commercial & Services	3,834	10
Transportation & Utilities	1,402	3
Other Urban/Built-up Land	2,184	5
Mixed Urban/Built-up Land	639	2
Strip Mines, Quarries & Gravel Pits	1,031	2
Lakes	47	>1
Reservoirs	3	>1
Forested Wetland	4	>1
Non-forested Wetlands	219	1
Industrial	1,589	4
Other Agricultural Land	393	1
Old Growth	0	0
Streams and Canals	1,655	4
Other	799	2
Total	**39,750**	**100**

LOCAL LANDSCAPE CONDITIONS

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

MANAGEMENT CHALLENGES ON THE UNIT

MANAGEMENT CHALLENGES

The St. Lawrence Flatlands management unit is quite different from other large public landholdings in New York State. It is located in the flat St. Lawrence Plains region near the St. Lawrence River, with extensive wetland complexes and other areas of seasonally flooded soils covering over 7,200 acres, or approximately 23% of the state land included in this unit.

Timber management has generally been confined to drier sandy soils that are within a mile or less of a maintained road. There are many pine plantations and hardwood stands which are inaccessible due to wetlands, or because an existing public road is unusable due to beaver flooding or general lack of maintenance. Attempts are made to continually improve the road system by having loggers upgrade roads to access previously unreachable stands. This also provides access for hunters and other recreational users.

Many stands have been grouped into the Natural Areas category due to their unsuitability for timber management due to wet soils, poor access, or because they represent uncommon or sensitive forest types. The percentage of Natural Areas in this unit is generally much higher than in other management units, but these stands do provide large contiguous areas of relatively undisturbed habitat which are uncommon in the surrounding landscape

Recreational use has always been an important feature in this unit. In addition to hunting, fishing, trapping, canoeing, and camping, many people enjoy the large network of recreational trails and roads open for hiking, biking, cross country skiing, snowshoeing, horse riding, and snowmobiling.

Brasher State Forest contains a network of over 50 miles of state maintained roads and trails open to recreational use. In general, the main Public Forest Access Roads are in good condition and receive yearly grading and mowing. Secondary Haul Roads are not actively maintained but are still in generally good condition and receive maintenance as needed. Many of the recreational trails are in poor condition and need attention. In the past, there have been several state employees based at the Brasher Field Headquarters who were available to do routine and regular trail maintenance. Over the last 10 years, staffing has dropped from 4 Operations field staff to 2.

Many trails in Brasher State Forest are in need of brushing, improved signage, improved parking at trailheads, and re-routing of sections impacted by beaver flooding. This plan will identify those trails that are most enjoyed by recreational users, and will seek to rehabilitate and improve trail conditions in the unit.

Many recreational users would like to see a network of ATV trails established in this unit. ATVs were previously allowed on Brasher State Forest from the 1980s through 2008, with trails gradually being

closed due to poor maintenance, increased use of undesignated illegal trails, and widespread rutting and mud on wet trails.

Current DEC guidelines limit ATV usage on State Forests to 2 scenarios. Trails can be opened to persons with disabilities through the DEC-issued Motorized Access Permit for People with Disabilities (MAPPWD) program. Permit holders are only allowed to ride ATVs on trails signed as open to ATVs under the MAPPWD program.

A second option is for a “Connector Trail” open to ATVs which crosses a state forest on a single defined route. The connector trail must follow the shortest environmentally acceptable route. Trails designated for ATV use should be dry, and have a minimal impact on wetlands, streams, and rare or unusual plant and animal species. The connector trail must provide a link in a larger public trail system on lands adjacent to the State forest, such as a cross county multiple use trail.

For more information about ATVs in this unit, see Appendix B.

MANAGEMENT OBJECTIVES AND ACTIONS

OBJECTIVES

Ecosystem Management

Table III.A. –Ecosystem Management Objectives and Actions	
Objective	**Actions**
Statewide Management	
SM I – Implement SPSFM in UMPs	Management actions and policies proposed in this unit are in compliance with the Strategic Plan for State Forest Management.
Active Forest Management	
AFM I – Apply sound silvicultural practices	Silvicultural practices are guided by prescriptions created for each stand prior to harvest. Sales are closely monitored during harvest to ensure compliance with Best Management Practices (BMP's). Maintaining forest health, vigor, and sustainable harvesting are integral parts of all state forest management.
AFM II – Use harvesting plans to enhance diversity of species, habitats & structure	Future management will promote a diversity of habitats by increasing the percentage of older forests, gradually converting even aged white pine plantations to uneven aged stands with several age classes, and creating scattered early successional stands across the landscape by harvesting mature red pine and Scotch pine plantations and converting them to seedling pine and hardwood forests.
AFM III – Fill ecoregional gaps to maintain and enhance landscape-level biodiversity	Shrublands and fields will be maintained by mowing or brush cutting to postpone succession to forest. Later successional forests >140 years old will eventually develop as pine plantations continue to age and develop late successional characteristics.

Table III.A. –Ecosystem Management Objectives and Actions	
Objective	**Actions**
AFM IV – Enhance matrix forest blocks and connectivity corridors where applicable	Matrix Forest Blocks in Brasher, Bombay, and Sodom State Forests will be managed with an emphasis on forest contiguity, and new acquisitions which enhance these blocks will be considered. Connectivity corridors may be enhanced by selected acquisitions which link isolated state forest parcels.
AFM V – Practice forest and tree retention on stands managed for timber	Forest and tree retention will be practiced in all silvicultural treatments, especially regeneration harvests which convert red pine and Scotch pine plantations to more native species mixes.

Resource Protection

Table III.B. –Resource Protection Objectives and Actions	
Objective	**Actions**
Soil and Water Protection	
SW I – Prevent erosion, compaction and nutrient depletion	Special management zones will be maintained around sensitive natural features. Harvesting will be limited to dry or frozen ground conditions. Best Management Practices will be used to protect water quality.
SW II – Identify and map SMZ's and highly-erodible soils	Special management zones have been created around state and classified wetlands, classified and unclassified streams, rivers, and seep / spring areas. Stands with many vernal pools or seasonally wet conditions will receive minimal or no timber management.
At-Risk Species and Natural Communities	
ARS I – Protect ARS&C ranked S1, S2, S2-3, G1, G2 or G2-3 where present	Known locations of rare or threatened species are protected by special management zones. Areas proposed for timber harvesting are searched for RTE species before marking begins.

Table III.B. –Resource Protection Objectives and Actions	
Objective	**Actions**
ARS II – Conduct habitat restoration and promote recovery of declining species	Habitat needs of declining species will be considered in all management actions in this unit. In addition, Lake Sturgeon have been stocked in the lower reaches of the St. Regis and Raquette Rivers.
ARS III - Consider protection and management of Species of Greatest Conservation Need	Many SGCN occupy wetlands and corridors located along streams and rivers, which are already protected by special management zones. Species such as northern goshawk are monitored for nesting activity, and any nearby timber harvesting or construction is scheduled to avoid goshawk disturbance.
Visual Resources and Aesthetics	
VR I – Maintain or improve overall quality of visual resources	Corridors along major streams and rivers have been removed from active timber management. Aesthetics are considered in all silvicultural prescriptions.
VR II – Use natural materials where feasible	Wood and stone are used for building projects whenever possible.
VR III – Lay out any new roads/trails to highlight vistas and unique natural features	Hiking and mountain biking trails are proposed along scenic river corridors in Brasher, Buckton, and Fort Jackson State Forests.
VR IV – Develop kiosks to provide education and reduce sign pollution	Kiosks are proposed for major recreational areas in Brasher and Southville State Forests.
Historic and Cultural Resources	
HC I – Preserve and protect historic and cultural resources wherever they occur	Features such as building foundations, wells, stone walls, and CCC waterholes are identified before any nearby timber harvesting occurs, and uncut buffers are used to minimize disturbance.
HC II – Inventory resources in GIS and with OPRHP	Historic features will be identified and added to the State Lands Assets GIS layer.

Infrastructure and Real Property

Table III.C. –Infrastructure and Real Property Objectives and Actions	
Objective	**Actions**
Boundary Line Maintenance	
BL I – Maintain boundary lines	Boundary lines will be maintained throughout the unit on a 5-year maintenance schedule.
BL II – Address encroachments and other real property problems	Requests have been made to survey encroachments, re-establish missing monuments, and survey recently acquired state forest parcels.
Infrastructure	
INF I – Provide and maintain public forest access roads, access trails, haul roads, parking areas, and associated appurtenances	Roads, trails, and infrastructure on this unit will be maintained on an as needed basis. New parking areas and recreational trails are proposed on State Forests which currently contain little developed infrastructure.
INF II – Upgrade, replace or relocate infra-structure out of riparian areas where feasible	Infrastructure will not be located near riparian areas, except for non-motorized recreational trails and river access points.
INF III – Resolve issues of uncertain legal status or jurisdiction	The status of former public roads and maintenance responsibilities will be discussed as part of the planning process.
INF IV – Prevent over-development	Planning and development will focus on maintaining the rural and wild character of properties in this unit.

Public/Permitted Use

Table III.D –Public / Permitted Use Objectives and Actions	
Objective	**Actions**
Universal Access	
UA I – Use minimum tool approach to provide universal access to programs	New facilities proposed in this plan will be built to universally acceptable stands whenever possible.
Formal and Informal Partnerships and Agreements	
PRT I – Collaborate with local organizations and governments to reach mutual goals	The Department will work with local governments and recreational organizations to promote access and responsible use of state managed properties.

Table III.D –Public / Permitted Use Objectives and Actions	
Objective	**Actions**
PRT II – Consider full range of impacts associated with VSAs and recurring TRPs	VSA's and TRP's will continue to be evaluated to ensure that they provide a net benefit to the experience of all users of state properties in this unit.
Recreation	
REC I – Accommodate public use while preventing illegal activity, reducing impacts and enhancing public safety	Forest Ranger staff will continue to patrol properties in this unit and enforce all applicable laws and regulations. The public will be informed of low intensity use standards such as "leave no trace" camping.
REC II – Provide public recreation information	Recreational opportunities in this unit will be publicized by creation of new informational kiosks in the unit, as well as development of public web pages for each state forest in the unit.
REC III – Inventory recreational amenities and schedule recreation management actions	Existing facilities and trails are inventoried in this plan, as well as the creation of proposed new trails, parking areas, and other infrastructure.
REC IV – Enhance fish & game species habitat	Techniques to improve game management will be considered whenever possible. For example, harvests might promote early successional habitat for grouse or rabbits, or protect areas known to serve as winter deer yards.
Off-Highway and All-Terrain Vehicle Use	
ATV I – Enhance recreational access by people with disabilities under the MAPPWD program	There are 2 proposed MAPPWD accessible ATV trails located on Bombay and Brasher State Forests.
ATV II – Consider requests for ATV connector routes across the unit	Requests for ATV connector routes will be evaluated on a case by case basis.
Mineral Resources	
MR I – Provide for mineral exploration and development while protecting natural resources and recreation	There are currently no proposals for mineral exploration or development in this unit.
Supporting Local Communities	
LC I – Provide revenue to New York State and economic stimulus for local communities	Timber harvesting will continue on state forests in this unit, to provide both jobs and forest products for the local community.

Table III.D –Public / Permitted Use Objectives and Actions	
Objective	**Actions**
LC II – Improve local economies through forest-based tourism	Recreational opportunities will be maintained or increased throughout this unit. Kiosks and web pages created for state forests in the unit will improve publicity of available trails and facilities.
LC III – Protect rural character and provide ecosystem services to local communities.	Properties will be managed to maintain their rural and minimally developed characteristics.

Forest Management and Health

Table III.E. –Forest Management and Health Objectives and Actions	
Objective	**Actions**
Forest Products	
FP I – Sustainably manage for forest products	Timber management is practiced in carefully selected stands in this unit, to improve forest vigor and health, promote a diversity of tree species and age classes, and provide forest products needed by the community.
FP II – Educate the public about the benefits of silviculture	Informational signs are posted near the landing on all timber sales offered through a bid process, which include sale objectives and contact information for the forester supervising the sale.
Plantation Management	
PM I – Convert plantation stands to natural forest conditions where appropriate	Species which are non-native (Scotch pine, Japanese and European Larch) or which do not naturally regenerate well in this area (red pine) will slowly be replaced by white pine and native hardwood forests.
PM II – Artificially regenerate plantations where appropriate	Plantations are gradually being converted to forests with a variety of species and age classes. White pine and red spruce seedlings are sometimes planted underneath existing red pine plantations in order to enhance natural regeneration.
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	Improvement thinnings are used to reduce tree overcrowding, remove crooked and diseased trees, create canopy gaps which allow the development of tree regeneration, and sustain early successional species which would otherwise decline in numbers.
FH II – Protect the unit and surrounding lands from introduced diseases and invasive plant and animal species	Forests are monitored for invasive plant species such as pale swallow-wort and Japanese knotweed, and selected areas are treated by limited herbicide application.
Managing Deer Impacts	
DM I – Monitor impacts of deer browsing on forest health and regeneration	Deer browse is monitored by tree regeneration surveys conducted during forest inventory mapping, and pre-timber harvest regeneration surveys.
DM II – Address issues of over-browsing	Over-browsing of tree regeneration by deer will be addressed locally by promoting a higher deer harvest in areas with a demonstrated pattern of excessive browse. The Deer Management Assistance Program (DMAP) may be used to issue more deer harvesting permits in areas with high deer populations.
Fire Management	
FM I – Support Forest Rangers in controlling the ignition and spread of wildfires	Timber sales require the lopping of tree branches and slash to minimize the threat of wildfire. Timber harvesting may be suspended during periods of extreme drought. The Forest Rangers have established a weather station for monitoring local conditions at the Brasher Falls field headquarters.
FM II – Maintain naturally occurring fire-dependent communities	There are no known fire dependent communities located in this unit.
Carbon Sequestration	
CS I – Keep forests as forests, where appropriate	Forests in this unit will be maintained in tree cover for the long term. Periodic timber management will promote a diversity of tree species, sizes, and age classes across the larger landscape.

Table III.E. –Forest Management and Health Objectives and Actions	
Objective	**Actions**
CS II – Enhance carbon storage in existing stands	The proportion of later successional forests >140 years will gradually increase, creating a long term carbon storage in these forests.
CS III – Keep forests vigorous and improve forest growth rates	Periodic thinning will reduce overstocking and remove diseased and defective trees. An example of this would be an improvement thinning in a white pine plantation, which would focus on removing crooked trees damaged by the white pine weevil and trees weakened by infection with white pine blister rust.
CS IV – Sequester carbon in forest products	Carbon will be sequestered in wood which is harvested for production of sawtimber and utility poles, and in the late successional forests.

TEN-YEAR LIST OF MANAGEMENT ACTIONS

Unit-wide Actions

Action 1

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

Action 2

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

Action 3

Improve maintenance and signage of 43.2 miles of designated recreational trails.

Action 4

Annually grade and mow 20.6 miles of public forest access roads.

Action 5

Annually mow or brush 16.4 miles of haul roads.

Action 6

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

Action 7

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

Action 8

Conduct periodic timber management on a total of 4,360 acres of forest in this unit. Of these proposed harvests, 3,879 acres will be thinnings, and 481 acres will be regeneration harvests that convert existing red and Scotch pine plantations to stands of native hardwood and conifer seedlings and saplings.

Action 9

Maintain 11 acres of early successional stands by periodic mowing or brush cutting. Additionally, stands scheduled for harvest will be considered for management as early successional wildlife habitat for species such as woodcock and ruffed grouse.

Action 10

Maintain 19,390 acres classified as Natural Areas. Of these, 12,469 acres are forest and 6,921 acres are non-forest (wetlands, streams, rivers, road and trail corridors, utility corridors, etc.).

Action 11

Monitor invasive species and practice control with limited herbicide application.

Action 12

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

Bombay State Forest (Fr. RA 2) Actions

Boundary line maintenance (2016)

Forest stand inventory (2020)

Install 4 new gates on Pike Brook Haul Road (2), Leach Access Trail, and the Railroad Bed PFAR

Install 2 new area signs on Cold Springs Road and the Railroad Bed PFAR

Inspect and repair bridge on Railroad Bed PFAR

Designate 0.9 mile of the Leach Access Trail as a CP3 / MAPPWD Trail open to ATV use with a permit

Restore CCC waterhole near Cold Springs Road or Pike Brook Haul Road

Bombay State Forest (Fr. RA 4) Actions

Boundary line maintenance (2016)

Forest stand inventory (2022)

Brasher State Forest (St. Law RA 1) Actions

Boundary line maintenance (2014, 2019)

Forest stand inventory (2022)

Install 2 new gates on Pascal Haul Road

Install new kiosk at the Redwater Camping Area

Install new lean-to at Redwater Camping Area

Designate 2.5 miles of Pascal Haul Road as a CP3 / MAPPWD Trail open to ATV use with a permit

Upgrade 2.5 miles of Pascal Haul Road to PFAR standards

Install new Canoe Launch / Fishing Access Site and 2 car parking area on Shady City Road (Deer River)

Install new Canoe Launch / Fishing Access Site and 2 car parking area on St. Law. County Route 55 (Deer River)

Maintain campsites, picnic tables, privies, and fire rings at the Redwater Camping Area, in co-operation with the CC Dam Association

Inspect and rehabilitate Redwater Dam impoundment

Survey and paint boundary lines of Warner parcel (97.2 ac)

Brasher State Forest (St. Law RA 5) Actions

Boundary line maintenance (2017, 2022)

Forest stand inventory (2020)

Replace 2 gates on Camp / Larue PFAR

Install new kiosk at Brasher Falls maintenance facility

Upgrade parking areas and campsites on Camp / Larue PFAR to include picnic tables, outhouses, and amenities for a horse staging area (hitching rails, etc.)

Upgrade proposed multi-use Connector Trail through Brasher State Forest

Brasher State Forest (St. Law RA 6) Actions

Boundary line maintenance (2015, 2020)

Forest stand inventory (2022)

Install 5 new gates on Bush PFAR, McCarthy PFAR, Wilson PFAR (2), and the Hastings Falls Haul Road

Restore CCC waterhole near Buckley Haul Road

Survey and paint boundary lines of Proposal G-2 / Champion parcel (8.0 ac)

Upgrade 1.0 mile of Hastings Falls Haul Road to PFAR standards

Upgrade proposed multi-use Connector Trail through Brasher State Forest

Brasher State Forest (St. Law RA 7) Actions

Boundary line maintenance (2018, 2023)

Forest stand inventory (2020)

Install new gate on Railroad Bed PFAR

Inspect and repair bridge on Railroad Bed PFAR

Inspect and repair 2 culverts on Railroad Bed Access Trail

Survey and paint boundary lines of Johnston & Mitchell parcel (50.0 ac)

Brasher State Forest (St. Law RA 10) Actions

Boundary line maintenance (2014, 2019)

Forest stand inventory (2020)

Install 2 new gates on the Bush PFAR and Hastings Falls Haul Road

Upgrade 1.1 mile of Hastings Falls Haul Road to PFAR standards

Survey and paint boundary lines of Luczkiewicz parcel (39.1 ac)

Brasher State Forest (St. Law RA 17) Actions

Boundary line maintenance (2014, 2019)

Forest stand inventory (2020)

Install new Canoe Launch / Fishing Access Site and 4 car parking area on Quinnell / Deer River Road (Deer River)

Survey and paint boundary lines of Saler & Spivak parcel (47.0 ac)

Buckton State Forest (St. Law RA 31) Actions

Boundary line maintenance (2015, 2020)

Forest stand inventory (2019)

Upgrade the southernmost 0.9 mile of Buckton Haul Road to PFAR standards

Install a new 2 car parking area on the Buckton Haul Road and a 0.5 mile trail to the river (West Branch of St. Regis)

Fort Jackson State Forest (St. Law RA 22) Actions

Boundary line maintenance (2018, 2023)

Forest stand inventory (2017)

Upgrade 0.4 miles of the northern section of the Barrett Road, in co-operation with the Town of Stockholm

Install a new 2 car parking area on Barrett Road

Upgrade an existing 0.9 mile recreation trail leading to the West Branch of the St. Regis River.

Survey and paint boundary lines of Proposal H / Cree parcel (41.5 ac)

Grantville State Forest (St. Law RA 15) Actions

Boundary line maintenance (2015, 2020)

Forest stand inventory (2021)

Knapp Station State Forest (St. Law RA 11) Actions

Boundary line maintenance (2015, 2020)

Forest stand inventory (2017)

Replace area sign and sign standard on Cook Road

Lost Nation State Forest (St. Law RA 9) Actions

Boundary line maintenance (2014, 2019)

Forest stand inventory (2017)

Survey and paint boundary lines of 5 new parcels (28.0 ac)

Raymondville State Forest (St. Law RA 33) Actions

Boundary line maintenance (2014, 2019)

Forest stand inventory (2021)

Install new 2 car parking area on Grantville Road

Sodom State Forest (St. Law RA 25) Actions

Boundary line maintenance (2014, 2019)

Forest stand inventory (2021)

Relocate and upgrade 1.4 miles of the former Crump Road, in co-operation with the town of Madrid

Southville State Forest (St. Law RA 23) Actions

Boundary line maintenance (2015, 2020)

Forest stand inventory (2020)

Install new 4 car parking area on West Stockholm – Southville Road

Install new information kiosk on West Stockholm – Southville Road

Detached Forest Preserve Parcel (St. Law FP 12, 13, 14, 15, 17, 18) Actions

Survey and paint boundary lines of all properties

Purchase property from willing sellers adjacent to the Louisville Swamp FP parcel to provide access

Sell or dispose of isolated properties or otherwise transfer from DEC jurisdiction

FOREST TYPE CODES

Natural Forest Types

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

Plantation Types

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

Management Strategy

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

Treatment Type

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

LAND MANAGEMENT ACTION SCHEDULES

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

State Forests	Stand	Acres	Forest Type			Management Category		Treatment Type
			Current	Post Treatment	Future	Current	Future	
Bombay SF (FR 2)	A-25	7.0	41	41	70	T-EA	T-UE	TH
	A-33	13.9	70	70	70	T-EA	T-UE	TH
	A-34	5.5	41	41	70	T-EA	T-UE	TH
	A-42	69.2	40	40	70	T-EA	T-UE	TH
	C-14	17.1	40	40	70	T-EA	T-UE	TH
Bombay SF (FR 4)	None							
Brasher SF (SL 1)	B-12.1	34.1	41	41	70	T-EA	T-UE	TH
	B-17	57.2	60	60	70	T-EA	T-UE	TH
	B-27	8.4	40	40	70	T-EA	T-EA	TH
	C-14.1	5.0	41	70	70	T-EA	T-UE	TH
	C-38.1	17.6	41	41	70	T-EA	T-UE	TH
	C-38.2	9.5	41	41	70	T-EA	T-UE	TH
	D-33	48.2	42	70	70	T-EA	T-EA	RG
	D-34	9.8	40	40	70	T-EA	T-EA	TH
	D-35.1	11.2	41	41	70	T-EA	T-UE	TH
	D-35.2	3.1	41	41	70	T-EA	T-UE	TH
	D-37	16.0	41	41	79	T-EA	T-UE	TH

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

State Forests	Stand	Acres	Forest Type			Management Category		Treatment Type
			Current	Post Treatment	Future	Current	Future	
	E-1	2.7	99	99	99	WL	WL	HM
	E-35.1	2.9	41	41	70	T-EA	T-UE	TH
	E-35.2	3.7	41	41	70	T-EA	T-UE	TH
	E-37	31.3	40	40	70	T-EA	T-EA	RL
Brasher SF (SL 5)	B-18	36.7	60	60	70	T-EA	T-EA	TH
	B-25.1	60.8	41	41	70	T-EA	T-UE	TH
	B-25.2	21.6	41	41	70	T-EA	T-UE	TH
	B-25.3	25.8	41	41	70	T-EA	T-UE	TH
	B-25.4	12.9	41	41	70	T-EA	T-UE	TH
	B-28	6.9	54	54	71	T-EA	T-EA	RG
	B-29	3.3	41	41	70	T-EA	T-UE	TH
	B-30	3.5	42	70	70	T-EA	T-EA	RG
	B-32	10.8	10	10	10	T-EA	T-UE	TH
	B-33	1.2	99	99	99	WL	WL	HM
	B-37.1	3.4	41	41	70	T-EA	T-UE	TH
	B-38	3.7	21	21	21	T-UE	T-UE	TH
	B-39	6.3	42	70	70	T-EA	T-EA	RG
	B-40	4.0	40	40	70	T-EA	T-EA	RG
	B-43	13.6	40	40	70	T-EA	T-EA	TH
	C-1	19.0	41	41	70	T-EA	T-UE	TH

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

State Forests	Stand	Acres	Forest Type			Management Category		Treatment Type
			Current	Post Treatment	Future	Current	Future	
	C-2	9.4	48	48	32	T-EA	T-EA	RG
	C-3.1	34.2	41	41	70	T-EA	T-UE	TH
	C-3.2	11.1	41	41	70	T-EA	T-UE	TH
	C-5.1	15.6	46	46	71	T-EA	T-EA	TH
	C-6	6.3	11	11	11	T-EA	T-UE	TH
	C-10	7.7	46	46	71	T-EA	T-EA	TH
	C-21.1	7.6	40	40	70	T-EA	T-EA	TH
	C-21.2	1.4	40	40	70	T-EA	T-EA	RG
	C-22	25.9	11	11	11	T-UE	T-UE	TH
	C-23.1	27.6	41	41	70	T-EA	T-UE	TH
	C-23.2	7.2	41	41	70	T-EA	T-UE	TH
	C-23.3	14.6	41	41	70	T-EA	T-UE	TH
	C-25.1	25.3	42	70	70	T-EA	T-EA	RG
	C-28	2.1	98	98	70	T-EA	T-EA	RG
	E-2.1	12.3	40	40	70	T-EA	T-EA	TH
	E-2.2	4.5	40	40	70	T-EA	T-EA	TH
	E-2.3	2.9	40	40	70	T-EA	T-EA	TH
	E-3	3.2	47	47	47	T-EA	T-UE	TH
	E-4.1	3.5	25	25	25	T-EA	T-EA	TH
	E-4.2	2.0	41	41	70	T-EA	T-UE	TH
	E-5.1	10.6	47	47	47	T-EA	T-UE	TH

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

State Forests	Stand	Acres	Forest Type			Management Category		Treatment Type
			Current	Post Treatment	Future	Current	Future	
	E-5.2	4.1	47	47	47	T-EA	T-UE	TH
	F-17	1.7	99	99	99	WL	WL	HM
Brasher SF (SL 6)	A-11	2.1	99	99	99	WL	WL	HM
	A-12	20.0	41	41	70	T-EA	T-UE	TH
	A-13	9.0	11	11	11	T-UE	T-UE	TH
	A-14	12.6	42	70	70	T-EA	T-EA	RL
	A-15	6.0	11	11	11	T-EA	T-UE	TH
	B-10	2.6	40	40	70	T-EA	T-EA	TH
	B-12	9.7	41	41	70	T-EA	T-UE	TH
	B-13	1.8	41	41	70	T-EA	T-UE	TH
	B-22.1	10.8	41	41	70	T-EA	T-UE	TH
	B-22.2	1.9	21	21	21	T-UE	T-UE	TH
	B-47	9.6	21	21	21	T-UE	T-UE	TH
	B-56.1	22.1	12	12	12	T-EA	T-UE	TH
	B-56.2	6.8	12	12	12	T-EA	T-UE	TH
	B-74	9.5	40	40	70	T-EA	T-UE	TH
	B-77.1	8.0	63	63	63	T-EA	T-UE	TH
	B-78	4.6	42	42	70	T-EA	T-EA	TH
	B-80	3.0	42	42	70	T-EA	T-EA	TH
	B-88	13.3	41	41	70	T-EA	T-UE	TH

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

State Forests	Stand	Acres	Forest Type			Management Category		Treatment Type
			Current	Post Treatment	Future	Current	Future	
	B-95	7.5	46	46	71	T-EA	T-EA	TH
	B-99	18.0	60	60	70	T-EA	T-EA	TH
	C-1.1	11.3	40	40	70	T-EA	T-UE	TH
	C-1.2	8.9	41	41	70	T-EA	T-UE	TH
	C-3.1	6.1	41	41	70	T-EA	T-UE	TH
	C-3.2	2.1	41	41	70	T-EA	T-UE	TH
	D-6	7.7	41	41	70	T-EA	T-UE	TH
	D-9.1	33.6	40	40	70	T-EA	T-EA	TH
	D-9.2	2.1	21	21	21	T-EA	T-UE	TH
	D-10.1	16.9	42	70	70	T-EA	T-EA	RL
	D-10.2	2.5	40	40	70	T-EA	T-EA	TH
	D-22.1	19.3	60	60	70	T-EA	T-EA	TH
	D-22.3	5.9	40	40	70	T-EA	T-EA	TH
	D-22.4	3.9	41	41	70	T-EA	T-UE	TH
	D-36.2	24.9	12	12	12	T-EA	T-UE	TH
	D-36.3	3.6	25	25	25	T-EA	T-EA	TH
	D-37	4.3	21	21	21	T-EA	T-UE	TH
	D-38.1	42.8	40	40	70	T-EA	T-EA	TH
	D-38.2	3.5	40	40	70	T-EA	T-EA	TH
	D-38.4	1.6	40	40	70	T-EA	T-EA	TH
	D-39	5.5	46	46	71	T-EA	T-EA	TH

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

State Forests	Stand	Acres	Forest Type			Management Category		Treatment Type
			Current	Post Treatment	Future	Current	Future	
	D-40	14.8	12	12	12	T-EA	T-UE	TH
	D-43	14.9	25	25	25	T-EA	T-EA	TH
	D-46	3.5	47	47	47	T-EA	T-UE	TH
	D-47	14.7	41	41	70	T-EA	T-UE	TH
	D-48	48.5	41	41	70	T-EA	T-UE	TH
Brasher SF (SL 7)	C-3	11.6	40	40	70	T-EA	T-EA	TH
	C-7.1	34.8	25	25	25	T-EA	T-EA	TH
	C-14.2	5.4	41	41	70	T-EA	T-UE	TH
	C-26	15.4	40	40	70	T-EA	T-UE	TH
	C-27	23.0	41	41	70	T-EA	T-UE	TH
	C-29	12.9	41	41	70	T-EA	T-EA	TH
	D-25	2.2	40	40	70	T-EA	T-EA	TH
	D-26.2	14.6	40	40	70	T-EA	T-EA	TH
	D-27	5.1	10	10	10	T-EA	T-UE	TH
	D-28	10.0	40	40	70	T-EA	T-UE	TH
	D-30	0.9	42	70	70	T-EA	T-EA	RL
	D-31	51.8	64	64	70	T-EA	T-UE	TH
	D-32	3.6	42	70	70	T-EA	T-EA	RL
	D-33	8.7	46	46	71	T-EA	T-UE	TH
	D-35	8.0	48	48	48	T-EA	T-EA	TH

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

State Forests	Stand	Acres	Forest Type			Management Category		Treatment Type
			Current	Post Treatment	Future	Current	Future	
	D-36	1.9	49	49	49	T-EA	T-EA	TH
	D-38	2.7	42	70	70	T-EA	T-EA	RL
	D-39	60.5	41	41	70	T-EA	T-UE	TH
	D-41	34.5	61	61	61	T-EA	T-EA	TH
	D-50	23.9	11	11	11	T-UE	T-UE	TH
Brasher SF (SL 10)	D-11	15.8	68	68	70	T-EA	T-UE	TH
	D-12	5.0	12	12	12	T-UE	T-UE	TH
	D-15	8.2	70	70	70	T-EA	T-EA	TH
	D-25.1	8.8	40	40	70	T-EA	T-EA	TH
	D-44	2.4	68	68	70	T-EA	T-EA	TH
	D-48	7.3	40	40	70	T-EA	T-EA	TH
	D-51	22.9	32	32	32	T-EA	T-EA	TH
	E-13	10.1	70	70	70	T-EA	T-EA	TH
	E-14.1	9.5	70	70	70	T-EA	T-UE	TH
Brasher SF (SL 17)	A-18.1	42.0	12	12	12	T-EA	T-UE	TH
	A-18.2	7.4	41	41	70	T-EA	T-UE	TH
	A-29.1	18.0	60	60	70	T-EA	T-EA	TH
	A-29.2	2.5	41	41	70	T-EA	T-UE	TH
	A-32	2.2	12	12	12	T-EA	T-UE	TH
	B-14.2	4.8	41	41	70	T-EA	T-UE	TH

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

State Forests	Stand	Acres	Forest Type			Management Category		Treatment Type
			Current	Post Treatment	Future	Current	Future	
	D-3	14.4	60	60	70	T-EA	T-UE	TH
Buckton SF (SL 31)	A-1	14.8	40	40	70	T-EA	T-EA	TH
	A-2	5.6	40	40	70	T-EA	T-EA	TH
	A-3	21.1	12	12	12	T-EA	T-UE	TH
	A-5.1	38.9	11	11	11	T-UE	T-UE	TH
	A-5.2	5.2	11	11	11	T-UE	T-UE	TH
	A-6	2.7	41	41	70	T-EA	T-UE	TH
	A-7	2.4	40	40	70	T-EA	T-EA	TH
	A-8	5.3	40	40	70	T-EA	T-EA	TH
	A-10	9.1	40	40	70	T-EA	T-EA	TH
	A-15	6.1	40	40	70	T-EA	T-EA	TH
	A-17	2.8	21	21	12	T-UE	T-UE	TH
	A-18	22.4	11	11	11	T-UE	T-UE	TH
	A-23	3.7	40	40	70	T-EA	T-EA	TH
	A-24	2.4	42	70	70	T-EA	T-EA	RL
	A-25	1.8	42	70	70	T-EA	T-EA	RL
	A-26	4.0	40	40	70	T-EA	T-EA	TH
	B-9	14.6	41	41	41	T-EA	T-UE	TH
	B-10	0.9	99	99	99	WL	WL	HM
	B-14.1	14.2	10	10	10	T-UE	T-UE	TH

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

State Forests	Stand	Acres	Forest Type			Management Category		Treatment Type
			Current	Post Treatment	Future	Current	Future	
	C-16.1	8.9	42	70	70	T-EA	T-EA	RL
	C-16.2	23.8	42	70	70	T-EA	T-EA	TH
Fort Jackson SF (SL 22)	None							
Grantville SF (SL 15)	None							
Knapp Station SF (SL 11)	A-8	9.2	46	46	71	T-EA	T-EA	TH
	A-9	14.6	10	10	10	T-EA	T-UE	TH
	A-10	9.8	63	63	63	T-EA	T-UE	TH
	A-13	7.1	71	71	71	T-EA	T-UE	TH
	A-14	3.8	10	10	10	T-EA	T-UE	TH
	A-15.1	7.9	41	41	70	T-EA	T-UE	TH
	A-15.2	2.4	41	41	70	T-EA	T-UE	TH
	A-16	32.4	60	60	70	T-EA	T-EA	TH
	A-17	3.6	41	41	70	T-EA	T-UE	TH
	A-18	4.9	46	46	71	T-EA	T-EA	TH
	A-19	9.4	41	41	70	T-EA	T-UE	TH
	A-20	8.7	42	42	70	T-EA	T-EA	TH
	A-21	6.2	41	41	70	T-EA	T-UE	TH
	A-25	8.8	70	70	70	T-EA	T-UE	TH
	D-1	6.8	12	12	12	T-EA	T-UE	TH

Table III.F. - Land Management Action Schedule for First Five-Year Period **(by State Forest)**								
State Forests	Stand	Acres	Forest Type			Management Category		Treatment Type
			Current	Post Treatment	Future	Current	Future	
	D-3	3.9	41	41	70	T-EA	T-UE	TH
Lost Nation SF (SL 9)	A-20.2	11.3	40	70	70	T-EA	T-EA	RG
	C-18	4.1	45	45	71	T-EA	T-UE	TH
	C-19	3.0	40	40	70	T-EA	T-EA	TH
	C-20	10.6	41	41	70	T-EA	T-UE	TH
	C-44	11.3	40	40	70	T-EA	T-EA	TH
	C-45	6.0	41	41	70	T-EA	T-UE	TH
	C-51	3.6	10	10	10	T-EA	T-UE	TH
	C-52	5.7	41	41	70	T-EA	T-UE	TH
	C-53	12.7	47	47	47	T-EA	T-UE	TH
Raymondville SF (SL 33)	None							
Sodom SF (SL 25)	None							
Southville SF (SL 23)	None							
Total Yrs 0-5		2,243.7						

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

State Forests	Stand	Acres	Forest Type			Management Category		Treatment Type
			Current	Post Treatment	Future	Current	Future	
Bombay SF (FR 2)	None							
Bombay SF (FR 4)	None							
Brasher SF (SL 1)	B-25	5.2	40	40	70	T-EA	T-UE	TH
	B-26	11.4	21	21	21	T-EA	T-UE	TH
	C-6.1	11.0	41	41	70	T-EA	T-UE	TH
	C-7	4.6	40	40	70	T-EA	T-EA	TH
	C-9	3.4	40	97	10	T-EA	T-EA	RG
	C-18	6.0	41	41	70	T-EA	T-UE	TH
	C-19	2.0	41	41	21	T-EA	T-UE	TH
	C-21	2.8	21	21	21	T-UE	T-UE	TH
	C-22	71.3	60	60	70	T-EA	T-EA	TH
	C-23.1	9.1	41	41	70	T-EA	T-UE	TH
	C-29	16.3	60	60	70	T-EA	T-UE	TH
	D-1	7.9	21	21	21	T-UE	T-UE	TH
	D-4	3.5	41	41	70	T-UE	T-UE	TH
	D-24	15.8	40	70	70	T-EA	T-EA	RG
Brasher SF (SL 5)	A-10.2	5.1	41	41	70	T-EA	T-UE	TH
	A-10.3	4.3	41	41	70	T-EA	T-UE	TH

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

State Forests	Stand	Acres	Forest Type			Management Category		Treatment Type
			Current	Post Treatment	Future	Current	Future	
	A-11	4.6	70	70	70	T-EA	T-EA	RG
	A-12	13.4	41	41	70	T-EA	T-UE	TH
	A-21	31.3	10	10	10	T-UE	T-UE	TH
	C-12.1	16.2	40	40	70	T-EA	T-EA	TH
	C-12.2	4.3	40	40	70	T-EA	T-EA	RG
	C-14.5	45.3	31	31	31	T-EA	T-EA	TH
	C-18	7.3	21	21	21	T-EA	T-UE	TH
	C-19	26.0	60	60	70	T-EA	T-EA	TH
	D-1.1	72.8	12	12	12	T-UE	T-UE	TH
	D-1.2	16.9	12	12	12	T-UE	T-UE	TH
	D-1.3	10.1	12	12	12	T-UE	T-UE	TH
	D-14.1	23.9	60	60	70	T-EA	T-UE	TH
	D-14.2	4.7	41	41	70	T-EA	T-UE	TH
	D-15	1.2	42	42	70	T-EA	T-EA	TH
	D-18.1	8.3	42	70	70	T-EA	T-EA	RG
	D-19	5.5	40	70	70	T-EA	T-EA	TH
	D-20	0.6	42	70	70	T-EA	T-EA	RG
	D-21	2.2	41	41	70	T-EA	T-EA	TH
	F-2	4.1	40	40	70	T-EA	T-UE	TH
	F-6	9.9	41	41	70	T-EA	T-UE	TH
	F-7	5.6	41	41	70	T-EA	T-UE	TH

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

State Forests	Stand	Acres	Forest Type			Management Category		Treatment Type
			Current	Post Treatment	Future	Current	Future	
	F-9	8.6	42	70	70	T-EA	T-EA	RG
	F-10	5.7	40	40	70	T-EA	T-EA	TH
	F-11	23.4	40	40	70	T-EA	T-EA	TH
	F-13	7.4	47	47	47	T-EA	T-EA	TH
	F-14	4.8	32	32	32	T-EA	T-EA	RL
	G-1.1	21.0	12	12	12	T-UE	T-UE	TH
	G-1.2	10.3	21	21	21	T-UE	T-UE	TH
	G-1.3	9.9	12	12	12	T-UE	T-UE	TH
	G-2	15.0	12	12	12	T-UE	T-UE	TH
	G-3	1.6	12	12	12	T-UE	T-UE	TH
	G-5	5.0	12	12	12	T-UE	T-UE	TH
	G-6	4.3	32	32	32	T-EA	T-UE	TH
	G-7.1	7.3	40	40	70	T-EA	T-EA	TH
	G-7.2	3.2	40	40	70	T-EA	T-UE	TH
	G-8	23.2	60	60	70	T-EA	T-UE	TH
	G-9	11.9	64	64	70	T-EA	T-UE	TH
	G-12.1	8.7	41	41	70	T-EA	T-UE	TH
	G-13.2	2.8	40	40	70	T-EA	T-UE	TH
Brasher SF (SL 6)	B-3.1	11.0	41	41	70	T-EA	T-UE	TH
	B-3.2	34.4	41	41	70	T-EA	T-UE	TH

Table III.G. - Land Management Action Schedule for Second Five-Year Period (by State Forest)								
State Forests	**Stand**	**Acres**	**Forest Type**			**Management Category**		**Treatment Type**
			Current	Post Treatment	Future	Current	Future	
	B-4.1	22.0	12	12	12	T-EA	T-EA	TH
	B-4.2	15.7	25	25	25	T-EA	T-EA	TH
	B-9	6.2	41	41	70	T-EA	T-UE	TH
	B-27.1	20.7	42	70	70	T-EA	T-EA	RL
	B-27.2	35.0	42	70	70	T-EA	T-EA	RL
	B-29.1	10.7	40	40	70	T-EA	T-UE	TH
	B-29.2	16.5	40	40	70	T-EA	T-UE	TH
	B-29.3	5.1	40	40	70	T-EA	T-UE	TH
	B-29.4	7.9	40	40	70	T-EA	T-UE	TH
	B-30	2.8	40	40	70	T-EA	T-UE	TH
	B-31	4.4	53	53	70	T-EA	T-EA	TH
	B-32	7.9	40	40	70	T-EA	T-UE	TH
	B-50	13.2	41	41	70	T-EA	T-UE	TH
	B-54	12.7	60	60	70	T-EA	T-UE	TH
	B-65.3	16.8	63	63	63	T-EA	T-EA	TH
	B-69.2	14.8	49	49	49	T-EA	T-EA	TH
	B-71	7.5	10	10	10	T-EA	T-EA	TH
	B-100	24.4	60	60	70	T-EA	T-EA	TH
	C-7	5.3	46	46	71	T-EA	T-EA	TH
	C-8	46.5	60	60	70	T-EA	T-UE	TH
	C-9.1	15.2	41	41	70	T-EA	T-UE	TH

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

State Forests	Stand	Acres	Forest Type			Management Category		Treatment Type
			Current	Post Treatment	Future	Current	Future	
	C-10	8.1	41	41	70	T-EA	T-UE	TH
	C-20	5.8	68	68	70	T-EA	T-EA	TH
	C-25	21.0	40	40	70	T-EA	T-EA	TH
	C-26	26.4	42	70	70	T-EA	T-EA	RL
	C-27	35.9	40	40	70	T-EA	T-EA	TH
	C-29.1	13.8	63	63	70	T-EA	T-EA	TH
	C-29.2	3.3	40	40	70	T-EA	T-EA	TH
	C-33.1	2.7	12	12	12	T-EA	T-UE	TH
	C-33.2	4.6	70	70	70	T-EA	T-EA	TH
	C-34	2.9	41	41	70	T-EA	T-UE	TH
	C-35	8.6	42	70	70	T-EA	T-EA	RL
	C-36	5.8	40	40	70	T-EA	T-UE	TH
	C-37	7.8	46	46	71	T-EA	T-EA	TH
	C-38	5.7	41	41	70	T-EA	T-UE	TH
	C-39.1	10.2	40	40	70	T-EA	T-UE	TH
	C-39.2	3.9	41	41	70	T-EA	T-UE	TH
	C-53	18.9	41	41	70	T-EA	T-UE	TH
	D-21.1	26.5	14	14	10	T-EA	T-UE	TH
	D-21.3	6.1	14	14	10	T-EA	T-UE	TH
Brasher SF (SL 7)	None							

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

State Forests	Stand	Acres	Forest Type			Management Category		Treatment Type
			Current	Post Treatment	Future	Current	Future	
Brasher SF (SL 10)	C-1	18.4	41	41	70	T-EA	T-UE	TH
	C-6	6.5	61	61	71	T-EA	T-UE	TH
	C-7	15.3	70	70	70	T-EA	T-UE	TH
	C-9	18.7	40	40	70	T-EA	T-EA	TH
	C-10	7.5	71	71	71	T-EA	T-UE	TH
	C-11.1	3.6	10	10	10	T-EA	T-UE	TH
	C-11.2	9.2	10	10	10	T-EA	T-UE	TH
	C-15	6.7	70	70	70	T-EA	T-EA	TH
	C-23	2.0	70	70	70	T-EA	T-EA	TH
	C-31	18.5	60	60	70	T-EA	T-UE	TH
	C-32	18.2	60	60	70	T-EA	T-UE	TH
	C-34	5.8	40	40	70	T-EA	T-EA	TH
	C-39	12.7	40	40	70	T-EA	T-EA	TH
	C-41.2	12.0	70	70	70	T-UE	T-UE	TH
	C-58	39.8	70	70	70	T-EA	T-EA	TH
	C-60	2.0	41	41	70	T-EA	T-UE	TH
	E-2	5.0	68	68	70	T-EA	T-UE	TH
	E-24.1	36.3	25	25	25	T-EA	T-EA	TH
	E-40	5.7	70	70	70	T-EA	T-EA	TH
Brasher SF (SL 17)	A-14.2	3.5	41	41	70	T-EA	T-UE	TH

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

State Forests	Stand	Acres	Forest Type			Management Category		Treatment Type
			Current	Post Treatment	Future	Current	Future	
	B-24.1	4.7	41	41	70	T-EA	T-UE	TH
	B-24.2	2.7	41	41	70	T-EA	T-UE	TH
	B-26	5.9	12	12	12	T-EA	T-UE	TH
Buckton SF (SL 31)	C-1.2	12.9	10	10	10	T-UE	T-UE	TH
	C-5	16.3	10	10	10	T-UE	T-UE	TH
	C-6	3.0	45	45	71	T-EA	T-UE	TH
	C-7	1.0	46	46	71	T-EA	T-EA	TH
	C-9	7.5	10	10	10	T-UE	T-UE	TH
	C-12	6.2	40	40	70	T-EA	T-EA	TH
	C-13.1	52.6	19	19	19	T-UE	T-UE	TH
	C-13.2	10.5	11	11	11	T-UE	T-UE	TH
	C-19	15.2	11	11	11	T-UE	T-UE	TH
	C-21	2.1	21	21	12	T-EA	T-UE	TH
	C-22	3.3	12	12	12	T-UE	T-UE	TH
Fort Jackson SF (SL 22)	A-23.1	12.8	42	70	70	T-EA	T-EA	RL
	A-23.2	10.0	42	70	70	T-EA	T-EA	RL
	A-23.3	3.7	42	70	70	T-EA	T-EA	RL
	A-24	6.0	11	11	11	T-UE	T-UE	TH
	A-26	25.6	10	10	10	T-UE	T-UE	TH
	A-49	48.6	40	40	70	T-EA	T-EA	TH

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

State Forests	Stand	Acres	Forest Type			Management Category		Treatment Type
			Current	Post Treatment	Future	Current	Future	
	B-2	6.6	40	40	70	T-EA	T-EA	TH
	B-4	36.9	41	41	70	T-EA	T-UE	TH
	B-5	7.6	14	14	12	T-EA	T-UE	TH
	B-9	6.1	40	40	70	T-EA	T-EA	TH
	B-10	6.9	42	70	70	T-EA	T-EA	RL
	B-15	12.7	42	42	70	T-EA	T-EA	TH
	B-18	11.5	21	21	12	T-EA	T-UE	TH
Grantville SF (SL 15)	B-2	2.5	99	99	99	WL	WL	HM
Knapp Station SF (SL 11)	C-8	44.6	14	14	11	T-EA	T-UE	TH
	C-16	4.8	42	70	70	T-EA	T-EA	RL
	C-18	21.6	42	70	70	T-EA	T-EA	RL
	C-19	19.1	47	47	47	T-EA	T-UE	TH
	C-20	6.9	11	11	11	T-UE	T-UE	TH
	C-22	16.1	40	40	70	T-EA	T-EA	TH
	C-23	3.6	14	14	10	T-EA	T-UE	TH
	C-24	10.4	42	70	70	T-EA	T-EA	RL
Lost Nation SF (SL 9)	A-11	5.4	42	70	70	T-EA	T-EA	RL
	A-15.1	20.1	32	32	32	T-EA	T-EA	TH
	A-15.2	6.2	32	32	32	T-EA	T-EA	TH

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

State Forests	Stand	Acres	Forest Type			Management Category		Treatment Type
			Current	Post Treatment	Future	Current	Future	
	A-19	9.3	42	70	70	T-EA	T-EA	RL
	A-20.1	19.6	40	70	T-EA	T-EA	T-EA	TH
	B-35.1	52.6	41	41	70	T-EA	T-UE	TH
	B-45.1	17.1	42	70	70	T-EA	T-EA	RL
Raymondville SF (SL 33)	None							
Sodom SF (SL 25)	None							
Southville SF (SL 23)	B-4	38.6	42	70	70	T-EA	T-EA	RL
Total Yrs 6-10		2,127.5						

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

State Forests	Stand	Acres	Forest Type		Future Management
			Current	Future	
Bombay SF (FR 2)	A-1	9.9	41	70	T-UE
	A-3	13.3	41	70	T-UE
	A-8	22.3	21	21	T-UE
	A-20	13.9	26	70	T-EA

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

State Forests	Stand	Acres	Forest Type		Future Management
			Current	Future	
	A-21	13.1	21	21	T-UE
	A-27	3.0	25	25	T-EA
	A-32	19.0	10	10	T-EA
	A-37	6.1	12	12	T-EA
	A-40	33.8	10	10	T-EA
	A-41	10.1	32	32	T-EA
	A-47	20.0	25	25	T-EA
	A-48	5.2	10	10	T-EA
	B-6	109.0	32	32	T-EA
	B-11	3.2	40	40	T-EA
	C-3	106.3	10	10	T-EA
	C-4	4.3	12	12	T-UE
	C-5	10.6	40	70	T-EA
	C-6	15.7	21	21	T-UE
	C-17	9.7	40	70	T-EA
	C-19	11.0	42	42	T-EA
Bombay SF (FR 4)	None				
Brasher SF (SL 1)	A-1	11.5	41	70	T-EA
	A-3	3.8	41	70	T-UE
	A-4	12.6	60	70	T-UE
	A-6.1	10.9	41	70	T-UE
	A-12	3.3	40	70	T-EA

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

State Forests	Stand	Acres	Forest Type		Future Management
			Current	Future	
	A-14	13.6	60	70	T-UE
	A-15	14.4	40	70	T-EA
	A-23	6.2	20	20	T-UE
	A-25.1	11.7	41	70	T-UE
	A-25.2	2.8	41	70	T-UE
	A-26.1	8.5	41	70	T-UE
	A-26.2	10.3	41	70	T-UE
	A-27	8.6	21	21	T-EA
	A-29	2.1	12	12	T-UE
	A-36	51.0	63	63	T-UE
	A-40.1	88.9	41	70	T-UE
	A-41	1.7	32	32	T-EA
	B-1	7.5	10	10	T-EA
	B-3.1	12.7	40	70	T-EA
	B-3.4	6.9	40	70	T-EA
	B-4.1	12.0	41	70	T-UE
	B-4.2	3.5	41	70	T-UE
	B-8	2.8	99	99	WL
	B-10	2.7	40	40	T-EA
	B-11	17.7	41	70	T-UE
	B-14	6.3	40	40	T-EA
	B-16	4.6	32	32	T-EA

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

State Forests	Stand	Acres	Forest Type		Future Management
			Current	Future	
	B-19	2.3	10	10	T-EA
	C-10	56.2	12	12	T-UE
	C-15	33.2	12	12	T-UE
	C-16	7.1	25	25	T-EA
	C-17	11.8	32	32	T-EA
	C-20	44.0	12	12	T-UE
	C-26	24.3	41	41	T-UE
	C-30	7.6	41	70	T-UE
	C-31	56.0	41	70	T-UE
	C-33	10.1	41	41	T-UE
	C-35	13.8	40	40	T-EA
	C-36	8.9	41	70	T-UE
	C-40	0.8	32	32	T-EA
	D-10	6.5	10	10	T-EA
	D-11.1	7.7	10	10	T-EA
	D-11.2	2.9	11	11	T-UE
	D-12	20.2	10	10	T-EA
	D-15	26.6	10	10	T-EA
	D-16.1	15.2	10	10	T-EA
	D-16.2	3.4	10	10	T-EA
	D-18	52.7	12	12	T-UE
	D-29	3.2	41	41	T-UE

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

State Forests	Stand	Acres	Forest Type		Future Management
			Current	Future	
	D-36	1.4	97	10	T-EA
	E-2	23.8	41	70	T-UE
	E-5.1	4.2	10	10	T-EA
	E-5.2	5.0	10	10	T-EA
	E-6	7.6	32	32	T-EA
	E-7	6.7	46	46	T-UE
	E-8	5.0	10	10	T-EA
	E-9	22.3	11	11	T-UE
	E-10	36.6	11	11	T-UE
	E-12.1	85.5	10	10	T-EA
	E-34.3	1.9	32	32	T-EA
	E-36	27.2	25	25	T-EA
Brasher SF (SL 5)	A-1.1	39.9	97	10	T-EA
	A-1.2	38.7	60	60	T-UE
	A-1.3	1.9	40	70	T-EA
	A-2	6.2	30	30	T-UE
	A-5	4.7	46	46	T-UE
	A-6	11.0	40	70	T-EA
	A-9	5.0	98	70	T-EA
	A-10.1	30.7	41	70	T-UE
	A-14	39.4	63	63	T-UE
	A-15	8.5	68	68	T-UE

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

State Forests	Stand	Acres	Forest Type		Future Management
			Current	Future	
	A-16	8.6	45	45	T-UE
	A-17.1	71.9	10	10	T-EA
	A-18.1	5.0	49	49	T-EA
	A-18.2	3.4	49	49	T-EA
	B-4.1	96.7	11	11	T-UE
	B-6	40.0	10	10	T-EA
	B-13	56.3	11	11	T-UE
	C-7.2	16.3	11	11	T-UE
	C-15.1	46.4	60	60	T-EA
	C-15.2	1.9	40	70	T-EA
	C-15.3	1.7	40	70	T-EA
	C-20.1	28.3	12	12	T-UE
	C-20.2	6.4	32	32	T-EA
	C-26	7.3	12	12	T-UE
	D-6.1	24.5	41	70	T-UE
	D-6.2	9.1	41	70	T-UE
	D-10	4.6	10	10	T-EA
	F-3	10.4	42	70	T-EA
	F-12	4.3	25	25	T-EA
	F-18	16.4	49	49	T-EA
	F-21	4.1	46	46	T-UE
	G-15	6.4	41	70	T-UE

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

State Forests	Stand	Acres	Forest Type		Future Management
			Current	Future	
	G-18	16.3	60	70	T-EA
	G-25	33.3	40	70	T-EA
Brasher SF (SL 6)	A-3	64.4	10	10	T-EA
	A-5	3.0	42	70	T-EA
	A-6	9.0	41	41	T-UE
	A-7	11.8	12	12	T-UE
	A-8	32.4	42	70	T-EA
	A-9	4.3	41	41	T-EA
	A-16	141.1	11	11	T-UE
	B-7	4.9	32	32	T-EA
	B-16.1	1.9	41	70	T-UE
	B-16.2	2.7	40	70	T-EA
	B-21.1	7.3	14	14	T-UE
	B-26.1	23.1	97	31	T-EA
	B-26.2	2.7	97	31	T-EA
	B-33	9.0	40	70	T-EA
	B-34	3.3	40	70	T-EA
	B-37	5.5	42	70	T-EA
	B-44	4.1	12	12	T-UE
	B-45.1	22.4	60	70	T-UE
	B-45.2	7.5	40	70	T-EA
	B-61	13.3	60	70	T-EA

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

State Forests	Stand	Acres	Forest Type		Future Management
			Current	Future	
	B-62	26.4	60	70	T-EA
	B-65.2	34.0	63	63	T-UE
	B-70	69.0	41	70	T-UE
	B-81.1	11.9	41	70	T-UE
	B-81.2	8.5	41	70	T-UE
	B-83	17.8	63	63	T-UE
	B-84	11.4	42	70	T-EA
	B-85	2.6	53	70	T-EA
	B-86	2.5	40	70	T-EA
	B-92	21.4	41	70	T-UE
	B-94	13.5	41	70	T-UE
	B-96.1	15.8	40	70	T-EA
	B-96.2	3.8	10	10	T-EA
	B-98	41.1	40	70	T-EA
	C-5.1	19.6	60	70	T-EA
	C-13.1	50.2	60	70	T-EA
	C-13.2	7.5	40	70	T-EA
	C-51	16.7	41	70	T-UE
	C-52	40.9	60	70	T-EA
	D-1	16.5	41	70	T-UE
	D-5	29.7	41	70	T-UE
	D-19	23.1	10	10	T-EA

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

State Forests	Stand	Acres	Forest Type		Future Management
			Current	Future	
	E-1.1	4.6	41	70	T-UE
	E-1.2	7.3	41	70	T-UE
	E-1.3	4.6	41	70	T-UE
Brasher SF (SL 7)	B-4	20.2	46	71	T-UE
	B-7.1	12.9	46	71	T-UE
	B-7.2	5.7	46	71	T-UE
	B-9.1	10.7	46	71	T-UE
	B-9.2	4.9	46	71	T-UE
	B-11	1.5	99	99	WL
	C-7.2	9.4	10	10	T-EA
	C-8.1	22.9	10	10	T-EA
	C-9	5.0	10	10	T-EA
	C-10	24.0	41	70	T-UE
	C-13	5.8	48	48	T-EA
	C-15	30.9	41	70	T-UE
	C-18	4.5	49	49	T-EA
	C-21	25.5	41	70	T-UE
	C-22	16.1	40	70	T-EA
	C-23	13.1	63	63	T-UE
	C-24.3	6.2	25	25	T-EA
	C-28	16.8	25	25	T-EA
	C-35	26.2	61	61	T-UE

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

State Forests	Stand	Acres	Forest Type		Future Management
			Current	Future	
	D-23	6.5	46	71	T-UE
	D-29	81.2	63	63	T-UE
	D-46	10.9	60	70	T-EA
	D-57	7.6	49	49	T-EA
Brasher SF (SL 10)	A-1	84.5	68	70	T-EA
	A-2	4.9	32	32	T-EA
	A-13	22.3	60	70	T-EA
	A-15	4.3	32	32	T-EA
	A-16	23.0	68	70	T-EA
	A-17	4.4	71	71	T-EA
	A-18	3.1	68	70	T-EA
	A-21	5.2	60	70	T-EA
	A-23	4.4	68	70	T-EA
	A-24	13.4	68	70	T-EA
	A-25	18.3	70	70	T-UE
	A-32.1	16.8	41	70	T-UE
	A-36	18.8	32	32	T-EA
	B-1	16.6	60	70	T-EA
	B-4.2	4.2	15	15	T-EA
	B-7	10.2	68	70	T-EA
	B-8	16.6	63	63	T-UE
	B-9	8.8	42	70	T-EA

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

State Forests	Stand	Acres	Forest Type		Future Management
			Current	Future	
	B-14	13.0	40	70	T-EA
	B-15	14.8	12	12	T-UE
	B-17.1	37.9	41	70	T-UE
	B-17.2	5.1	41	70	T-UE
	B-17.3	8.3	41	70	T-UE
	B-18.1	10.2	70	70	T-UE
	B-18.2	2.9	70	70	T-UE
	B-24	15.3	41	70	T-UE
	B-28	12.7	11	11	T-UE
	B-30.1	41.9	12	12	T-UE
	B-30.2	6.3	40	70	T-EA
	B-30.3	24.3	12	12	T-UE
	B-30.4	5.3	98	98	WL
	C-8.1	21.1	32	32	T-EA
	C-22	6.7	10	10	T-EA
	C-26.1	55.0	40	70	T-EA
	C-28	6.0	40	70	T-EA
	C-29	9.1	97	31	WL
	C-30	7.4	70	70	T-EA
	C-33.2	6.1	32	32	T-EA
	C-37	9.3	40	70	T-EA
	C-38	8.1	70	70	T-UE

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

State Forests	Stand	Acres	Forest Type		Future Management
			Current	Future	
	C-41.1	6.3	60	70	T-EA
	C-47.1	6.5	40	70	T-EA
	C-47.2	4.8	40	70	T-EA
	C-49.1	2.1	68	70	T-UE
	C-49.2	2.1	70	70	T-UE
	C-51	4.2	40	70	T-EA
	C-53	7.9	41	70	T-UE
	C-57	9.8	32	32	T-EA
	D-2.1	23.6	41	70	T-UE
	D-3	24.6	70	70	T-UE
	D-4	2.9	97	70	WL
	D-5.2	2.4	63	71	T-UE
	D-10	2.7	68	68	T-UE
	D-18	10.8	70	70	T-UE
	D-19	22.6	70	70	T-EA
	D-20.1	9.3	12	12	T-UE
	D-32	11.2	60	70	T-UE
	D-34	4.3	12	12	T-UE
	D-36	36.6	12	12	T-UE
	D-43	4.4	70	70	T-EA
	E-5	4.7	41	70	T-UE
	E-6	6.1	41	70	T-UE

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

State Forests	Stand	Acres	Forest Type		Future Management
			Current	Future	
	E-7	6.9	60	70	T-UE
	E-8	7.6	32	32	T-EA
	E-19	6.0	41	70	T-UE
	E-20	10.6	41	70	T-UE
	E-21.1	23.0	32	32	T-EA
	E-21.2	8.8	12	12	T-UE
	E-22	9.6	32	32	T-EA
	E-23.1	13.7	70	70	T-EA
	E-23.2	8.2	31	31	WL
	E-23.3	5.5	12	12	T-UE
	E-23.4	3.2	70	70	T-EA
	E-31.1	54.2	10	10	T-EA
	E-31.2	18.7	31	31	WL
	E-36	8.2	10	10	T-UE
Brasher SF (SL 17)	A-1.1	5.2	70	70	T-EA
	A-1.2	3.2	40	70	T-EA
	A-6.1	6.5	25	25	T-EA
	A-6.2	1.7	40	70	T-EA
	A-7	4.4	15	15	T-EA
	A-8	6.0	41	70	T-UE
	A-9	34.7	12	12	T-UE
	A-10.1	14.3	12	12	T-UE

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

State Forests	Stand	Acres	Forest Type		Future Management
			Current	Future	
	A-10.2	2.8	12	12	T-UE
	A-11	18.4	70	70	T-EA
	A-14.1	7.6	41	70	T-UE
	A-20	4.8	12	12	T-UE
	A-21.1	5.7	41	70	T-UE
	A-21.2	3.8	41	70	T-UE
	A-23	3.0	21	12	T-UE
	A-24	3.1	21	12	T-UE
	A-26	3.4	40	70	T-EA
	A-27	4.9	21	21	T-UE
	A-37	6.6	41	70	T-UE
	B-13	25.0	60	70	T-EA
	B-14.1	19.4	60	70	T-EA
	B-19.1	6.7	12	12	T-UE
	B-23	4.4	41	70	T-UE
	B-25	29.7	13	13	WL
	B-27	3.6	12	12	T-UE
	B-28.2	5.3	25	25	T-EA
	B-32.1	4.2	10	10	T-EA
	B-33.1	24.9	12	12	T-UE
	B-33.2	19.5	10	10	T-EA
	B-34	10.9	40	70	T-EA

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

State Forests	Stand	Acres	Forest Type		Future Management
			Current	Future	
	B-36	12.5	41	70	T-UE
Buckton SF (SL 31)	A-9	3.0	41	70	T-UE
	A-11	1.3	99	99	WL
	A-14	0.9	40	70	T-EA
	A-16	1.9	41	70	T-UE
	A-19	1.0	40	70	T-EA
	B-2	24.2	11	11	T-UE
	D-6	16.2	10	10	T-EA
	D-8	10.3	40	70	T-EA
	D-13	12.0	40	70	T-EA
	D-16	1.9	32	32	T-EA
	D-17	12.6	10	10	T-UE
Fort Jackson SF (SL 22)	A-2.1	10.9	14	11	T-UE
	A-2.3	2.7	32	32	T-EA
	A-3	7.0	32	32	T-EA
	A-17.2	6.6	11	11	T-UE
	A-18	4.0	40	70	T-EA
	A-19	15.6	11	11	T-UE
	A-22	3.2	10	10	T-EA
	A-33	11.0	11	11	T-UE
	A-37.1	23.4	40	70	T-EA
	A-37.2	1.3	40	70	T-EA

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

State Forests	Stand	Acres	Forest Type		Future Management
			Current	Future	
	A-44.1	7.7	68	70	T-UE
	A-46	12.0	98	70	WL
	A-47	25.2	98	70	WL
	A-48	86.9	98	70	WL
	A-50	2.7	97	31	WL
	A-52	27.1	40	70	T-EA
	A-54	27.9	40	70	T-EA
	B-8	24.4	10	10	T-EA
	B-14	45.3	11	11	T-UE
Grantville SF (SL 15)	A-3	20.1	12	12	T-UE
	A-5	3.1	10	10	T-EA
	A-7	9.4	70	70	T-EA
	A-8	15.7	70	70	T-EA
	A-15	14.9	41	70	T-UE
	A-17.1	13.0	12	12	T-UE
	A-17.2	7.1	12	12	T-UE
	A-18	10.0	98	70	WL
	A-20.1	4.7	63	63	T-UE
	A-25	7.5	63	63	T-UE
	A-28	11.2	70	70	T-EA
	B-1	26.2	70	70	T-EA
	B-3	18.6	15	15	T-EA

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

State Forests	Stand	Acres	Forest Type		Future Management
			Current	Future	
Knapp Station SF (SL 11)	A-3	14.9	40	70	T-EA
	B-1	4.1	42	70	T-EA
	B-2.1	5.2	40	70	T-EA
	B-2.2	3.2	40	70	T-EA
	B-5	11.5	46	71	T-UE
	B-6	64.6	41	41	T-UE
	B-10	11.8	15	15	T-EA
	C-9.1	14.7	15	15	T-EA
	C-15	11.6	10	10	T-UE
Lost Nation SF (SL 9)	A-1.2	6.5	41	70	T-UE
	A-10	43.8	41	70	T-UE
	A-13	24.6	11	11	T-UE
	A-18	96.7	25	25	T-EA
	A-26	10.5	21	21	T-UE
	A-29	5.0	41	41	T-UE
	A-31	12.5	41	41	T-UE
	A-32	13.8	41	41	T-UE
	A-36	30.6	41	70	T-UE
	A-40	26.4	12	12	T-UE
	B-8	9.8	10	10	T-EA
	B-10	23.7	60	70	T-EA

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

State Forests	Stand	Acres	Forest Type		Future Management
			Current	Future	
	B-21	13.8	41	70	T-UE
	B-26.1	3.0	40	70	T-EA
	B-26.2	2.6	40	70	T-EA
	B-29.1	5.5	10	10	T-EA
	B-30	9.4	98	70	WL
	B-31	26.8	41	70	T-UE
	B-32	8.3	98	70	WL
	B-33	19.6	41	70	T-UE
	B-35.2	4.1	41	70	T-UE
	B-37	2.5	41	70	T-UE
	B-40	64.2	41	70	T-UE
	B-50	43.4	40	70	T-EA
	C-1.1	12.0	41	70	T-UE
	C-1.2	11.8	41	70	T-UE
	C-1.3	6.3	41	70	T-UE
	C-1.4	7.1	41	70	T-UE
	C-2.1	4.4	46	71	T-UE
	C-15	15.7	12	12	T-UE
	C-17	16.9	25	25	T-EA
	C-21.1	19.5	12	12	T-UE
	C-23	7.0	10	10	T-UE
	C-24	5.9	40	70	T-EA

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

State Forests	Stand	Acres	Forest Type		Future Management
			Current	Future	
	C-30	2.9	32	32	T-EA
	C-38	13.1	10	10	T-EA
	C-39	15.6	41	70	T-UE
	C-54	9.2	45	71	T-UE
Raymondville SF (SL 33)	A-17.1	10.9	10	10	T-EA
	A-17.2	27.6	10	10	T-EA
	A-19	6.9	42	70	T-EA
	A-23	3.8	42	70	T-EA
	A-24	20.5	32	32	T-EA
	A-27	17.2	25	25	T-EA
	A-28	30.0	40	70	T-EA
	A-29	3.8	70	70	T-EA
	A-30	48.8	10	10	T-UE
	A-39	9.5	40	70	T-EA
	A-40	10.6	46	71	T-UE
	A-41	3.8	32	32	T-EA
Sodom SF (SL 25)	A-17	12.9	70	70	T-UE
	B-1.1	79.9	32	32	T-UE
	B-1.4	4.3	60	70	T-UE
	B-3	2.9	10	10	T-EA
	B-4	12.0	40	70	T-EA

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

State Forests	Stand	Acres	Forest Type		Future Management
			Current	Future	
	B-5.1	13.7	10	10	T-EA
	B-8	8.6	32	32	T-EA
	B-11	29.5	42	70	T-EA
	B-12	9.6	46	71	T-UE
	B-16	8.2	32	32	T-UE
	B-20	5.2	40	70	T-EA
	C-4	39.8	32	32	T-EA
	C-5	5.9	32	32	T-EA
	C-12	15.4	12	12	T-UE
	C-13.1	16.9	32	32	T-EA
	C-14	40.7	12	12	T-UE
Southville SF (SL 23)	A-5.1	18.3	70	10	T-EA
	A-5.2	8.1	42	70	T-EA
	A-6.1	50.1	10	10	T-EA
	A-6.2	26.9	15	15	T-EA
	A-8	11.5	10	10	T-EA
	A-10	11.2	70	11	T-UE
	A-11	30.3	11	11	T-UE
	A-13	12.9	10	10	T-EA
	A-14	2.7	10	10	T-EA
	A-17	4.0	42	70	T-EA
	A-18	6.9	42	70	T-EA

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

State Forests	Stand	Acres	Forest Type		Future Management
			Current	Future	
	A-20	38.2	42	70	T-EA
	B-3	9.5	11	11	T-UE
	B-5	44.9	11	11	T-UE
	B-6	3.6	11	11	T-UE

Table III.I.- Natural Areas **(by State Forest)**

State Forests	Stand	Acres	Forest Type
Bombay SF (FR 2)	A-2	5.9	46
	A-4	8.8	99
	A-5	2.2	15
	A-6	17.5	25
	A-7	5.7	46
	A-9	2.3	25
	A-10	1.4	10
	A-11	5.0	99
	A-12	9.9	15
	A-13	3.0	49
	A-14	17.0	99
	A-15	10.6	99

Table III.I.- Natural Areas **(by State Forest)**			
State Forests	Stand	Acres	Forest Type
	A-16	2.6	25
	A-17	17.0	97
	A-18	7.4	99
	A-19	5.4	32
	A-22	8.4	71
	A-23	10.6	25
	A-24	18.2	32
	A-26	20.9	71
	A-28	6.0	32
	A-29	6.7	25
	A-30	23.5	32
	A-31	8.1	25
	A-35	6.7	24
	A-36	15.0	15
	A-38	20.9	32
	A-39	20.8	25
	A-43	2.9	46
	A-44	17.7	13
	A-45	9.4	32
	A-46	35.9	25
	A-49	14.2	99
	A-711	12.5	99

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	B-1	7.6	32
	B-2	4.0	32
	B-3	13.5	97
	B-4	12.0	99
	B-5	111.5	32
	B-7	53.3	23
	B-8	80.9	32
	B-9	47.2	15
	B-10	68.9	32
	B-711	6.6	99
	C-1	85.0	32
	C-2	15.3	99
	C-7	8.6	40
	C-8	18.0	99
	C-9	18.2	99
	C-10	14.5	15
	C-11	38.8	32
	C-12	171.7	32
	C-13	16.1	21
	C-15	17.0	99
	C-16	154.8	14
	C-18	75.1	32

Table III.I.- Natural Areas **(by State Forest)**			
State Forests	Stand	Acres	Forest Type
	C-711	12.3	99
Bombay SF (FR 4)	A-1	7.2	25
	A-2	8.0	25
	A-3	14.3	41
	A-4	7.7	49
	A-5	19.3	25
	A-6	14.0	99
	A-7	7.0	15
	A-8	12.6	14
	A-9	9.3	12
	A-10	172.8	99
	A-11	8.3	99
	A-12	10.6	99
	A-13	17.5	15
	A-14	26.8	41
	A-15	57.3	99
	A-16	122.1	70
	A-17	111.4	32
	A-18	23.0	15
	A-19	49.8	99
	A-20	36.3	41
	A-21	26.6	41

Table III.I.- Natural Areas **(by State Forest)**			
State Forests	Stand	Acres	Forest Type
	A-711	1.4	99
Brasher SF (SL 1)	A-2	4.2	41
	A-5	27.6	99
	A-6.2	20.7	12
	A-6.3	2.7	41
	A-6.4	4.4	99
	A-6.5	2.6	41
	A-7	6.2	41
	A-8	9.6	12
	A-9	2.8	97
	A-10	10.7	63
	A-11	3.6	97
	A-13	2.2	12
	A-16.1	6.2	99
	A-16.2	7.4	99
	A-17	3.8	32
	A-18	45.5	99
	A-21	5.5	97
	A-24	3.3	97
	A-26.3	1.6	97
	A-28	1.6	99
	A-30	5.3	12

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	A-31.1	32.9	41
	A-31.2	2.8	12
	A-32	3.4	21
	A-33	3.3	99
	A-34	14.1	41
	A-35	0.8	99
	A-37	3.9	99
	A-38	0.8	99
	A-39	4.1	99
	A-40.2	10.7	12
	A-40.3	4.0	15
	A-42	4.5	12
	A-43	73.6	99
	A-711	3.9	99
	B-2	1.0	32
	B-3.2	13.3	97
	B-3.3	9.8	97
	B-5	4.9	99
	B-6.1	51.0	15
	B-6.2	8.5	99
	B-7	18.5	46
	B-9	8.2	99

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	B-12.2	6.1	41
	B-13	2.5	99
	B-15	15.3	11
	B-18	3.6	44
	B-20.1	19.2	32
	B-20.2	3.2	15
	B-21	83.7	99
	B-22	7.4	60
	B-23	59.4	15
	B-24.1	106.1	14
	B-24.2	144.8	12
	B-28	19.5	99
	B-29	2.1	40
	B-30	2.0	30
	B-31	13.7	32
	B-32	7.9	21
	B-33	20.7	21
	B-711	10.0	99
	B-920	3.0	99
	C-1	10.9	11
	C-2	3.2	32
	C-3.1	4.0	21

Table III.I.- Natural Areas **(by State Forest)**			
State Forests	Stand	Acres	Forest Type
	C-3.2	5.7	21
	C-4	123.8	99
	C-5	12.9	12
	C-6.2	1.4	32
	C-8.1	23.1	12
	C-8.2	15.9	97
	C-11	1.6	12
	C-12	5.6	12
	C-13	5.4	41
	C-14.2	1.7	41
	C-23.2	3.0	41
	C-24	4.4	41
	C-25	9.2	99
	C-27	3.2	41
	C-28	11.0	99
	C-32.1	14.7	15
	C-32.2	8.1	32
	C-34	9.5	32
	C-37	20.4	99
	C-38.3	2.3	41
	C-39	3.1	41
	C-41	9.2	12

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	C-42	10.9	10
	C-43	24.9	12
	C-711	7.7	99
	D-2	83.2	32
	D-3	3.6	41
	D-5	5.3	99
	D-8.1	116.6	99
	D-8.2	6.1	99
	D-8.3	9.0	99
	D-8.4	20.7	99
	D-9	17.0	12
	D-13.1	27.8	32
	D-13.2	5.7	11
	D-14.0	11.0	54
	D-17	3.4	54
	D-19	6.9	99
	D-20	14.6	99
	D-21	21.9	99
	D-22	6.4	32
	D-23	61.3	99
	D-25	8.7	99
	D-26	11.0	99

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	D-27	6.8	26
	D-28	1.7	42
	D-29	3.2	41
	D-30.1	49.8	25
	D-30.2	10.3	99
	D-31	1.2	21
	D-32	6.4	12
	D-38	68.3	99
	D-711	13.5	99
	E-3	3.5	25
	E-4	14.5	32
	E-11	9.4	32
	E-12.2	11.8	10
	E-13	6.6	15
	E-15	32.0	25
	E-17.1	47.1	46
	E-17.2	26.6	15
	E-18	60.3	15
	E-19	2.5	40
	E-20	16.7	13
	E-21	20.8	49
	E-22	11.7	10

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	E-23	35.2	41
	E-24	9.6	40
	E-25.1	9.5	15
	E-25.2	5.0	15
	E-26	23.8	32
	E-29	10.3	13
	E-30.1	33.8	15
	E-30.2	24.6	97
	E-30.3	1.2	32
	E-34.1	24.7	15
	E-34.2	3.8	32
	E-38	4.7	97
	E-40	57.2	25
	E-41	2.6	10
	E-42.1	65.9	32
	E-42.2	48.4	25
	E-42.3	8.2	32
	E-42.4	16.6	32
	E-42.5	48.1	25
	E-43	20.0	99
	E-44.1	3.7	41
	E-44.2	1.2	41

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	E-45	26.4	99
	E-48	9.2	32
	E-49	69.8	13
	E-50	136.7	99
	E-51	193.9	99
	E-52	2.1	40
	E-53	8.7	99
	E-711	7.4	99
Brasher SF (SL 5)	A-3	24.7	99
	A-4	8.8	99
	A-7	50.7	13
	A-8	26.0	97
	A-13	27.4	99
	A-17.2	1.5	97
	A-19	8.5	99
	A-20.1	19.9	70
	A-20.2	1.9	99
	A-711	4.5	99
	B-1.1	89.6	99
	B-1.2	5.3	99
	B-2	7.8	12
	B-3	3.8	12

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	B-4.2	56.6	11
	B-5	1.9	10
	B-7	1.1	45
	B-9	6.3	11
	B-11	5.6	11
	B-12.1	8.5	32
	B-12.2	10.6	32
	B-14	12.5	99
	B-15	3.1	46
	B-16	8.9	15
	B-17	32.0	14
	B-19	1.3	54
	B-22	3.9	97
	B-24.1	14.0	12
	B-24.2	6.2	15
	B-26	14.4	13
	B-27	2.8	11
	B-31	3.8	32
	B-34	1.9	32
	B-35.1	8.3	99
	B-35.2	6.0	32
	B-36.1	15.2	63

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	B-36.2	5.2	46
	B-37.2	2.6	40
	B-41	2.7	32
	B-42	5.8	99
	B-44	49.9	99
	B-45	55.9	99
	B-46.1	10.2	15
	B-46.2	1.7	12
	B-47	11.9	99
	B-711	13.6	99
	C-4.1	3.1	32
	C-4.2	2.9	25
	C-4.3	2.2	99
	C-4.4	9.4	41
	C-5.2	2.6	98
	C-7.1	20.3	32
	C-8	39.5	99
	C-9	30.2	97
	C-11.1	15.2	31
	C-11.2	3.0	99
	C-11.3	3.4	97
	C-13	52.5	99

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	C-14.1	1.0	10
	C-14.2	11.8	97
	C-14.3	33.0	11
	C-14.4	13.8	32
	C-16	5.5	97
	C-17	6.1	12
	C-24	8.5	99
	C-25.2	4.8	42
	C-27	30.4	11
	C-711	8.9	99
	C-720	2.5	99
	C-910	9.4	99
	D-1.4	5.3	12
	D-1.5	3.3	99
	D-2	2.1	10
	D-3	3.7	25
	D-4.1	16.3	12
	D-4.2	2.7	99
	D-5	3.9	46
	D-6.3	1.2	41
	D-7	32.1	99
	D-8	1.6	25

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	D-9.1	5.6	45
	D-9.2	5.3	45
	D-11	3.2	32
	D-12	7.1	15
	D-13	23.5	11
	D-16	5.1	25
	D-17	2.4	97
	D-18.2	1.3	42
	D-711	4.7	99
	E-1	25.1	12
	E-6	2.6	25
	E-7	3.5	15
	E-8	4.5	32
	E-9.1	13.9	12
	E-9.2	9.9	12
	E-10.1	15.0	99
	E-10.2	2.0	99
	E-11	1.7	12
	E-12	3.0	25
	E-711	0.2	99
	F-1	13.1	12
	F-4	1.1	46

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	F-5	11.7	99
	F-8.1	13.7	15
	F-8.2	2.3	99
	F-8.3	6.1	32
	F-8.4	3.8	15
	F-8.5	3.6	25
	F-15	6.7	25
	F-16	2.3	49
	F-19	10.8	15
	F-20.1	6.1	99
	F-20.2	2.4	97
	F-22.1	32.7	25
	F-22.2	1.0	99
	F-23	12.9	49
	F-24	6.1	99
	F-26	7.0	99
	F-29	2.4	40
	F-32	69.4	25
	F-33	4.4	40
	F-34	3.8	15
	F-35	21.5	25
	F-36	1.5	99

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	F-37	121.1	99
	F-711	6.9	99
	F-920	4.7	99
	G-4	11.0	99
	G-10	16.6	12
	G-11	2.2	10
	G-12.2	8.5	41
	G-13.1	13.1	60
	G-14	3.3	15
	G-16	5.6	32
	G-17	2.8	25
	G-20	0.5	41
	G-24	35.7	25
	G-26	66.8	99
	G-27	17.5	41
	G-920	2.7	99
Brasher SF (SL 6)	A-1	4.7	11
	A-10	12.7	32
	A-711	4.4	99
	A-722	0.4	99
	B-1	4.2	25
	B-2	14.8	12

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	B-4.3	3.7	25
	B-5	12.0	12
	B-6	4.5	41
	B-8	43.7	15
	B-11.1	17.2	41
	B-11.2	8.7	41
	B-14	1.2	41
	B-15	19.4	32
	B-17	56.2	15
	B-18	10.3	14
	B-19	33.2	15
	B-20	5.5	41
	B-21.2	3.6	12
	B-23	7.1	21
	B-24	5.2	12
	B-25	1.1	41
	B-28	3.3	14
	B-35	28.8	32
	B-40	159.1	12
	B-43.1	16.2	13
	B-43.2	41.2	97
	B-43.3	8.6	32

Table III.I.- Natural Areas **(by State Forest)**			
State Forests	Stand	Acres	Forest Type
	B-46	22.0	46
	B-48	3.1	40
	B-49	11.0	12
	B-51	3.2	41
	B-53	177.3	12
	B-55	7.0	40
	B-57	2.6	99
	B-60	12.7	46
	B-63	4.0	97
	B-65.1	53.9	12
	B-66	4.2	46
	B-67.1	3.1	41
	B-67.2	5.6	21
	B-68	1.8	46
	B-69.1	2.1	41
	B-72	2.4	97
	B-75	1.8	25
	B-76	5.4	99
	B-77.2	2.8	25
	B-79	31.5	99
	B-82	5.4	12
	B-87	4.9	54

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	B-89.1	6.2	25
	B-89.2	2.6	32
	B-93	2.6	99
	B-97	9.7	32
	B-101	761.4	99
	B-711	35.7	99
	C-2	13.7	25
	C-4	42.6	99
	C-5.2	7.0	41
	C-6	70.4	99
	C-9.2	4.8	40
	C-15	34.6	97
	C-16	4.9	21
	C-19	1.9	40
	C-21.1	370.1	14
	C-21.2	5.2	10
	C-22	96.6	15
	C-23	2.8	40
	C-24	39.5	99
	C-28	10.7	12
	C-30	4.8	40
	C-40	2.8	32

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	C-41	1.4	40
	C-42	23.7	15
	C-43	13.4	12
	C-44	8.1	46
	C-45	35.7	25
	C-48	2.5	42
	C-49.1	15.5	99
	C-49.2	2.3	99
	C-50	23.8	10
	C-54	25.6	41
	C-711	13.8	99
	D-2	30.1	12
	D-3	27.6	12
	D-4	23.9	99
	D-7	9.4	99
	D-8	0.8	99
	D-11	5.1	99
	D-12	14.4	42
	D-14	45.3	12
	D-16	4.0	41
	D-17	9.3	46
	D-20.1	102.1	99

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	D-20.2	63.9	99
	D-20.3	9.5	99
	D-21.2	17.2	14
	D-22.2	5.1	15
	D-23	6.9	99
	D-24	2.1	46
	D-25	200.8	15
	D-26.1	30.9	15
	D-26.2	16.5	97
	D-28	19.6	12
	D-29	8.3	97
	D-30	26.6	99
	D-31.1	15.8	41
	D-31.2	3.7	25
	D-32	4.3	99
	D-33.1	18.1	25
	D-33.2	9.5	25
	D-34	3.1	25
	D-35	10.8	99
	D-36.1	20.2	15
	D-36.4	10.9	25
	D-38.3	4.2	40

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	D-41	3.9	10
	D-42	1.5	47
	D-44	7.8	42
	D-45.1	62.7	11
	D-45.2	2.8	25
	D-49	54.5	97
	D-50	6.4	97
	D-51	56.7	15
	D-711	3.5	99
	E-2	5.9	12
	E-3	2.4	99
	E-4.1	7.2	97
	E-4.2	4.8	99
	E-711	0.7	99
Brasher SF (SL 7)	B-1	9.3	11
	B-2	0.8	99
	B-5	8.0	99
	B-6	6.5	14
	B-9.3	1.5	46
	B-10	11.3	49
	B-12	2.2	41
	B-13.1	21.7	13

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	B-13.2	19.6	25
	B-13.3	32.9	25
	C-1	1.8	99
	C-2	5.5	32
	C-4	10.5	99
	C-5	2.7	99
	C-6	1.2	99
	C-7.3	3.6	15
	C-8.2	5.1	40
	C-14.1	15.3	64
	C-16	20.3	15
	C-19.1	48.0	99
	C-19.2	3.0	99
	C-20	1.0	32
	C-24.1	50.6	49
	C-24.2	2.3	32
	C-25	13.4	46
	C-30	105.8	99
	C-33.1	5.3	41
	C-33.2	5.6	41
	C-33.3	4.9	41
	C-34	39.2	13

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	C-36	57.9	12
	C-711	7.0	99
	D-8	3.7	60
	D-9	9.2	14
	D-10	4.1	99
	D-11	47.0	99
	D-12	15.2	14
	D-13	8.6	97
	D-14	7.8	40
	D-15.1	9.6	97
	D-15.2	12.8	99
	D-16.1	2.7	40
	D-16.2	6.3	46
	D-17.1	69.3	46
	D-17.2	12.6	46
	D-19	6.8	41
	D-20	21.4	32
	D-21	3.8	41
	D-22.1	16.3	99
	D-22.2	2.1	99
	D-22.3	2.2	97
	D-24.1	1.2	99

Table III.I.- Natural Areas **(by State Forest)**			
State Forests	Stand	Acres	Forest Type
	D-24.2	6.1	97
	D-26.1	24.2	46
	D-37	3.8	21
	D-40	30.9	25
	D-42	2.9	99
	D-44	9.2	32
	D-45	5.6	32
	D-47	3.6	99
	D-48	7.8	32
	D-49	23.4	11
	D-51	22.2	99
	D-52	38.1	15
	D-53	7.1	40
	D-54	23.1	15
	D-55.1	6.1	40
	D-55.2	2.5	40
	D-56.1	53.0	99
	D-56.2	1.6	99
	D-711	60.5	99
Brasher SF (SL 10)	A-3.1	6.3	32
	A-3.2	7.3	97
	A-4	26.6	97

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	A-5	9.0	71
	A-6	12.0	24
	A-7.1	23.2	32
	A-7.2	44.5	32
	A-8	3.0	12
	A-11	2.8	42
	A-12	17.0	99
	A-14	13.3	99
	A-22.1	11.0	99
	A-22.2	5.9	97
	A-26	2.0	32
	A-27	14.8	97
	A-28	5.1	25
	A-29	8.8	99
	A-32.2	3.1	41
	A-33	13.6	25
	A-34	2.6	15
	A-37	3.6	61
	A-38	5.6	97
	A-39	12.7	99
	A-711	2.4	99
	B-2	50.4	15

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	B-3	2.2	99
	B-4.1	56.3	15
	B-5	2.2	63
	B-6	32.1	99
	B-10.1	55.2	99
	B-10.2	11.7	99
	B-11	23.9	15
	B-16.1	14.1	15
	B-16.2	5.8	14
	B-16.3	47.5	15
	B-16.4	18.6	15
	B-16.5	8.3	97
	B-16.6	8.1	15
	B-19	22.7	99
	B-20	4.6	10
	B-21	13.8	99
	B-22	30.1	99
	B-25	16.6	99
	B-26	11.1	99
	B-27	9.8	32
	B-29	7.1	15
	B-30.5	7.0	10

Table III.I.- Natural Areas **(by State Forest)**			
State Forests	Stand	Acres	Forest Type
	B-32	42.0	15
	B-711	4.7	99
	C-2	2.6	31
	C-4	28.1	15
	C-8.2	7.4	32
	C-13	2.0	70
	C-14	16.6	32
	C-16	12.0	71
	C-17	15.6	99
	C-18	15.5	15
	C-20	7.4	32
	C-21	8.2	25
	C-24	7.2	14
	C-25.1	33.9	15
	C-25.2	112.7	15
	C-25.3	10.7	99
	C-25.4	3.9	97
	C-26.2	3.7	40
	C-27	28.4	15
	C-33.1	26.0	99
	C-36	7.3	40
	C-40	8.6	97

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	C-42	5.6	99
	C-43	6.0	70
	C-44.1	6.4	42
	C-44.2	2.0	42
	C-45	8.8	97
	C-46	10.8	15
	C-47.3	2.4	40
	C-48	2.1	42
	C-50	29.7	99
	C-52	6.6	15
	C-54	3.7	15
	C-56	17.2	99
	C-59	12.2	97
	C-711	9.7	99
	D-2.2	15.0	70
	D-5.1	97.0	70
	D-5.3	11.9	71
	D-6.1	39.1	97
	D-6.2	7.5	32
	D-7	2.1	42
	D-8	5.4	68
	D-9	28.3	15

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	D-13	8.1	15
	D-20.2	7.5	26
	D-21	36.8	99
	D-24	15.6	32
	D-25.2	2.5	40
	D-30	3.8	32
	D-31	2.0	12
	D-33	4.9	99
	D-35	4.1	97
	D-37	18.2	99
	D-38	31.5	15
	D-41	2.7	46
	D-42	3.4	15
	D-45	2.0	97
	D-46	13.8	70
	D-47	14.5	71
	D-52	75.1	99
	D-53	14.0	99
	D-54	14.9	99
	D-55	6.2	68
	D-56	2.4	32
	D-711	9.5	99

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	D-722	0.5	99
	D-920	20.8	99
	E-1	13.3	99
	E-9	2.4	97
	E-10	7.2	70
	E-12	5.7	99
	E-14.2	7.8	32
	E-17	10.3	15
	E-18	8.8	32
	E-21.3	8.5	15
	E-24.2	2.0	32
	E-24.3	2.6	32
	E-25	9.9	32
	E-27	4.7	97
	E-28	11.8	30
	E-29	3.5	32
	E-32.1	5.9	99
	E-32.2	3.1	99
	E-33	8.3	32
	E-39	10.0	15
	E-41	63.6	99
	E-42	5.2	70

Table III.I.- Natural Areas **(by State Forest)**			
State Forests	Stand	Acres	Forest Type
	E-43	64.1	97
	E-44	27.1	99
	E-45	21.8	99
	E-711	4.1	99
Brasher SF (SL 17)	A-2.1	13.7	13
	A-2.2	8.1	13
	A-3	18.9	12
	A-4	1.9	21
	A-5	1.9	12
	A-12	9.8	11
	A-13.1	5.9	12
	A-13.2	2.8	32
	A-16	3.4	15
	A-17	2.1	21
	A-30.1	1.0	14
	A-30.2	2.8	14
	A-31	6.3	41
	A-36	73.5	99
	A-38	1.9	32
	A-39	4.5	21
	A-711	5.9	99
	B-1	55.4	14

Table III.I.- Natural Areas **(by State Forest)**			
State Forests	Stand	Acres	Forest Type
	B-2	51.8	25
	B-14.3	0.6	99
	B-15	5.7	25
	B-18	10.8	11
	B-19.2	9.4	11
	B-20	9.3	12
	B-24.3	2.0	41
	B-28.1	10.2	11
	B-29	3.4	32
	B-30.1	4.3	32
	B-30.2	2.6	97
	B-31.1	7.2	21
	B-31.2	7.2	41
	B-32.2	1.6	12
	B-35	2.3	32
	B-711	7.1	99
	D-4	30.2	10
	D-5	16.4	21
	D-7	13.5	97
	D-8.1	16.8	60
	D-8.2	2.9	41
	D-9	20.0	14

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	D-10	2.1	99
	D-11	18.7	99
	D-12	13.8	97
Buckton SF (SL 31)	A-4.1	4.1	25
	A-4.2	3.6	99
	A-12	5.0	14
	A-13	16.4	11
	A-20	7.0	99
	A-21	17.2	11
	A-22	4.6	11
	A-711	4.3	99
	B-1	31.9	99
	B-3	3.4	41
	B-4	8.0	11
	B-5	4.7	97
	B-6	2.3	97
	B-7	24.9	99
	B-8	3.5	12
	B-11	34.0	11
	B-12	14.9	15
	B-13	13.9	99
	B-711	3.0	99

Table III.I.- Natural Areas **(by State Forest)**			
State Forests	Stand	Acres	Forest Type
	C-1.1	84.9	10
	C-2	19.3	10
	C-3.1	9.2	15
	C-3.2	10.5	15
	C-4	25.2	11
	C-8	2.7	99
	C-10	16.8	99
	C-11	3.7	99
	C-15.1	13.6	25
	C-15.2	9.9	99
	C-17	21.3	11
	C-18	3.4	99
	C-20	1.1	15
	C-23	10.0	99
	C-711	2.6	99
	D-1	3.0	25
	D-3	3.6	70
	D-4	2.4	25
	D-7	1.4	40
	D-9	12.1	14
	D-10	8.0	97
	D-12	11.5	32

Table III.I.- Natural Areas **(by State Forest)**			
State Forests	Stand	Acres	Forest Type
	D-15	14.4	32
	D-19	13.0	40
	D-20	4.8	10
	D-21	8.7	11
	D-22	40.6	11
	D-23	7.4	99
	D-24	61.7	99
	D-711	3.0	99
Fort Jackson SF (SL 22)	A-1	21.8	99
	A-2.2	2.8	40
	A-7	5.2	40
	A-13	17.1	99
	A-15	3.0	99
	A-16	5.9	11
	A-17.1	4.0	11
	A-20	5.7	20
	A-25	6.5	11
	A-28	2.8	99
	A-32	14.1	10
	A-34	9.5	99
	A-35	17.6	11
	A-36	8.5	10

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	A-38.1	6.5	11
	A-38.2	3.3	11
	A-38.3	2.8	11
	A-39	12.8	32
	A-41	1.1	42
	A-42.1	11.5	15
	A-42.2	10.9	15
	A-42.3	2.0	15
	A-44.2	2.4	68
	A-45	4.7	99
	A-51	22.7	10
	A-53	25.6	99
	A-711	11.9	99
	B-1.1	14.6	11
	B-1.2	3.4	11
	B-3	4.6	97
	B-6	15.2	46
	B-7	4.3	15
	B-11	30.1	15
	B-12.1	22.6	14
	B-12.2	22.5	14
	B-12.3	5.3	14

Table III.I.- Natural Areas **(by State Forest)**			
State Forests	Stand	Acres	Forest Type
	B-13.0	1.0	99
	B-16	4.1	42
	B-17	3.4	42
Grantville SF (SL 15)	A-1	2.2	99
	A-2.1	10.4	15
	A-2.2	2.0	99
	A-4	4.7	30
	A-6.1	22.5	32
	A-6.2	8.4	15
	A-6.3	2.1	99
	A-9	7.2	99
	A-10	12.5	32
	A-11	4.6	12
	A-13	9.5	32
	A-14	5.2	71
	A-19	6.9	70
	A-20.2	5.0	63
	A-21.1	11.6	32
	A-21.2	3.3	15
	A-22	12.6	15
	A-23.1	53.0	15
	A-23.2	9.7	99

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	A-23.3	6.4	15
	A-24	2.0	99
	A-26	15.0	99
	A-27	9.4	70
	A-29	6.6	99
	A-30	32.1	99
	A-31	14.5	11
	A-711	2.0	99
	B-4	5.5	32
	B-5	11.7	63
	B-6	14.0	99
	B-10	13.9	10
	B-11.1	83.0	15
	B-11.2	15.9	32
	B-11.3	3.5	15
	B-11.4	2.5	15
	B-12	8.1	99
	B-13	16.1	15
	B-14	5.4	32
	B-15	9.5	14
	B-16	5.9	15
	B-17	4.8	99

Table III.I.- Natural Areas **(by State Forest)**			
State Forests	Stand	Acres	Forest Type
	B-19	44.4	32
	B-20	80.6	99
	B-710	4.5	99
Knapp Station SF (SL 11)	A-1	2.2	25
	A-2	4.3	25
	A-11.1	19.5	99
	A-11.2	15.3	97
	A-12.1	1.5	63
	A-12.2	1.5	10
	A-22	28.1	99
	A-23	4.7	97
	A-24	5.4	99
	B-3.1	2.7	14
	B-3.2	2.1	14
	B-4	9.7	99
	B-7.1	2.2	46
	B-7.2	0.9	97
	B-8	10.7	46
	B-9	2.4	14
	B-11	10.2	46
	B-711	8.0	99
	C-2.1	7.4	41

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	C-2.2	1.8	41
	C-3	6.9	40
	C-4	1.6	10
	C-6	5.5	10
	C-7	12.8	32
	C-9.2	4.4	99
	C-10	9.3	11
	C-11.1	14.1	41
	C-11.2	5.1	13
	C-12	1.4	25
	C-13	1.2	99
	C-14	12.7	32
	C-17	3.2	15
	C-21	18.8	14
	C-25	23.3	99
	C-26	140.1	99
	C-27	1.3	40
	C-28	1.8	97
	C-29	0.5	99
	C-711	4.9	99
	D-6	5.2	70
	D-7.1	11.4	41

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	D-7.2	3.2	41
	D-9	7.0	25
	D-11	32.2	99
	D-12	19.5	25
	D-13	4.3	22
	D-14.1	2.7	11
	D-14.2	2.5	11
	D-15	11.8	12
	D-16	7.3	40
	D-17	4.8	10
	D-18.1	5.5	97
	D-18.2	2.1	97
	D-18.3	1.7	20
	D-19	2.3	44
	D-20.1	3.6	25
	D-20.2	2.4	99
	D-21	5.2	10
	D-22	52.5	99
	D-711	1.2	99
Lost Nation SF (SL 9)	A-1.1	29.1	41
	A-2	6.8	11
	A-3	11.6	11

Table III.I.- Natural Areas **(by State Forest)**			
State Forests	Stand	Acres	Forest Type
	A-4	17.4	99
	A-5	5.7	21
	A-6	5.3	99
	A-9	20.9	99
	A-12	1.4	99
	A-14	24.7	13
	A-16	6.7	32
	A-17	27.5	15
	A-21	32.0	15
	A-22	17.5	99
	A-24	1.1	97
	A-33.1	5.7	97
	A-33.2	4.5	97
	A-34	9.8	41
	A-35.1	28.0	12
	A-35.2	5.0	25
	A-37	13.0	29
	A-38	4.1	10
	A-39.1	22.3	25
	A-39.2	4.3	25
	A-41	3.3	99
	A-711	9.1	99

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	B-1	24.3	99
	B-2.1	3.8	42
	B-2.2	4.4	42
	B-3.1	2.8	97
	B-3.2	1.9	97
	B-9	11.2	15
	B-11	1.8	42
	B-12.1	16.3	25
	B-12.2	3.3	32
	B-13	22.6	32
	B-14	5.7	42
	B-15	1.4	99
	B-16	3.9	25
	B-17	14.4	99
	B-18	14.8	97
	B-19.1	8.4	32
	B-19.2	3.3	14
	B-20	8.6	99
	B-29.2	6.3	10
	B-34.1	22.5	99
	B-34.2	2.1	99
	B-38	9.0	14

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	B-41	1.1	14
	B-43	3.1	42
	B-44.1	8.4	14
	B-44.2	3.2	14
	B-45.2	3.4	42
	B-46	9.4	11
	B-47	3.4	99
	B-48	7.9	97
	B-49	2.8	97
	B-51	173.4	99
	B-52	15.6	15
	B-711	2.2	99
	C-1.5	1.9	41
	C-2.2	4.0	46
	C-3	4.8	15
	C-5	7.7	15
	C-6	3.1	97
	C-7	3.5	21
	C-8	7.2	21
	C-9	7.5	99
	C-10	3.9	25
	C-13	2.3	21

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	C-14	4.0	25
	C-21.2	5.4	21
	C-22	2.7	25
	C-25	3.7	40
	C-26.1	45.2	25
	C-26.2	2.8	25
	C-27	3.0	25
	C-28	2.9	14
	C-29.1	8.3	25
	C-29.2	3.0	25
	C-31	1.5	20
	C-33	1.9	25
	C-34	1.6	25
	C-36	4.1	32
	C-40	26.2	15
	C-41	3.5	40
	C-42	10.6	99
	C-43	10.3	15
	C-47	3.5	15
	C-48	11.5	32
	C-49	4.4	25
	C-55	52.3	99

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	C-711	13.7	99
Raymondville SF (SL 33)	A-1	7.0	70
	A-2	12.8	70
	A-3	28.5	32
	A-4	7.6	63
	A-5.1	16.4	99
	A-5.2	13.3	15
	A-5.3	6.8	99
	A-5.4	40.1	15
	A-5.5	23.5	15
	A-5.6	2.3	99
	A-7	16.1	99
	A-8	36.2	32
	A-10	2.2	15
	A-12	10.7	11
	A-13	5.3	12
	A-15	7.0	15
	A-18	2.7	22
	A-20.1	46.5	99
	A-20.2	3.0	99
	A-21	14.3	15
	A-22	3.5	12

Table III.I.- Natural Areas **(by State Forest)**			
State Forests	Stand	Acres	Forest Type
	A-25	8.0	15
	A-26	13.5	32
	A-32	15.3	15
	A-34	67.7	99
	A-35	9.5	15
	A-36	8.0	71
	A-38	2.3	32
	A-42	3.0	32
	A-43	5.1	14
	A-711	4.8	99
	A-722	4.4	99
Sodom SF (SL 25)	A-1	6.7	32
	A-2.1	23.7	32
	A-2.2	27.6	32
	A-3	27.2	97
	A-4	4.8	15
	A-5.1	82.1	99
	A-5.2	42.1	99
	A-5.3	51.7	99
	A-6	30.9	15
	A-7	11.5	10
	A-8	22.6	10

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	A-9	6.6	99
	A-10	125.0	32
	A-11	14.7	15
	A-12	10.7	10
	A-13.1	23.6	32
	A-13.2	13.7	15
	A-14.1	95.4	32
	A-14.2	21.6	32
	A-14.3	11.1	32
	A-14.4	7.8	15
	A-15	26.7	99
	A-16	4.4	32
	A-18	27.3	99
	B-1.2	6.6	15
	B-1.3	3.2	97
	B-2	5.3	24
	B-5.2	9.8	15
	B-9.1	7.2	99
	B-9.2	2.6	99
	B-13	36.6	71
	B-14	2.6	99
	B-15	8.5	12

Table III.I.- Natural Areas (by State Forest)			
State Forests	Stand	Acres	Forest Type
	B-17.1	16.9	15
	B-17.2	7.9	15
	B-18	18.4	99
	B-19	49.7	32
	B-21	4.5	99
	B-711	4.6	99
	C-2.1	16.1	14
	C-2.2	6.5	14
	C-3	23.8	99
	C-6	15.0	24
	C-7	8.3	14
	C-8	2.3	71
	C-13.2	33.8	32
	C-16	3.6	32
	C-18	5.2	15
	C-19	10.9	99
	C-20	17.4	99
	C-21	12.9	99
	C-711	0.5	99
	C-722	59.0	99
Southville SF (SL 23)	A-3.1	21.1	10
	A-3.2	14.0	10

Table III.I.- Natural Areas **(by State Forest)**			
State Forests	Stand	Acres	Forest Type
	A-4	11.4	25
	A-12	2.4	15
	A-15	15.0	10
	A-16	9.7	32
	A-19	13.0	11
	A-22	29.1	11
	A-24	18.6	11
	A-25	26.1	99
	A-26	7.4	15
	A-27	12.7	99
	A-28	18.4	32
	A-711	4.9	99
	B-9	11.1	15
	B-10	16.3	15
	B-711	2.3	99
	Total Acres	19,390.3	

GLOSSARY

GLOSSARY

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

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

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

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

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

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

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

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

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

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

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

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

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

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

LARGE SAWTIMBER Trees 18"+ diameter at breast height.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

STATE FOREST - STATE REFORESTATION AREA Lands owned by the State of New York, administered by the Department of Environmental Conservation and authorized by Environmental Conservation Law to be devoted to the establishment and maintenance of forests for watershed protection, the production of timber and other forest products, and for recreation and kindred purposes.

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

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

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

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

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

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APPENDICES & FIGURES

APPENDIX A - SUMMARY OF COMMENTS AND RESPONSES TO THE ST. LAWRENCE FLATLANDS UMP

The following is a summary of the public comments that were received during the creation of the St. Lawrence Flatlands Unit Management Plan. Public scoping meetings were held June 20, 2012 at the Brasher Falls High School and June 23, 2012 at the Madrid-Waddington High School. A public draft meeting was held December 1, 2014 at the Brasher Falls High School. Comments were received at the public meetings, as well as through letters, phone calls, emails, and face to face meetings with contributors. **Comments** are in bold text, with *DEC responses* in italics.

Facilities Comments

1. There is no cost analysis of the proposed projects in the UMP. What are the cost estimates for road and trail brushing, grading, trail hardening, etc?

Detailed cost estimates for proposed actions will be created before implementation. Projects will be completed over many years, which will make timely cost estimates more accurate than those produced several years in advance.

2. The Pascal Haul Road and Old Keenan Roads near Shady City are in poor condition and soil is eroding and flowing into Lawrence Brook. The problem started several years ago when a culvert was removed and needs to be fixed.

The Pascal Haul Road is proposed for extensive rehabilitation and improvement to PFAR standards. The Old Keenan Road is a Town of Brasher Road and cannot be maintained by the DEC unless it is qualified abandoned by the town. The DEC supports improved maintenance of roads and trails, regardless of jurisdiction.

Forestry Comments

1. We support managing state forests in ways that reduce climate change. Forests can reduce climate change by sequestering carbon in trees. Some state forest areas should be managed for the creation of old growth timber that sequesters large amounts of carbon. State forests should not be used to produce firewood or other products which release carbon to the atmosphere.

Many of the actions proposed in this plan will increase carbon sequestration. Over 12,000 acres of forest are proposed for inclusion in the Natural Areas category, which means that they will receive minimal forest management now or in the future. The acreage of late successional forests will gradually increase as stands continue to age. The Department disagrees about the production of firewood from state

forests. Firewood is an important heating source for local residents, and will continue to be sold on a limited basis as time and staffing allows. Firewood thinnings also promote the improved growth of residual stands, which results in improved sawtimber quality in the future.

2. We strongly support maintaining uncut corridors along streams and rivers.

The plan proposes uncut corridors on state land along river corridors. These areas may still be suitable for non-motorized recreational trails and facilities.

3. We strongly support the implementation of Best Management Practices (BMPs) when performing timber harvests and other forest management, as BMPs prevent soil erosion, rutting, spreading invasive species, and sedimentation into nearby bodies of water.

BMP implementation is standard practice on state forest timber sales, as well as construction and maintenance projects.

4. We would like to express our support of gradually transitioning even-aged white pine stands to uneven-aged stands through sustainable harvests intended to improve forest health while maintain native conifer and hardwood stands. In addition, we also support and encourage creating and maintaining areas of early successional shrubland and late successional shrubland and late successional forest habitat, as proposed in the UMP.

These proposed actions will take place over many years, and will provide a gradual transition to a more diverse forest with stands of varied ages and tree species. Additional details concerning the creation of early successional habitat has been included in the "Wildlife-related Recreation: Hunting" section of the plan.

5. We support using sustainable forestry for timber harvests, especially when it can have multiple benefits, such as supporting the local economy through timber sales while improving forest health and wildlife habitat through ecological forest management. When possible, harvest should take place outside of the breeding bird season (May-July), to minimize disturbance and destruction of nests and young.

The Department strongly considers wildlife needs when proposing and implementing timber harvests. Some sales must be harvested under frozen conditions to minimize site disturbance or due to nearby habitat for RTE species. However, some sales are located deep in the forest on seasonal unplowed roads, which necessitates that they be harvested in the summer due to accessibility issues.

6. Protection of endangered species habitat should be a higher priority than maximizing timber harvest. Preservation of habitat should be a high priority and the UMP should be flexible to respond to these concerns.

Approximately 62% (19,390 acres) of this unit has been classified as Natural Areas, which will receive minimal active management and will be allowed to develop in a natural state. Other sensitive habitats outside of Natural Areas will be protected when management occurs nearby.

7. Is there a way the public can be given notice before timber harvesting takes place, possibly on the state forest webpage?

All timber sales over $500 in value are required to go through a competitive bid process, and are advertised on the DEC public website at: http://www.dec.ny.gov/lands/71130.html. Informational signs with contact information are also posted on active timber sales.

Recreation Comments

All-Terrain Vehicles (ATVs)

1. People miss having the roads and trails open to ATVs and would like some type of ATV trail system in Brasher State Forest. The County Forest parcel on the Bush Road should be linked by an ATV trail system. The Burns Road and Burns Trail should be re-opened to ATVs. The Tri-Town ATV Riders previously maintained ATV trails and provided materials, labor and equipment, and are willing to help maintain trails again if they can have legal ATV trails on state forests.

The UMP includes a proposal to open over eight miles of roads and trails to public ATV use.

2. ATVs were previously concentrated in the Brasher area, but the opening of a county wide multi use trail would reduce the concentration of ATV use in Brasher State Forest. A multiple use trail system will bring more business to all of the towns in St. Lawrence County.

The UMP includes a proposal to connect the property to the St. Lawrence County Multi-use Trail System.

3. How were ATV concerns addressed in the *Strategic Plan for State Forest Management* and what was the process for its adoption? Where is the ATV policy currently? Why were ATV trails shut down with little explanation given?

The Strategic Plan for State Forest Management reviewed law and regulations governing ATV use on state lands, potential impacts of ATV use, and case histories of past ATV usage on State Forests located across the state. It was offered for public review and comment and was adopted in 2010. The ATV policy is still in a draft status. ATV trails in Brasher State Forest were closed due to continued problems with maintenance, and the lack of nearby trail connections which would justify their continued use.

4. ATV use should be allowed to provide access for hunting, fishing, trapping, and wildlife viewing. Establish a trail system committee to help make any decisions regarding opening state lands to motorized use. We need to protect the interests of private landowners and the environment. Trail users need to be accountable. Environmental issues of opening new areas to ATV use need to be adequately addressed. If new areas are opened to ATV use, we should also provide adequate parking areas and facilities.

The UMP proposes to increase motorized access to the unit for people with disabilities via designated trails, in order to make hunting, fishing and other recreational pursuits more accessible. These proposals take into account the need to protect neighboring private lands and the environment.

5. I live next to a state forest and have experienced problems with illegal ATV use on the state forest, as well as very loud and disruptive users. Law enforcement is often not available to help control these problems as they happen. There should be lower speed limits set for motorized users, perhaps 30 mph on roads and 15 mph on trails. There should be phone numbers posted so that violators can be reported to law enforcement officers.

Law enforcement is necessary to enforce trail regulations and ticket violators. Patrols will periodically tour these properties to ensure that all applicable laws are being followed.

6. I am opposed to ATV use in this unit. They cause environmental damage and are noisy. I feel that ATV use would be dangerous due to small children operating ATVs as well as intoxicated drivers.

The UMP includes mitigation measures to avoid and minimize potential adverse impacts such as those cited above.

7. ATV use may cause transport and dispersal of invasive species. This may cause Common Reed to invade sensitive wetland areas, including black ash stands. ATVs may spread invasive species due to mud on the tires. How will invasive species be monitored and curtailed? To prevent the spread of non-native invasive plants due to increased ATV use, the adoption of "clean tire" program may be useful, with checkpoints at trail entrances and/or parking areas.

Regular inspections of the trail system will be made to monitor for invasive species and remove them before they become permanent. Staging areas will be monitored for invasive species so that they are transported onto the trail system.

8. True ATVs can transport invasive species, but no more so than hikers and bicyclists. Again this section of the plan appears to intentionally paint ATVs in a negative light.

Invasive species transport along motor vehicle trails and roads has been shown to be a widespread and frequently encountered problem. Efforts must be made to minimize the damage done by transport of invasive species.

9. Many medicinal plant species important to Mohawk culture are found in wetland areas, which may be damaged by ATV use.

The Department agrees that wetland areas are susceptible to damages from ATV use. Wetlands near recreational trails will be monitored for invasive species and other potential problems.

10. The plan to connect state forest roads to public highways as part of an ATV route does not meet the standards of section 2405 of Vehicle and Traffic law. Opening roads to ATV use does not constitute

a trail system under section 2405 of Vehicle and Traffic law. The proposed multi-use trail is basically an ATV trail. Few other groups use the trail once it is opened to ATVs.

Section 2405 of the Vehicle and Traffic Law does allow for short sections of roads to be open to ATV use in order to connect other legal ATV riding areas. It is the intent of the UMP to comply with this and all legal provisions that apply to the use of ATVs.

11. For ATV riding to become a more accepted and sustainable form of recreation, numerous State policy and budgetary changes will need to be made, including but not limited to: (1) legislative amendments to prohibit recreational riding on our state's most sensitive lands, including, but not limited to, the Forest Preserve in the Adirondack Park; (2) amendments to Vehicle and Traffic Law section 2405 to clarify its intent and incentivize trail construction of private trail networks; (3) Increasing the registration fee of ATVs, with all funds dedicated to well-planned trail construction, enforcement staffing and resources, and rider education; and (4) Legislation that incentivizes "bad actors" to not repeat their offenses when caught by enforcement.

Legislation is outside the scope of the UMP.

12. ATVs should be limited to main (dirt) logging roads. ATVs should not be used on paved roads due to safety concerns. Manufacturers specifically recommend not using ATVs on paved surfaces.

The UMP does not propose to allow ATVs on any paved roads.

13. A letter dated 12/08/14 was received from the St. Lawrence County (SLC) Legislature supporting responsible motorized recreation (including ATV use) on parcels in the St. Lawrence Flatlands Unit Management Plan. A resolution dated 12/15/2014 was received from the SLC legislature finance committee which would open certain county forests in the town of Brasher and Stockholm to ATV use. A resolution dated 01/02/15 was received from the SLC legislature finance committee which would open certain county highways in the Towns of Brasher, Lawrence, and Stockholm to ATV use. A resolution dated 01/02/15 was received from the St. Lawrence County Legislature "in Support of Reinstating of the ATV Trail System in the Brasher State Forest and to Include Community Connector Trail through Buckton and Ft. Jackson State Forests to Connect to St. Lawrence County Multi-Use Trail System." A letter dated 01/13/15 was received from the Town of Brasher in support of connector trails through Brasher, Buckton, and Ft. Jackson State Forests, as well as four loop trails proposed in Brasher State Forest which would be open to ATV riding.

The cited resolutions and letters were considered when developing the UMP proposal to allow ATVs on certain roads and trails within the unit.

14. Consider not only where ATVs can go, but perhaps when, so as to reduce overlap with snowmobiles, skiers, and to limit damage to wet ground.

The list of potential mitigation measures includes seasonal restrictions as well as restrictions on the hours of use.

15. In spite of the ban in recent years, ATVs have regularly driven through the Ft. Jackson parcel, for example, according to area residents. When the ATV corridor is provided in the Brasher Forest parcel, more effort will be needed to prevent unauthorized access to other parcels. Will the riding clubs assist in that effort?

Riding clubs will be encouraged to help monitor the trail system and inform riders of the regulations. Enforcement of regulations, however, must be implemented by law enforcement officers.

16. ATVs for many years were allowed to use the state lands included in the Flatlands UMP for both recreational riding and during involvement in Department endorsed programs such as hunting, fishing, and trapping. Local residents, individuals with camps and visitors utilized ATVs to get to hunting, fishing, and trapping locations and to transport deer and game. The Department's decision to restrict/ban use of ATVs on Public Forest Access Roads and Haul Roads has unnecessarily hindered this mode of sporting access and makes access difficult for the less fit, elderly and those with handicapping conditions.

ATV use on state forests must comply with guidelines found in the Strategic Plan for State Forest Management (approved 2010), as well as relevant Environmental Conservation and Vehicle & Traffic Law. Connector trails may be allowed across state forests if specific conditions are met.

17. (Regarding information on page 58 of the Draft Plan that ATVs may be disruptive to birds, hunters, and non-motorized recreational users). Although ATV noise may be disruptive to some mammal species as well as nesting and breeding birds, we also know that based on field observations animals and birds quickly adjust to such noise and in many instances use roads traveled by automobiles, ATVs and snowmobiles as travel corridors. ATVs may be disruptive to hunters that is true, but no more so than an automobile or airplane. This section of the plan appears to intentionally paint ATVs in a negative light and we question the scientific basis for these statements.

There is extensive scientific evidence that ATVs can be disruptive to nearby birds, wildlife, and non-motorized recreationists.

18. (Regarding limiting ATV trail usage to times of dry ground). The Department's setting specific dates for ATV use is not convenient for people to use ATVs during the big game and trapping seasons.

The first requirement of any trail system is that it be able to sustain usage without degradation and damage. Motor Vehicle usage must be limited to times of dry or frozen ground. This will not allow ATV access throughout all hunting, fishing and trapping seasons. Users are, however, able to access areas by foot on a year round basis.

19. (Regarding trespass onto private land). We do not close the roads to everyone who speeds on the highway. An approach that punishes the collective whole at the expense of a few will only serve to further alienate lawful and contributing users from the Department. (Regarding illegal trails). This section of the UMP seems as it if is written to appease the environmentalists.

In order to have a sustainable and environmentally sound trail system, users must be limited to trails that can sustain usage without environmental damage. This requires limiting motorized usage to roads and trails that have hardened trail surfaces, adequate drainage, and stabilized wetland crossings.

20. (Regarding trail maintenance). The Department will never have sufficient staff to monitor all publically owned lands. Engaging user groups in a positive way to accomplish these goals appears to be the only alternative. The local ATV clubs have done extensive work in the past to rehabilitate problem areas, such as the Burns Trail. Will there be a dedicated funding source to monitor ATV use in the areas covered by this UMP? What guarantee is there that prior problems will not reappear?

The Department will work with willing partners and outside groups such as ATV clubs, local towns, and St. Lawrence Co. to help maintain the trail system through the issuance of Temporary Revocable Permits (TRP's), Volunteer Stewardship Agreements (VSA's), or Cooperative Agreements (CA's). A regular funding source is proposed which will fund labor and materials for the maintenance of the Multi-use Trail System. It is expected that some negative impacts will re-occur after the trail system re-opens, but through monitoring and mitigation they will be kept to a low level of impact.

21. In order to minimize disturbance to large, intact forested habitats, we support re-opening trails to ATV use only on pre-existing trails that have been previously open to ATV use, and only allowing ATV use if the DEC has the capacity to provide proper enforcement of speed limits and no off-trail driving.

The UMP proposes ATV use only on existing roads and trails.

Other Motorized Recreation

1. (snowmobiles) - Truck trails are posted for 25 MPH speed limit but typical snowmobile trails have a 55 MPH speed limit. Truck trail speed limits should be increased for snowmobiles. People feel harassed by law enforcement.

The speed limit on DEC maintained PFARs and Haul Roads is 25 MPH for all users.

2. DEC needs to work with all user groups (NYS Horse Council, ATVs, Snowmobiles, bikes) for multi-use trails. It is an unfair assumption that when one user group gains access to a trail system that other usage goes down.

At the statewide level, the Department meets on a regular basis with the NYS Trails Council, which includes representative of all the major trail user groups. In addition, the Department meets with the NYS Conservation Council, which represents the interests of hunters, anglers and trappers. On the local level, the Department encourages input from all interested parties, and has regularly attended meetings of the St. Lawrence County Recreational Trails Advisory Board.

Non-Motorized Recreation

1. I support creation of cross country skiing trails on Knapp Station State Forest along the Cook Road. I support the development of parking areas and recreational trails on Sodom State Forest. We strongly

support the creation of hike/bike trails along scenic river corridors. We support the creation of new trails. The state must provide more support for staff to conduct trail maintenance.

New trails are proposed in Brasher, Buckton and Fort Jackson State Forests.

2. I recommend a primitive campsite along the Raquette River on Grantville State Forest, which would provide access for users of the Raquette River Blueway Corridor.

The Department is not opposed to developing a campsite at this location, but feels that it would receive minimal use. Recreationists are currently free to camp anywhere on the state forest as long as it is at least 150 feet from roads, trails, and water bodies.

3. Informational kiosks and web pages will help direct visitors to trails by specifying length, terrain, and likely sights (river shore, red pine plantation, waterhole, wetland, etc.) We support the restoration (and interpretation) of the water hole by the Buckley Haul Road. At the same time, we recommend one or more dedicated foot trails to interesting destinations, such as river shoreline, wetland, or CCC waterhole. If such trails for non-motorized visitors were narrow with curves, they would be less attractive to motors, thus quieter, safer for walkers, less disturbing to wildlife, and less eroded.

The plan proposes development of 3 new informational kiosks in the unit, as well as restoration of the restoration of at least one water hole. Other interpretive trails will be considered as funds and staffing allows.

4. We support the proposed access trail to the St. Regis River's east bank in Ft. Jackson State Forest. The Barrett Road is largely impassible and needs to be fixed up to reach the proposed parking area. The state should work with the town to improve the road. We support the proposed access trail to the St. Regis River's east bank in Buckton State Forest.

The Barrett Road is proposed to be upgraded in cooperation with the Town of Stockholm.

5. For the 3 proposed canoe launches / fishing access along the Deer River in Brasher State Forest, the resulting trip up or downstream includes class I rapids, and so it is not for beginners. Signage should warn paddlers of class I rapids. The proposed river access points / canoe launches along the Deer River in Brasher State Forest should be relocated to provide better access to flat water sections of the river.

Signs will be posted warning paddlers of potential hazards along difficult stretches of river. Ideally, river access points will provide good road accessibility and access to flat water whenever feasible.

6. Multi-use trails for motorized recreation should be allowed in certain areas but there should also be trails dedicated to non-motorized recreation, especially on smaller isolated parcels such as Buckton and Southville State Forests. The St. Regis River Corridor should also be developed for fishing and paddling, as well as mountain biking and hiking. There should be more non-motorized uses such as cross country skiing and hiking on medium sized state parcels, such as Grantville and Raymondville

State Forests. We enjoy skiing at Brasher, Buckton, and Southville State Forests and would like to see some areas restricted from motor vehicle access.

The UMP proposes to allow limited motorized use on State Forests in the unit. Access to the St. Regis River corridor is proposed to be improved.

7. Horse trails are poorly marked and difficult to follow. Maps are not adequate and people get lost.

The Department is undertaking efforts to rehabilitate and improve the most popular trails to promote continued use.

Wildlife Comments

1. I support active forest management to promote habitat for wildlife including ruffed grouse and American woodcock, song birds, White tailed deer, and other species. I support even-aged forest management to provide habitat for ruffed grouse, American woodcock, snowshoe hare, cottontail rabbits, white tailed deer, songbirds, and other wildlife. (Regarding Habitat Improvement). An insufficient amount of attention has been paid to this very important aspect of state land management.

One of the goals of this plan is to provide increased early successional habitat on the unit which will benefit many wildlife species. Additional information has been included in the "Wildlife-related Recreation – Hunting" section which outlines suggested management practices to create habitat for both game and non-game species.

2. We strongly support "managing deer impacts" in the St. Lawrence Flatlands through the implementation of ecological assessments of white-tailed deer impacts on forest regeneration and health. Management objectives should reflect those assessments, with deer densities maintained at levels that allow native tree and shrub regeneration.

Deer management is largely within the domain of the DEC's Bureau of Wildlife, which regulate hunting seasons and issue special permits to increase deer harvests in over-populated areas. Areas experiencing heavy deer browse may benefit from the issuance of Deer Management Assistance Program (DMAP) permits which allow additional deer harvesting in over-populated wildlife management units.

3. How will the blue heron rookeries be protected?

The heron rookeries, as well as other habitat important to RTE species, will be periodically monitored to ensure their continued health and integrity. Timber management and the creation of new roads or trails in the vicinity will be limited to minimize potential disturbances.

4. There is little information in the plan concerning birds and birding. Brasher State Forest contains many RTE bird species and provides critical bird habitat. It could become a major birding tourist area if it were better publicized.

The Departments agrees that the State Forests in this unit contain critical bird habitat. Table I.F. (At-Risk Species) lists over 20 Rare, Threatened, or Endangered bird species that may be found on unit. We would support promotion of this area as a birding site, with the birding community providing input on what new trails / observations points / etc. that they would like to see developed.

5. There should be a special goose season. Youth hunts would encourage more participation.

Wildlife regulations are beyond the scope of this plan.

6. Beavers are a problem and the UMP should have a policy for dealing with them.

Beavers are regularly trapped along the major waterways and wetlands in this unit. They are most problematic when they dam road culverts or otherwise flood roads and trails.

7. Leave dead end roads open for sportsmen access.

Roads are left open when they provide regular, good quality access. Many short dead end roads have been gated or barricaded due to problems with garbage dumping, illegal camping, or because they have become "party" spots.

Miscellaneous Comments

1. What time period does this UMP cover? When was the *Strategic Plan for State Forest Management* adopted? Are there management plans in place for the smaller (detached forest preserve) parcels? Are they too small for specific management plans? There should be outreach to the local town boards for their input.

This Unit Management Plan covers a ten year period from its time of adoption. The Strategic Plan for State Forest Management underwent a public review process and was adopted in 2010. The detached forest preserve parcels are too small and isolated to justify individual management plans. They have been included here due to their proximity to other state lands in this unit. Town boards and other local governments have been asked for their input, and their comments have been considered and incorporated into the plan.

2. More effort should be made to control invasive species. Invasive problems will likely become worse in the future. We strongly support improving forest health in this region by controlling invasive species and encourage DEC's ongoing participation in the St. Lawrence – Eastern Lake Ontario PRISM (Partnerships for Regional Invasive Species Management).

Invasive species are one of the most important threats to natural ecosystems. Invasive species will continue to be monitored, and management will be implemented when possible.

3. We support identifying and minimizing disturbances to the many old features on these parcels.

Treatment areas are searched for historical features before timber harvesting or construction occurs. Special effort is made to minimize their disturbance and preserve them for the future.

4. Mineral extraction should be prohibited on all state properties in this unit.

There are currently no active mines or wells on state properties in this unit.

5. Users of the forest should be reminded of the high value of wetlands found in this unit.

Wetlands have received extensive protection in this plan. Interpretive signs and trails will highlight their importance where appropriate.

6. We support the acquisition of additional parcels that are adjacent to lands included in this UMP, to be protected from development or fragmentation.

Purchase of additional land will be considered when it enhances existing state properties.

7. We support the designation High Conservation Forests, including the strong ties these forests have to Mohawk culture. Also supports the continued stewardship and management of the black ash resource to provide basket trees for Native American culture.

Continued protection and stewardship of the black ash resource will be encouraged throughout this unit.

APPENDIX B - 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.

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 waste water disposal

Therefore the actions proposed in this UMP, except the proposal described below to open multi-use recreational trails to ATVs in four State Forests, 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]).

One management action, the proposal to open multi-use recreational trails to ATVs through Brasher, Bombay, Buckton, and Ft. Jackson State Forests, was found to be beyond the scope of the SPSFM, and therefore required further environmental review under SEQR. To address this issue, a Supplemental

Environmental Impact Statement for the Proposed Multi-Use Recreational Trail System was prepared, and follows as part of Appendix B.

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.

Final Supplemental Environmental Impact Statement

for the Proposed Multi-Use Recreational Trail System

Located in the St. Lawrence Flatlands

Unit Management Planning Area

June 24, 2015

FSEIS Prepared by:

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1.0 Introduction

This Final Supplemental Environmental Impact Statement (FSEIS) is being prepared pursuant to the State Environmental Quality Review Act (SEQRA) to analyze the relevant areas of environmental concern resulting from the construction of a proposed Multi-Use Recreational Trail on State-owned lands in the St. Lawrence Flatlands Unit Management Planning Area, which includes Brasher, Bombay, Buckton, and Ft. Jackson State Forests. These forests are located in the towns of Brasher and Stockholm in St. Lawrence County, and the towns of Bombay and Moira in Franklin County. The trail system would be open to a variety of non-motorized and motorized recreation, including All Terrain Vehicles (ATVs). Current DEC policy, as outlined in the Strategic Plan for State Forest Management (Strategic Plan), provides that public use of ATVs will be allowed on State Forests only to provide access to recreational programs under the Department's Motorized Access Program for People with Disabilities (MAPPWD), and to allow limited ATV use for connector routes, on a case by case basis. The Strategic Plan provides that designation of ATV connector trails on State Forests will only occur after "full SEQRA review" of the designation. Department staff have determined that the proposed action may have a significant adverse impact on the environment, therefore, this FSEIS will examine all reasonable alternatives to determine which action will avoid or minimize adverse environmental impacts to the maximum extent practicable.

The FSEIS will describe the St. Lawrence Flatlands proposed Multi-Use Recreational Trail proposals, identify potential impacts, suggest mitigation measures, and describe other reasonable alternatives that were considered during this analysis.

This Final Supplemental Environmental Impact Statement has been prepared in accordance with the State Environmental Quality Review Act (Article 8 of the Environmental Conservation Law and 6 NYCRR Part 617).

2.0 Description of the Proposed Project

2.1 Project Background

There is a large network of multiple use trails located in Brasher State Forest. These trails originated as a mixture of former public roads, roads created by the state during the Civilian Conservation Corps era, and woods roads created for timber harvesting or fire suppression. During the 1970s and 1980s, many of these roads and trails were opened for snowmobile use and cross country skiing, and were maintained in conjunction with the local snowmobile clubs. During the 1980s and 1990s, many trails were opened for horse riding, as well as ATV use. Due to maintenance concerns, ATV usage was gradually curtailed and is no longer permitted on trails or roads on State-owned lands in this unit.

Trails in the St. Lawrence Flatlands unit receive steady usage year round, by people enjoying motorized and non-motorized recreation, as well as hunters and campers. The large trail system in Brasher State Forest is generally in poor condition, due to statewide resource constraints for trail maintenance and improvement. An effort is being made to improve the condition of the most popular trails, by improving signage, brushing and widening overgrown trails, providing trailhead parking, and providing maps and web pages to promote the trail system.

In addition to the State maintained multiple use trails in this unit, the Town of Stockholm also owns a multiple use trail along the former Rutland Railroad right-of-way which passes through Knapp Station State Forest. There are also several trails available on St. Lawrence County #18, which is located adjacent to Brasher State Forest.

2.2 History of ATV use in this Unit

The following is a summary of the Brasher State Forest ATV trail system, reprinted from the *Strategic Plan for State Forest Management:* Chapter 5: Off-Highway and All-Terrain Vehicle Use (p. 217):

ATV Case Study: DEC Region 6 (1985-2008)

"In the 1980s, all of the multi-use trails in the Brasher State Forest were opened to ATV use; 36 different trails were opened as well as all 15 truck trails. Use was low to minimal to begin with, consisting mainly of local ATV enthusiasts who lived adjacent to the State Forest. In a relatively short time, ATV use escalated dramatically, and environmental issues began to surface.

By the early 1990s, ATV use was curtailed on trails that had become badly rutted or which had developed severe mud holes. In most cases, "Braid Trails" were illegally established by ATV riders to avoid the obstacles created by previous ATV activity. With no dedicated funding source available to maintain the trails or remediate damage, unacceptable environmental impacts led to further closures. By 2000, 12 trails remained open, and by 2004, only five trails remained legally opened to ATV use. Illegal ATV use continued to occur on the closed trails. Illegal braid trails continued to be created, and unauthorized new trails saw ATV use.

DEC worked with a local ATV club to remediate damage to several key trails, and the volunteers did some excellent work to fix the damage that had occurred on those trails. The rest of the trails that were closed due to ATV damage have yet to be remediated. A series of court decisions applying Vehicle and Traffic Law §2405 annulled local laws that had opened roads to ATV use. The courts ruled that public roads cannot be opened to ATV use unless it is otherwise impossible to access adjoining trails or riding areas. Since the few remaining open trails were linked by miles of Public Forest Access Roads that remained open to car and truck traffic, all roads and trails were closed to ATV traffic."

In general, the main problems with the former ATV trail system in Brasher State Forest can be summarized as follows:

- All trails were initially opened to ATV use. In hindsight, ATV use should have been restricted to roads and trails that were dry or which had undergone trail hardening in wet sections. Wetter trails should not have been opened to ATV use at any time.

- Little to no money or staff time was available for trail maintenance. This resulted in trails deteriorating and many mud holes and rutted sections developing. Many of these trails had to be closed because there was not sufficient money or staffing to rehabilitate the trails.

- There was a continual problem with ATVs driving in areas that were off limits – either trails not open to ATVs, new illegal trails created by riders, or areas where vehicles deliberately mud-bogged through wetlands, or "hill climbed" on sandy slopes prone to erosion.

2.3 Project Summary

The proposed action consists of upgrading an existing road and trail network on Brasher, Bombay, Buckton, and Ft. Jackson State Forests to provide a multi-use trail system, including ATV use. Some roads and trails will require brushing, grading, culvert or bridge installation, and placing of hard fill to provide a stable trail surface. SEQR analysis for any road or trail sections opened for ATV use that are not located on State-owned lands as part of the larger trail system is not covered by this document. Any such analysis that is determined to be necessary will be conducted by St. Lawrence County as an amendment or supplement to the October 2012 Final Generic Environmental Impact Statement for the Proposed St. Lawrence County Multi-Use Recreational Trail System.

3.0 Potential Impacts and Mitigation

An Environmental Assessment Form ("EAF") was prepared to determine the potential significant impacts of the Brasher State Forest Proposed ATV Trail. The EAF identified the following potential impacts which needed to be further addressed: Soil Compaction and Erosion, Noise, Invasive Species, Illegal Trails and Trespass onto Private Land, Conflicts with Other Users, Effects on Wildlife, and Effects on Air Quality.

3.1 Soil Compaction and Erosion

Existing Conditions:

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 the Strategic Plan on page 108 at http://www.dec.ny.gov/lands/64567.html.

The topography in this area is generally flat with an elevation range from 160 feet above sea level at the Grass River Indian Meadows in Massena, to 580 feet above sea level on Fort Jackson State Forest in the Town of Stockholm. The area is best characterized as having a large number and wide disbursement of wetlands interspersed with a series of glacial tills in the forms of eskers and drumlins. Eskers are best described as relatively narrow ridge-like formations while drumlins are hill-like formations resembling the shape of an inverted spoon.

While many different soil types can be found in this large block, the following listing gives the most prevalent soil types found beneath the general forest cover types.

Upland Natural Hardwood and/or Softwood Stands

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

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

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

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

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

Planted Forests

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

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

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

Coveytown loamy fine sand: Very deep, nearly level and somewhat poorly drained medium lime soil. The upper 2 to 3 feet is formed in sandy lake laid deposits and the lower part is loamy glacial till. Available water capacity is very low. Permeability is moderately rapid to rapid in the upper part and moderately slow to moderate in the lower part.

Lowland Swamps

Borosaprists & Fluvaquents, frequently flooded: Nearly level, moderately shallow to very deep and very poorly to somewhat poorly drained soils that are in flood plain areas. Most of these soils have formed in

organic material (muck). Some have formed in mineral soil material (sand, silt or clay). These areas are subject to frequent flooding from nearby streams.

Fluvaquents - Udifluvents complex, frequently flooded: Shallow to deep, nearly level, very poorly to well drained**,** sandy to clayey soils that are in flood plain areas. These areas are subject to frequent flooding from nearby streams.

The soils underlying the proposed multi-use trail system are generally well drained sands or loamy sands. Poorly drained organic soils are sometimes encountered along recreational trails which cross small wetlands or areas affected by beaver flooding activity. Wet trails must receive maintenance to improve drainage and harden the trail surface before being opened to motor vehicle use.

List of Potential Impacts:

- Erosion
- Soil compaction
- Increased sedimentation and turbidity

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

Soil erosion can be a major problem on roads and trails exposed to ATV traffic. Low density soils are often compacted by repeated ATV travel, which decreases soil permeability to water and increases the chance for soil erosion. Water logged soils or soils with a high clay content are subject to severe compacting during wet weather. Rill and gully erosion may occur when water flows down channelized wheel tracks in a trail which has become compacted. Erosion is also prone to occur on steep sandy slopes which have little vegetation to secure the soil. A secondary effect of erosion is increased sedimentation in nearby streams and wetlands when eroded soil washes from roads and trails during rain events or during spring snowmelt.

The primary methods used to limit or eliminate erosion are to harden trail surfaces before motor vehicle usage, provide culverts or bridges at wetland crossings, provide undisturbed buffers along streams / wetlands, and limit trail usage to times of dry or frozen ground.

List of Potential Mitigation Measures:

- Whenever possible locate trails on well drained and stable soils. Harden any trail surfaces susceptible to rutting, and install cross drainage (culverts or bridges) to allow water passage under the trail.
- Do not locate trails on steep slopes or steep uphill grades. Maximum slope on trails should be

15%.

- Use soil stabilization practices on exposed soil around bridges after construction.
- Whenever possible, provide buffer strips of undisturbed vegetation between trails and any streams or wetlands. Minimum suggested buffers are 300' for fish bearing streams, 150' for other permanent non fish-bearing streams, and 150' for ponds and other wetlands over an acre. Minimize or eliminate stream crossings.
- Limit trail usage by ATVs to times of dry ground. Under this proposal, the trail system would be open to ATV use from May 15th to Sept. 15th of each year. ATV usage outside this time period is liable to either cause trail damage due to wet conditions, or to conflict with snowmobile usage of the trail system. Trails may also be closed during other periods of prolonged wet weather.
- A trail monitoring program will be initiated during the ATV riding season (mid-spring to mid-fall) to identify and correct trail erosion, illegal trail building, invasive species, and other similar problems before they become permanent.
- Monitor trail conditions before trails are opened, as well as changes caused by trail usage.
- There will be DEC staff (Lands and Forests, Operations, and/or Law Enforcement) assigned to spend at least 5 days a month during the open riding season to ride trails, monitor conditions, enforce regulations, and do trail maintenance.
- There must be funds available to the local DEC Operations staff specifically dedicated to buying materials and equipment, and providing regular maintenance of the multi-use trail system.
- The Department will work with willing partners and outside groups such as ATV clubs, local towns, and St. Lawrence Co. to help maintain the trail system through the issuance of Temporary Revocable Permits (TRP's), Volunteer Stewardship Agreements (VSA's), or Cooperative Agreements (CA's).

3.2 Noise

Existing Conditions:

The properties in this unit are very rural and sounds from manmade disturbance are relatively infrequent and intermittent, such as a car passing every few hours along a seasonal road. Road and trail usage is more common during big game hunting season, but is still mostly limited to sporadic short term visits.

List of Potential Impacts:

- Noise created by ATVs and snowmobiles

- Impact to non-motorized recreational users
- Disturbance of nearby private properties
- Disturbance of bird and animal species

Increased noise from ATVs has been shown to be disruptive to some mammal species as well as nesting and breeding birds. Noise from ATVs may also be disruptive to hunters and non-motorized recreational users located near the trail corridor.

The major past noise complaints have been from large scale rallies or "poker-runs" of 20 or more snowmobiles or ATVs which can cause a large amount of noise as they pass along a common route.

Initial construction activity will result in temporary noise impacts. There will be short-term noise impacts during initial trail rehabilitation activities including grading, ditching, culvert installation, and spreading of gravel for surface hardening. Most significant noise impacts will cease after completion of the initial trail rehabilitation and construction stage. Yearly trail maintenance will cause temporary noise impacts lasting a few days at each work location.

List of Potential Mitigation Measures:

- Site trails away from houses and reduce speed limits.
- Restrict organized rallies or "poker-runs" which would cause a large number of motorized vehicles to congregate along a given route. 6 NYCRR Section 190.8(cc) requires sponsors of organized riding events of more than twenty people to obtain a permit from the Department.
- Adopt regulations setting a maximum ATV speed limit of 25 miles per hour on DEC maintained roads, the same as cars and trucks, and a maximum speed limit of 15 miles per hour on trails open to ATVs. Users would be ticketed for exceeding the posted speed limits.
- Adopt regulations limiting trail usage to the late spring, summer and early fall seasons, and restricting operating hours. Under this proposal, the trail system would be open to ATV use from May 15th to Sept. 15th of each year. Operating hours would be from 6 am to midnight during the open riding season. These hours correspond to commonly used open hours on Town roads, as well as portions of the St. Lawrence County Multiuse Trail System that have been opened to ATV use.

3.3 Invasive Species

Existing Conditions:

As global trade and travel have increased, so has the introduction of non-native species. While many of these non-native species do not have adverse effects on the areas in which they are introduced, some become invasive in their new ranges, disrupting ecosystem function, reducing biodiversity and degrading natural areas. Invasive species have been identified as one of the greatest threats to

biodiversity, second only to habitat loss (McGinley and Duffy, "Invasive species"). Invasive species can damage native habitats by altering hydrology, fire frequency, soil fertility and other ecosystem processes.

Several species of invasive plants are present across the project area. Invasive species found in upland areas include Common Buckthorn (*Rhamnus cathartica*), Honeysuckle (*Lonicera* spp.), Japanese Knotweed (*Fallopia japonica*), and Pale Swallow-wort (*Vincetoxicum rossicum*). Buckthorn is common along roads and trails and near old home sites, while knotweed and swallow-wort are commonly found near old house sites, power line rights of way, and other disturbed sites.

Wetland areas are sometimes affected by invasive plants such as Common Reed (*Phragmites australis*) and Purple Loosestrife (*Lythrum salicaria*). Both are commonly found in disturbed or degraded wetlands near major roads, but are less frequently found in more remote and undisturbed areas.

List of Potential Impacts:

- Invasive plants can be transported from one location to another via soil and plant debris carried on ATV tires or frames.
- Displacement of native plant species, leading to reduced biodiversity and forage.

Known invasive species populations have been mapped on a GIS layer available to DEC staff. This layer is regularly updated as new invasive species locations are found.

Most invasive species are still relatively low in density and have not caused widespread degradation to natural species assemblages. The two species that appear to have the highest potential for further expansion and resource damage are Pale Swallow-wort in upland areas and Common Reed in wetlands.

List of Potential Mitigation Measures:

- Require cleaning of ATV tires and chassis when entering and leaving the Multi-use trail system
- Remove invasive plants from trails when feasible
- Control invasive plants at staging areas so that they do not spread onto trails
- A trail monitoring program will be initiated during the ATV riding season (mid-spring to mid- fall) to identify and remove invasive species before they become permanent

3.4 Illegal Trails and Trespass onto Private Land

Existing Conditions:

Illegal trails created by users can be very damaging to understory vegetation and soils, especially those which travel through wet areas. Some trails are deliberately sought out for "mud bogging" in wet areas or "hill climbing" on steep slopes, which are prone to severe erosion and damage. It can be very

difficult to effectively prohibit ATV access to a road or trail that is closed to ATVs. Barriers and gates are often by-passed by the creation of new illegal trails around the barriers.

ATVs are only allowed on roads and trails that are specifically signed as open to ATV use. Any other re-routes, braid trails, newly established trails, hill climbs, mud bogs, or any other undesignated ATV use is illegal. Users are ticketed for riding on any roads or trails not posted as open to ATV use.

There are currently many illegal ATV trails spread throughout the unit. These include roads and trails that were once open to ATV use that have since been closed, newly created trails, or trails that bypass wet sections of trail that have become otherwise impassible.

List of Potential Impacts:

- Erosion and rutting
- Damage to wet areas
- Damage to vegetation
- Creation of new illegal trails onto existing trail network
- Trail locations might encourage trespass onto private lands

Trails sited close to private property can be disruptive to landowners and can encourage trespass onto private lands. Also, private landowners may create their own illegal trails which connect their property to an existing road or trail network.

In order to have a sustainable and environmentally sound trail system, users must be limited to trails that can sustain usage without environmental damage. This requires limiting motorized usage to roads and trails that have hardened trail surfaces, adequate drainage, and stabilized wetland crossings.

List of Potential Mitigation Measures:

- Do not open trails to ATVs in areas that have historically been subject to frequent illegal riding or trespass.
- Conduct periodic patrols of the trails by law enforcement to enforce regulations and ticket violations.
- Partner with willing outside groups such as ATV clubs, local towns, and St. Lawrence Co. to help educate users about illegal use and help monitor/patrol trails to prevent illegal use.
- Monitor illegal usage on roads and trails that are not open to ATV use. If an excessive amount of sampled roads and trails are found to be used illegally in a given month, this may result in the DEC portion of the trail system being closed temporarily. Repeated incidents of excessive illegal ATV use may result in permanent closing of the DEC portion of the trail system.

3.5 Conflicts with Other Users

Existing Conditions

The State Forests in this unit are used for a wide variety of recreational uses. Sportsmen extensively use these areas for hunting, fishing, and trapping throughout the year. Other common recreational uses include hiking, mountain biking, horse riding, cross country skiing, snowmobiling, canoeing, camping, bird watching, and general enjoyment of the natural world.

Overall, there has been a peaceful coexistence of most recreational and trail user groups.

List of Potential Impacts:

- Conflicts between ATV use and other recreational users

Recreationists who value and use State Forests because they provide places where one can experience solitude are opposed to the development of ATV trails because of concerns such as noise, pollution, disturbance to wildlife and ground or vegetation impacts. The impacts, intensity, and nature of both legal and illegal ATV use has been shown to cause other recreational uses to decline, and in some cases completely cease, once an area is opened for ATV use (Moore 1994; Strategic Plan 2010).

Some non-motorized trail users, such as hikers, mountain bikers, and skiers, have expressed a preference for trails which are relatively remote and not open to motorized users such as cars, ATVs, or snowmobiles, due to safety concerns as well as reduced noise. Some users recommend that multi-use trails for motorized recreation should be allowed in certain areas but there should also be trails dedicated to non-motorized recreation, especially on smaller isolated parcels such as Buckton and Southville State Forests.

Initial List of Potential Mitigation Measures:

- Educate users about minimizing potential conflicts on multi-use trails.
- Adopt regulations setting a maximum ATV speed limit of 25 miles per hour on DEC-maintained roads, the same as cars and trucks, and a maximum speed limit of 15 miles per hour on trails open to ATVs. Users would be ticketed for exceeding the posted speed limits.
- Display signs clearly at trail locations to inform users about trail uses.
- Limit motorized recreational use to designated roads and trails along selected travel corridors.

3.6 Wildlife

Existing Conditions

The State Forests in this unit provide over 30,000 acres of varied wildlife habitat, including coniferous and hardwood forests, large wetlands complexes, and miles of frontage along several major rivers.

Most of the major animal, plant, reptile, fish, and invertebrate species native to the St. Lawrence – Champlain Valley Ecoregion may be found on properties in the St. Lawrence Flatlands management unit.

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

The less severe winter conditions normally encountered within the St. Lawrence Transition zone do not generally result in the winter yarding of deer to the same extent as what normally occurs in the more forested western Adirondack Foothills zone. Still, some yarding does occur and there are two known yarding areas within the Brasher Forest that exceed 200 acres in size.

Fishing opportunities exist on the St. Regis River, Deer River, Redwater Pond and some tributaries. Smallmouth Bass, Walleye and Muskellunge offer the most popular fishing in the rivers while panfish and Largemouth Bass attract anglers to Redwater Pond.

Fishery resources are classified and managed as cool water. Primary sport fish are Walleye, Muskellunge, Northern Pike, and Smallmouth Bass. These fish are found in the larger streams and rivers where summer temperatures tend to be moderate. Cold water species, such as Brown and Brook Trout, have been collected during routine fisheries surveys in the vicinity of the State Forest parcels making up the unit.

Relatively few fisheries surveys (19) have been completed either on or in the vicinity of state-owned parcels incorporated in the unit. In general the low number of survey events is due to limited fishery resources and access. Relevant fishery resources are primarily found in the larger streams. A total of 69 fish species have been found within the watersheds at elevations below 800 feet.

Trapping is a popular pastime in this unit. The large wetland complexes spread throughout the area support healthy populations of Muskrat, Beaver, Mink, and River Otter. Upland areas support populations of Red Fox, Bobcat, Coyote and Fisher. Trapping is often necessary to control the large Beaver population in this area, which often dam road culverts and cause localized flooding problems.

The presence of at-risk species and communities on the St. Lawrence Flatlands Unit and in the surrounding landscape has been investigated to inform appropriate management actions and protections. This investigation was conducted in development of the draft St. Lawrence Flatlands Unit Management Plan (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 the Strategic Plan page 115 at http://www.dec.ny.gov/lands/64567.html.

Investigation included the following:

- A formal plant survey was conducted on this Unit in 2007 by the New York Natural Heritage Program (NYNHP).
- Element Occurrence Records for the NYNHP Biological and Conservation Data System were consulted for information.
- Review of the State Forest Predicted Richness Overlay (SF PRO) GIS layer, created by the NYNHP.
- Consultation of NYNHP species guides.
- Consultation of the NYS Comprehensive Wildlife Conservation Strategy

Table 3.A lists the At-Risk species confirmed or predicted on State Forests near the proposed trail alternatives. Data sources such as the Breeding Bird Atlas and SF PRO GIS layer provide information for a generalized area, but do not include specific locations where Rare, Threatened, or Endangered (RTE) species have been located. When RTE species have been confirmed within 300' of a proposed trail alternative, those species are listed specifically in the text for that alternative.

*Table 3.A. - At-Risk Species**

Species Name	NYNHP Rank	Habitat	Record Source	NYS Status
Confirmed or Predicted within the Unit				
Animals				
Indiana Bat (*Myotis sodalis*)	S1	Forest	SF PRO (PRED)	E SGCN
Birds				
American Bittern (*Botaurus lentiginosus*)	S4	Wetland	BBA (CONF)	PSC SGCN
Bald Eagle (*Haliaeetus leucocephalus*)	S2S3B,S2N	River	NHEO (CONF)	T SGCN
Black Tern (*Chlidonias niger*)	S2B	Wetland	NHEO (CONF)	E SGCN
Common Nighthawk (*Chordeiles minor*)	S4	Forest	BBA (CONF)	PSC SGCN
Cooper's Hawk (*Accipiter cooperii*)	S4	Forest	BBA (CONF)	PSC SGCN
King Rail (*Rallus elegans*)	S2B	Wetland	SF PRO (CONF)	T SGCN
Least Bittern (*Ixobrychus exilis*)	S3B, S1N	Wetland	NHEO (CONF)	T SGCN

Northern Goshawk (*Accipiter gentilis*)	S4B, S3N	Forest	BBA (CONF)	PSC SGCN
Northern Pintail (*Anas acuta*)	S2	Wetland	BBA (CONF)	GAME SGCN
Osprey (*Pandion haliaetus*)	S4	River	BBA (CONF)	PSC SGCN
Pied-billed Grebe (*Podilymbus podiceps*)	S3B, S1N	Wetland	NHEO (CONF)	T SGCN
Red-shouldered Hawk (*Buteo lineatus*)	S4	Forest	BBA (CONF)	PSC SGCN
Sharp-shinned Hawk (*Accipiter striatus*)	S4	Forest	BBA (CONF)	PSC SGCN
Upland Sandpiper (*Bartramia longicauda*)	S3B	River	NHEO (CONF)	T SGCN
Whip-poor-will (*Caprimulgus vociferous*)	S4	Forest	BBA (CONF)	PSC SGCN
Fish				
Blackchin Shiner (*Notropis heterodon*)	S1	River	SF PRO (PRED)	U SGCN
Eastern Sand Darter (*Ammocrypta pellucida*)	S2	River	NHEO (CONF)	T SGCN
Iowa Darter (*Etheostoma exile*)	S2	River	NHEO (CONF)	U SGCN
Lake Sturgeon (*Acipenser fulvescens*)	S1S2	River	NHEO(CONF)	T SGCN
Mooneye (*Hiodon tergisus*)	S1	River	NHEO (CONF)	T SGCN
Northern Brook Lamprey (*Ichthyomyzon fossor*)	S1	Stream	NHEO (CONF)	U
Mollusks				
Black Sandshell (*Ligumia recta*)	S2S3	River	SF PRO (PRED)	U SGCN
Yellow Lampmussel (*Lampsilis cariosa*)	S3	River	NHEO (CONF)	U SGCN
Dragonflies				
Brook Snaketail (*Ophiogomorphus aspersus*)	S2	River	NHEO (CONF)	U SGCN

Extra-striped Snaketail (*Ophiogomphus anomalus*)	S1	River	NHEO (CONF)	PSC SGCN
Rapids Clubtail (*Gomphus quadricolor*)	S1S2	River	SF PRO (PRED)	U SGCN
Reptiles				
Blanding's Turtle (*Emys blandingii*)	S2S3	Wetland	NHEO (CONF)	T SGCN
Plants				
Alpine Cliff Fern (*Woodsia alpina*)	S1	Cliff	SF PRO (PRED)	E
Arctic Rush (*Juncus trifidus*)	S2	Cliff	SF PRO (PRED)	T
Auricled Twayblade (*Listera auriculata*)	S1	Wetland	SF PRO (PRED)	E
Balsam Willow (*Salix pyrifolia*)	S2S3	Wetland	NHEO (CONF)	T
Brown Bog Sedge (*Carex buxbaumii*)	S2	River	NHEO (CONF)	T
Hill's Pondweed (*Potamogeton hilli*)	S2	Wetland	SF PRO (PRED)	T
Hooker's Orchid (*Platanthera hookeri*)	S1	Forest	SF PRO (PRED)	E
Lake-cress (*Neobecki aquatica*)	S2	Wetland	NHEO (CONF)	T
Dwarf Sand-cherry (*Prunus pumila var depressa*)	S2	Grassland	SF PRO (PRED)	T
Meadow Horsetail (*Equisetum pratense*)	S2	Forest	NHEO (CONF)	T
Mingan Moonwort (*Botrychium minganense*)	S1	Forest	SF PRO (PRED)	E
Northern Reedgrass (*Calamagrostis stricta*)	S2	Wetland	SF PRO (PRED)	T
Northern Bog Aster (*Symphyotrichum boreale*)	S2	Wetland	SF PRO (PRED)	T
Pink Wintergreen (*Pyrola asarifolia ssp. Asarifolia*)	S2	Forest	NYNH (CONF)	T

Rhodora (*Rhododendron canadense*)	S2	Wetland	NHEO (CONF)	T
Riverweed (*Podostemum ceratophyllum*)	S2	River	SF PRO (PRED)	T
Roseroot (*Rhodiola rosea*)	S1	Cliff	SF PRO (PRED)	E
Sartwell's Sedge (*Carex sartwellii*)	S1	Wetland	SF PRO (PRED)	T
Scarlet Indian-paintbrush (*Castilleja coccinea*)	S1	Grassland	NHEO (CONF)	E
Slender Marsh Bluegrass (*Poa paludigena*)	S1	Wetland	SF PRO (PRED)	E
Small Bur-reed (*Sparganium natans*)	S2	Wetland	NHEO (CONF)	T
Smooth Cliff Brake (*Pellaea glabella* ssp. *glabella*)	S2	Cliff	SF PRO (PRED)	T
Southern Twayblade (*Listera australis*)	S1	Wetland	SF PRO (PRED)	E
Southern Yellow Flax (*Linum medium var. texanum)*	S2	Grassland	NYNH (CONF)	T
Virginia False Gromwell (*Onosmodium virginianum*)	S1	Grassland	SF PRO (PRED)	E
Whorled Mountain-mint (*Pycnanthemum verticillatum var. verticillatum*)	S1S2	Grassland	NHEO (CONF)	T
Confirmed or Predicted in the Landscape and May Be Affected by State Forest Management				
Birds				
Golden Winged Warbler (*Vermivora chysoptera*)	S4	Grassland	BBA (CONF)	PSC SGCN
Grasshopper Sparrow (*Ammodramus savannarum*)	S4	Grassland	BBA (CONF)	PSC SGCN

Horned Lark (*Eremophila alpestris*)	S5	Grassland	BBA (CONF)	PSC SGCN
Loggerhead Shrike (*Lanius ludovicianus*)	S1	Grassland	BBA (CONF)	E SGCN
Northern Harrier (*Circus cyaneus*)	S3	Grassland	BBA (CONF)	T SGCN
Sedge Wren (*Cistothorus platensis*)	S2	Grassland	BBA (CONF)	T SGCN

*Defined as NYNHP rank S1, S2, S2-3, G1, G2 or G2-3 OR identified as an SGCN. Readers should note that species identified only from the SF PRO GIS layer are predicted occurrences which have not been confirmed as being present.

Key to Codes

BBA - Breeding Bird Atlas

(PRED) - Predicted Species

(CONF) - Confirmed Species

NHEO – Natural Heritage Element Occurrence GIS Layer

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

SF PRO – State Forest Predicted Richness Overlay GIS coverage

Status

E - Endangered Species (New York)

T - Threatened Species (New York)

PSC - Protected, Special Concern Species (New York)

SGCN - Species of Greatest Conservation Need

U - Unlisted (New York)

GAME - Game Species (New York)

Several species of fish listed as either State Endangered (E) or Threatened (T) have been reported in the Raquette River and St. Regis River watersheds. Eastern Sand Darter (E) and Lake Sturgeon (T) have both been reported in DEC surveys in the vicinity of the St. Lawrence Flatlands unit. Mooneye (T) have been reported at the downstream portions of the St. Regis River. Lake Sturgeon have been stocked in the lower Raquette and St. Regis Rivers in an effort to bolster populations and de-list the species.

This unit is also known to host at least two active Great Blue Heron (*Ardea herodias*) rookeries, located on Bombay and Brasher State Forests. Both rookeries are situated in large wetland complexes which are in remote sections of these forests.

Potential Impacts:

- Damage to habitat
- Noise disruption to wildlife near trail
- Cause wildlife injury and mortality

Wildlife habitat may be damaged through the trampling of vegetation along well used recreational trails, and the introduction of non-native invasive species.

Noise and disturbance from ATVs have been found to have a wide variety of potential negative effects on wildlife, including increased stress, altered movement patterns, avoidance of high use areas, and disrupted nesting activities of birds. ATV use may also cause direct mortality of animals, reptiles, and amphibians which are crossing roads or recreational trails.

Most of the rare, threatened, or endangered species in this unit are found in wetland or riverine habitats, or use these habitats during some period of their development. Any potential degradation of wetlands or other sensitive habitat could have a potentially severe negative impact on rare, threatened, or endangered species which are dependent on that habitat.

Special care must be taken to minimize disturbance during trail construction and maintenance activities which occur near known RTE species locations.

Initial List of Potential Mitigation Measures:

- Limit ATV use to designated trails.
- Minimize wetland and stream crossings. Trails will cross these sensitive areas only at stabilized crossings which may require culverts or small bridges. Do not alter surrounding wetland water levels during trail construction.
- Adopt regulations setting a maximum ATV speed limit of 25 miles per hour on DEC-maintained roads, the same as cars and trucks, and a maximum speed limit of 15 miles per hour on trails open to ATVs. Users would be ticketed for exceeding the posted speed limits.

3.7 Air Quality

Existing Conditions:

The air quality in the State Forests in this management unit is generally good. These forests are very rural with little heavy industry or industrial air pollution, compared to more urban areas. It is rare to have ozone warnings or other health related issues in this vicinity.

Potential Impacts:

- Air pollution caused by ATV exhaust
- Particulate matter stirred up by driving ATVs on unpaved roads

There are varying opinions about the environmental impacts of the air pollution produced by ATVs. Presently, it is not possible to measure air pollution caused specifically by ATVs. Noise pollution is generally an issue of concern for those who currently use or live near State Forests as described above. The Strategic Plan states "that machines will be monitored for compliance with muffler requirements and a minimum 1,000 foot buffer zone must be left between the trail and neighboring private structures."

Initial List of Potential Mitigation Measures:

- Adopt regulations setting a maximum ATV speed limit of 25 miles per hour on DEC-maintained roads, the same as cars and trucks, and a maximum speed limit of 15 miles per hour on trails open to ATVs. Users would be ticketed for exceeding the posted speed limits.
- ATVs used on this trail system must be licensed and registered, and must meet current EPA guidelines for air pollutants and exhaust.

3.8 Unavoidable Adverse Environmental Impacts

Unavoidable adverse environmental impacts associated with the upgraded road and trail network are very minor. These are temporary, and include noise, dust, odors and fumes.

3.9 Irreversible and Irretrievable Commitments of Environmental Resources

There are no actions that will be undertaken that will result in significant irreversible or irretrievable commitment of resources. If at some later time, the improved road and trail network is no longer used, the trails and roads and any improvements made to them will revert back to a natural state. The only permanent commitment of resources are the raw materials used for upgrading the road and trail network, and the energy source expended during the construction phase and maintenance of the area, all of which will be extremely minimal.

3.10 Growth Inducing Aspects of the Proposed Action

An increase in use to the area can be expected as a result of upgrading the existing road and trail network to a multi-use trail system allowing ATV use. The influx of users can be expected to benefit local economies.

3.11 Impacts of the Proposed Action on the Use and Conservation of Energy

The proposed action will cause only a minor increase in the use of energy. This will occur during the construction phase of the project as a result of the use of fossil fuels to operate machinery for road and trail hardening and grading, culvert and bridge construction, and for brushing of vegetation. This will cause only a temporary increase in energy use.

4.0 Alternatives Analysis

The *Strategic Plan for State Forest Management* allows for ATV use on state maintained roads and trails under two conditions (p. 222):

"Based on evaluation of past efforts to accommodate ATV use and the many impacts and constraints associated with off road vehicles, the Department will not permit ATV use on State Forests , except;

- as may be considered to accommodate a "connector trail" through Unit Management Planning or a similar public process; and
- on those specific routes designated for use by DEC-issued Motorized Access Permit for People with Disabilities (MAPPWD)."

Connector Trails

The following conditions must be met for a proposed ATV Connector Trail across State Forest land (Strategic Plan p. 223):

"In the event another entity is establishing a legitimate public ATV trail system on lands adjacent to a State Forest, and a State Forest is needed to serve as a connecting link, or in the event that a State Forest road or trail could serve to connect already designated ATV trails open to the public, DEC will evaluate and consider the proposal. Any such trail proposal must comply with state law, department policy and regulations. If it is determined to be environmentally compatible, a connecting trail could be established on the State Forest. This would be dependent on the availability of sufficient funds to establish and maintain a sustainable trail. The State Forest based connector trail, if approved, must follow the shortest environmentally acceptable route available.

The inclusion of a connector trail in a UMP and the subsequent establishment of any such trail could only occur if it does not compromise the protection of the natural resources of the Unit, significantly conflict with neighbors of State Forests, nor interfere with other established recreational areas. Such designation shall only occur through the amendment or adoption of a UMP or another process which provides similar opportunities for public review and comments and full SEQRA review of the proposed designation.

Connector trails will be monitored to ensure that legal use does not lead to illegal off-trail use within State Forest lands or on neighboring private property. Should illegal use increase significantly adjacent to any connector trail, that trail will be subject to closure."

Additionally, any trail alternatives which open roads that are open to motor vehicles must comply with the New York State Vehicle and Traffic Law (VTL) Section 2405, which prohibits the opening of highways (i.e. any road open for public motor vehicle use) to ATV use unless "it is otherwise impossible for ATVs to gain access to areas or trails adjacent to the highway." Courts have repeatedly interpreted this to mean that public roads can only be open to ATV use when that portion of road being opened provides a critical connection between existing trail systems in order to make the trail system viable. Highways designated as open to ATV use are not trails for purposes of the VTL, so road-to-road connections are suspect under VTL §2405. Alternatives which open large sections of public road without direct trail-to-trail connections could be subject to a legal challenge under VTL §2405. To comply with VTL §2405, the roads could be closed to all motorized vehicles but ATVs, but that alternative would deny the use of these areas to any other motorized vehicles.

4.1 Proposed Connector Trail through Brasher State Forest

This section provides an alternatives review of each of the Brasher State Forest connector trail proposals. Roads and trails maintained by the Department of Environmental Conservation (DEC) are denoted in the text.

Alternative 1a (preferred alternative). (See Figure 10 – Alternatives 1a and 1b). During scoping sessions for the Brasher UMP in 2001, local ATV clubs requested a multiple use recreational trail (including ATVs) which would cross portions of Brasher State Forest, as well as St. Lawrence County Forest #18 located on the Bush Road. This route is the preferred alternative for a connector trail through Brasher State Forest.

The following roads and trails are proposed for opening to ATV use, beginning in the southeast portion of Brasher State Forest at the junction of St. Lawrence County Route 50 and the Burns Trail, and heading northerly:

Road or Trail Name	Distance (miles)
Burns Trail (DEC)	1.4
Shop Loop Haul Road (DEC)	0.3
Ranger Trail (DEC)	0.3
Camp / Larue PFAR (DEC)	0.9
Kennehan Haul Road (DEC)	0.8
North Kennehan Trail (DEC)	0.8
County Trail	0.2 (St. Lawrence County Forest)
John G. Trail	0.4 (St. Lawrence County Forest portion)

John G. Trail (DEC)	1.4 (state forest portion)
McCarthy PFAR (DEC)	0.2
Bush PFAR (DEC)	0.5
Wilson PFAR (DEC)	0.1
Ralph B. Trail (DEC)	0.6
Bobcat Trail (DEC)	0.9
Bush PFAR (DEC)	0.5
Bush Road (town)	0.3

The proposed ATV route would end at the junction of the Bush Road and St. Lawrence County Route 55 in the hamlet of Brasher Iron Works. This route would travel through the central portion of Brasher State Forest, and would involve opening a total of 2.2 miles of DEC Public Forest Access Roads, 1.1 miles of Haul Roads, and 5.4 miles of other recreational trails on Brasher State Forest to ATV use. An additional 0.6 mile of trails would need to be opened on St. Lawrence County Forest #18, and would require the St. Lawrence County Legislature to officially designate the county portion of the trail as opened to ATV use. A 0.3 mile portion of the Bush Road in Brasher Iron Works would need to be opened to ATV use by the Town of Brasher. The longest continuous stretch of road opened to ATV use would be 1.7 miles long (Camp/Larue PFAR & Kennehan Haul Road).

There are several portions of these roads and trails which would require rehabilitation before they could be re-opened to ATV use. The main PFARs are in good condition and would require no additional maintenance. The haul roads are generally in good condition but would require brushing, grading, and limited trail hardening, especially the Kennehan Haul Road. Most of the DEC trails included in this route have received minimal maintenance over the last several years due to staffing shortages and are in fair to poor condition. They would require brushing, grading, and localized trail hardening and culvert installations.

There are two trail sections that are in very poor condition and would require substantial improvement.

The North Kennehan Trail contains several seasonally wet and muddy sections that need surfacing and ditching. A major problem area is “Alligator Swamp” which is located near the boundary line of St. Lawrence RA 5 (Brasher State Forest) and the southwestern boundary line of County Forest #18. The trail crosses the outlet of a large 200 acre+ wetland. There is a section of trail approximately 200 feet long that is under standing water during much of the year. This section would require either large culverts or a small bridge to cross the outlet, as well as substantial fill for raising the trail surface and tread hardening. This area is within the 100’ buffer of a classified state and federal protected wetland. Any fill or trail work within this area will require permits from the appropriate regulatory agency – both

the NYS Department of Environmental Conservation (State Classified Wetlands) and the US Army Corps of Engineers (Federal Classified Wetlands).

The Bobcat Trail contains a section of seasonally wet trail (near the intersection with the Ralph B. Trail) that was previously hardened with cobble rock, but still remains wet. There is an approximately 150 foot long section that needs additional drainage, buildup of the trail surface, and culvert installation.

Most of the work needed along roads and trails will occur in areas that are wet and require stabilization. Many road and trail segments are seasonally wet for short distances, and may require ditching, culvert installation and surfacing with a foot or more of hard fill, such as crushed stone or cobble rock.

Some sections of trail have become damaged by past ATV use, and consist of low rutted areas which are filled with standing water for distances of 10 to 50 feet. These areas would be smoothed, and geotextile would be placed in the wet trail section. Then crushed stone or cobble would be placed on the geotextile to raise the trail surface a foot or more and provide a hard, stable trail surface. In some cases, it may be preferable to re-route a trail in a better location, rather than re-use a trail which is poorly located and will require frequent maintenance.

Large wetlands or streams will require drainage structures to let water pass under the trail unimpeded. Wetland crossings would utilize either a large diameter open bottomed arch culvert, or a snowmobile bridge ranging from 10 to 25 feet long. A snowmobile bridge would require installation of abutments, which would be composed of either wood cribbing or large rock rip-rap. Both culverts and bridges would require the placing of crushed stone or fill for covering approaches to the wetland crossing. Silt fencing will be used near wetlands to minimize soil movement and erosion from the trail corridor. All road and trail work will be performed using guidelines found in the *New York State Forestry Best Management Practices for Water Quality: BMP Field Guide.*

Heavy equipment usage will be required to perform rehabilitation and maintenance on the trail system. Activities which involve transporting crushed rock and stone will require the use of a small dump truck to deliver the material as close to the worksite as possible. The material will then be re-loaded into either a Utility Task Vehicle (UTV) with a dump box or a small pull behind dump trailer and taken to the worksite. A small mini-excavator would be used for ditching, culvert installation, and placing of hard fill. A small bulldozer or a tractor and York rake would be used for grading trails when accessibility and trail conditions permit.

Trees located along haul roads and trails may need to be removed or limbed in order to increase headroom clearance for motor vehicles or horse riders using the trail system. Trees may also be removed to straighten and widen narrow sections of trail, or improve areas with poor sight distance along the trail. In general, tree removal is expected to be relatively minor and the existing road and trail dimensions will be maintained or slightly widened.

This is the preferred alternative because it would utilize primarily trails, with limited use of roads only where no other suitable routes were available. It would provide a connecting link to County Forest #18

in the central portion of Brasher State Forest, as well as the communities of Brasher Falls and Brasher Iron Works. This alternative would also use trails that are more scenic and remote, which riders have said they prefer compared to traveling along well traveled motor vehicle roads.

Alternative 1b. (See Figure 10 – Alternatives 1a and 1b). This alternative is very similar to Alternative 1a, with some minor re-routing in the vicinity of County Forest #18.

The southern section of the trail would remain the same, utilizing the Burns Trail (DEC), Shop Loop Haul Road (DEC), Ranger Trail (DEC), Camp / Larue PFAR (DEC), Kennehan Haul Road (DEC), and North Kennehan Trail (DEC). It would then travel north on the County Trail a distance of 0.8 mile to the junction with the Bush PFAR. Then it would travel east on the Bush PFAR (DEC) a distance 1.3 miles to the junction with the McCarthy PFAR (DEC). It would then follow the same route as Alternative 1a, using the Bush PFAR (DEC), Wilson PFAR (DEC), Ralph B. Trail (DEC), Bobcat Trail (DEC), Bush PFAR (DEC), and Bush Road ending at St. Lawrence County Route 55 in Brasher Iron Works.

This alternative would increase travel along the Bush PFAR from 0.5 to 1.3 miles, but would eliminate 1.4 miles of travel on the John G. Trail (State Forest portion) and 0.2 mile on the McCarthy PFAR. The distance traveled on trails on County Forest #18 would increase from 0.6 to 0.8 mile.

This alternative would use more roads and fewer trails, which would likely decrease needed rehabilitation and maintenance. The 2 poorest trail sections (North Kennehan Trail and Bobcat Trail) would still require substantial rehabilitation.

Total distances traveled on this route would be 2.8 miles of DEC Public Forest Access Roads, 1.1 miles of Haul Roads, and 4.0 miles of other recreational trails on Brasher State Forest. A total of 0.8 mile of trails would need to be opened on St. Lawrence County Forest #18, and 0.3 mile of the Bush Road (town road).

Alternative 1c. (See Figure 10 – Alternatives 1c and 1d). This route uses primarily town of Brasher roads for a trail corridor, but also includes a short section of the Bush Public Forest Access Road (PFAR), which would allow connection to the northern end of County Forest #18.

Under this alternative, the Town of Brasher would have to re-open public roads previously used by ATVs. New York State Vehicle and Traffic Law (VTL) Section 2405 prohibits the opening of highways (i.e. any road open for public motor vehicle use) to ATV use unless "it is otherwise impossible for ATVs to gain access to areas or trails adjacent to the highway." Courts have repeatedly interpreted this to mean that public roads can only be open to ATV use when that portion of road being opened provides a critical connection between existing trail systems in order to make the trail system viable. Highways designated as open to ATV use are not trails for purposes of the VTL, so road-to-road connections are suspect under VTL §2405. Because Alternative 1c opens large sections of public road without direct trail-to-trail connections, implementation of this alternative could be subject to a legal challenge under VTL §2405. To comply with VTL §2405, the town could close the roads identified in Alternative 1c to all

motorized vehicles but ATVs, but that alternative would deny the use of Brasher State Forest to any other motorized vehicles.

The southern portion of the trail would begin at the junction of the Leary-Flint Road and the Burns Road. It would travel west 2.4 miles on the Burns Road to the junction with St. Lawrence County Route 50. Then it would travel 0.9 mile west on St. Lawrence County Route 50 to the intersection with the Vice Road near the village of Brasher Falls. It would then travel 0.5 mile north on the Vice Road and turn sharply left, continuing north on the Vice Road for an additional 3.9 miles to the junction with the Bush Public Forest Access Road. A 1.0 mile section of the Bush PFAR (DEC) leading from the Vice Road east to County Forest #18 would be opened to ATV use, and would allow ATV users access to any trails opened to ATV use on the County Forest. Users could then return to the Vice Road and continue north 3.1 miles on the Vice Road, to the intersection with the Meyers Road. Riders would then continue 2.3 miles east on the Meyers Road to the junction with St. Lawrence County Route 55, between the hamlets of Brasher Iron Works and Helena. From here the trail would travel 0.8 mile southeast on County Route 55, to the junction with the Smith Road. It would then travel 0.3 mile north on the Smith Road to the junction with the Quinell Road. The trail would then continue 2.9 miles northwest on the Quinell Road to the hamlet of Helena.

The St. Lawrence County Roads which would need to be opened to ATVs are as follows (1.7 miles total):

St. Lawrence County Route 50 – 0.9 mile

St. Lawrence County Route 55 – 0.8 mile

The Town of Brasher Roads which would need to be opened to ATVs are as follows (15.4 miles total):

Burns Road – 2.4 miles

Vice Road – 7.5 miles

Meyers Road – 2.3 miles

Smith Road – 0.3 mile

Quinell Road – 2.9 miles

The DEC Public Forest Access Roads which would need to be declared open to ATVs are as follows:

Bush Public Forest Access Road – 1.0 mile

Most of the roads along this route are in fair to good condition and would require little additional maintenance to allow a multi-use trail system. However, the northernmost 2.5 mile section of the Vice Road (between Brasher Center and the Meyers Road) has not been maintained in many years and is in very poor condition. It would require, at minimum, ditching, grading and culvert installation.

There is a confirmed record of Eastern Sand Darter, a threatened fish species, being present in the Deer River near this proposed alternative route.

Alternative 1d. (See Figure 10 – Alternatives 1c and 1d). This alternative is similar to Alternative 1c above, but uses different roads in the central section.

The southernmost section would remain the same, beginning at the junction of the Leary-Flint Road and the Burns Road. The trail would proceed northwest using the Burns Road, St. Lawrence County Route 50, and the Vice Road. At the intersection of the Vice Road and the Bush PFAR, the trail would proceed east 1.0 mile on the Bush PFAR (DEC) to St. Lawrence County Forest 18. Riders could then access any trails on the County Forest that were open to ATV use. Riders would then continue northeast on the Bush PFAR (DEC) an additional 3.6 miles to the Bush Road, and then proceed north 0.3 mile on the Bush Road to the intersection with St. Lawrence County Route 55 in Brasher Iron Works. The trail would then proceed north 0.3 mile on St. Lawrence County Route 55 to the junction with the Smith Road. The trail from this point would follow the same route as Alternative 1c, utilizing the Smith and Quinell Roads to reach the hamlet of Helena.

This option would eliminate the northernmost 2.5 mile portion of the Vice road that is in poor condition, as well as the Meyers Road, and would re-direct traffic onto the Bush PFAR and Bush Road.

Compared to Alternative 1c, the total amount of St. Lawrence County roads open to ATVs would decrease from 1.7 to 1.2 miles. Town of Brasher roads open to ATVs would decrease from 15.4 to 10.3 miles. DEC maintained PFARS open to ATVs would increase from 1.0 to 4.6 miles.

There is a confirmed record of Eastern Sand Darter, a threatened fish species, being present in the Deer River near this proposed alternative route.

4.2 Proposed Loop Trails through Brasher and Bombay State Forests

The Draft St. Lawrence Flatlands Unit Management Plan was offered for public review and comment from November 5th, 2014 to January 15th, 2015. As part of the review and comment process, the St. Lawrence County Recreational Trails coordinator, in conjunction with the Town of Brasher, submitted a proposal for 6 loop trails covering various routes in Brasher and Bombay State Forests. These routes would also intersect with the proposed Connector Trail through Brasher State Forest (Alternative 1a), as well as Town of Brasher Roads, St. Lawrence County Roads, and trails across county and private land which would be opened to ATV use.

The following is an alternatives review of each of the loop trail proposals. Roads and trails maintained by the DEC are denoted in the text.

Alternative 2a (Loop 1). (See Figure 10 – Alternatives 1a and 2a). This proposal would utilize a system of Town of Brasher roads and DEC roads to form a loop southwest of Brasher Iron Works. The loop would begin at the intersection of the Meyers Road and Vice Road. It would then travel southwest 1.3 miles on the Vice Road to the intersection with the northern end of the Hastings Falls Haul Road. Riders would then travel 2.0 miles southwest on the Hastings Falls Haul Road (DEC) to the

intersection with the Vice Road. The trail would then continue 0.2 mile south on the Vice Road to the intersection with the Bush PFAR. It would then continue 2.8 miles northeast along the Bush PFAR (DEC) to the intersection with the Wilson PFAR. Then It would travel 2.1 miles north on the Wilson PFAR (DEC) to the intersection with the Meyers Road. Lastly, It would travel 0.3 mile northwest on the Meyers Road to the beginning point.

This route would travel through the central portion of Brasher State Forest, and would involve opening a total of 4.9 miles of DEC Public Forest Access Roads, 2.0 miles of DEC Haul Roads, and 1.8 miles of Town of Brasher Roads to ATV use. This loop overlaps with portions of the proposed Connector Trail through Brasher State Forest (Alternative 1a). The roads common to both proposals include the Bush PFAR (0.5 mile) and the Wilson PFAR (0.1 mile).

Most of the roads along this route are in fair to good condition and would require little additional maintenance to allow a multi-use trail system. However, the northernmost 1.3 mile section of the Vice Road (between Brasher Center and the Meyers Road) has not been maintained in many years and is in very poor condition. It would require, at minimum, ditching, grading and culvert installation.

This section of Brasher State Forest can be accessed by using the Meyers Road and the Vice Road (Town of Brasher Roads). County Forest #18 would still be accessible from the proposed Connector Trail through Brasher State Forest (Alternative 1a). This proposal does not meet Strategic Plan requirements for a connector trail, which state that "The State Forest-based connector trail, if approved, must follow the shortest environmentally acceptable route available." In this case, the general area could be accessed by the proposed Brasher State Forest Connector Trail (Alternative 1a), plus Town of Brasher Roads, without opening additional DEC maintained roads.

This route opens a total of 8.7 miles of Town of Brasher and DEC Roads to ATV use. This proposal for opening the Hastings Falls Haul Road, Bush PFAR, and Wilson PFAR to ATV use does not meet the requirements of Vehicle and Traffic Law §2405, which prohibits the opening of highways (i.e. any road open for public motor vehicle use) to ATV use unless "it is otherwise impossible for ATVs to gain access to areas or trails adjacent to the highway." Courts have repeatedly interpreted this to mean that public roads can only be open to ATV use when that portion of road being opened provides a critical connection between existing trail systems in order to make the trail system viable. Highways designated as open to ATV use are not trails for purposes of the VTL, so road-to-road connections are suspect under VTL §2405. Alternatives which open large sections of public road without direct trail-to-trail connections could be subject to a legal challenge under VTL §2405.

Alternative 2b (Loop 2). (See Figure 10 – Alternatives 1a and 2b). This proposal would utilize a system of Town of Brasher roads, DEC roads, DEC trails, and trails on St. Lawrence County Forest #18 to form a loop leading from Brasher Falls north to the County Forest and then returning to Brasher Falls.

The trail would begin at the intersection of the Vice Road and the Camp / Larue PFAR north of Brasher Falls. It would travel 1.4 miles north on the Camp / Larue PFAR (DEC) to the intersection with the Kennehan Haul Road. Riders would then travel 0.8 mile north on the Kennehan Haul Road (DEC) to the

intersection with the North Kennehan Trail. The trail would then travel north 0.8 mile on the North Kennehan Trail (DEC) to the intersection with the County Trail (located on St. Lawrence Co. Forest #18). It would then travel 0.8 mile north on the County Trail to the intersection with the Bush PFAR. Users would then travel 0.9 mile west on the Bush PFAR (DEC) to the intersection with the Vice Road. The route would then travel 3.9 miles south along the Vice Road to the beginning point.

This route would travel through the central portion of Brasher State Forest, and would involve opening a total of 2.3 miles of DEC Public Forest Access Roads, 0.8 mile of DEC Haul Roads, 0.8 mile of DEC trails. 0.8 mile of county trails, and 3.9 miles of Town of Brasher Roads to ATV use. This loop overlaps with portions of the proposed Connector Trail through Brasher State Forest (Alternative 1a). The roads and trails common to both proposals include the Camp / Larue PFAR (0.9 mile), Kennehan Haul Road (0.8 mile), and the North Kennehan Trail (0.8 mile).

Most of the roads along this route are in good condition and would require little additional maintenance to allow a multi-use trail system. However, the Kennehan Haul Road and North Kennehan Trail will require maintenance (see description of work needed under Alternative 1a).

This section of Brasher State Forest can be accessed by the proposed Connector Trail through Brasher State Forest (Alternative 1a). Opening the southern portion of the Camp / Larue PFAR does not provide access to additional areas. This proposal does not meet Strategic Plan requirement for a connector trail, which states that "The State Forest-based connector trail, if approved, must follow the shortest environmentally acceptable route available." In this case, the general area could be accessed by the proposed Brasher State Forest Connector Trail (Proposal 1a), without opening additional DEC maintained Roads.

This route opens a total of 7.0 miles of Town of Brasher and DEC Roads as well as 1.6 miles of DEC and county trails to ATV use. This proposal does not meet the requirements of Vehicle and Traffic Law §2405, which prohibits the opening of highways (i.e. any road open for public motor vehicle use) to ATV use unless "it is otherwise impossible for ATVs to gain access to areas or trails adjacent to the highway." Courts have repeatedly interpreted this to mean that public roads can only be open to ATV use when that portion of road being opened provides a critical connection between existing trail systems in order to make the trail system viable. Highways designated as open to ATV use are not trails for purposes of the VTL, so road-to-road connections are suspect under VTL §2405. Alternatives which open large sections of public road without direct trail-to-trail connections could be subject to a legal challenge under VTL §2405.

Alternative 2c (Loop 3). (See Figure 10 – Alternatives 1a, 2c, 2d). This proposal would utilize a system of Town of Brasher roads, St. Lawrence County roads, and DEC roads to form a loop around the Walter F. Pratt CC Dam / Redwater camping area near North Lawrence. The trail would begin at the intersection of the Old Keenan Road and the CC Dam PFAR. It would travel southwest 1.3 miles along the CC Dam PFAR (DEC) to the intersection with St. Lawrence Co. Route 55. Riders would then travel south 0.5 mile on SLC Route 55 to the intersection with the East Cotter Road. It would then travel 1.0

mile northeast along the East Cotter Road to the intersection with the Old Keenan Road. Users would then travel 0.6 mile north along the Old Keenan Road to the beginning point.

This route would travel through the southeastern portion of Brasher State Forest, and would involve opening a total of 1.3 miles of DEC Public Forest Access Roads, 1.6 miles of Town of Brasher Roads, and 0.5 mile of St. Lawrence County Roads to ATV use.

The CC Dam PFAR and County Route 55 are in good condition and would require little additional maintenance to allow a multi-use trail system. However, the East Cotter and Old Keenan Roads have not been maintained in many years and are in very poor condition. They would require, at minimum, ditching, grading and culvert installation.

The CC Dam PFAR was open to ATVs during the late 1980s and into the 1990s. This area contains a popular camping area that is heavily used during the summer months. The camping area was subject to repeated problems with ATV use: ATVs driving in closed areas such as on lawns and on the dam impoundment, ATVs not following the posted speed limits, and large group ATV rides which disturbed other campers and recreationalists. It is likely that if this route were re-opened to ATV use, many of these problems would re-occur. Due to past problems with ATV use in this area, the Department does not support opening roads and trails in the Walter F. Pratt / CC Dam picnic area to ATV use now or in the future.

This section of Brasher State Forest can be accessed by using the Old Keenan and East Cotter Roads (Town of Brasher Roads). This proposal does not meet Strategic Plan requirements for a connector trail, which state that "The State Forest-based connector trail, if approved, must follow the shortest environmentally acceptable route available." In this case, the general area could be accessed by Town of Brasher Roads, without opening additional DEC maintained roads.

This route opens a total of 3.4 miles of Town of Brasher, DEC, and County Roads to ATV use. This proposal for opening the CC Dam PFAR to ATV use does not meet the requirements of Vehicle and Traffic Law §2405, which prohibits the opening of highways (i.e. any road open for public motor vehicle use) to ATV use unless "it is otherwise impossible for ATVs to gain access to areas or trails adjacent to the highway." Courts have repeatedly interpreted this to mean that public roads can only be open to ATV use when that portion of road being opened provides a critical connection between existing trail systems in order to make the trail system viable. Highways designated as open to ATV use are not trails for purposes of the VTL, so road-to-road connections are suspect under VTL §2405. Alternatives which open large sections of public road without direct trail-to-trail connections could be subject to a legal challenge under VTL §2405.

There is a confirmed record of Northern Brook Lamprey, an imperiled fish species, being present in Redwater Creek near this proposed alternative route.

Alternative 2d (Loop 4). (See Figure 10 – Alternatives 1a, 2c, 2d). This proposal would utilize a system of Town of Brasher roads and DEC roads to form a loop northeast of the Walter F. Pratt CC Dam /

Redwater camping area. It would begin at the intersection of the Old Keenan Road and the Liberty PFAR. It would travel northeast 1.7 miles along the Liberty PFAR (DEC) to the end of the currently maintained road. Here the road becomes the Pascal Haul Road (DEC), which is an unmaintained road in poor condition. The route would continue 2.5 miles northwest along the Pascal Haul Road (DEC) to the intersection with the Old Keenan Road. The trail would then travel 1.0 mile south along the Old Keenan Road to the beginning point.

This route would travel through the eastern portion of Brasher State Forest, and would involve opening a total of 1.7 miles of DEC Public Forest Access Roads, 2.5 miles of DEC Haul Roads, and 1.0 mile of Town of Brasher Roads to ATV use.

The Liberty PFAR is in good condition and would require little additional maintenance to allow a multi-use trail system. However, the Pascal Haul Road and Old Keenan Roads have not been maintained in many years and are in very poor condition. They would require, at minimum, ditching, grading and culvert installation.

This route has several difficulties. If the Old Keenan Road were opened to ATV use, opening the DEC maintained Liberty PFAR and Pascal Haul Road to ATVs would be redundant – riders could access the main north south route along the Old Keenan Road without opening any DEC roads in this area.

The Pascal Haul Road is also in very poor condition, containing many wet and flooded sections of road. In the Draft St. Lawrence Flatlands UMP, this road is proposed for rebuilding to PFAR standards, and would be opened to ATV use through the MAPPWD program, in which persons with disabilities may obtain permits to use ATVs on roads and trails posted as MAPPWD routes. The Pascal Haul Road was selected for this designation because it is a relatively isolated area which would be amenable to hunting and other recreational uses. Opening this area to ATV use by other riders would potentially limit is effectiveness and value to MAPPWD trail users.

This section of Brasher State Forest can be accessed by using the Old Keenan Road (Town of Brasher Road). This proposal does not meet Strategic Plan requirements for a connector trail, which state that "The State Forest-based connector trail, if approved, must follow the shortest environmentally acceptable route available." In this case, the general area could be accessed by Town of Brasher Roads, without opening additional DEC maintained roads.

This route opens a total of 5.2 miles of Town of Brasher and DEC Roads to ATV use. This proposal for opening the Liberty PFAR and Pascal Haul Road to non-MAPPWD ATV use does not meet the requirements of Vehicle and Traffic Law §2405, which prohibits the opening of highways (i.e. any road open for public motor vehicle use) to ATV use unless "it is otherwise impossible for ATVs to gain access to areas or trails adjacent to the highway." Courts have repeatedly interpreted this to mean that public roads can only be open to ATV use when that portion of road being opened provides a critical connection between existing trail systems in order to make the trail system viable. Highways designated as open to ATV use are not trails for purposes of the VTL, so road-to-road connections are

suspect under VTL §2405. Alternatives which open large sections of public road without direct trail-to-trail connections could be subject to a legal challenge under VTL §2405.

Alternative 2e (Loop 5). (See Figure 10 – Alternatives 1a, 2e, 2f). This proposal would utilize a system of Town of Brasher roads, Town of Moira roads, DEC roads, and DEC trails to form a loop leading from Shady City east into Bombay State Forest in Franklin County, then north towards Brasher Iron Works, and finally returning south to Shady City.

The loop would begin at the intersection of the Old Keenan Road and the Hurley Road in Shady City. It would travel 2.2 miles east along the Hurley Road to the Franklin County line. Here the Hurley Road changes to the Best Road (Town of Moira). The route would continue an additional 1.1 miles east on the Best Road to the intersection with the Railroad Bed PFAR. It would then travel 4.3 miles northwest along the Railroad Bed PFAR (DEC) through Bombay State Forest and Brasher State Forest to the intersection with the Old Keenan Road. Users would then travel 2.5 miles south along the Old Keenan Road to the beginning point. In addition to this route, it is also proposed to open 2 DEC trails as alternate routes leading from the Old Keenan Road to the Railroad Bed PFAR. These trails include the Bear Run Trail (0.4 mile) and the Hoggsback Trail (1.9 miles).

This route would travel through the eastern portion of Brasher State Forest, and would involve opening a total of 4.3 miles of DEC Public Forest Access Roads, 2.3 miles of DEC trails, 4.7 miles of Town of Brasher Roads, and 1.1 miles of Town of Moira Roads to ATV use.

The Railroad Bed PFAR is in good condition and would require little additional maintenance to allow a multi-use trail system. However, the Hurley, Old Keenan, and Best Roads have not been maintained in many years and are in very poor condition. They would require, at minimum, ditching, grading and culvert installation.

This section of Brasher State Forest can be accessed by using the Hurley and Old Keenan Roads (Town of Brasher Roads) and the Best Road (Town of Moira Road). This proposal does not meet Strategic Plan requirements for a connector trail, which state that "The State Forest-based connector trail, if approved, must follow the shortest environmentally acceptable route available." In this case, the general area could be accessed by Town of Brasher and Moira Roads, without opening additional DEC maintained roads and trails. This would provide access from Shady City to Brasher Iron Works, as well as Moira in Franklin County. Additionally, the Hoggsback trail was open to ATVs during the 1980s and 1990s and was later closed to ATV use due to rutting in the central portion of the trail. The Hoggsback Trail can be used by snowmobiles under frozen conditions, but it is not suitable to ATV use.

This route opens a total of 10.1 miles of Town of Brasher, Town of Moira, and DEC Roads, as well as 2.3 miles of DEC trails to ATV use. This proposal for opening the Railroad Bed PFAR to ATV use does not meet the requirements of Vehicle and Traffic Law §2405, which prohibits the opening of highways (i.e. any road open for public motor vehicle use) to ATV use unless "it is otherwise impossible for ATVs to gain access to areas or trails adjacent to the highway." Courts have repeatedly interpreted this to mean that public roads can only be open to ATV use when that portion of road being opened provides a

critical connection between existing trail systems in order to make the trail system viable. Highways designated as open to ATV use are not trails for purposes of the VTL, so road-to-road connections are suspect under VTL §2405. Alternatives which open large sections of public road without direct trail-to-trail connections could be subject to a legal challenge under VTL §2405.

There are confirmed records of several threatened species located along this proposed alternative route. Species know to be present nearby include: Blanding's Turtle (reptile), Least Bittern and Pied-billed Grebe (birds), and Balsam Willow and Meadow Horsetail (plants).

Alternative 2f (Loop 6). (See Figure 10 – Alternatives 1a, 2e, 2f). This proposal would utilize a system of Town of Brasher roads, DEC trails, and trails across private land to form a loop leading from Helena to Brasher Iron Works and return. It would begin at the intersection of Depot Street and the Quinell Road in Helena. It would proceed 2.9 miles southeast along the Quinell Road to the intersection with the Smith Road. The route would then travel north 0.5 mile along the Smith Road to the intersection with the Railroad Bed Access Trail. Users would then travel northwest 0.8 miles along the Railroad Bed Access Trail (DEC) to the intersection with the Quinell Road. Riders would then use either the Quinell Road or a snowmobile trail across private lands to return 1.8 miles to the starting point in Helena.

This route would travel through the northern portion of Brasher State Forest, and would involve opening a total of 0.8 mile of DEC Trails, 3.4 miles of Town of Brasher Roads, and up to 1.8 miles of trails on private land to ATV use.

This section of Brasher State Forest can be accessed by using the Quinell and Smith Roads (Town of Brasher Roads). This would provide access from Helena to Brasher Iron Works. This proposal does not meet Strategic Plan requirement for a connector trail, which states that "The State Forest-based connector trail, if approved, must follow the shortest environmentally acceptable route available." In this case, the general area could be accessed by Town of Brasher Roads, without opening additional DEC trails.

There is a confirmed record of Eastern Sand Darter, a threatened fish species, being present in the Deer River near this proposed alternative route.

4.3 Proposed Connector Trail through Buckton and Ft. Jackson State Forests

During the comment period for the draft St. Lawrence Flatlands UMP, the St. Lawrence County Recreational Trails coordinator submitted a proposal for a connector trail through Buckton and Ft. Jackson State Forests in the town of Stockholm.

The following is an alternatives review of the proposed Connector Trail through Buckton and Ft. Jackson State Forests. Roads and trails maintained by the DEC are denoted in the text.

Trail improvements needed to prepare State Forest roads and trails for use as ATV routes may commence upon approval of SEQR findings associated with this SGEIS, and the St. Lawrence Flatlands UMP, pending suitable on-site conditions, along with necessary permits, and approved work plans being secured. However, State Forest roads and trails necessary for the connection to the cross-county trail

will be opened only when landowner permissions for crossing all additional properties necessary for the connection have been secured to the satisfaction of the department, so that the entire connection can be opened at one time.

Alternative 3a. (See Figure 10 – Alternatives 1a and 3a). This proposal would create a multi-use connector trail through Buckton and Ft. Jackson State Forests. This trail would use a combination of DEC roads and trails, Town of Stockholm roads, and trails across private land to provide a multi-use corridor trail. Only those sections of the multi-use trail which cross State Forests will be considered in this alternative review.

In Buckton State Forest, the trail would begin at the northern edge of the forest at the intersection of U.S. Highway 11 and the Club Road. It would travel south along the Club Road for 0.4 mile. It would then follow an existing snowmobile trail (DEC) 0.3 mile south to the state forest boundary. Then it would follow the snowmobile trail 0.2 mile across a private inholding and back onto Buckton State Forest. The route would then continue 0.7 mile south along the snowmobile trail (DEC) to the junction with the Buckton Haul Road. Users would then continue south along the Buckton Haul Road (DEC) 0.8 mile to the junction with the Buckton Road.

This route would travel through the central portion of Buckton State Forest, and would involve opening a total of 0.8 mile of DEC Haul Road, 1.0 mile of DEC Trail, 0.4 mile of Town of Stockholm Road, and 0.2 mile of trail across private land to ATV use.

This route is potentially acceptable as a multi-use trail corridor. It utilizes trails not open to motor vehicles as much as possible. It also crosses the state forest in the shortest environmentally acceptable route.

The roads and trails do, however, need considerable improvement and maintenance. The northern portion of the Club Road crosses a State and Federal Classified Wetland which seasonally floods the road. This area would need a bridge or large culverts, and would need hard fill to stabilize the road. Any fill or trail work within this area will require permits from the appropriate regulatory agency – both the NYS Department of Environmental Conservation (State Classified Wetlands) and the US Army Corps of Engineers (Federal Classified Wetlands).

The trail crossing the private inholding would need the landowner's permission to be opened to ATV use.

The portion of trails and road south of the private inholding would require grading, localized hardening, culvert installation, and brushing.

In Ft. Jackson State Forest, the connector trail would begin at the northern edge of the forest at the junction of the Nichols Road and the Sheldon Access Trail. It would then proceed 0.6 mile southeast along the Sheldon Access Trail (DEC) to the junction with the Snowmobile Trail. It would then travel 0.1 mile south along the Snowmobile Trail (DEC) to the junction with the Loop Trail. It would then

travel 0.2 mile south along the Loop Trail (DEC) to the junction with the Sheldon PFAR. It would then travel 0.4 mile south (DEC) on the Sheldon PFAR to the southern boundary of Ft. Jackson State Forest.

This route would travel through the central portion of Ft. Jackson State Forest, and would involve opening a total of 0.4 mile of DEC Public Forest Access Road and 0.9 mile of DEC Trails to ATV use.

This route is potentially acceptable as a multi-use trail corridor. It utilizes trails not open to motor vehicles as much as possible. It also crosses the state forest in the shortest environmentally acceptable route.

The roads and trails do, however, need considerable improvement and maintenance. The Sheldon Access Trail contains some wet and rutted sections that will require drainage and hard fill. Portions of the Snowmobile and Loop Trails are very sandy and will require hard surfacing. The remainder of the roads and trails to be opened would require grading and brushing.

This proposed multi-use trail across Buckton and Ft. Jackson State Forests could potentially be opened in the future, as part of a larger connector trail system using roads and trails located off from State Forest properties. Any such proposed connector trail system would require its own SEQR analysis for the complete trail proposal.

Alternative 3b). *No action alternative.* This alternative would maintain the current conditions, with no DEC maintained roads or trails open to ATV use. This would deny the public a legitimate use of state forest lands for a connector trail, as well as possible economic benefits to adjoining communities. For these reasons, the no action alternative is not the preferred alternative.

Any future proposals to open roads or trails under DEC jurisdiction to ATV use would need to be reviewed on a case by case basis. Any potential connection between ATV trails in Brasher State Forest and St. Lawrence County's county-wide multi-use trail system will require the crossing of private lands in order to ensure compliance with the VTL. Any further development of that connection that involves the potential use of state land will be handled through an additional modification to the St. Lawrence Flatlands UMP as well as supplemental SEQR analysis, as necessary. DEC will continue to work with St. Lawrence County to ensure the viability of such a connection.

5.0 Comments and Responses to the Draft Supplemental Environmental Impact Statement

The following is a summary of the public comments that were received during the creation of the Draft SEIS for the Proposed Multi-Use Recreational Trail System Located in the St. Lawrence Flatlands Unit Management Planning Area. The DSEIS was posted on the St. Lawrence Flatlands UMP Website (http://www.dec.ny.gov/lands/22578.html). The comment period was open between April 15 and May 15, 2015. Comments were received through email and letters. **Comments** are in bold text, with *DEC responses* in italics.

In Section 1.0 (Introduction), the DSEIS should balance environmental, social and economic impacts, positive and negative as required by SEQR.

It is true that environment factors are not the sole consideration in decision making. The State Environmental Quality Review Act (SEQRA) requires that social, economic, and environmental factors be "considered together in reaching decisions on proposed activities" (Environmental Conservation Law Section 8-0103). However, this same statute also provides that State agencies must "regulate such activities so that due consideration is given to preventing environmental damage," and that they "have an obligation to protect the environment for the use and enjoyment of this and all future generations." Therefore, negative environmental consequences cannot be ignored simply because a significant economic benefit may be derived as a result of the activity causing that damage.

The purpose of this environmental review is to analyze the potential environmental effects of the trail system on state managed lands. Potential environmental, social, and economic benefits include increased tourism, ability of users to visit previously inaccessible areas, gas and food sales, and hotel visits. The amount and frequency of these increased benefits are difficult to quantify. A review of potential economic benefits for a similar area can be found in the "Tug Hill Region ATV Economic Impact Study", cited in the appendix.

In Section 2.1 (Project Background), if the Multi-Use Trail were allowed on State Forest lands the resources of NYSDEC could be leveraged with Trail funds to provide better trail maintenance and improved public access.

It is possible that the creation of a multi-use trail system may provide additional funding sources for monitoring and maintenance. However, it is imperative that permanent funding for materials, equipment, and staff time dedicated to trail monitoring and maintenance be established before the multi-use trail system begins operation.

In Section 2.2 (History of ATV use in this Unit), poor maintenance of the trails in the past may be due to poor management of NYSDEC resources. Is it possible that NYSDEC management did not request the needed funds for trail management or directed funds and resources to other projects, which lead to the condition of the trails to degrade and closure of all trails.

In the past, the local DEC Operations crew had no dedicated funding source or staff time available for trail maintenance. They were also not provided with the necessary equipment (mini excavator, UTV with dump box, etc.) and materials to perform regular trail maintenance.

Section 3.1 (Soil Compaction and Erosion) of the DSEIS lists several conditions which are necessary for a future sustainable trail system, including: proper trail location, trail monitoring by DEC Forestry / Operations / Law Enforcement staff, and dedicated funding and staff time geared specifically to trail maintenance.

In Section 2.3 (Project Summary), the DSEIS describes how the NYSDEC segmented the project, whereas the NYSDEC should have worked closer with St. Lawrence County. A segmented project is contrary to SEQR regulation.

SEQR regulations discourage segmented review of an "action" unless segmented review is "clearly no less protective of the environment." In the case of this analysis, the action being reviewed is the design, construction and maintenance of multi-use trails on state-owned lands in this management unit.

The DSEIS was developed in conjunction with the draft St. Lawrence Flatlands Unit Management Plan (UMP), which reviews other potential management issues on state land in this unit. Also, the analysis conducted for the DSEIS is supplemental to the environmental review that was conducted for the Strategic Plan for State Forest Management, which is a Generic Environmental Impact Statement and covers the other actions proposed in the UMP.

Any proposed connector trail system crossing state managed land will also likely utilize a system including town roads, county roads, and trails crossing private land. These routes are often located miles away from the nearest state forest land in this management unit. As such, their potential inclusion in a connector trail system is beyond the scope of this analysis, and would require its own environmental review.

In Sections 3.1 to 3.5 (Potential Impacts and Mitigation: Soil Compaction and Erosion, Noise, Invasive Species, Illegal Trails and Trespass onto Private Land, Conflicts with Other Users), the DSEIS totally focuses on the Multi-Use trail as an ATV trail and concentrates on the negative impacts and does not explore any positive impacts, such as emergency access to injured hikers via ATV's/vehicles to remote areas. The DSEIS is totally devoid of positive social or economic impacts.

The Strategic Plan for State Forest Management offers a comprehensive review of other potential recreational uses of the multi-use trail, including hiking, mountain biking, horse riding, cross country skiing, snowshoeing, and snowmobiling. It also serves as an Environmental Impact Statement for the potential effects of these uses. It was therefore unnecessary to repeat this environmental review for the multi-use trail system in the St. Lawrence Flatlands UMP unit. The purpose of the DSEIS is to review potential negative environmental effects of the proposed alternatives, and suggest methods to avoid and/or mitigate these negative effects.

In Section 4.1 (Proposed Connector Trail Through Brasher State Forest). We agree with the proposed 1a or 1b alternatives to include Quinell Road, Smith Road, a portion of Rte. 55 and the Burns Road. The Quinell Road will connect to our staging area at the Brasher Garage and our Snowmobile Grooming Building.

Alternative 1a is the preferred alternative for a connector trail through Brasher State Forest. It minimizes the use of roads open to cars and trucks, and provides the shortest environmentally acceptable route across state managed land. The Quinell Road, Smith Road, Burns Road, and County Route 55 are not under the jurisdiction of the DEC and their opening to ATV use would be under the purview of the Town of Brasher and St. Lawrence County, respectively.

In Section 4.3 (Proposed Connector Trail through Buckton and Ft. Jackson State Forests), Alternative 3a would continue to be used for our snowmobile trail use as state right of way on Rte. 11 is allowed for snowmobiles but not ATV's. We would like this included as a future option for the multi-use trail as private landowners may change. We would like an alternate trail considered for the multi-use trail from the intersection of Rte. 11, Rte. 420, and County Route 49. The trail would use 1.1 miles of CR 49 towards Ft. Jackson and connect onto two parcels of a private landowner and enter the Buckton State Forest below the private inholding between the two Buckton State Forest parcels and continue with the rest of the proposed Alternative 3a through Ft. Jackson State Forest. We feel this route will be a lesser impact on residents from Rte. 11 to Club Road.

The initial proposal for a connector trail through Buckton State Forest (Alternative 3a) uses existing roads and snowmobile trails for the trail route. The proposed revised route uses areas with few or no trails across state forest land, and would likely require substantial work to avoid wetlands and to provide stabilized wetland crossings. This would not satisfy the Strategic Plan for State Forest Management's requirement that any proposed connector trail "must follow the shortest environmentally acceptable route available". Such a re-route would be preferred only if the existing roads and trails proved impossible to use. The Department would prefer to upgrade and use existing roads and trails rather than create entirely new routes. Additionally, this proposal includes road and private land issues over which the Department has no authority.

The term "Multiple Use" trail is a misnomer. When motorized and non-motorized users share the same trail, motorized usage tends to dominate. Hikers and skiers need to be vigilant to protect themselves from rapidly moving ATVs or snowmobiles. It is not the same quality experience as traveling on non-motorized only trails.

It is DEC policy to provide recreational opportunities for as broad a spectrum of users as possible. Rather than providing separate trails for separate user groups, which would result in an extreme proliferation of trails, the department provides trails that are open to multiple user groups. This does not mean the Department expects that all users will have the best possible experience in all places. This policy does however provide more options for more users in more locations. Non-motorized users may choose not to use trails where motorized use is allowed.

Regulations will be adopted which describe the maximum speeds allowed for motorized vehicles on the trail system, i.e. 15 miles per hour (MPH) on trails. Additionally, there are many other trails available in this unit that will continue to be open only to non-motorized recreation.

How will trails be maintained to sustain additional motorized use? Many of the trails are already in poor condition due to past damage caused by motorized use and a general lack of maintenance. Without a stable funding source it seems unlikely the expensive trail repair and improvement can take place let alone the necessary continued maintenance to mitigate the already substantial impact ATVs have on the environment.

In Section 3.1 (Soil Compaction and Erosion), the Department suggests numerous mitigation measures for improving trail maintenance and preventing re-occurrence of past problems. After roads and trails have undergone an initial rehabilitation and trail hardening, they would be sustained through regular monitoring and maintenance by DEC staff, with funding directed specifically for trail monitoring and maintenance. Volunteer assistance is also recognized as a possible resource for maintaining the trail system.

We are concerned with enforcement of regulations. Financial constraints will limit the frequency and efficacy of enforcement patrols and user education. Also, due to the lack of much-needed updates in laws and regulations, the DEC is constrained on how they can enforce regulations to control inappropriate behavior.

Law enforcement will patrol the trail system to enforce regulations and laws. Regulations will be adopted to limit speeds to 15 MPH on trails; regulations already limit speed to 25 MPH on DEC maintained roads. Regulations would also be adopted specifying the trail system as open to ATV use from May 15th to September 15th each year, and hours of operation would be from 6 am to midnight. Protocols will also be put in place to monitor the effectiveness of the mitigation measures used. If monitoring results indicate that mitigation efforts are not successful, those efforts will need to be improved or the trail system will need to be closed until such time as they can be improved.

The proposal for six loop trails in Brasher State Forest is not acceptable. It does not minimize ATV impact on the forest and does not meet the standards of a connector trail. The loops also do not comply with Vehicle and Traffic Law Section 2405 which prohibits the opening of roads and highways to ATV use unless it is otherwise impossible for ATVs to gain access to legally open areas adjacent to the highways.

These are some of the reasons why none of the loop trails are included in the preferred alternative. The Department has undertaken a thorough review of the proposed alternatives, and is confident that the preferred alternative fully complies with any and all relevant laws, regulations, policies and other legal guidance.

The impact of invasive species deserves special attention. The proposed cleaning and decontamination measures seem unlikely to be effective given the shortage of staff and money. It is unlikely that ATV users will voluntarily take the time to wash their vehicles free of plant matter prior to entering the St. Lawrence Flatlands Unit.

The Department agrees that transport and establishment of invasive species along the multi-use trail is a potentially serious problem. Information about invasive species will be posted at staging areas and trail heads. Regular trail monitoring will look for new invasive species along the trails and will attempt to control them before they become permanently established.

We oppose all of the alternatives brought forth in the DSEIS due to their extensive potential for causing irreversible environmental damage to the Brasher State Forest.

The Department feels that the rehabilitation of roads and trails necessary to create a connector trail will improve them substantially from their current condition. Regular maintenance and mitigation of potential problems should also minimize deterioration of trail quality.

We do not support the addition of ATV riding on state lands until ATV use is reformed at a state-wide level. For ATV riding to become a more accepted and sustainable form of recreation, numerous state policy and budgetary changes will need to be made, including but not limited to:

- **Enacting legislation that prohibits recreational riding on our state's most sensitive lands, including, but not limited to, the Adirondack Park Forest Preserve.**
- **Amending Section 2405 of the Vehicle and Traffic Law to clarify its intent and encourage trail construction of private trail networks.**
- **Increasing the fees to register ATVs, and dedicating all funds to well-planned construction of private trail networks, rider education and enforcement staffing and resources.**
- **Enacting legislation to encourage "bad actors," who are caught by law enforcement, to not become repeat offenders.**

The Department acknowledges these comments, but legislative changes are beyond the scope of this environmental review.

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APPENDIX C – PARCEL ACQUISITION HISTORY

Bombay State Forest – Franklin County Reforestation Area 2

Proposal	Acres	Grantor	Recorded	Deed	Map #
A	687.52	Howard P. Sears	1935	L 216 / P 134	6126
B	143.88	Lawrence & Floyd Durant	1935	L 216 / P 226	6126
C	76.60	V. Delbert & Floyd Durant	1935	L 216 / P 228	6126
D	220.48	M. Alice Crowley	1935	L 216 / P 232	6126
E	74.64	Clint Barrett	1935	L 216 / P 235	6126
F	129.66	Alice Smith	1937	L 221 / P 50	5977
G	36.89	W.C. & J.J. Shields	1937	L 225 / P 339	6248
H	318.50	Dennis L. Hurley	1940	L 230 / P 224	6127
I	90.94	Heirs of Peter Villnave	1940	L 229 / P 348	6127, 6249
J	176.44	Estate of H. Corbin Brush	1940	L 231 / P 111	5978
AA	206.17	Federal Land Bank of Springfield, Mass.	1940	L 232 / P 167	6015*

*769.99 acres total; remainder is in St. Lawrence RA 1 Proposal AA

Bombay State Forest – Franklin County Reforestation Area 4

Proposal	Acres	Grantor	Recorded	Deed	Map #
A	642.97	J.J. & W.C. Shields	1937	L 225 / P 335	5984
B	72.31	Harry & Lillian Jock	1948	L 287 / P 531	6255
C	43.16	Albert & Bertha Sova	1949	L 297 / P 139	6256

Brasher State Forest – St. Lawrence County Reforestation Area 1

Proposal	Acres	Grantor	Recorded	Deed	Map #
A	378.94	Bernice D. Clark	11/04/1932	L 278 / P 472	5822
B	68.66	George H. Dishaw	11/04/1932	L 278 / P 474	5822
C	66.78	Mary Alvina Nicklaw	11/04/1932	L 278 / P 475	5822
D	77.23	Alice Saulsbury	08/21/1933	L 283 / P 66	5692
E	526.62	Bernice E. Clark	10/30/1934	L 289 / P 255	6013
F	26.00	Charles Dishaw	02/19/1935	L 291 / P 118	6014
G	51.82	Michael M. Hurley	05/15/1935	L 292 / P 209	6014
H	136.92	Augustus Delosh	05/15/1935	L 292 / P 211	6014
I	24.20	David Delosh	05/15/1935	L 292 / P 208	6014
J	262.30	Ellen Gaffney	05/20/1935	L 292 / P 241	6014
K	172.11	Nelson J. and Josephine Gardner	10/14/1935	L 295 / P 39	5693
L	152.75	Amos Lavare	03/13/1936	L 297 / P 76	5823
M	17.03	Alexander Lavare	04/30/1936	L 297 / P 405	5823
N	52.59	Floyd & Irene Yaddow	01/28/1937	L 304 / P 11	5823
O	96.91	Catherine T. Taylor	07/15/1936	L 299 / P 69	5694, 5695
P	49.43	Mary Alvina Nicklaw	09/22/1936	L 301 / P 14	5696
Q	120.97	Blanche C. Barton	11/06/1936	L 301 / P 89	5824
R	22.54	Katherine Shorette	06/30/1937	L 305 / P 145	5824
S	53.03	Charles Dishaw	09/02/1938	L 312 / P 179	5697
T	26.77	Jerry Griffin, executor for David Delosh	01/19/1939	L 314 / P 438	5698

Brasher State Forest – St. Lawrence County Reforestation Area 1 (continued)

Proposal	Acres	Grantor	Recorded	Deed	Map #
U	25.52	St. Lawrence County c/o Alton Scruton	03/23/1939	L 315 / P 398	5699
V	199.28	Daniel Tower	02/15/1940	L 321 / P 247	5862
W	----	(Acquired later as part of Proposal AA)	----	----	5825
X	47.21	Florence L. Davis	02/27/1940	L 321 / P 313	5862
Y	298.07	William & Victoria Arquiett	11/18/1940	L 326 / P 359	5827
Z	45.30	Frank & Jennie Dumas	03/27/1941	L 328 / P 278	5700
AA	563.82	Federal Land Bank of Springfield, Mass.	10/21/1941	L 334 / P 16	6015***
BB	310.58	Jeremiah E. Hurley	04/02/1948	L 416 / P 336	5828
CC	51.52	James & Agatha McGraw	02/27/1948	L 415 / P 79	5828
D-2 *	48.71	Katherine Shorette	01/31/1963	L 716 / P 130	6495
E-2 *	234.08	Henry & Bridget Barse	12/04/1963	L 730 / P 212	6532
F-2 **	134.03	Roderick & Norene J. Mathieson	01/24/1985 05/24/1985	L 987 / P 748 L 990 / P 53	10386 (correction)
G-2 **	98.79	Peggy Henning	04/18/1988	L 1018 / P 13	10587
----	97.2	Nancy Warner	03/27/2006	L 2006 / P 5075	----

* Multiple Use Area ** 1972 Bond Act ***769.99 acres total; remainder is in Fr. RA 2 Proposal AA

Brasher State Forest – St. Lawrence County Reforestation Area 5

Proposal	Acres	Grantor	Recorded	Deed	Map #
A	408.75	Bert S. Crapser	04/25/1933	L 281 / P 164	6020
B	115.29	Jesse & Marguerite Hastings	04/25/1933	L 281 / P 163	6020
C	4.20	George Kennehan et al.	06/05/1933	L 281 / P 442	6020
D	235.39	Richard E. and Clara Heffernan	06/05/1933	L 281 / P 444*	6020
E	164.42	Michael & Mary O'Connell	07/19/1933	L 282 / P 305	5839
F	92.02	Nelson & Grace Locke	11/14/1933	L 284 / P 236	5718
G	25.55	James B. McNulty	08/23/1935	L 293 / P 417	5719
H	23.70	Sherman & Bessie Jesmer	01/03/1936	L 296 / P 59	5720
I	40.11	William &Ethel Thomas	02/13/1937	L 302 / P 339	5721
J	84.45	Michael O'Connell et al	03/19/1938	L 310 / P 10	5722
K	240.48	Mary F. O'Brien	08/25/1938	L 312 / P 110	5840
L	62.67	James & Elizabeth Goodnow	09/16/1938	L 312 / P 274	5840
M	52.11	John & Cornelius Crowley	08/25/1938	L 312 / P 112	5840
N	97.73	N. Walter Locke	10/29/1938	L 313 / P 245	5723
O	1.85	Peter & Kate Normile	08/25/1938	L 312 / P 109	5840
P	155.70	Richard E. Heffernan	09/16/1938	L 312 / P 276	5840
Q	62.83	Walter & Margaret Tyo	09/16/1938	L 312 / P 278	5840
R	57.60	Charles H. Taylor	09/21/1939	L 318 / P 444	5724

*Also a quit claim recorded 08/09/1935 at L. 293 P. 345.

Brasher State Forest – St. Lawrence County Reforestation Area 5 (continued)

Proposal	Acres	Grantor	Recorded	Deed	Map #
S	30.11	Charles & Nellie Wolcott	01/30/1940	L 321 / P 127	5841
T	165.20	Katherine & Margaret Cotter Margaret Cotter, Admin. for Timothy Cotter	12/31/1940 12/31/1940	L 327 / P 207 L 327 / P 205	5842
U	71.50	Frank Dumas	05/07/1942	L 337 / P 147	5843
V	66.13	Walter & Margaret Tyo	04/09/1942	L 335 / P 405	5843
W	84.35	Walter Tyo	07/25/1947	L 402 / P 516	5725
X	12.60	Joseph Stark, Jr.	06/28/1950	L 460 / P 128	5726
Y *	412.83	Lawrence Mallette estate	03/21/1963	L 717 / P 424	7214
Z *	120.81	Clifford & Keitha Savage	11/09/1962	L 713 / P 63	Sketch map
A-2 *	204.88	Gerald & Carolyn Normile	07/12/1962	L 706 / P 377	6447
B-2 *	39.50	Loren Aldrich	11/29/1963	L 730 / P 104	7214
C-2 *	136.37	Cornelius P. Crowley (estate)	12/23/1963	L 731 / P 278	6549
D-2	35.75	St. Lawrence County	01/24/1969	L 816 / P 177	7273
E-2 **	39.02	Joseph P. Doboze	05/10/1979	L 940 / P 729	9725
F-2 **	65.91	Paul V. Dillon	08/11/1989	L 1031 / P 895	----
G-2	13	Jarmila & Asen Ganev	05/03/1996	L 1097 / P1066	----

*Multiple Use Area **1972 Bond Act

Brasher State Forest – St. Lawrence County Reforestation Area 6

Proposal	Acres	Grantor	Recorded	Deed	Map #
A	78.33	John D. McCarthy, exec. for William Cotter Mary H. Cotter	06/15/1933 06/15/1933	L 282 / P 75 L 282 / P 77	6021
B	50.38	John Hamlin et al.	06/15/1933	L 282 / P 82	6021
C	313.98	George & Marsha Lacomb	06/15/1933 06/29/1933	L 282 / P 78 L 282 / P 170*	6021
D	78.74	Harriet Sabray	06/15/1933	L 282 / P 79	6021
E	108.62	Fred Sova	02/15/1935	L 291 / P 86	6021
F	166.08	Henry & May Lashomb	06/07/1935	L 293 / P 100	5727
G	267.34	George & Martha Youmell	10/14/1935	L 295 / P 38	5846
H	148.03	Alexander Sova	10/28/1935	L 295 / P 70	5846
I	92.43	Allen Lashomb	11/30/1936	L 301 / P 273	5728
J	283.67	Richard E. Heffernan	05/21/1937	L 304 / P 191	5847
K	119.42	Richard & Clara Heffernan	01/19/1938	L 308 / P 399	5848
L	89.96	Carl H. Hamlin et al.	08/09/1939	L 318 / P 108	5849
M	242.15	Cornelius & Gladys Leary	09/21/1939	L 318 / P 442	5849
N	160.43	Henry Lashomb estate	11/22/1939	L 320 / P 129	5850
O	119.98	William, James, and Elizabeth Goodnow	11/22/1939	L 320 / P 127	5850
P	123.23	Michael Hammill et al.	12/07/1939	L 320 / P 229	5850

*Release of Life Use recorded 12/13/1950 at L. 469 P. 280.

Brasher State Forest – St. Lawrence County Reforestation Area 6 (continued)

Proposal	Acres	Grantor	Recorded	Deed	Map #
Q	218.95	John C. Crapser	11/22/1939	L 320 / P 123	5851
R	589.73	Ella Lantry	08/08/1942	L 338 / P 340	5852
S	98.44	Richard Heffernan estate	07/22/1940	L 324 / P 195	5853
T	27.59	William Quinell et al.	08/27/1940	L 324 / P 479	5853
U	162.90	Barney & Mary Lantry	11/18/1940	L 326 / P 361	5854
V	63.56	St. Lawrence County	11/18/1940	L 326 / P 363	5854
W	256.06	Frank B. Corbett	12/05/1942	L 340 / P 430	5855
X	91.36	John F. & Viola Wells	12/05/1942	L 341 / P 146	5729
Y	635.45	Carl & Marion Hamlin	09/30/1946	L 382 / P 446	5856
Z	47.64	John & Mary Robare	11/25/1947	L 410 / P 467	5730
AA	175.05	Bertram & Orma Shorette	06/28/1950	L 460 / P 125	5857
B-2	263.58	Rebie Ormsby	04/23/1958	L 630 / P 561	5845
C-2	300.74	Earl & Florence Savage	10/15/1959	L 661 / P 556	5844
D-2 *	56.27	Lottie M. Cotter	07/12/1962 01/08/1963	L 706/P384*** L 715 / P 298	6270
E-2 *	65.64	William S. Crapser	03/10/1965	L 751 / P 365	2802
F-2	17.5	Margaret Sova et al.	12/29/1993	L 1075 / P 181	----
G-2	8.00	Champion International Corp., c/o the Conservation Fund	07/01/1999	L 1999 / P 13117****	----

*Multiple Use Area **1972 Bond Act ***Release of Claim. Property was appropriated.

****Referenced in the Deed as parcels 47, 48, and 49.

Brasher State Forest – St. Lawrence County Reforestation Area 7

Proposal	Acres	Grantor	Recorded	Deed	Map #
A	50.38	Ellen Gaffney	07/24/1934	L 287 / P 471	6022
B	----	Rejected - Acquired as Proposals H & M	----	----	6022
C	52.75	Ella T. Lantry	07/24/1934	L 287 / P 472	6022
D	54.90	William A. Nowland	07/24/1934	L 287 / P 476	6022
E	62.78	Florence & Ida Richardson	07/24/1934	L 287 / P 477	6022
F	24.09	Ida A. Richardson	07/24/1934	L 287 / P 474	6022
G	102.43	William Toomey	08/03/1934	L 288 / P 67	6022
H	201.50	James Gaffney	07/24/1934	L 287 / P 473	6022
I	313.65	William & May Durant	12/21/1934	L 290 / P 216	6023
J	26.36	Johnson & Elizabeth Drewery	12/21/1934	L 290 / P 214	6023
K	98.50	Cora E. McIntosh et al.	09/12/1935	L 294 / P 103*	5731
L	150.83	Catherine Crowley	03/17/1936	L 297 / P 99	5858
M	99.07	James Gaffney estate	12/10/1937	L 308 / P 155	6022
N	104.23	New York Central Railroad Company	04/14/1939	L 316 / P 54	6015
O	169.66	Joseph & Helen Dupuis	08/03/1940	L 325 / P 31	5859

*See also Grant of Right of Way from Atlasta Farm, Inc., to John and Lee LaTulipe, recorded 08/19/1975 at L. 902 P. 86.

Brasher State Forest – St. Lawrence County Reforestation Area 7 (continued)

Proposal	Acres	Grantor	Recorded	Deed	Map #
P	48.04	Robert & Floy Smith	06/17/1949	L 441 / P 148	5733
Q	54.04	Ernest Buell et al.	03/30/1951	L 473 / P 113	5860
R	264.33	Johnson Drewery	03/16/1951	L 472 / P 364	5861
----	50.0	Kenneth Johnston et al.	08/01/2002	L 2002 / P 12994	----

Brasher State Forest – St. Lawrence County Reforestation Area 10

Proposal	Acres	Grantor	Recorded	Deed	Map #
A	183.25	Lindsey& Ellen Jesmer	07/24/1935	L 294 / P 8	6026
B	169.56	George & Marcia Lacomb	07/24/1935	L 294 / P 5	6026
C	300.49	Michael Kirkey et al.	07/24/1935	L 294 / P 3	6026
D	254.09	Albert & Etta Christian	07/24/1935	L 293 / P 263	6026
E	184.85	Burt & Mary McGregor	07/27/1935 08/20/1935	L 293 / P 267 L 293 / P 390	6026 (correction)
F	160.69	Henry& Lula Brothers	10/14/1935	L 294 / P 361	6026
G	172.43	George & Alice Burgess	10/14/1935	L 294 / P 362	6026
H	200.92	Bert & Mary McGregor	10/28/1935	L 295 / P 71	6026
I	25.30	Sophia Eamon	07/24/1935	L 293 / P 265	6026
J	105.16	Thomas &Jessie Raymo	07/24/1935	L 293 / P 262	6026
K	72.96	Joseph & Alphretta Bilow	07/24/1935	L 294 / P 6	6026
L	94.46	Guy Jesmer et al.	01/04/1937	L 302 / P 60	5871

Brasher State Forest – St. Lawrence County Reforestation Area 10 (continued)

Proposal	Acres	Grantor	Recorded	Deed	Map #
M	32.93	Eliza & William Quenell	11/30/1936	L 302 / P 56	5871
N	33.35	Frank & Maude Eldridge	11/18/1936	L 301 / P 210	5739
O	15.14	Lester & Victoria Eldridge	11/18/1936	L 301 / P 209	5739
P	83.26	William & Ethel Crouch	04/02/1937	L 303 / P 229	6027
Q	70.27	Agnes & Angus McGregor	06/30/1937	L 305 / P 147	6027
R	13.94	William Baxter et al.	06/30/1937	L 305 / P 144	6027
S	103.88	Mary K. Dawson	07/16/1937	L 305 / P 222	6027
T	162.51	William & Hattie Hough	07/16/1937	L 305 / P 219	6027
U	156.04	William L. Goodnow	06/20/1939	L 317 / P 161	5872
V	66.07	John & Lulu Crapser	09/25/1939	L 318 / P 472	5873
W	7.53	John & Lulu Crapser	09/27/1939	L 318 / P 495	5873
X	196.62	Michael Murray	08/20/1940	L 324 / P 410	5874
Y	46.03	Ivan F. & Eleanor Eldridge	09/03/1941	L 331 / P 359	5741
Z	92.70	Belle O'Neill	06/21/1948	L 421 / P 25	5742
A-2	114.56	Emery L., Anita E., & Jennie Baxter	06/28/1950	L 460 / P 131	5875

Brasher State Forest – St. Lawrence County Reforestation Area 10 (continued)

Proposal	Acres	Grantor	Recorded	Deed	Map #
B-2	77.94	George & Alice Burgess	04/03/1958	L 629 / P 594	5876
C-2	24.49	Vilas Green	10/17/1958	L 642 / P 268	5743
D-2	37.30	Lois L. Bashaw	06/08/1961	L 688 / P 272	6515
E-2 *	86.91	Ross & Marion Giles	11/09/1962	L 713 / P 70	6505
F-2 **	33.44	Arnold Leggue	01/26/1990	L 1036 / P 763	----
----	39.10	Edward & Helen Luczkiewicz	10/30/2001	L 2001 / P 19316	----

*Multiple Use Area **1972 Bond Act

Brasher State Forest – St. Lawrence County Reforestation Area 17

Proposal	Acres	Grantor	Recorded	Deed	Map #
A	216.44	James & Agatha McGraw	12/07/1939	L 320 / P 227	6033
B	270.96	Dan & Addie McIntyre	08/01/1939	L 317 / P 484	6033
C	51.10	Peoples Trust Co., exec . for Charles McConnell	12/07/1939	L 320 / P 225	6033
D	208.61	Laura F. Butler et al.	07/24/1939	L 317 / P 401	6033
E	53.35	Harlow K. Yaddow	10/07/1939	L 319 / P 177	6033
F	62.53	St. Lawrence County c/o Alton Scruton	10/26/1942	L 341 / P 55	5747
G	10.80	Michael J. Dawson	08/01/1939	L 317 / P 474	6033
----	47	Joyce E. Saler & Jerry Spivak	11/02/2005	L 2005 / P 19210	----

Buckton State Forest – St. Lawrence County Reforestation Area 31

Proposal	Acres	Grantor	Recorded	Deed	Map #
A	184.97	John H. Connolly	05/17/1950	L 457 / P 440	6048
B	188.89	Charles Chambers et al.	05/17/1950	L 457 / P 443	6048
C	55.11	Olevia Erma Chambers	05/17/1950	L 457 / P 434	6048
D	153.95	Glenn S. Hardy & Gayle Hardy Kent	05/17/1950	L 457 / P 437	6048
E *	70.72**	Gayle Hardy Kent	03/28/1962	L 701 / P 328	6553
F *	214	Daniel T. & Leo D. Kelly	12/15/1961	L 698 / P 4	8552
G *	208.19	Eugene Thompson	05/19/1964	L 736 / P 424	6477

*Multiple Use Area **Deed calls for 57 acres. Later survey indicates 70.72 acres is more correct.

Fort Jackson State Forest – St. Lawrence County Reforestation Area 22

Proposal	Acres	Grantor	Recorded	Deed	Map #
A	247.13	Theodore & Ella Rivers	06/08/1950	L 458 / P 558	6039
B	111.49	Jessie Clark Sanford	06/23/1950	L 459 / P 552	6039
C	252.11	Harold & Anita Phippen	06/29/1950	L 460 / P 155	6039
D	24.15	Henry N. Buckland	06/09/1950	L 458 / P 592	6039
E	109.32	Henry Sheldon	08/01/1950	L 462 / P 128	6039
F	44.78	Henry Sheldon et al.	08/05/1950	L 462 / P 284	6039
G *	83.46	Helen & Murray Premo	04/03/1962	L 701 / P 474	6433
H	41.5	Lois L. Cree	07/22/1992 05/03/1993	L 1060 / P 586 L 1067 /P1139	---- (correction)
I	23.53	St. Lawrence County	01/06/1994	L 1075 / P 559	----

*Multiple Use Area

Grantville State Forest – St. Lawrence County Reforestation Area 15

Proposal	Acres	Grantor	Recorded	Deed	Map #
A	229.92	Henry & Hattie Soper Mabel Sharp, exec. J. Frank Sharp	05/27/1937 09/25/1950	L 304 / P 238 L 465 / P 21	6031
B	137.85	Henry Allen estate	05/27/1937	L 304 / P 235	6031
C	177.17	Amos E. & Mary J. Phelix	05/27/1937	L 304 / P 237	6031
D	89.20	Mrs. A.D. Spotswood	07/19/1948	L 422 / P 539	5745
E	22.72	Aram & Arek Baratian	12/08/1949	L 450 / P 506	5746
F	119.60	Lucia S. Chawner & Grace Y. Soule estate	03/02/1950	L 454 / P 105	5883

Knapp Station State Forest – St. Lawrence County Reforestation Area 11

Proposal	Acres	Grantor	Recorded	Deed	Map #
A	272.01	Mark & Mary Mahoney	03/30/1936	L 297 / P 202	6028
B	110.36	No. NY Trust Co, trustee for Frank Smith	03/30/1936	L 298 / P 17	6028
C	115.92	Walter Planty et al.	03/30/1936	L 298 / P 19	6028
D	51.89	George & Mabel Gardner	03/30/1936	L 297 / P 204	6028
E	102.60	Anna McCarthy Gresser	09/20/1937	L 306 / P 363	5877
F	----	(Rejected)	----	----	6028
F-1	4.03	David Gregg	07/16/1937	L 305 / P 220	6028
G	112.96	Lindon & Ruth Riggs	02/19/1951	L 471 / P 491	5878

Knapp Station State Forest – St. Lawrence County Reforestation Area 11 (continued)

Proposal	Acres	Grantor	Recorded	Deed	Map #
H**	95.32	William & Sadie Rule	11/26/1963	L 730 / P 23	6327
I*	39.61	Cecil & Elizabeth Flint	05/08/1964	L 736 / P 99	6473
J*	10.75	Eva & Howard Owney	12/19/1962	L 714 / P 527	6811
K*	87.26	Iva I. Arquiett, widow of Anthony	06/10/1963	L 721 / P 171	6517

* Multiple Use Area **Appropriated

Lost Nation State Forest – St. Lawrence County Reforestation Area 9

Proposal	Acres	Grantor	Recorded	Deed	Map #
A	205.82	Elbert F. Felton et al.	08/21/1933	L 283 / P 60	6025
B	109.29	Roy C. & May A. Hatch	08/21/1933	L 283 / P 63	6025
C	40.41	Edwin Hosmer	08/21/1933	L 283 / P 62	6025
D	149.19	Joseph& Marie Lacomb	08/21/1933	L 283 / P 65	6025
E	31.95	Philip E. Murray	07/15/1936	L 299 / P 68	5736
F	85.84	Clinton & Maud Burnap	12/05/1933	L 284 / P 364*	5737
G	94.95	Clara Heffernan exec. Richard Heffernan	04/30/1941	L 330 / P 8	5867
H	257.97	William Brothers	04/15/1940	L 323 / P 44	5868
I	144.75	The Canton Savings and Loan Association	12/07/1939	L 320 / P 231	5868
J	229.76	Karl & Goldie Van Kennen	12/01/1942	L 340 / P 398	5738

*Proposal F was subject to a ROW granted by Clinton and Maud Burnap to Ralph and Dora Stearns recorded 07/16/1929 at L. 249 p. 326. The parcel accessed by this ROW was later acquired as Prop O.

Lost Nation State Forest – St. Lawrence County Reforestation Area 9 (continued)

Proposal	Acres	Grantor	Recorded	Deed	Map #
K	59.88	Homer French	02/16/1951	L 471 / P 459	5869
L	121.34	A. Dolphis & Erdine Gauthier	11/26/1958	L 644 / P 473	5870
M *	150.00	Edwin & Cecile Chapman	08/19/1963	L 725 / P 82	7551
N *	197.90	Daniel L. Mahoney	08/19/1963	L 725 / P 79	6518
O	4.86	St. Lawrence County	10/25/1968	L 812 / P 415	5737
P **	16	St. Lawrence County	10/22/1990 02/15/1991	L 1044 / P 581 L 1047 / P 403	---- (correction)
Q	9.0	St. Lawrence County (4H lots)	12/20/1993	L 1074 / P 973	----
R	1.0	Robert Maginn (4H lot)	02/08/1994	L 1076 / P 238	----
----	1.0	Michael Caza (4H lot)	05/30/2001	L 2001 / P 9372	----
----	1.0	Ann McWilliams (4H lot)	06/11/2001	L 2001 / P 10341	----

*Multiple Use Area ** 1972 Bond Act

Raymondville State Forest – St. Lawrence County Reforestation Area 33

Proposal	Acres	Grantor	Recorded	Deed	Map #
A	200.35	Ralph F. Jandrew	01/16/1951	L 470 / P 369	6050
B	164.25	Lyndon & Nora L. Whittaker	01/16/1951	L 470 / P 376	6050
C	98.82	Daniel A. & Mildred E. Dechane	01/16/1951	L 470 / P 382	6050
D	57.03	Silas A. Pelo & Walter Campbell	01/16/1951	L 470 / P 366	6050
E	25.42	Earl Snyder	01/16/1951	L 470 / P 373	6050
F	70.18	Aram & Arek Baratian	01/16/1951	L 470 / P 379	6050
G	26.89	Clarkson University	05/29/1990	L 1039 / P 815	----

Sodom State Forest – St. Lawrence County Reforestation Area 25

Proposal	Acres	Grantor	Recorded	Deed	Map #
A	374.55	William & Emma Bradley	09/07/1949	L 445 / P 492	6040
B	258.97	William & Bernice Borrman	09/07/1949	L 445 / P 495	6040
C	451.89	Thomas F. O'Neil et al.	09/12/1949	L 446 / P 53	6040
D	68.80	Mabel B. Sharp	11/21/1952	L 503 / P 202	5896
E	4.97	Henry & Bertha Luther	11/21/1952	L 503 / P 205	5896
F	264.82	Mary E. Frego	11/21/1952	L 503 / P 198	5896

Southville State Forest – St. Lawrence County Reforestation Area 23

Proposal	Acres	Grantor	Recorded	Deed	Map #
A	265.76	Rachel Ober Page & Howard R. Sanford	02/21/1941	L 327 / P 496	5891
B	96.41	Marium M. Sanford	02/21/1941	L 327 / P 498	5891
C	132.35	Charles De Longy & Howard R. Sanford	02/21/1941	L 327 / P 494	5891
D	46.97	Howard R. Sanford & Charles De Longy	02/21/1941	L 327 / P 492	5891

Detached Forest Preserve Parcels

Parcel	Acres	Grantor	Recorded	Deed	Map #
FP SL 12 Lisbon	20.38	NYS Comptroller Tax Deed - Sale of 1900	03/24/1900 05/05/1904	L 154C/ P 1805 L 163B/ P 1201	----
FP SL 13 Lisbon	11.74	NYS Comptroller Tax Deed - Sale of 1890	01/25/1892 04/05/1899	L 1366/ P 1814 L 153B / P 648	----
FP SL 14 Waddington	7.0	NYS Comptroller Tax Deed - Sale of 1900	03/24/1900 05/05/1904	L 154C/ P 1802 L 163B/ P 1201	----
FP SL 15 Waddington	3.42	NYS Comptroller Tax Deed - Sale of 1900	03/24/1900 05/05/1904	L 154C/ P 1805 L 163B/ P 1203	8687
FP SL 17 Louisville	350.33	Mortgage Foreclosure - 1907	*	*	----
FP SL 18 Massena	43.39	Treaty with St. Regis Indians	02/21/1845 (treaty)	**	160*** 198**** 8815

* Records indicate no deed on file with the St. Lawrence County Clerk's Office in Canton. Property description is from a mortgage with the NYS Department of Finance.

**Recorded in the Office of the Secretary of State in Book of "Original Treaties and Other Indian Papers" No. 1 at page 301.

***Map is in the office of the Surveyor General. Mix's catalog p. 257.

****Map is in the office of the Surveyor General. Mix's catalog p. 260.

APPENDIX D – HISTORIC PHOTOS



Brasher State Forest – RA 1 Proposal E South of Hurley Road

Red Pine planted 4’ X 4’ spacing 1936 with scattered brush covering



Same Location 2012



Brasher State Forest – RA 1 Proposal D

Near the current County Rte. 55 & CC Dam PFAR

Waterhole built by foreman Henry Beresford and CCC Camp S-95 Crew, September 1937



Brasher State Forest – RA 5 Proposal G

Tree nursery near CCC Camp S-95 Brasher Falls, July 1937

Near the current DEC Brasher Falls Maintenance Center



Brasher State Forest – RA 5 Proposal I

Waterhole built by Beresford and Camp S-95

Fire pump test, September 1937

Located just north of the current DEC Maintenance Center



Approximately the same location, 2012

Most accessible waterholes were filled in for safety reasons in the 1960s



Brasher State Forest – RA 7 Proposal I

Surviving CCC Waterhole located near the Jeep Trail, 2010



Brasher State Forest – RA 10 Proposal T

Site of the former Sand Hill fire tower, 80’ tall, from abt. 1950 to 1961

All that remains are the footers for the tower and observer’s cabin, 2012

Located on State Highway 420, across from the Norfolk fire station



Brasher State Forest – RA 10 Proposal C

Scotch pine planted 4’ x 4’ on blow sand for erosion control, July 1938

Located on the Vice Road north of camps near Brasher Center



Same approximate location, 2012

Scotch pine was harvested in 2007 to release a white pine understory

APPENDIX E – ROAD STATUS

Table F.1 – Status of Town of Brasher Roads as of the 2001 Draft Brasher UMP

Road Name	Length (miles)	Use	Maintenance
Buckley Road	0.2	Seasonal	Town performs occasional maintenance on the first 0.2 mile
Burns Road	2.4	East end (year round) West end (seasonal)	Town annually maintains 0.4 miles on the east end. DEC has annually maintained the remaining 2 miles for as long as can be remembered
Bush Road	0.8	East end (year round)	Maintained by the town
County Rte. 53 to Maple Ridge	1.2	Year round	No maintenance being performed
Durant Road	2.5	Seasonal	Has been physically abandoned
East Cotter Road	1.0	Seasonal	Maintained by the town
Hopson Road	3.4	Year round	Maintained by the town
Hurley Road	2.3	Seasonal	No maintenance being performed. DEC has sometimes done minor work such as culvert replacement
Keenan Road	2.4	Year round	Maintained by the town
Lalonde Road	1.1	Seasonal	Southern portion not maintained

Road Name	Length (miles)	Use	Maintenance
McCarthy Road	3.2	Year round	Paved road maintained by town
McCuin Road	0.4	Year round	Maintained by the town (Shady City portion)
Munson Road	2.2	Year round	Maintained by the town
Myers Road (Meyers Road)	2.7	Primarily seasonal	Maintained by the town
Old Keenan Road (McCuin Road)	6.1	Seasonal	DEC has previously maintained 0.9 miles connecting 2 DEC owned roads. No maintenance being performed on the remaining 5.2 miles
Quinell Road (Deer River Road)	2.8	Year round	Maintained by the town
Shady City Road	0.4	Year round	Paved road maintained by town
Smith Road	3.5	Year round	Paved road maintained by town
Vice Road	7.6	Primarily seasonal	1.26 miles is paved and maintained by the town 0.1 mile is unpaved and maintained to a private residence 3.73 miles is passable during the summer but receives little maintenance or plowing. Up until 2000, the DEC maintained a 1.9 mile section which connects two DEC roads 2.51 miles are physically abandoned / impassible

CERTIFICATE OF QUALIFIED ABANDONMENT OF TOWN HIGHWAY

Brookdale-Jenkins Corners Road,	Town of Stockholm
Reynolds Road	Town of Stockholm
Club Road	Town of Stockholm
Sheldon Road	Town of Stockholm

WHEREAS, it duly appears to the undersigned, David Gebo, Town Superintendent of the Town of Stockholm, St. Lawrence County, New York, and to the Town Board of said Town that the following Town Highways in the Town of Stockholm:

Brookdale-Jenkins Corners Road: Having its terminus at the Jenkins Corners Road and extending northwesterly 1.00 mile in the Town of Stockholm.

Reynolds Road: Having its terminus at the Potsdam-Stockholm Town Line and extending northeasterly 0.76 ± mile in the Town of Stockholm.

Club Road: Having its terminus at the Buckton Road and extending northwesterly 1.53 ± miles in the Town of Stockholm.

Sheldon Road: Having its terminus at the Hopkinton-Stockholm Town Line and extending northwesterly 1.48 ± miles to the Nichols Road in the Town of Stockholm.

in said Town have not become wholly disused but that they have not in the last two years been usually travelled along the greater part thereof, by more than two vehicles daily, in addition to pedestrians and persons on horseback, and

WHEREAS, it also duly appears to the undersigned Superintendent of Highways of the County of St. Lawrence, that a Qualified Abandonment of such highways is proper and will not cause injustice or hardship to the owners or occupants of any lands adjoining such highways, and

WHEREAS, the said County Superintendent of Highways did duly hold a public hearing at the Town of Stockholm Municipal Building, Winthrop, New York, on the First day of May 1979, at 7:30 P.M., on the question of whether there should be Qualified Abandonments of the said Town Highways above mentioned, pursuant to the provisions of Section 205 of The Highway Law of the State of New York, and

WHEREAS, at least twenty days written notice of such hearing was duly given by Certified Mail to all the owners and occupants of all lands adjoining such highway, a copy of which "Notice of Hearing" is hereto annexed.

NOW, THEREFORE, I, the undersigned Superintendent of Highways of the County of St. Lawrence, New York, DO DECIDE that the said highways have not for two years next preceeding hereto been usually travelled along the greater part thereof, by more than two vehicles daily, in addition to pedestrians and persons on horseback, and that a Qualified Abandonment of such highways is proper and will not cause injustice or hardship to the owners or occupants of any lands adjoining the same.

-1-

AND THE SAID COUNTY SUPERINTENDENT OF HIGHWAYS AND THE Town Superintendent of Stockholm and the Town Board of said Town of Stockholm DO HEREBY CERTIFY that the four (4) Town Highways described on Page 1 of this Certificate of Qualified Abandonment, are the Town Highways desired to be Qualified Abandoned.

THEREFORE, the Town Highways known as the BROOKDALE-JENKINS CORNERS Road, 1 ± mile; REYNOLDS ROAD, 0.76 ± mile; CLUB ROAD, 1.53 ± miles and the SHELDON ROAD, 1.48 ± miles, are all henceforth Qualifiedly Abandoned within the meaning of and with the effect provided for in Section 205 of The Highway Law of the State of New York.

DATED: May 18, 1979

John Cook
Supt. of Highways for the County of St. Lawrence, New York

Donald Hebo
Town Supt. of the Town of Stockholm

Town Board of The Town of Stockholm

Edward W. Towner
Supervisor

Keith I. Dype
Justice of Peace Councilman

Robert H. Woods
Justice of Peace Councilman

Lee Reynolds
(Town Councilman)

Bernard A. Rockwood
(Town Councilman)

Jacqueline White
Town Clerk

From Kevin Kingsley
5/20/2011

APPENDIX F – COMPREHENSIVE FISH SPECIES LIST

Table 1. Comprehensive fish species list for the Flatlander UMP within the Raquette, St. Regis, and Salmon River watersheds. Species list reflects those collected from 1986-Present and found in the New York State Statewide Fisheries Database at elevation less than 800 feet.

Common Name	Family	Genus	Species
Northern Brook Lamprey	Petromyzontidae	*Ichthyomyzon*	*fossor*
American Brook Lamprey	Petromyzontidae	*Lampetra*	*appendix*
Sea Lamprey	Petromyzontidae	*Petromyzon*	*marinus*
Lake Sturgeon	Acipenseridae	*Acipenser*	*fulvescens*
Longnose Gar	Lepisosteidae	*Lepisosteus*	*osseus*
American Eel	Anguillidae	*Anguilla*	*rostrata*
Mooneye	Hiodontidae	*Hiodon*	*tergisus*
Chinook Salmon	Salmonidae	*Oncorhynchus*	*tshawytscha*
Rainbow Trout	Salmonidae	*Oncorhynchus*	*mykiss*
Atlantic Salmon	Salmonidae	*Salmo*	*salar*
Brown Trout	Salmonidae	*Salmo*	*trutta*
Brook Trout	Salmonidae	*Salvelinus*	*fontinalis*
Central Mudminnow	Umbridae	*Umbra*	*limi*
Northern Pike	Esocidae	*Esox*	*lucius*
Muskellunge	Esocidae	*Esox*	*masquinongy*
Central Stoneroller	Cyprinidae	*Campostoma*	*anomalum*
Common Carp	Cyprinidae	*Cyprinus*	*carpio*
Cutlip Minnow	Cyprinidae	*Exoglossum*	*maxillingua*
Brassy Minnow	Cyprinidae	*Hybognathus*	*hankinsoni*
Eastern Silvery Minnow	Cyprinidae	*Hybognathus*	*regius*

Common Name	Family	Genus	Species
Golden Shiner	Cyprinidae	*Notemigonus*	*crysoleucas*
Emerald Shiner	Cyprinidae	*Notropis*	*atherinoides*
Bridle Shiner	Cyprinidae	*Notropis*	*bifrenatus*
Common Shiner	Cyprinidae	*Luxilus*	*cornutus*
Blacknose Shiner	Cyprinidae	*Notropis*	*heterolepis*
Spottail Shiner	Cyprinidae	*Notropis*	*hudsonius*
Rosyface Shiner	Cyprinidae	*Notropis*	*rubellus*
Spotfin Shiner	Cyprinidae	*Cyprinella*	*spiloptera*
Sand Shiner	Cyprinidae	*Notropis*	*stramineus*
Mimic Shiner	Cyprinidae	*Notropis*	*volucellus*
Northern Redbelly Dace	Cyprinidae	*Phoxinus*	*eos*
Finescale Dace	Cyprinidae	*Phoxinus*	*neogaeus*
Bluntnose Minnow	Cyprinidae	*Pimephales*	*notatus*
Fathead Minnow	Cyprinidae	*Pimephales*	*promelas*
Eastern Blacknose Dace	Cyprinidae	*Rhinichthys*	*atratulus*
Longnose Dace	Cyprinidae	*Rhinichthys*	*cataractae*
Creek Chub	Cyprinidae	*Semotilus*	*atromaculatus*
Fallfish	Cyprinidae	*Semotilus*	*corporalis*
Pearl Dace	Cyprinidae	*Margariscus*	*margarita*

APPENDIX G –BLACK ASH MANAGEMENT OUTLINE

Brasher Forest Unit Management Plan
Black Ash Management Outline
Les Benedict
On Behalf of Akwesasne Task Force on the Environment
Akwesasne Mohawk Territory
March 7,2001

The Akwesasne Task Force on the Environment (ATFE) has been working for the past 9 years on studying Black Ash (*F. nigra*) to learn how best to preserve it. Black Ash is used by Native Americans, including the Mohawks to make ornamental and utility baskets. Generations of basket makers have relied on local supplies of Black Ash to provide the raw material for basket making.

Elders of the community have tasked the ATFE to look for ways to preserve Black Ash for future basket makers.

Black Ash prefers to grow in wetlands forests, there is a limited amount of habitat where Black Ash will grow. Of those that grow very few are selected for basket making. Native basket makers are skilled at selecting suitable trees and have specific requirements about the trees they use for making their baskets.

Loss of habitat and little understanding of the trees growth requirements, much less those necessary for producing quality basket logs, coupled with no management of these species because it has little commercial value, has made the tree scarce in New York State.

The Brasher Forest represents a tremendous opportunity for studying Black Ash as well as management of this tree as an important resource for the Mohawks. Already, the ATFE has partnered with SUNY-ESF Ranger School to study Black Ash and develop a study plot to learn more about this tree. Significant progress has been achieved with the partnership Mohawks have developed with SUNY-ESF. Mohawks have also been working with the DEC's Saratoga Tree Nursery to grow and produce Black Ash seedlings for reforestation. Several plots now exist on the reservation thanks to the assistance received from the DEC and SUNY-ESF. This type of partnership can be extended further with additional research and development of plans to identify and assess Black Ash stands in the Brasher forest and apply information that has been recently developed to enhance these stands for basket making, species preservation, and further study.

I offer this outline as the first step toward incorporating a Black Ash study and enhancement plan into the Brasher State Forest Unit Management Plan.

- Develop a working agreement between Mohawks of Akwesasne, SUNY-ESF, Ranger School and the New York State DEC Forestry Program to cooperate in the interest of studying, preserving and enhancing Black Ash.
- Identify existing Black Ash stands within the Brasher State Forest (other State Forests as well).

- Assess the quantity and quality of the Black Ash stands within the Brasher State Forest through an inventory.
- Apply current knowledge and experience to enhance growth of Black Ash for seed production, reproduction, growth and basket making
- Develop harvesting plan that is sustainable for Black Ash -minimize high grading and selective cutting.
- Develop a seed collection plan for the collection of seeds for germination and reforestation efforts and for ensuring plant diversity.
- Develop a habitat preservation plan that prevents loss of Black Ash habitat.
- Incorporate the harvesting and preservation plans into NYS DEC Forest Unit Plans where other opportunities exist, statewide.
- Identify resources available to the partners that can be utilized to accomplish the preceding.

Introduction

Black Ash (f. nigra) is an important non-timber forest resource utilized by traditional Native American basket makers for baskets. Black ash is commonly found in around the fringe of wetland habitats. It is n9t considered to be an important commercial timber species and is harvested only incidentally by commercial harvesters. Select logs (bolts) are highly sought by traditional basket makers, but have become uncommon in the Northern New York area, forcing Mohawks to travel extensive distances to obtain adequate supplies.

Black ash is available throughout New York State in private and State managed forests. Rarely are black ash trees made available to Mohawks by private landowners. State managed forests have been the primary resource for Mohawks, but supplies have diminished somewhat and areas being cut have not adequately regenerated to supply both quality and quantity of logs needed.

The Mohawks in association with State University New York -Environmental Science and Forestry (SUNY-ESF), Cornell University, and several other partners have been studying black ash characteristics, habitat, and potentials for stand improvement and management for several years. These studies and several others by graduate students have yielded significant contributions to the improvement of black ash timber resources.

The New York State Department of Environmental Conservation (NYSDEC) requested the participation of Mohawk tribal government and tribal members in the Unit Management Plan (UMP) for the Brasher State Forest in early 2001. The Mohawks forwarded written comments in addition to verbal statements to be included in the UMP. Included were comments that NYSDEC incorporate a Black Ash Management Plan into the UMP for the perpetuation, regeneration and management of black ash.

This document embodies a shared desire and common interest to protect, enhance and regenerate black ash. The foundation for black ash preservation has been and will continue to be based on cooperation. This will be accomplished through the Adopt-A-Natural Resource Stewardship Program mechanisms instituted by the NYSDEC. This program serves as the framework for structuring a

management system or program that acknowledges and preserves the inherent rights of the both the Mohawks and the NYSDEC.

Objectives

The objective of the Black Ash Management Plan is to manage black ash resources in St. Lawrence County and Franklin County, held on State Forest Lands, under the Adopt-A-Natural Resource Stewardship Program. To manage means to employ silvicultural practices determined to be appropriate for black ash to enhance the growth potential of existing stands (plots) for habitat diversity, production of basket grade logs and sustainable regeneration (seed source, seedlings for transplant and natural regeneration). Black ash management will be achieved in a manner that is respectful of the inherent rights of Mohawk people who are the primary end users of black ash and the NYSDEC who has primary stewardship for resources on State lands.

Management practices to be employed in implementing the plan will be reflective of current black ash management practices and will be in consultation with Dr. Michael Bridgen, or his designee or successor, SUNY-ESF, who has been primarily instrumental in specialized black ash studies, and the NYSDEC who possess the technical resources for applied timber management and through the Akwesasne Task Force on the Environment who has acted and will continue to act as a coordinator for the plan, including supplying of volunteer resources under the stewardship program.

Process

Identify existing Black Ash stands within the Brasher State Forest (other State Forests as well).
Assess the quantity and quality of the Black Ash stands within the Brasher State Forest through an inventory.
Apply current knowledge and experience to enhance growth of Black Ash for seed production, reproduction, growth and basket making
Develop harvesting plan that is sustainable for Black Ash -minimize high grading and selective cutting.
Develop a seed collection plan for the collection of seeds for germination and reforestation efforts and for ensuring plant diversity.
Develop a habitat preservation plan that prevents loss of Black Ash habitat.
Incorporate the harvesting and preservation plans into NYS DEC Forest Unit Plans where other opportunities exist, statewide.
Identify resources available to the partners that can be utilized to accomplish the preceding.

Identification of Black Ash Stands

The NYSDEC possesses forest inventory records that include the identification and location of forest resources that include black ash. The NYSDEC agrees to provide information regarding the location of

these stands in the form of maps, hardcopy or digital if available. The identity and location of existing black ash trees will be for the purposes of this management plan.

Assessment -To be developed/discussed.

Enhancement -Based on current knowledge and that to be learned.

Harvesting -To be developed/discussed.

Seed Collection -Seed collection as identified in Adopt-a-Resource agreements.

Habitat Preservation -To be developed/discussed.

Incorporation of Plans in NYSDEC Unit Management Plans

Partnerships -Continue with Adopt-a-Resource program.

APPENDIX H –ST. REGIS MOHAWK POSITION LETTER

St. Regis Mohawk Tribe

RECEIVED
NOV 18 2013
NYSDEC
Region 6-Potsdam

Chief Ron LaFrance Jr.
Chief Paul O. Thompson
Chief Beverly Cook
Sub-Chief Michael L. Conners
Sub-Chief Eric Thompson
Sub-Chief Shelley Jacobs

November 12, 2013

Mr. Patrick Whalen
Forester
NYS Department of Environmental Conservation
6739 U.S. Highway 11
Potsdam, NY 13676

Shé:kon/Dear Mr. Whalen,

Over the course of several years the Tribe has participated in activities and partnered with a number of organizations and agencies to promote the development of a forest management plan that includes the Brasher State Forest.

In Ennisko:wa/March 2001 some of our staff and community members participated in a community meeting hosted by the NYSDEC to explain the forest management plan process and to elicit preliminary feedback from interested parties. Following this meeting the Tribe issued a letter (Ohiari:ha/June 29, 2001) to Mr. John Gibbs, Associate Forester, NYSDEC conveying our position regarding the management plan development and content. The Tribe's input was focused on the black ash tree which is utilized by traditional basket makers.

Since that time the Tribe has invested time and resources into management of black ash resources in the Brasher State Forest. It has also partnered with academia and several state, federal and non-governmental organizations to manage black ash that is of benefit to other flora and fauna of managed areas and to the benefit of all citizens of New York State as well.

Open dialogue between your office and our environmental managers has fostered a mutual understanding of the complex issues regarding forest management, Mohawk Culture and the New York State environmental and forestry management policies and practices. Despite what sometimes may have seemed to have been barriers to each other's concerns the dialogue has proved to be important for developing solutions to resource management through a partnership based on this mutual understanding.

It is our understanding that a management plan is forthcoming and the Tribe wanted to take this opportunity to restate its position regarding the management plan, noting that new initiatives have since broadened the plan. Also, previous successes are acknowledged and serve as a model for others to follow for partnering in resource management.

Helping Build A Better Tomorrow

412 State Route 37
Akwesasne, New York 13655
Phone: 518-358-2272

The Tribe can now speak as a true partner with the NYSDEC, and can bring to the discussion the insight and wisdom gained through the years that we have worked together on black ash management.

- There are certain assets of the Brasher State Forest that have intrinsic value to the Mohawks for traditional and ceremonial purposes. These assets may also have some commercial value and so we request that the plan include provisions which acknowledge these assets, acknowledge their value to the Mohawks, and limit their harvesting to ensure that they are not negatively impacted

- The Mohawks and all Iroquois people have the inherent right to hunt, fish and gather. In order for Tribal members to maintain their connection with the natural world the Brasher State Forest is a resource that offers opportunities for hunting, fishing and gathering. Sometimes, these activities are directly connected with ceremonial practices that are sometimes difficult for external cultures to comprehend but if interfered with results in conflicts and great misunderstandings. We understand that it is not the purpose of the management plan to decide whether or not to recognize and honor these rights; however we request that the DEC acknowledge the existence and complexities of our fundamental rights as they related to the development and implementation of DEC policies and regulations and commit to working with us as they are developed.

- Firewood continues to be an important resource for Tribal members as a primary and secondary source of heat. As fossil fuel costs continue to climb or at least remain uncertain, opportunities to access firewood remains an important consideration. The Tribe recognizes the challenges that the NYSDEC faces with budget and personnel cutbacks and how they can affect the ability of staff to devote effort toward smaller, non-commercial firewood harvests. The Tribe requests that the management plan contain provisions for small firewood harvesting permits for Tribal members.

- The management of Black Ash resources is an ongoing effort between the Tribe and the NSYDEC that has been built upon a partnership with several agencies and organizations including: The Ranger School, US Fish and Wildlife, USDA-APHIS, South Nation Conservation, Mohawk Council of Akwesasne, USDA Forest Service, and the Akwesasne Task Force on the Environment. This partnership has directly resulted in:
    - The inventorying of black ash resources in Brasher State Forest
    - The implementation of silviculture prescriptions in black ash stands in the Brasher State Forest to improve the availability of black ash for basket makers
    - A wider understanding of the silvicultural requirements of black ash
    - The collection and storage of black ash, green ash and white ash seeds at the National Center for Genetic Resources Preservation, Ft. Collins, CO from the Brasher State Forest for public benefit
    - The development of a stronger relationship between the Tribal, State, Federal, Provincial and Academic partners involved with the project
    - Provided a working example of the partnership and success that can be achieved under the Adopt a Natural Resource Program

The Tribe requests that the management plan contain language that provides for the continuation of initiatives that have promoted partnerships and enhancement of forest and black ash resources in the Brasher State Forest.

- Continue to identify, inventory, assess and manage black ash stands
- Include harvest provisions or plans for black ash in management plan for basket makers
- Continue black ash management efforts under the Adopt a Natural Resource Program or any legacy program no matter what it is termed
- Continue seed collection efforts

- Medicine plants used in traditional Mohawk healing practices thrive in special habitat and niches of forest and wetland environments that occur in the Brasher State Forest. The Mohawks remain concerned for the protection of medicine plants and their habitat. Recognition of Mohawk inherent rights to gather these plants remains an important consideration for the Forest Management Plan to ensure Tribal members may gather these plants without interference from conservation officers or forest rangers. The management plan must also include provisions to prevent logging and recreational activities (e.g. - ATV travel) from damaging habitat where these plants are. The Tribe offers to advise NYSDEC about these plants and their habitat but safeguards must be in place to prevent commercial market harvesting. The Tribe recommends provisions be added to the management plan that establish a system of medicine plant identification and protection.

- Point of Contact - Through the decades our Tribal members have enjoyed the friendship of several foresters appointed to the Brasher Forest. These foresters demonstrated their commitment to the NYSDEC in their professionalism and developed unique bonds with many of our community members, particularly black ash harvesters. They were respectful and open minded, bringing a great deal of cultural sensitivity to their work. Two of these foresters that come to mind include David Corse and his successor Timothy Baxter. The Tribe considers having this type of point of contact to be important for continuation of a relationship between NYSDEC and the Tribe and its members. The Tribe recommends the NYSDEC appoint such a contact within their offices to work with our community members so that this type of relationship can be perpetuated.

Recently, the Saint Regis Mohawk Tribe has undertaken initiatives that are the result of long-standing negotiations for a natural resource damage claim which broadens the scope of resource access within the Brasher State Forest. Due to its distance and isolation from industrial contamination the Brasher State Forest provides a unique opportunity for the Tribe to conduct cultural restoration efforts. Attached is a memorandum from Mrs. Barbara Tarbell, Natural Resource Damage Coordinator, outlining her programs interest in utilization of the Brasher State Forest as a location for implementing cultural activities. The program Mrs. Tarbell is involved with revolves around the availability of pollution free natural resources that are nearby the reservation. The program is unique in that it uses experienced traditional practitioners in medicine plants, hunting, fishing, and gathering to mentor students seeking to learn and employ Mohawk customs and values that promote responsible and sustainable practices. Incorporating

this program into the Forest Management Plan will provide the NYSDEC with an opportunity to support and participate in a model cultural restoration.

The Tribe would greatly appreciate the opportunity to comment directly on the actual language of the management plan and if this is acceptable we request a meeting with you as soon as possible to provide our input. Thank you for your time and consideration of our comments. If you have any questions, please do not hesitate to contact us..

Niawen/Thank You.

THE SAINT REGIS MOHAWK TRIBAL COUNCIL

Ron LaFrance, Jr.,
Tribal Chief

Paul O. Thompson,
Tribal Chief

Beverly Cook,
Tribal Chief

APPENDIX I - MEMORANDUM FROM THE ST. REGIS MOHAWK TRIBE REGARDING BRASHER STATE FOREST AND CULTURAL RESTORATION

St. Regis Mohawk Tribe
Environment Division

Ken Jock,
Director

MEMORANDUM

TO: Les Benedict, Env. Division Assistant Director

FROM: Barbara Tarbell, NRDA Program Manager

SUBJECT: Brasher Forest Unit Management Plan

DATE: 8/6/13

CC: Ken Jock, Env. Division Director

The Saint Regis Mohawk Tribe has partnered with the Department of Interior/Fish and Wildlife Service; NYS Department of Environmental Conservation and National Oceanic Atmospheric Administration (NOAA) collectively as the St. Lawrence Environment Trustee Council (the Trustees). The role of the Trustees is to act on behalf of the public to protect and restore natural resources that have been injured by the release of hazardous materials.

Over the past two decades the Trustees have pursued a resolution to the Natural Resource Damages claim against the responsible parties Alcoa and General Motors. As you know, General Motors filed for bankruptcy in 2011 which ended our cooperative resolution process with them. However, we recently announced a settlement with Alcoa and will soon be implementing an exciting new restoration program. The cultural component of the settlement is on the leading edge of restoration in Indian Country, and compensates for injury to cultural practices attributable to natural resource contamination. The main impact that Akwesasne community members have experienced in terms of usage of the natural resource is the severance of a spiritual, utilitarian, economic, and subsistent relationship with the natural resources. Essentially the goal of cultural restoration is to reinvigorate this relationship and fully support and nurture this knowledge of traditional cultural practices on the land.

The Brasher Forest represents a clean and safe area with special habitat that is necessary in our efforts for restoration. The inherent right to hunt, fish, and gather medicines is essential to the implementation of the Cultural Restoration Program. In re-learning these traditional activities it is intrinsic to Mohawk custom and values that responsible and sustainable methodologies would be practiced and incorporated in the program. The attached information will provide a detailed summary of the goals and objectives of the Cultural Restoration Program including the Apprenticeship Program which will pair up knowledgeable teachers with students for a hands-on learning experience.

The Brasher Forest Unit Management Plan represents a significant opportunity to open dialogue and create partnerships between NYSDEC and the Mohawk community. There are several instances of successful partnerships to draw from including the Black Ash study and preservation.
We are encouraged by the existing partnerships and look forward to future discussions.

Nia:wen/Thank you,

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Helping Build A Better Tomorrow

Saint Regis Mohawk Tribe
Cultural Restoration Program

The release of contaminants into the natural environment has forced Akwesasro:non (people of Akwesasne) to give up traditional resource harvesting activities. As a result they have been denied the ability to provide their families with healthy foods; and denied the ability to fulfill their traditional obligations toward the land, waters, plants and animals; denied the ability to pass on practical, theoretical, philosophical and linguistic knowledge of what it means to be Kanien'keha:ka (Mohawk people).

The historical baseline set for resource-based cultural practices relative to ecological conditions "but for" the release of contaminants is 1955. The pre-pollution population (considered in terms of family units) reliant on traditional resources and resource-based cultural practices was 100%. The overall proportion of activities based on cultural practices related to the land, ecosystem and aquasystem of Akwesasne for subsistence at the time identified for the baseline pre-pollution conditions was 95%. Previous to this date the Mohawks of Akwesasne were not detrimentally affected by industrialization and maintained the capacity to adapt to cultural diffusions and changes in the natural environment in ways that were consistent with their values and the responsibilities inherent in Haudenosaunee culture.

It was determined through research that there are four main areas of traditional cultural practices harmed by the release of hazardous contaminants. They are (not in any particular format): 1. Water, fishing and use of the river. 2. Horticulture and basketmaking. 3. Medicinal plants and healing. 4. Hunting and trapping. Language has also been detrimentally affected by the decline of traditional cultural practices and those words associated with these activities are at risk of being lost.

Water, Fishing and use of the River

Life in Akwesasne centered around the rivers, which provided the people with their main sources of protein- fishing as an economic and cultural activity was central to the identity of the people. The rivers also provided the people with a source of clean drinking water, a means of transportation, and a favorite recreation, in swimming. Being cut off from the physical and psychological and recreative sustenance provided to Akwesasro:non by the river has impacted the people negatively in countless ways. People miss the ability to fish and use the water of the St. Lawrence and other rivers. People noticed changes in

the water quality, including the taste and smell of both fish and the water, and adapted their resource harvesting activities accordingly.

Horticulture, Farming and Basketmaking

The people of Akwesasne relied on traditional horticulture and farming activities to support their subsistence, with further moneys generated through the sale of hand made baskets and locally produced and or collected food items. These activities were important aspects of the people's lives right up to the time when pollution made such activities difficult if not impossible. Until such time, people in Akwesasne were largely self-sufficient. The ability to produce most food items through horticulture and farming (along with that acquired through fishing, hunting and trapping), provided people with autonomy and independence and the power to be in control of the changes to their traditional practices. Until the time of heavy industrialization the people of Akwesasne were able to assert an effective measure of control over the impacts of the outside world; this autonomous existence and balanced organic pattern of change was effectively destroyed by the industrialization of the area and the ensuing effects of its toxic by-products on the environment.

Medicine Plants and Healing

The release of contaminants have also had detrimental effects on the medicinal plants that knowledgeable Akwesasro:non gathered in order to deal with many issues from increasing the milk supply of nursing mothers to treating fevers, pain, boils, toothache hair loss and so on. In some cases, the pollution led to the disappearance of medicine plants and in other cases, it changed the appearance or taste of the plants, alarming healers. Medicines also came from animal parts that can now no longer be obtained for similar reasons. While some still travel to distant locations in order to attempt to pick up traditional medicines, much of this knowledge is at risk of being lost given that traditional healing can no longer be practiced without the local availability of medicines. The perception that medicine plants were contaminated have also had an impact on the loss of the traditional activity.

Hunting and Trapping

Along with fishing, horticulture and farming, people also depended on hunting and trapping in order to supplement their diet and income. Hunters and trappers tend to be experts in animal behavior and health. This is not only because of their continuous observation and recording of the health of animals while they skin and process them (including such areas as organ health, normal fat layers, etc), but also

because of their detailed knowledge of the interdependencies of all plants and animals of the ecosystem they rely on (Feit 1973; Freeman 1992; Berkes 1999; Nadasty 2004; Spak 2001). Hunters and trappers then tend to be "at the front line" of observing environmental change, which often includes an awareness as to why certain animals are becoming sick, given that they know what these animals eat and need in order to survive. It is therefore not surprising that the hunters and trappers of Akwesasne noted changes in the animals and decided against the consumption of their meat before any official advisories had been given.

Language

Mohawk language in Akwesasne suffered since the relationship to the land and river has been severed by environmental contamination. Issues surrounding the serious concern about language loss have been reflected at gatherings and Council meetings throughout the Haudenosaunee Confederacy. A gathering, which included representatives from Akwesasne, was held at the Onondaga Nation in May of 2002 and provided impetus for considering language restoration as an urgent priority. The purpose of the workshop was to determine what should be done to ensure the survival and growth of all Haudenosaunee languages. The case of Akwesasne was discussed as being of particular concern. In spite of the fact that a number of middle aged and elderly speakers still exist in the community, there is an extremely low number of speakers who are willing and able to teach the language. It was made clear at this gathering that the Mohawk language is seriously threatened, since fluency in the language is restricted to those 45 and older. The Mohawk Language was not a written language; it was passed down generation to generation through daily oral use. We have now skipped a generation of Mohawk speakers, and in some families two generations no longer speak or understand the Mohawk language.

Overall Restoration Objective

The community's ultimate objective is to re-establish the harmed cultural practices to the level at which they were practiced but for the release of contaminants into the ecosystem.

The restoration plan developed seeks to return to traditional practices, where a) these practices are spread among all age groups and throughout the family groups in the community, b) the number of people doing land-based cultural activities is increasing at pace with overall population numbers, c) the practices are diffuse within the social, political and economic life of Akwesasne, d) the practices adapt to the changing culture of the community, and e) the situation is achieved where people again gain the

level of expertise in these areas that specialized knowledge and the skill level within the community actually begin to increase and the practices evolve further.

General Restoration Framework

The cultural restoration framework focuses on taking urgent action to prevent further loss of knowledge associated with land-based cultural practices, and addresses the immediate needs of the community in terms of identifying and supporting practices, programs and persons in their efforts to ensure the survival of traditional Mohawk cultural life. The focus is on restoring necessary connections, regenerating key cultural practices, and transferring crucial cultural knowledge. In taking this approach to restoration, the patterns of belief and practice that once characterized the Mohawk community can be restored over time and through focused efforts will achieve a regenerating point at which these traditional cultural practices will once again be widespread and self-sustaining and once again be fundamental parameters of existence in Akwesasne. This will ensure the long-term cultural integrity of Akwesasne as an indigenous community, but also promote physical health, serve as a major factor in the recovery of social stability and in the generation of economic self-sufficiency based on traditional practices.

Akwesasne's approach to cultural restoration seeks to restore land-based cultural practices and traditional economic activities within the community. It will do this in two ways. First, it will establish and directly support long-term master-apprentice relationships in the four areas of traditional cultural practice that were harmed by the release of hazardous contaminants, and promote and support the regeneration of practices associated with traditions in these areas:

1. Water, fishing and the use of the river: Restoring traditional community fishing practices and local economy; restoring language use and transmission of knowledge regarding traditional fishing and river practices.
2. Horticulture, farming and basket-making: Restoring traditional and sustainable farming practices that are vital to the local economy; Restoring traditional roles and responsibilities for engaging in farming and other activities, such as basket-making; Provision of access to natural resources for farming or other traditional uses.
3. Medicine plants and healing: Restoration of cultural sites and/or species necessary for the spiritual survival of the community; Restoration of traditional medicine plants, such as sweet

grass; Regeneration of intergenerational teachings, language, and relationships between Elders and youth regarding medicine plants and healing.

4. Hunting and trapping: Restoration of traditional hunting practices as community livelihood; Restoration of animal habitats and populations; Regeneration of intergenerational teachings and relationships between elders and youth regarding hunting and trapping.

Cultural Restoration Plan

The restoration effort will have four main elements, each addressing a significant need. The four main components of cultural restoration include 1) Apprenticeship program, 2) Language promotion, 3) Institutional Funding, and 4) Provision of access to necessary natural resources.

Apprenticeship Program

The Master Apprentice Program will provide opportunities for people who are interested in learning traditional cultural practices (Apprentices) to work with knowledge holders in the community (Masters). The program objective is to provide a viable plan of action for the continuance of traditional cultural practices through the transfer of knowledge between the Masters and Apprentices and future generations. These "masters" will be equipped as necessary with tools, supplies and support and connected with an appropriate number of "apprentices" (varying according to specific practice and based on the teaching capacity of specific masters) drawn from an established pool of younger Akwesasne individuals who have expressed interest and demonstrated commitment to learning cultural practices under this teaching model. It is anticipated that there will be sufficient numbers of masters and apprentices available to create numerous small-group teams in all four areas of harm. Financial support will be provided to both the masters and apprentices to allow full-time participation by both teachers and learners for the period of time required for apprentices to gain a level of cultural knowledge and language fluency which allows them to practice autonomously and to take on a mentoring role for the next generation of learners.

The master-apprentice model is most appropriate to the objective of restoring harmed land-based cultural practices because it is a structure and a relationship which allows for the integration of an Indigenous learning-teaching approach. The goal of the process over time is to bring the apprentice to a point where he or she possesses the skills of the master and the confidence to assume a teaching role to others. An important measure of the program is through recognition by the community; most commonly apprentices are "certified" legally, but in the Cultural Apprenticeship Program, beyond the awarding of a

certificate, will require that apprentices take part in annual traditional knowledge community conferences to demonstrate their growing skill level, and be recognized publically to ensure their credibility and to promote them as cultural resources and sources of knowledge accessible to the community as a whole at the conclusion of the program.

Language Promotion

A capacity for promoting and supporting the restoration of *Kanien'keha* (the Mohawk language) through both the Master-Apprentice relationships and the existing institutional activities is a core feature of the overall restoration plan. This aspect of the plan addresses the language deficits in terms of number of speakers in the community and the depth and complexity of the language itself, both of which were detrimentally affected by the community's disconnection from the land-based and riverine cultural activities. Initiatives to maintain the transmission of language and important technical focal vocabulary embedded in traditional resource harvesting practices are an important aspect in the effort to restoring the health and vitality of the people.

The goal of this aspect is to increase the number of language speakers by having all participants in the Master-Apprentice program and all of the main participants involved in institutional projects recover fluency in Kanienkeha. A community wide strategy will also be supported through this program, with emphasis on working with other organizations and agencies to saturate Akwesasne with Kanienkeha using all available print and broadcast media (radio, newspapers, print, video, street signs, education materials, etc).

Access To Resources

There are natural resource needs specific to each area of cultural practice, and where resources are lacking or where the existing resources in Akwesasne are not safe or usable, measures will be taken to provide Akwesasro:non access to the necessary resources in the upstate New York or southern Ontario/Québec region. The main areas of need in this respect are for fishing, natural foods and medicine gathering, and hunting and trapping.

Over the past decade, realizing the effects of contamination on the local water surrounding Akwesasne and in order to maintain their cultural practice, Akwesasne fishers have shifted their practice to locations away from Akwesasne. One main area of use is located one hour north-west of Akwesasne. The relationship between Akwesasne and its sister community benefits a few Akwesasne residents, but due to the fact that only those who are invited can participate in that fishery, most Akwesasro:non are denied

the ability to continue their practice in this manner. There is also an Algonquin community with close cultural and familial ties to the Mohawk Nation, which is located near Maniwaki, Quebec, three hours north-east of Akwesasne, and offers some Akwesasro:non similar by-invitation opportunities for hunting moose and bear in Algonquin territory. There are also abundant trapping resources in the area as well as a choice berry picking site.

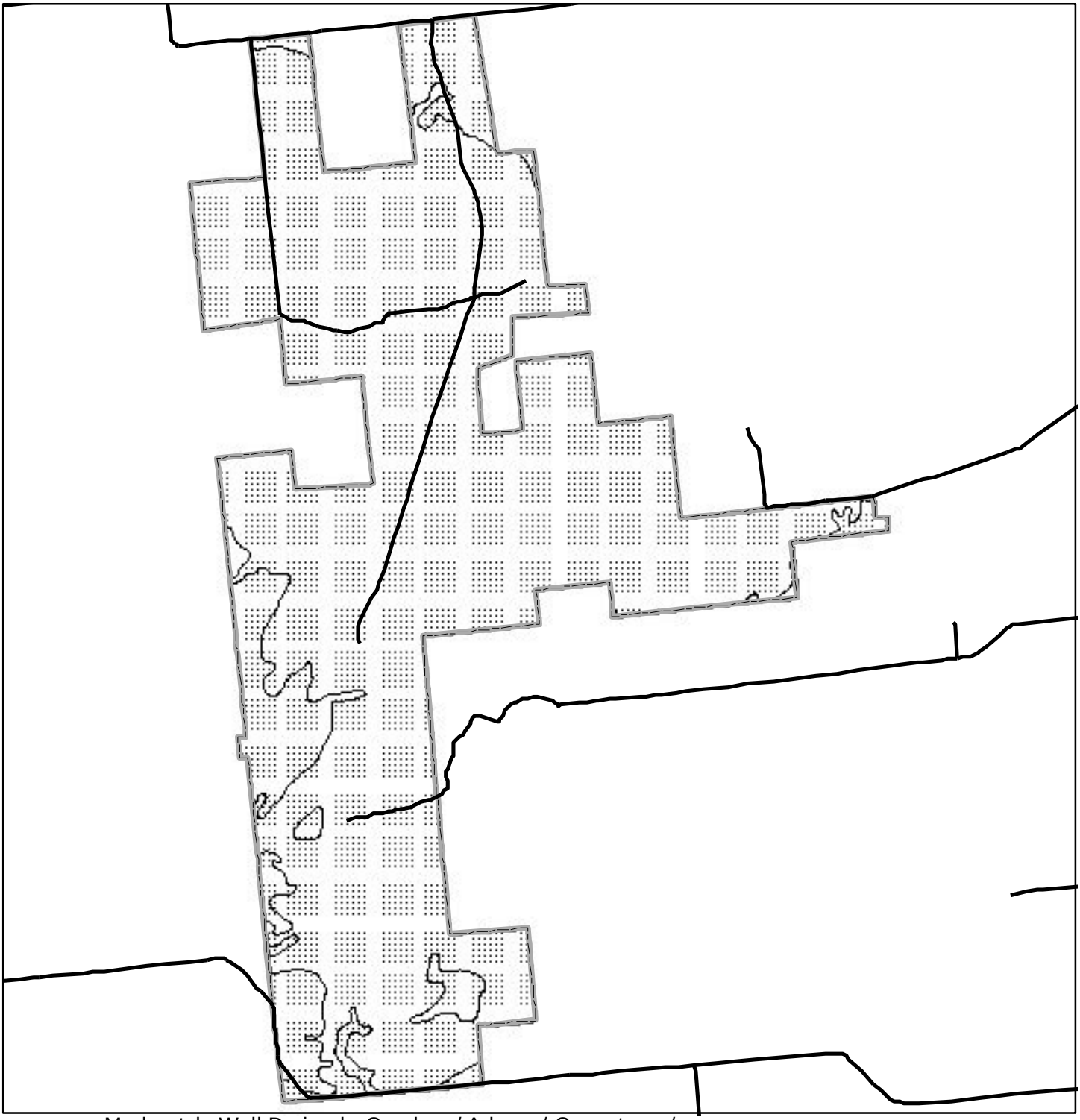
These activities are a clear indication of the adaptation and direct cultural change resulting from the health concerns surrounding the St. Lawrence fishery and abandonment of local hunting and trapping practices. The acquisition of property or partnerships created to access and utilize natural resources in the vicinity of Akwesasne is necessary to fulfill the objectives of the Cultural Restoration Program.

Conclusion

The cultural restoration plan, is a way of taking urgent action to prevent further loss of knowledge associated with natural resource-based cultural practices, and addresses a range of immediate needs in the community in terms of identifying and supporting practices, programs and persons in their efforts to ensure the survival of traditional Mohawk cultural life. Our focus is on beginning the work to restore necessary connections, regenerate key cultural practices, and transfer crucial cultural knowledge. In taking this approach to restoration, we believe that the patterns of belief and practice that once characterized the Mohawk community can start to be restored and that over time through our focused efforts we will achieve a regenerating point at which these traditional cultural practices will once again be widespread and self-sustaining and once again be fundamental parameters of existence in Akwesasne. This will ensure the long-term cultural integrity of Akwesasne as an indigenous community; serve as a major factor in the recovery of social stability and in the generation of economic self-sufficiency based on traditional practices.

FIGURE 1. – SOIL MAPS

(see appendices and figures)



Moderately Well Drained - Croghan / Adams / Coveytown / Hogansburg loamy fine sands; Croghan sand Hogansburg and Grenville soils

Poorly Drained - Au Gres-Scarboro-Croghan association; Borosaprists and Fluvaquents, Deford loamy fine sand; Deford mucky loamy fine sand; Dorval muck; Malone loam, Naumburg loamy fine sand;

Very Well Drained - Adams sand

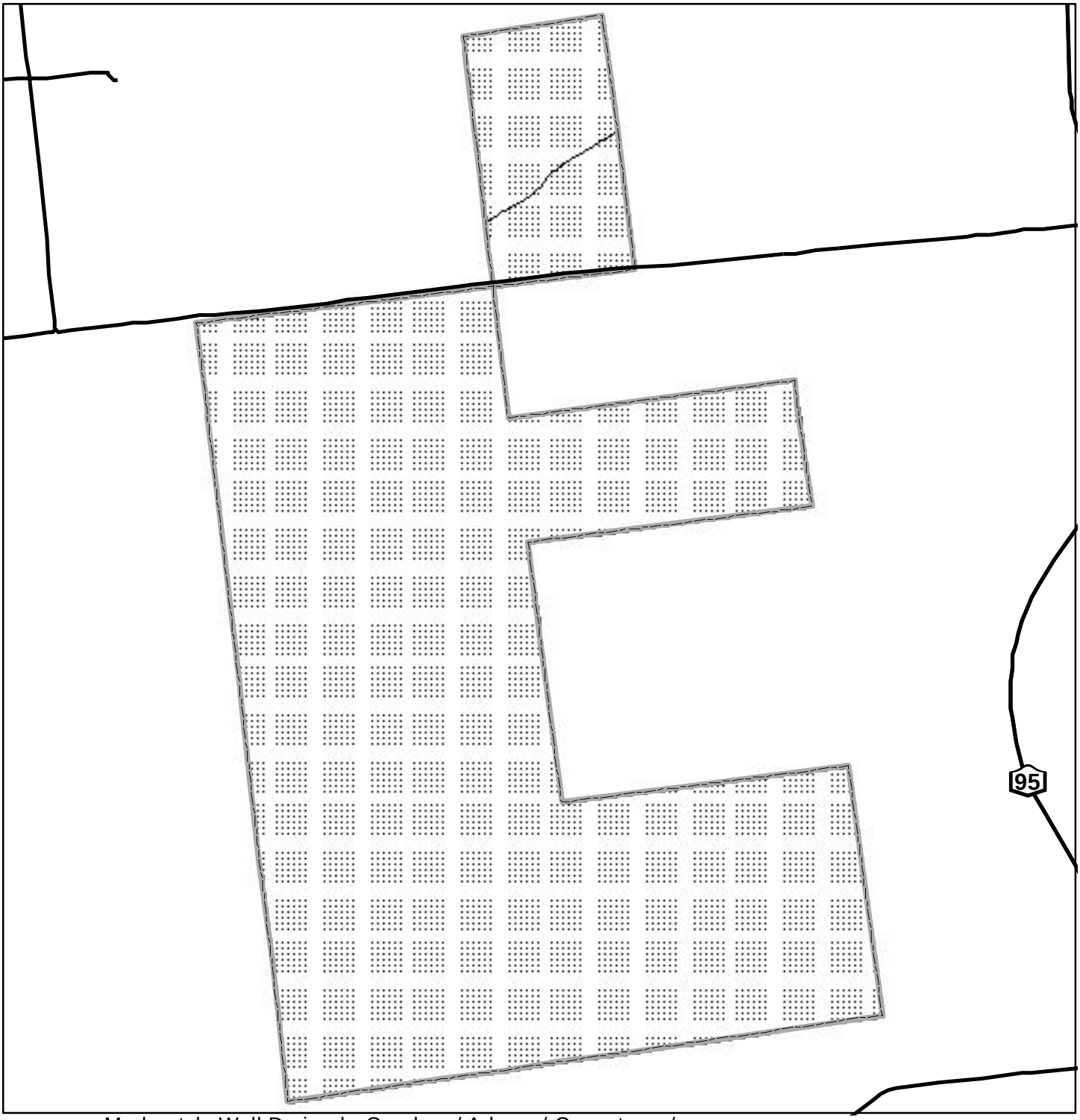
Forest Boundary

Public Roads

BOMBAY STATE FOREST
FRANKLIN 2
SOIL TYPE
FIGURE 1

N

0 0.25 0.5 Miles



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Very Well Drained - Adams sand

Forest Boundary

Public Roads

BOMBAY STATE FOREST
FRANKLIN 4
SOIL TYPE
FIGURE 1

N

0 0.25 0.5 Miles



Moderately Well Drained - Croghan / Adams / Coveytown / Hogansburg loamy fine sands; Croghan sand Hogansburg and Grenville soils

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Very Well Drained - Adams sand

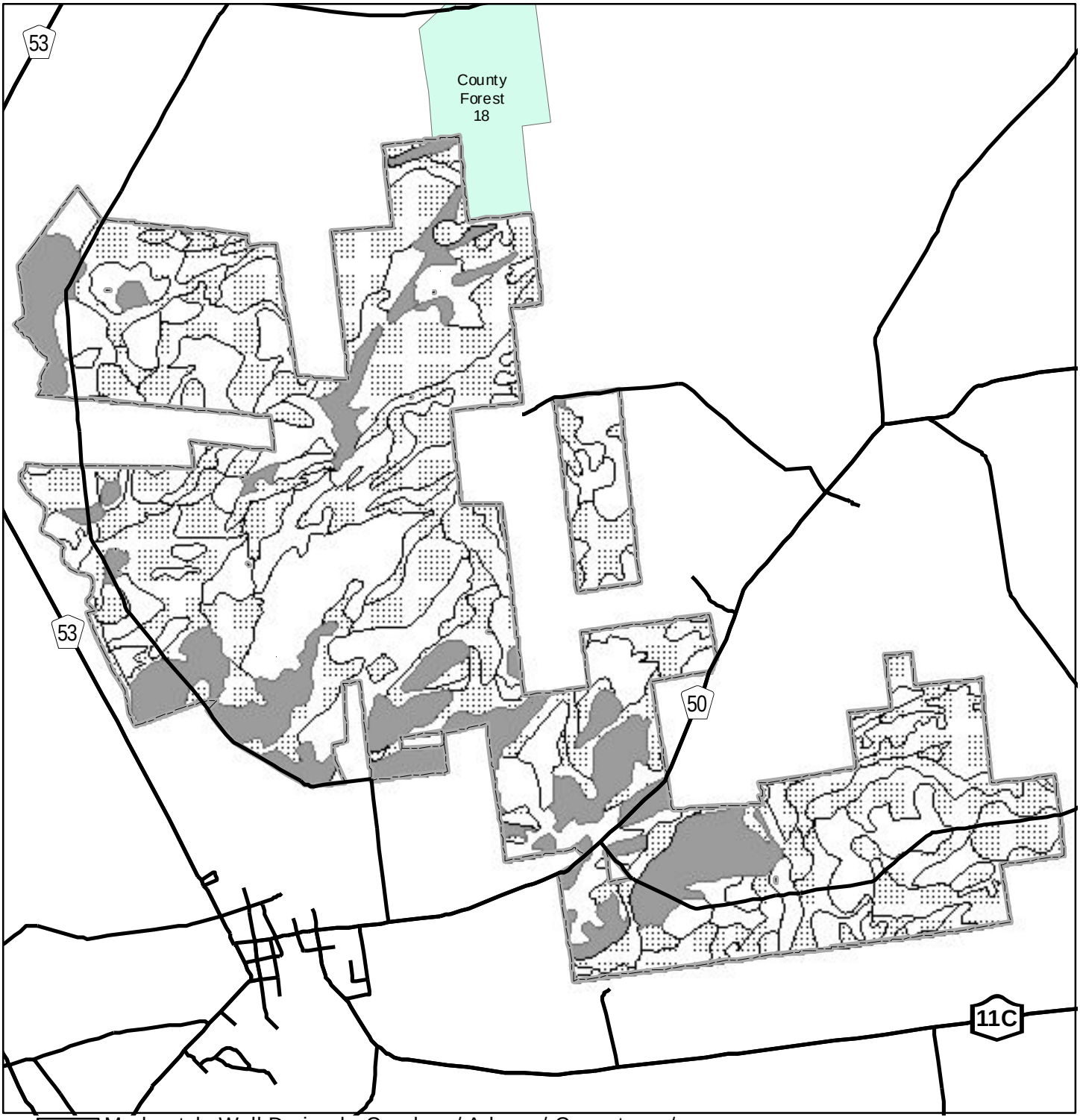
Forest Boundary

Public Roads

BRASHER STATE FOREST
ST. LAWRENCE 1
SOIL TYPE
FIGURE 1

N

0 0.25 0.5 Miles



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Very Well Drained - Adams sand

Public Roads

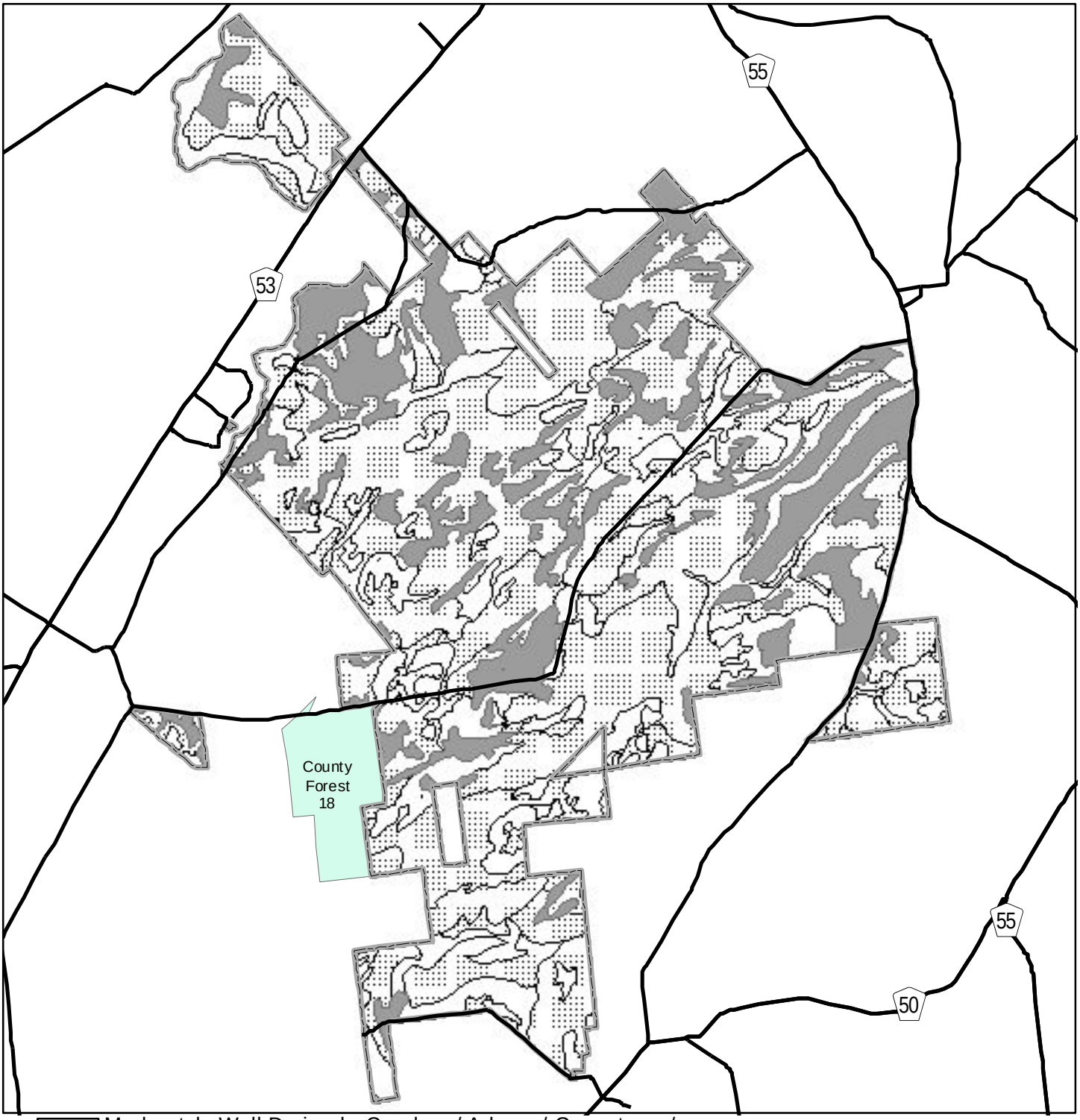
Forest Boundary

County Forest

BRASHER STATE FOREST
ST. LAWRENCE 5
SOIL TYPE
FIGURE 1

N

0 0.25 0.5 Miles



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Very Well Drained - Adams sand

Public Roads

Forest Boundary

County Forest

BRASHER STATE FOREST
ST. LAWRENCE 6
SOIL TYPE
FIGURE 1

N

0 0.25 0.5 Miles



Moderately Well Drained - Croghan / Adams / Coveytown / Hogansburg loamy fine sands; Croghan sand Hogansburg and Grenville soils

Poorly Drained - Au Gres-Scarboro-Croghan association; Borosaprists and Fluvaquents, Deford loamy fine sand; Deford mucky loamy fine sand; Dorval muck; Malone loam, Naumburg loamy fine sand;

Very Well Drained - Adams sand

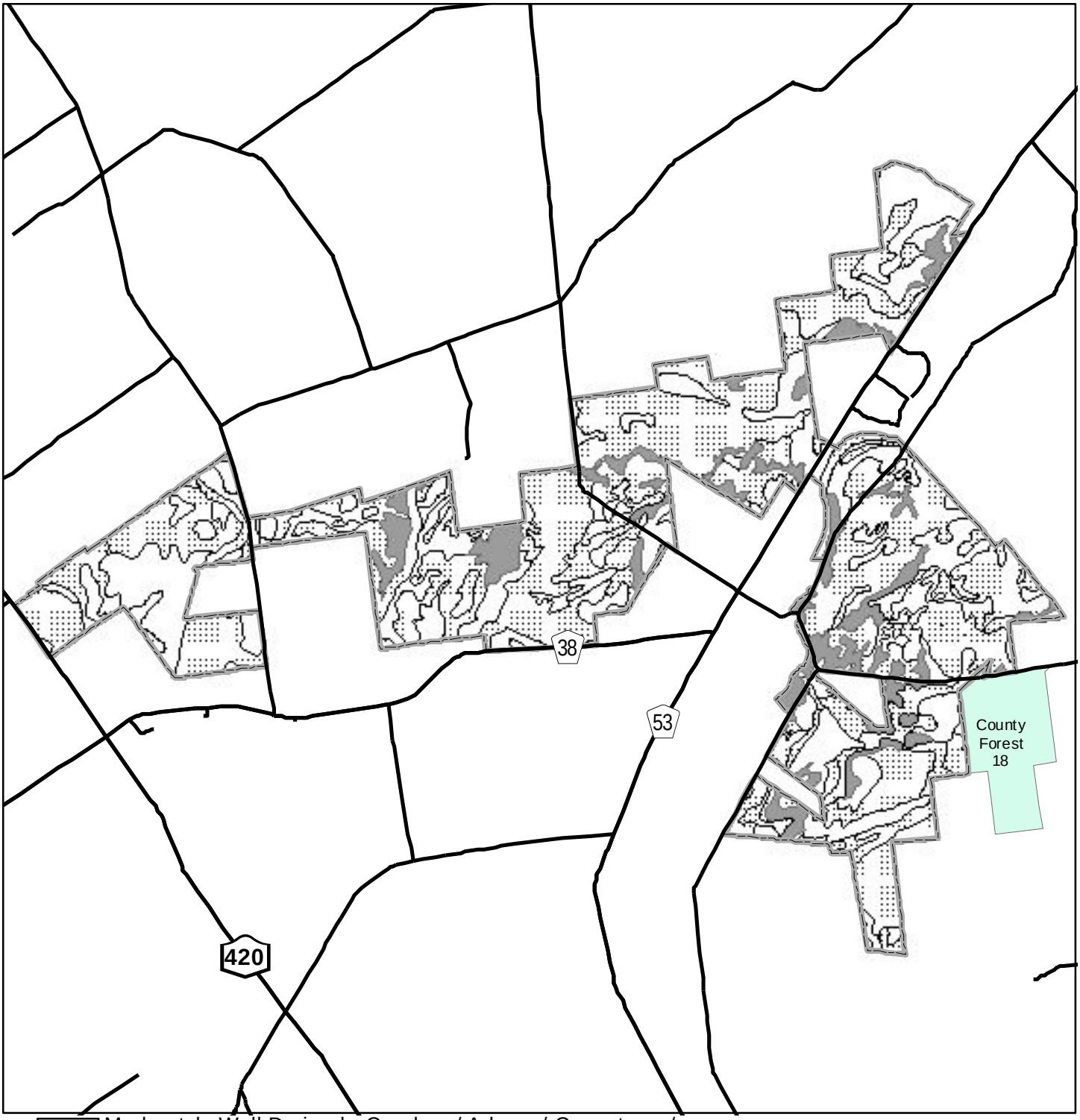
Forest Boundary

Public Roads

BRASHER STATE FOREST
ST. LAWRENCE 7
SOIL TYPE
FIGURE 1

N

0 0.25 0.5 Miles



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Very Well Drained - Adams sand

Public Roads

Forest Boundary

County Forest

BRASHER STATE FOREST
ST. LAWRENCE 10
SOIL TYPE
FIGURE 1

N

0 0.25 0.5
Miles



Moderately Well Drained - Croghan / Adams / Coveytown / Hogansburg loamy fine sands; Croghan sand Hogansburg and Grenville soils

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Very Well Drained - Adams sand

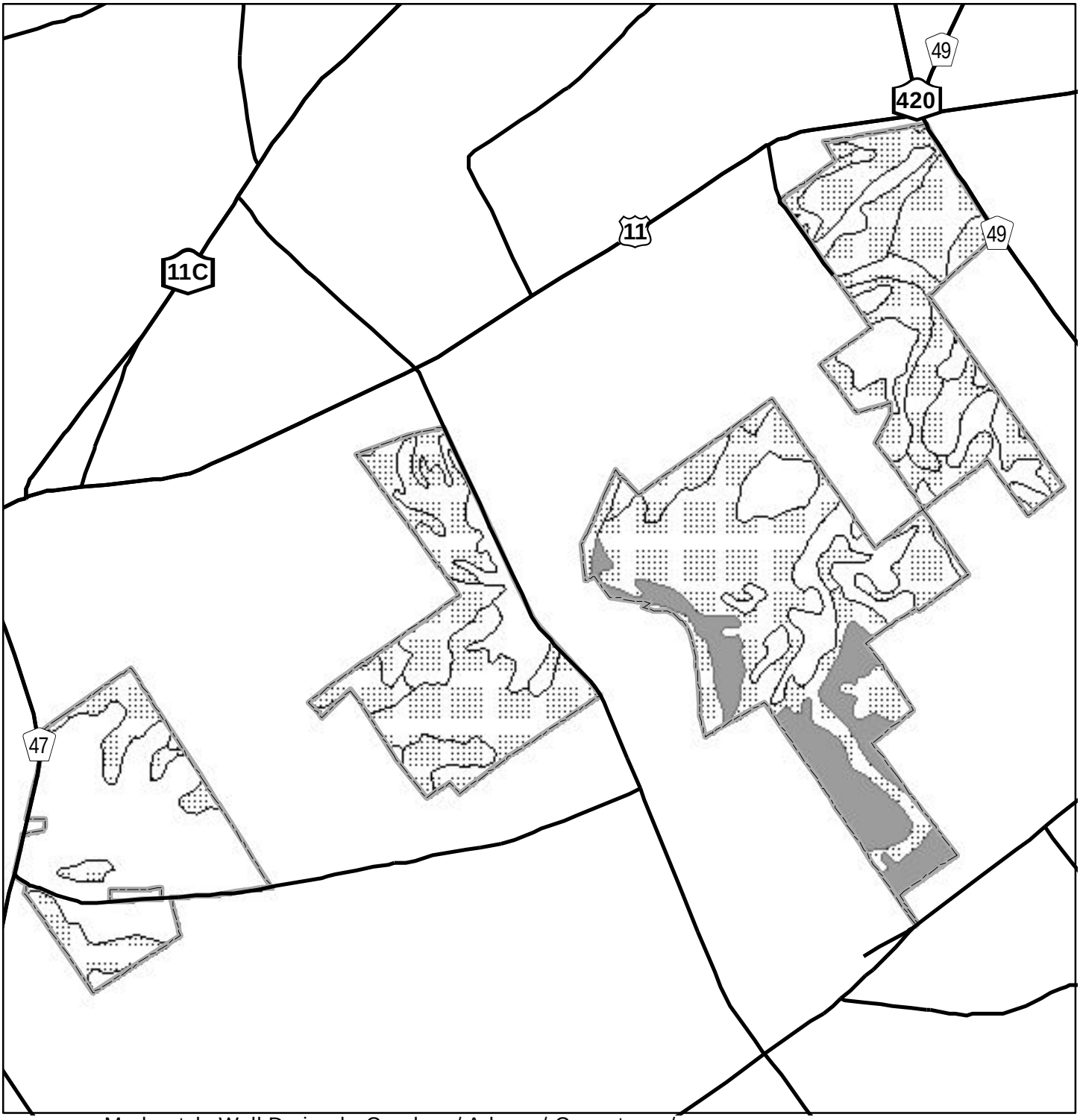
Forest Boundary

Public Roads

BRASHER STATE FOREST
ST. LAWRENCE 7
SOIL TYPE
FIGURE 1

N

0 0.25 0.5 Miles



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Very Well Drained - Adams sand

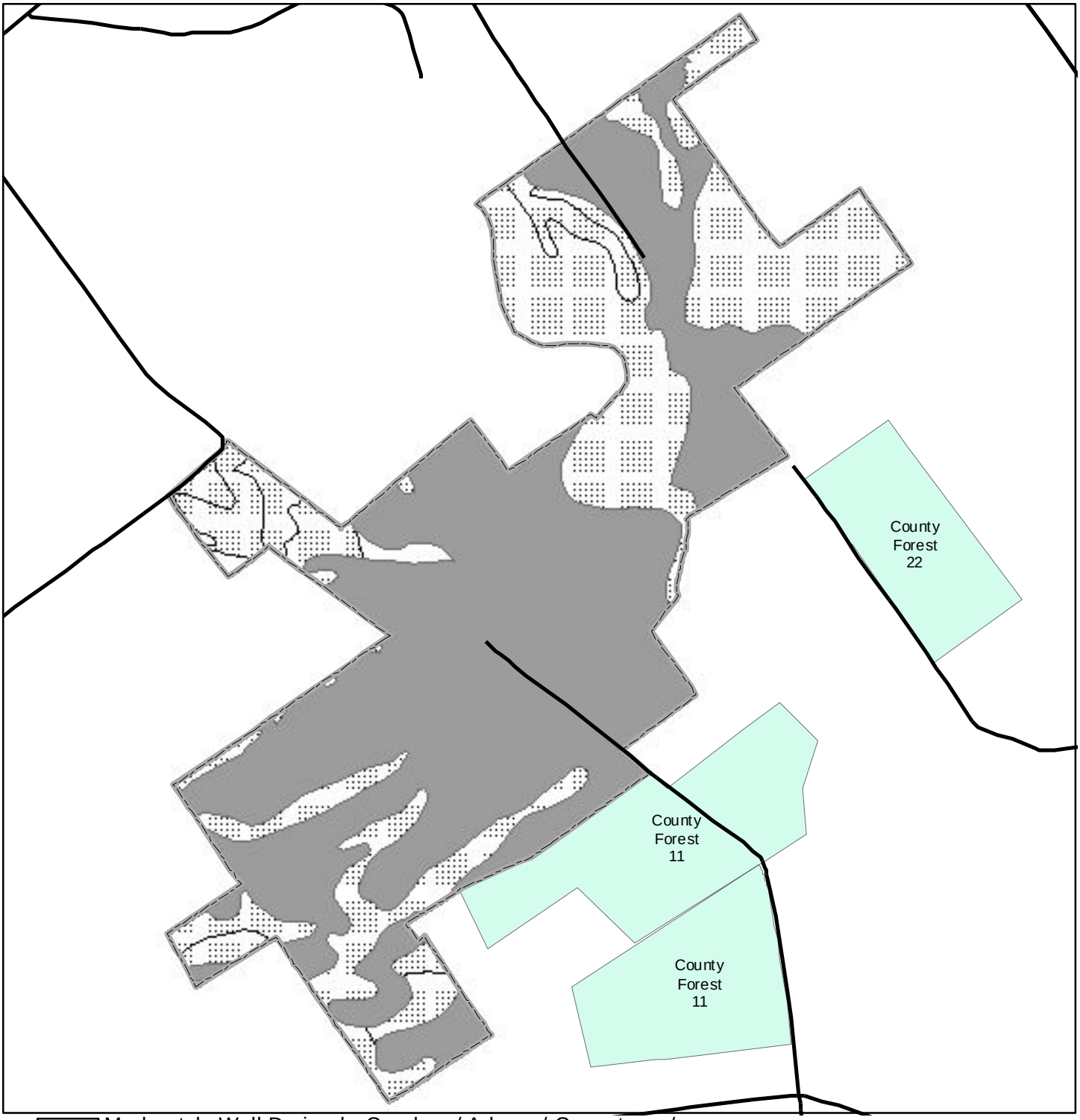
Forest Boundary

Public Roads

BUCKTON STATE FOREST
ST. LAWRENCE 31
SOIL TYPE
FIGURE 1

N

0 0.25 0.5 Miles



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Very Well Drained - Adams sand

Public Roads

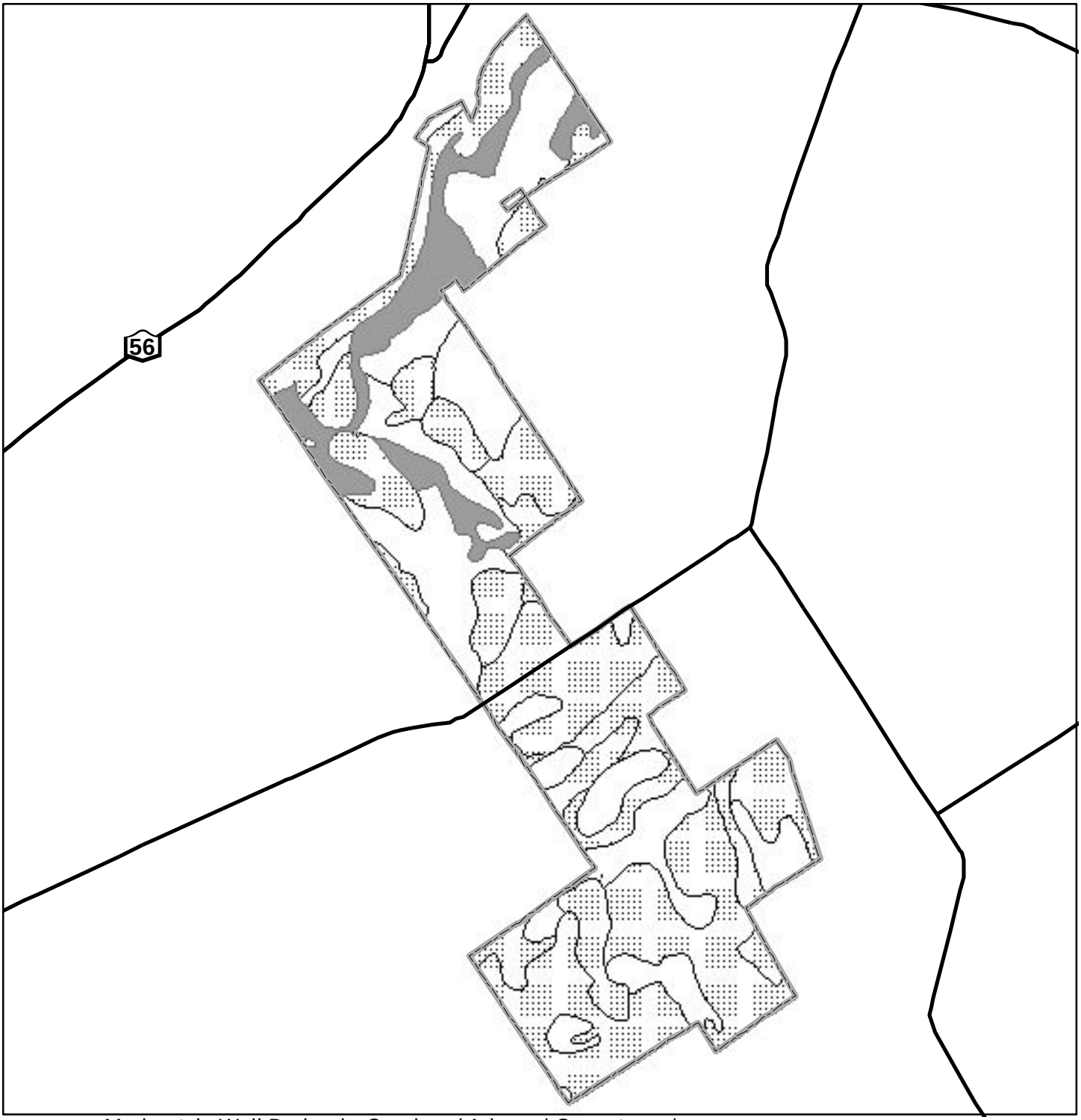
Forest Boundary

County Forest

FORT JACKSON STATE FOREST
ST. LAWRENCE 22
SOIL TYPE
FIGURE 1

N

0 0.25 0.5 Miles



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Very Well Drained - Adams sand

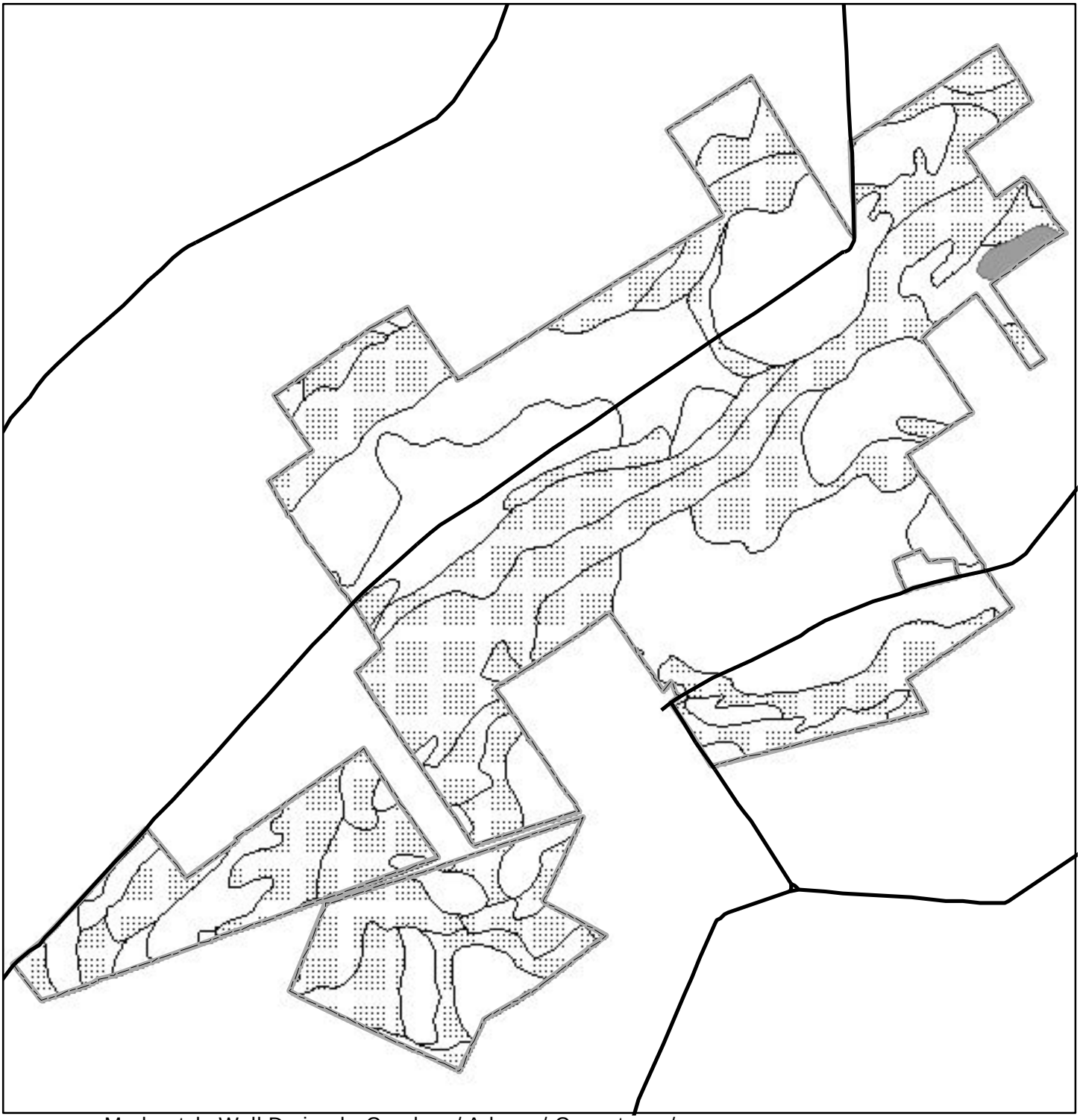
Forest Boundary

Public Roads

GRANTVILLE STATE FOREST
ST. LAWRENCE 15
SOIL TYPE
FIGURE 1

N

0 0.25 0.5 Miles



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Very Well Drained - Adams sand

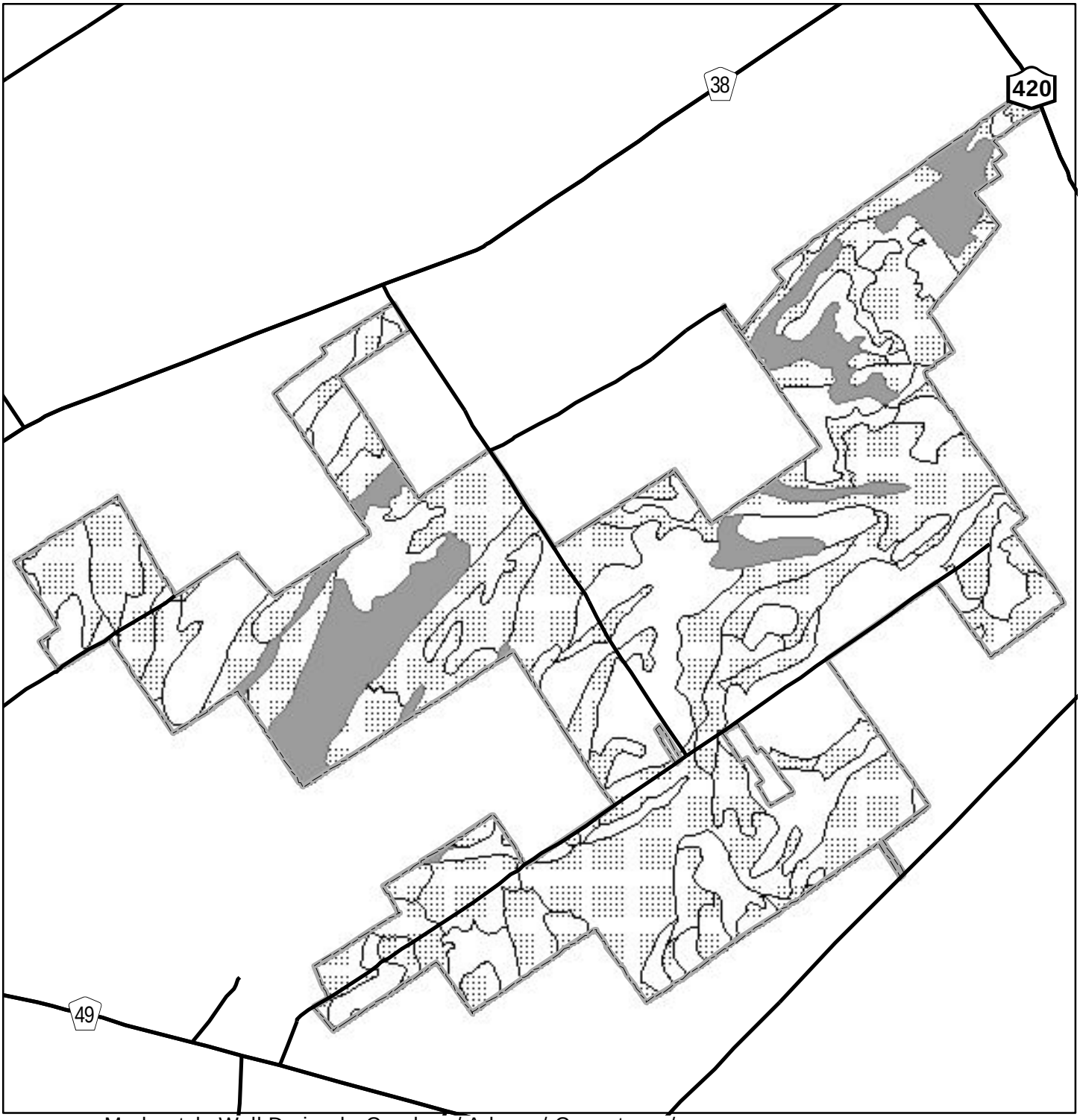
Forest Boundary

Public Roads

KNAPP STATION STATE FOREST
ST. LAWRENCE 11
SOIL TYPE
FIGURE 1

N

0 0.25 0.5 Miles



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Very Well Drained - Adams sand

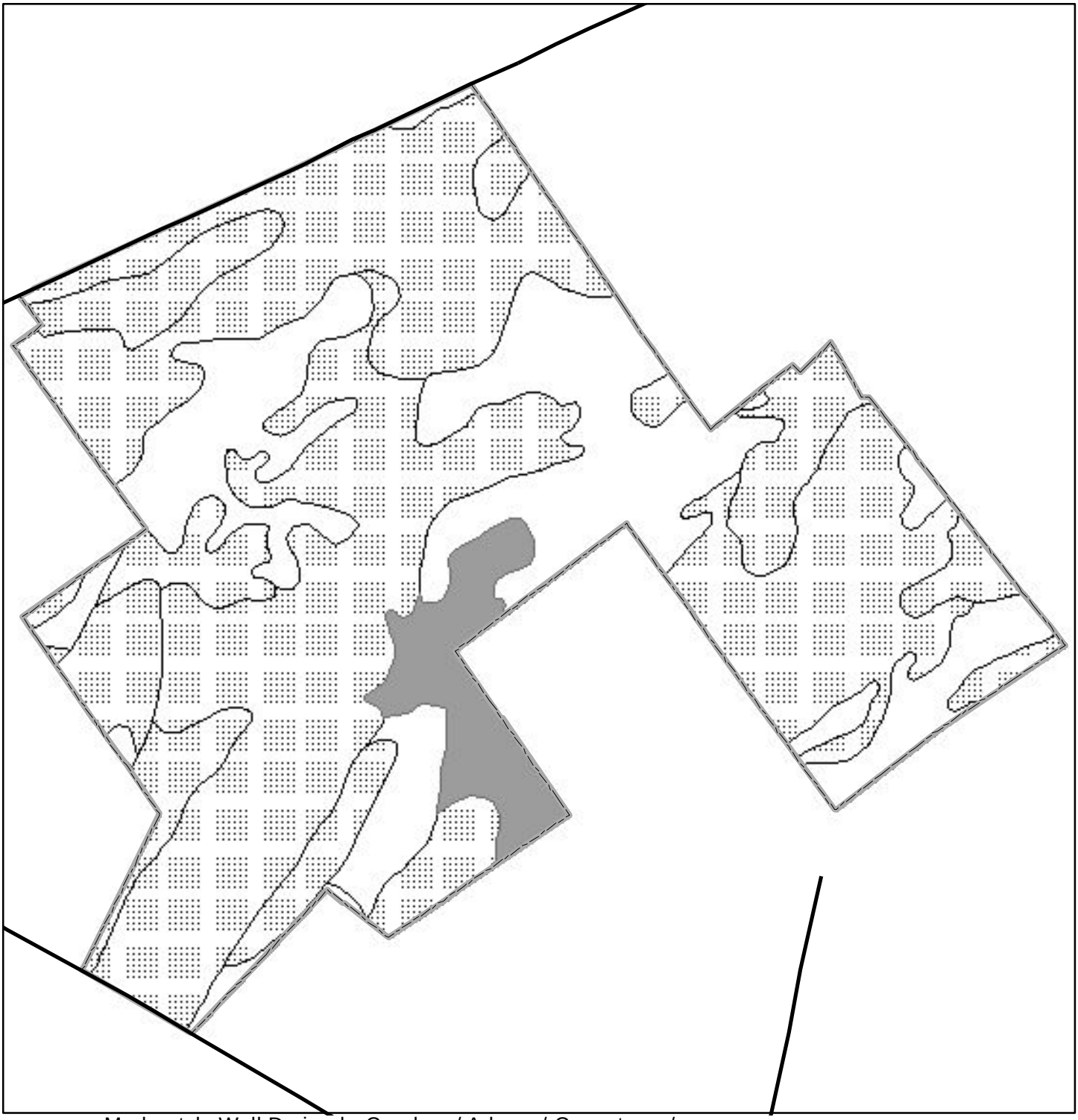
Forest Boundary

Public Roads

LOST NATION STATE FOREST
ST. LAWRENCE 9
SOIL TYPE
FIGURE 1

N

0 0.25 0.5 Miles



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Very Well Drained - Adams sand

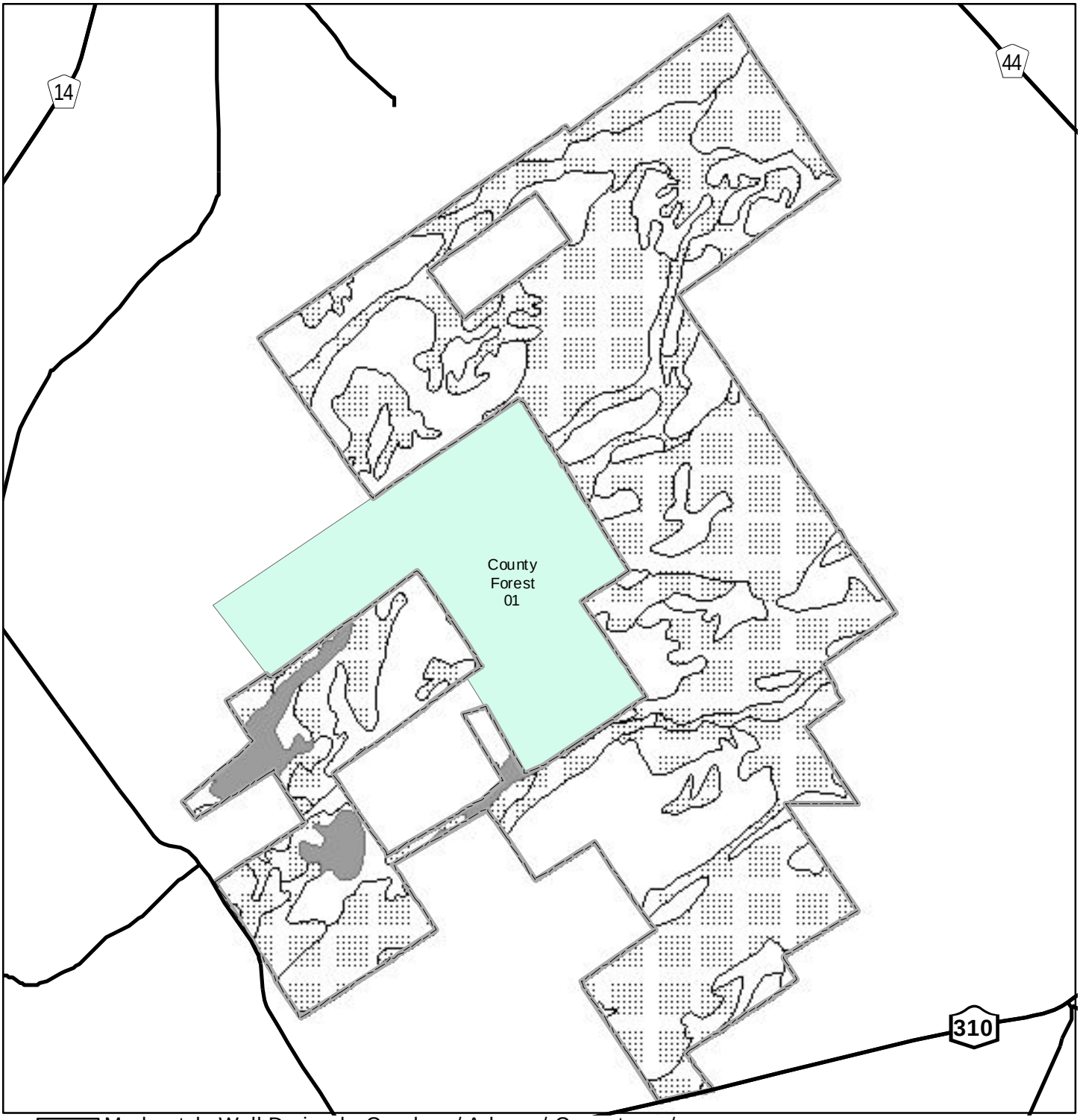
Forest Boundary

Public Roads

RAYMONDVILLE STATE FOREST
ST. LAWRENCE 33
SOIL TYPE
FIGURE 1

N

0 0.25 0.5 Miles



Moderately Well Drained - Croghan / Adams / Coveytown / Hogansburg loamy fine sands; Croghan sand Hogansburg and Grenville soils

Poorly Drained - Au Gres-Scarboro-Croghan association; Borosaprists and Fluvaquents, Deford loamy fine sand; Deford mucky loamy fine sand; Dorval muck; Malone loam, Naumburg loamy fine sand;

Very Well Drained - Adams sand

Public Roads

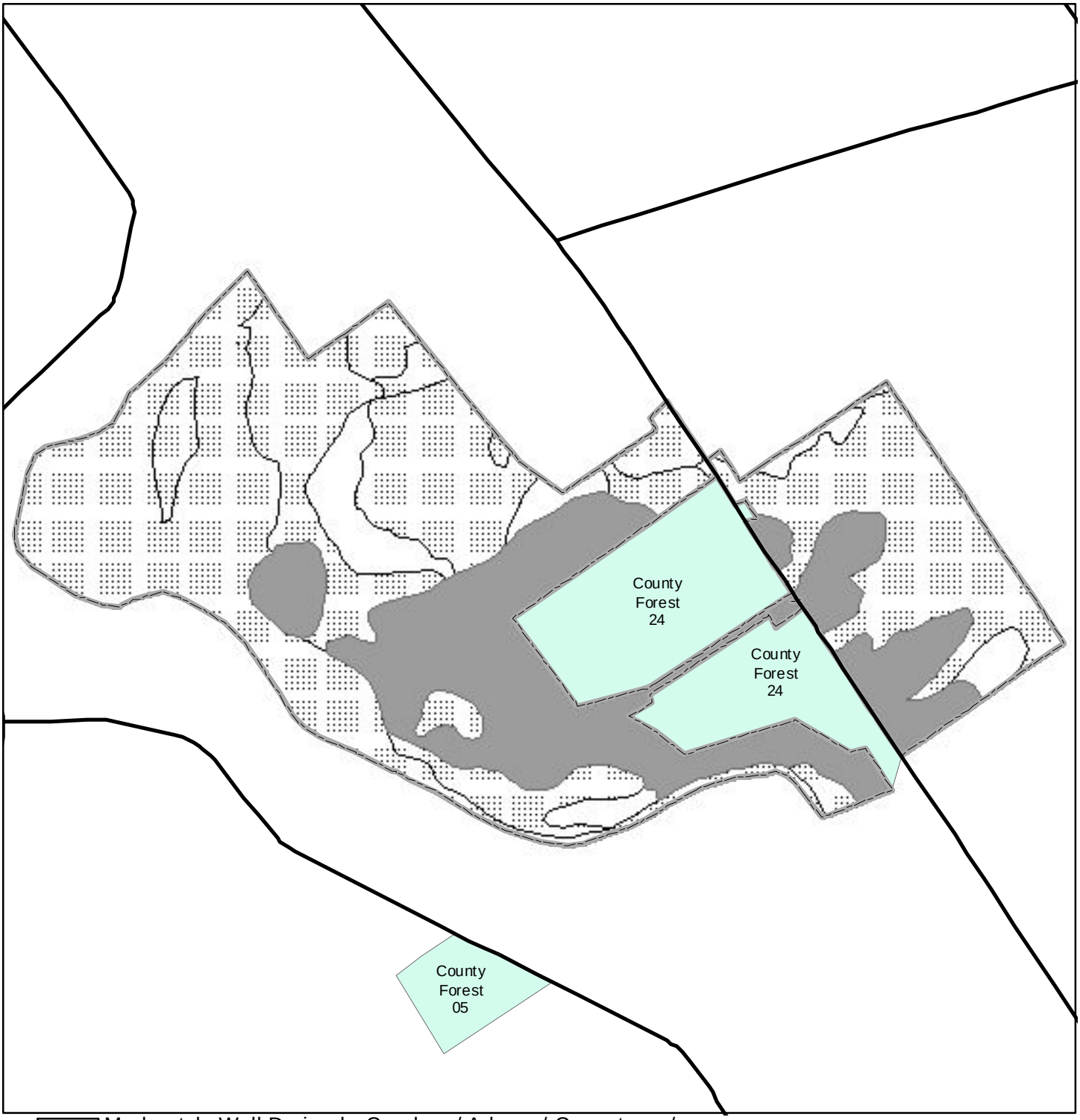
Forest Boundary

County Forest

SODOM STATE FOREST
ST. LAWRENCE 25
SOIL TYPE
FIGURE 1

N

0 0.25 0.5 Miles



Moderately Well Drained - Croghan / Adams / Coveytown / Hogansburg loamy fine sands; Croghan sand Hogansburg and Grenville soils

Poorly Drained - Au Gres-Scarboro-Croghan association; Borosaprists and Fluvaquents, Deford loamy fine sand; Deford mucky loamy fine sand; Dorval muck; Malone loam, Naumburg loamy fine sand;

Very Well Drained - Adams sand

Public Roads

Forest Boundary

County Forest

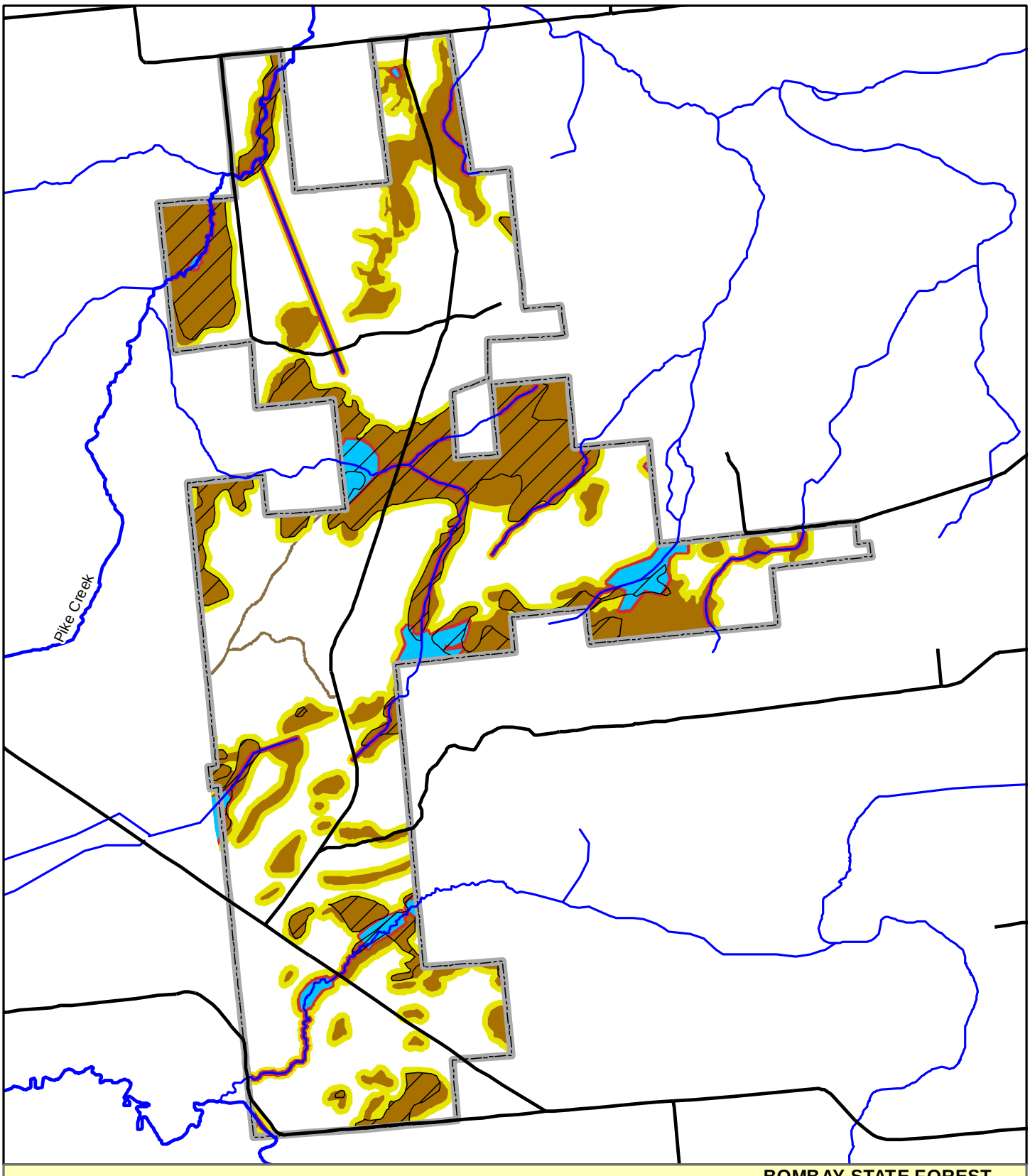
SOUTHVILLE STATE FOREST
ST. LAWRENCE 23
SOIL TYPE
FIGURE 1

N

0 0.25 0.5 Miles

FIGURE 2. – HYDROLOGY AND SPECIAL MANAGEMENT ZONE MAPS

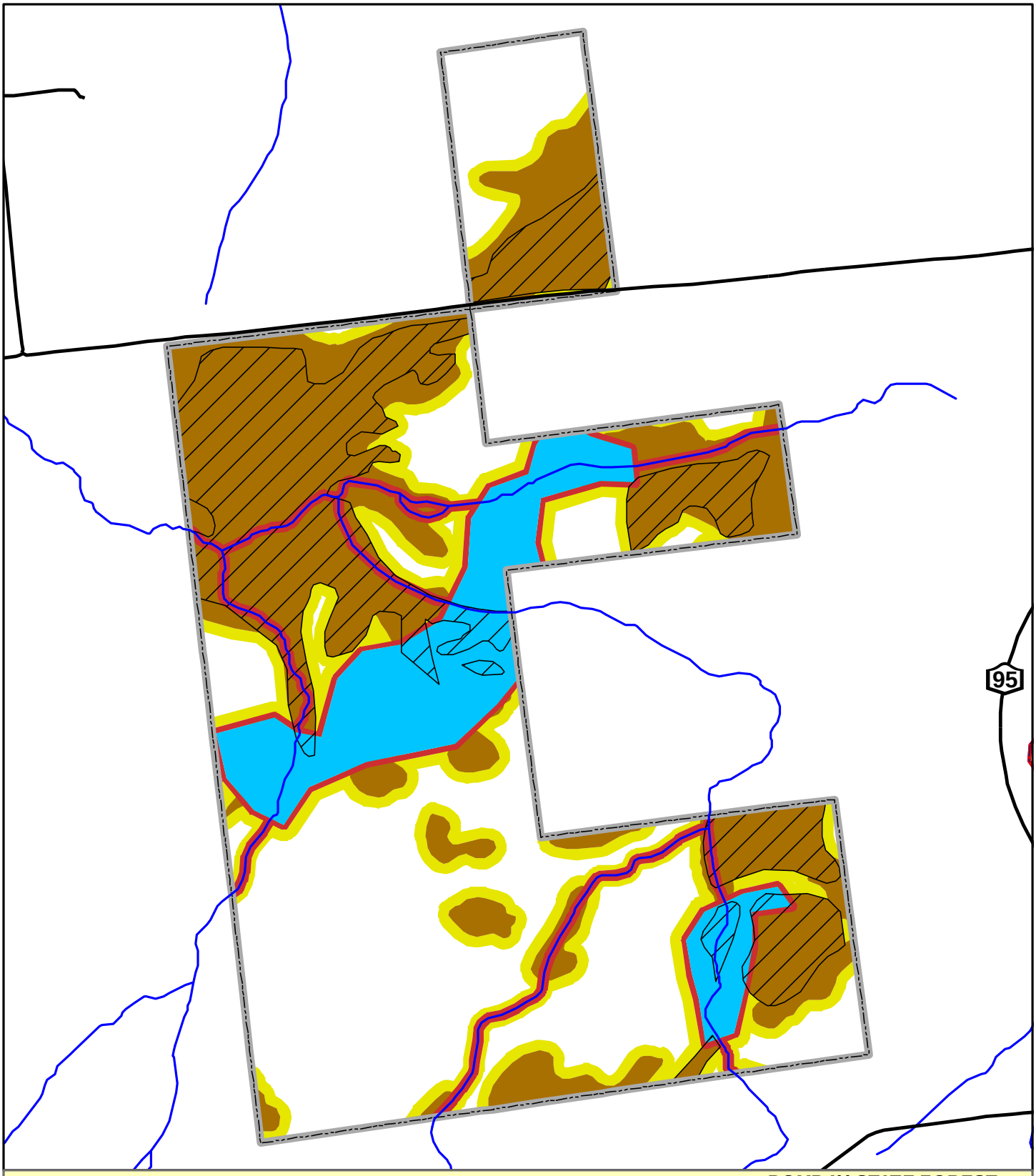
(see appendices and figures)



Protected Stream
Public Roads
Named Streams
Streams
STATE FOREST BOUNDARY
County Forest
NYS Regulated Freshwater Wetlands
OPEN WATER
PROTECTION BUFFER
EQUIPMENT EXCLUSION ZONE
75 PERCENT CROWN COVER/ BASAL AREA RETENTION SMZ
TOP AND SLASH EXCLUSION ZONE

0 0.25 0.5 Miles

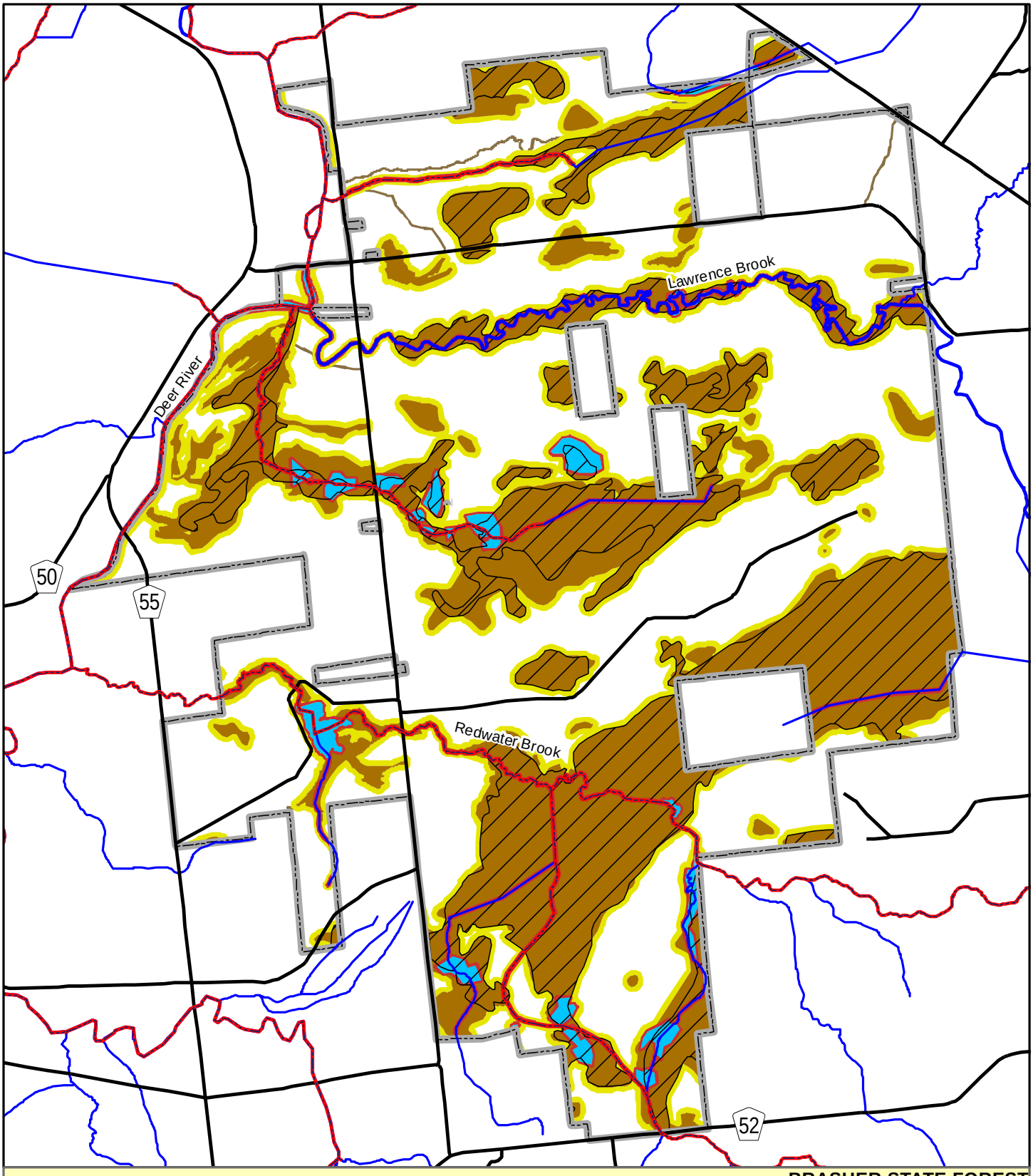
BOMBAY STATE FOREST
FRANKLIN 2
Hydrology and SMZ's
Figure 2



Protected Stream
Public Roads
Named Streams
Streams
STATE FOREST BOUNDARY
County Forest
NYS Regulated Freshwater Wetlands
OPEN WATER
PROTECTION BUFFER
EQUIPMENT EXCLUSION ZONE
75 PERCENT CROWN COVER/ BASAL AREA RETENTION SMZ
TOP AND SLASH EXCLUSION ZONE

0 0.25 0.5 Miles

BOMBAY STATE FOREST
FRANKLIN 4
Hydrology and SMZ's
Figure 2

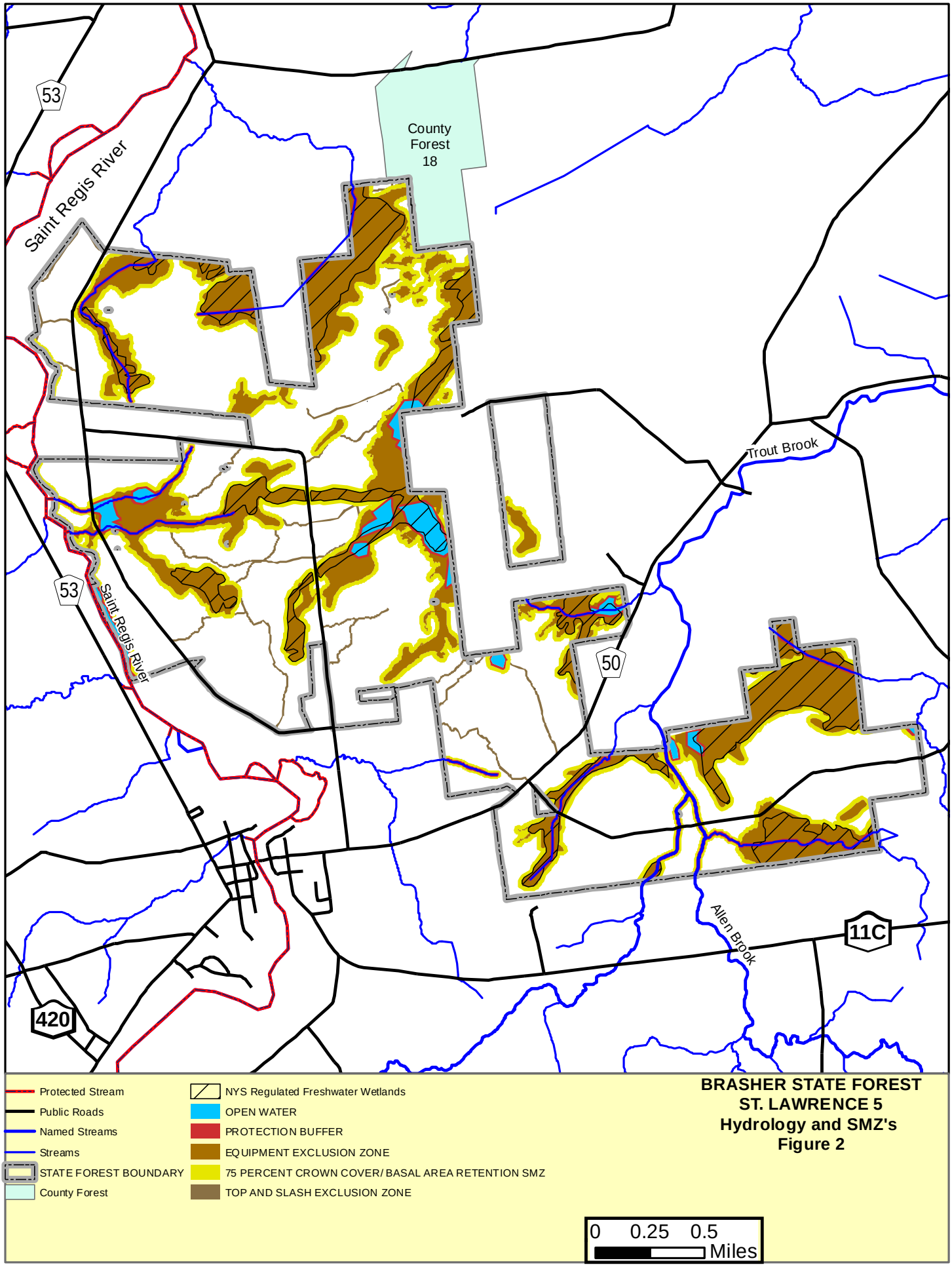


Protected Stream
Named Streams
Streams
STATE FOREST BOUNDARY
County Forest
Public Roads

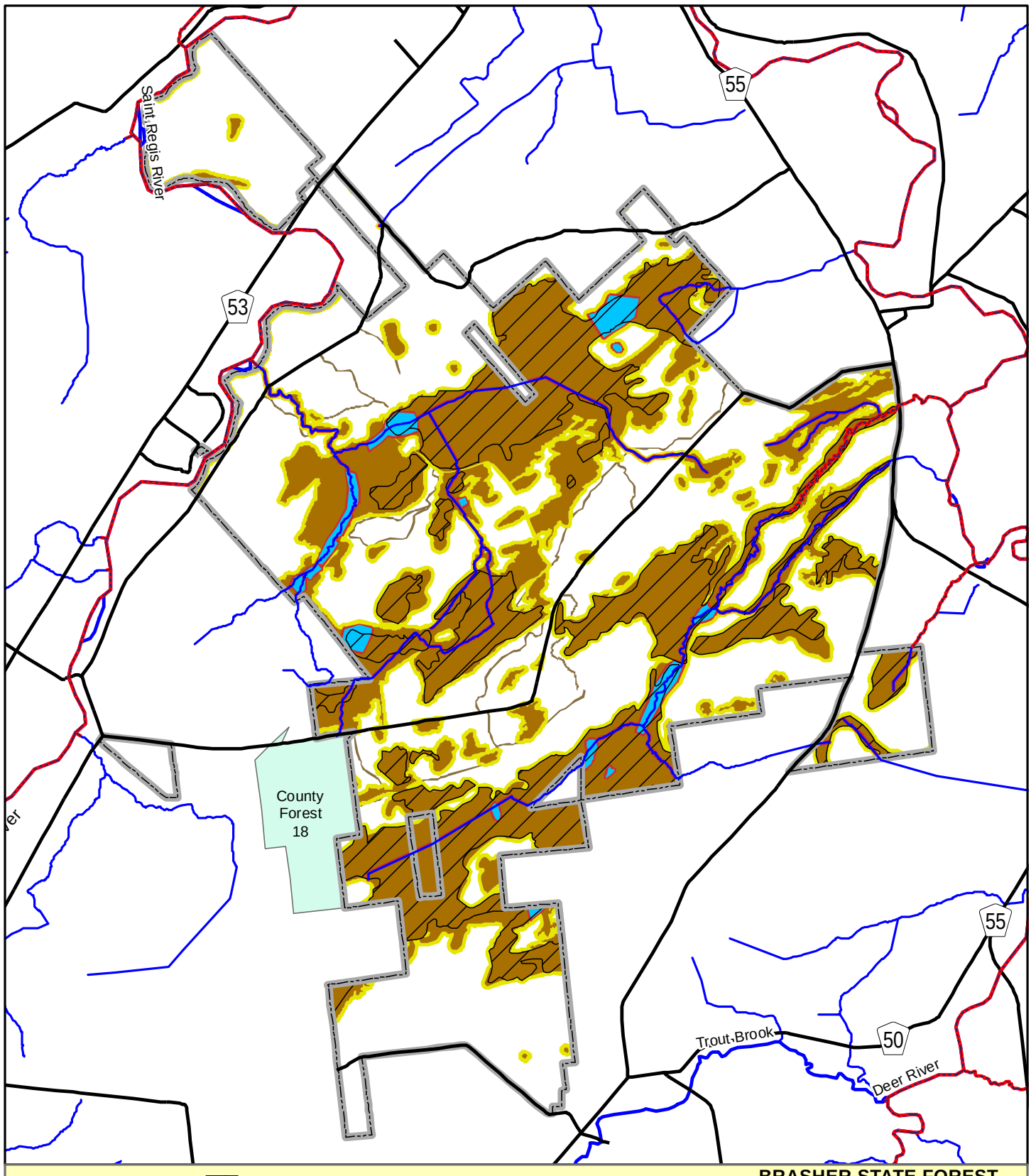
NYS Regulated Freshwater Wetlands
OPEN WATER
PROTECTION BUFFER
EQUIPMENT EXCLUSION ZONE
75 PERCENT CROWN COVER/ BASAL AREA RETENTION SMZ
TOP AND SLASH EXCLUSION ZONE

0 0.25 0.5 Miles

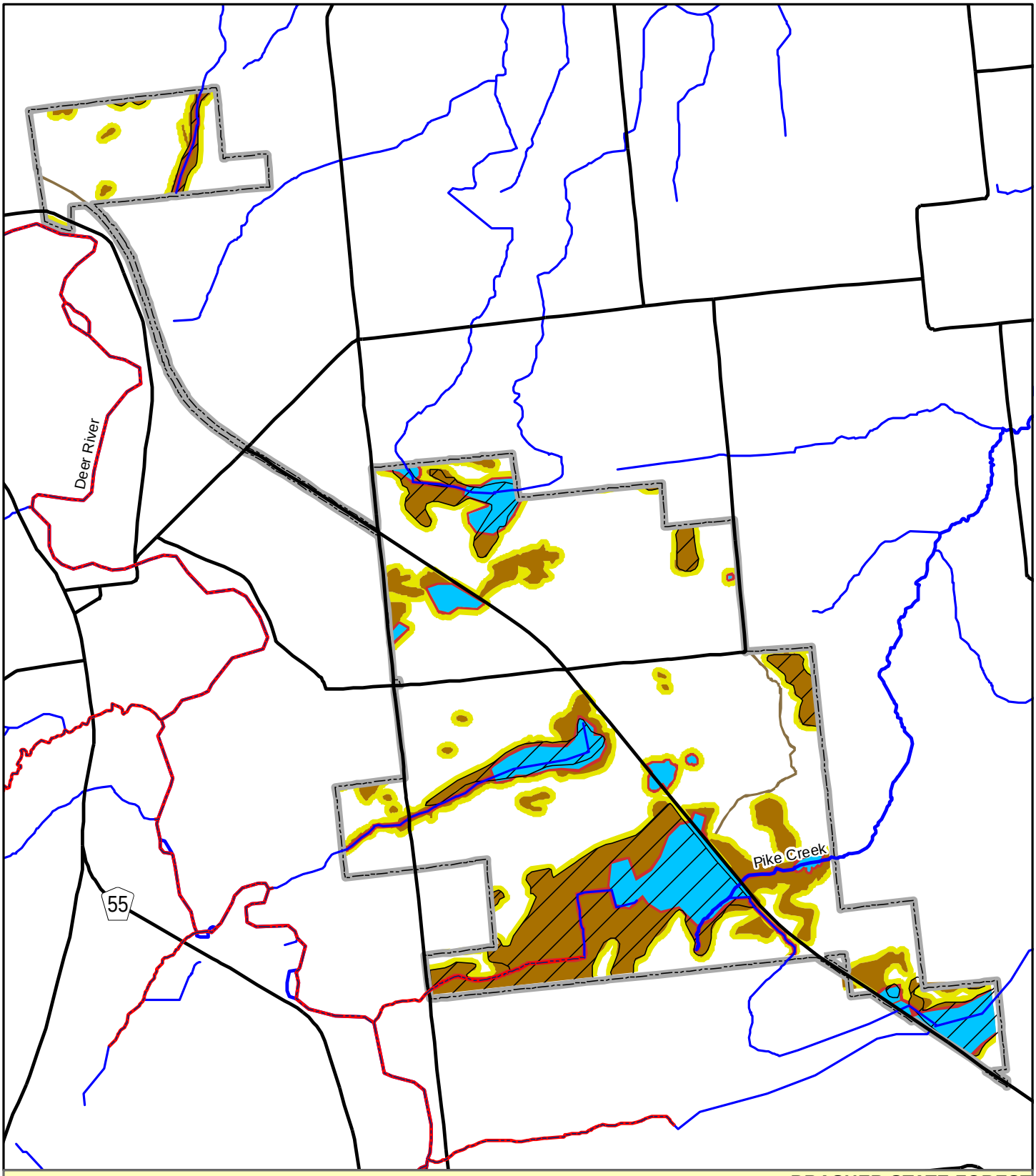
BRASHER STATE FOREST
ST. LAWRENCE 1
Hydrology and SMZ's
Figure 2



BRASHER STATE FOREST
ST. LAWRENCE 5
Hydrology and SMZ's
Figure 2



BRASHER STATE FOREST
ST. LAWRENCE 6
Hydrology and SMZ's
Figure 2

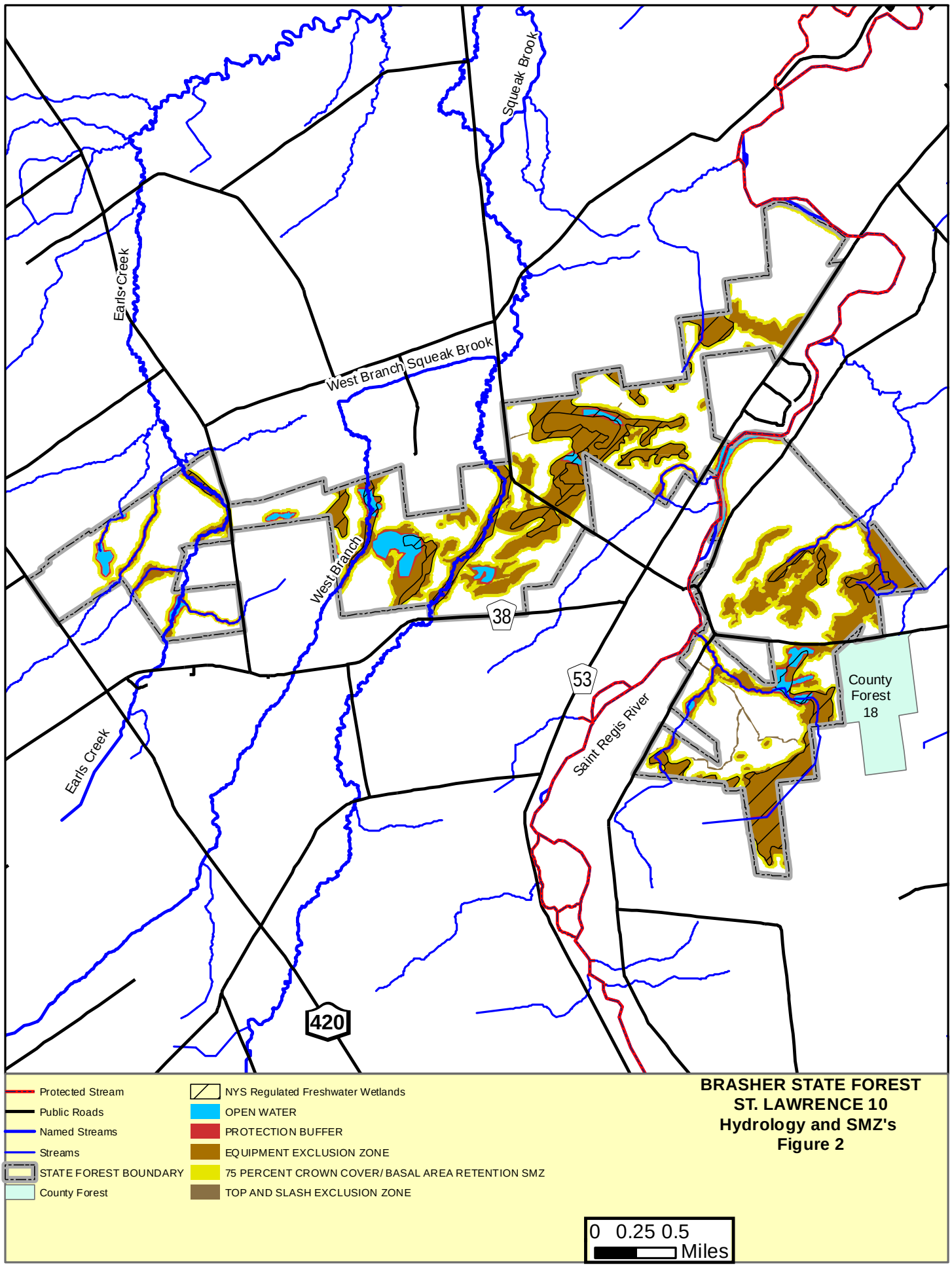


Protected Stream
Named Streams
Streams
STATE FOREST BOUNDARY
County Forest
Public Roads

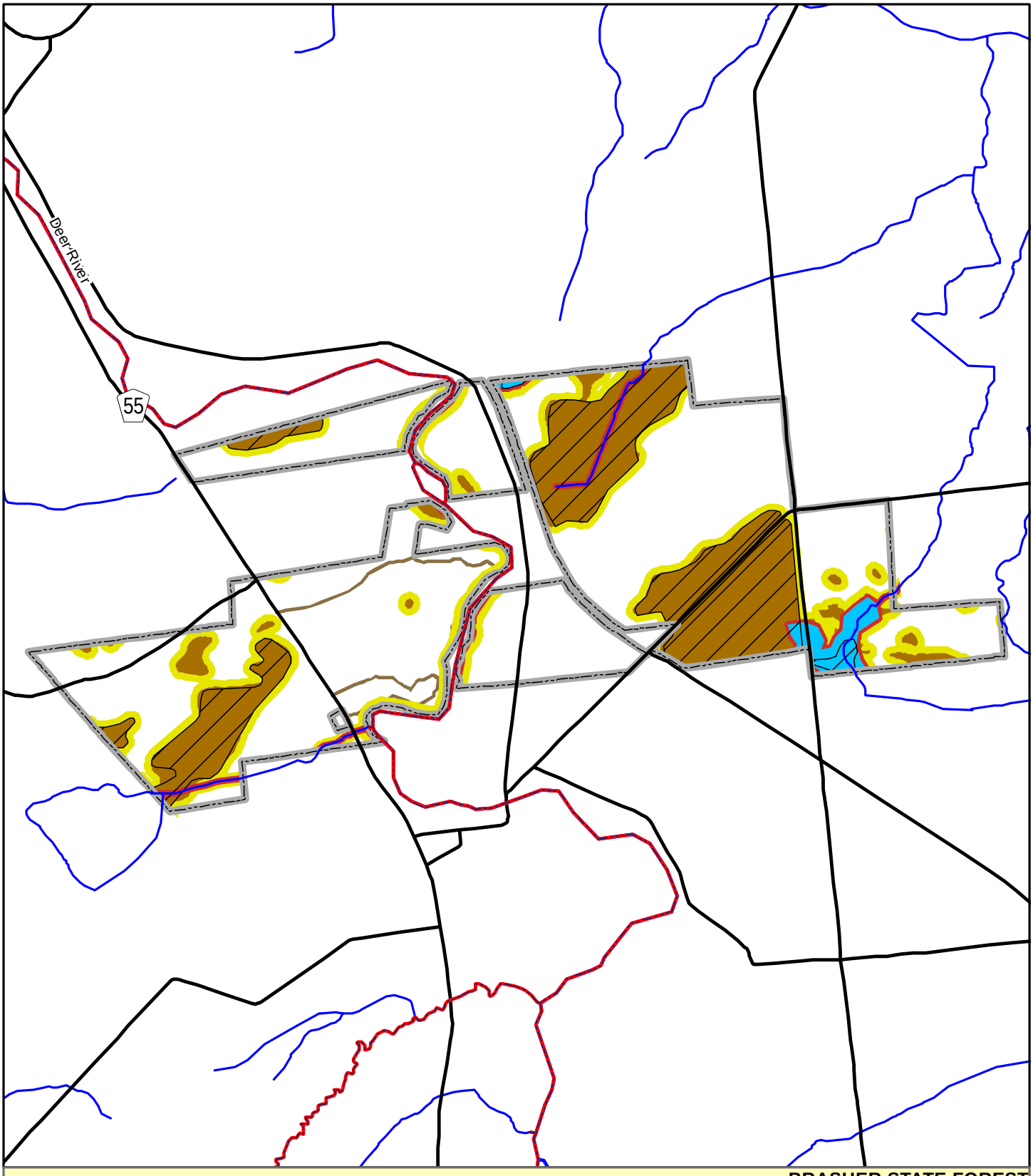
NYS Regulated Freshwater Wetlands
OPEN WATER
PROTECTION BUFFER
EQUIPMENT EXCLUSION ZONE
75 PERCENT CROWN COVER/ BASAL AREA RETENTION SMZ
TOP AND SLASH EXCLUSION ZONE

0 0.25 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 7
Hydrology and SMZ's
Figure 2



BRASHER STATE FOREST
ST. LAWRENCE 10
Hydrology and SMZ's
Figure 2

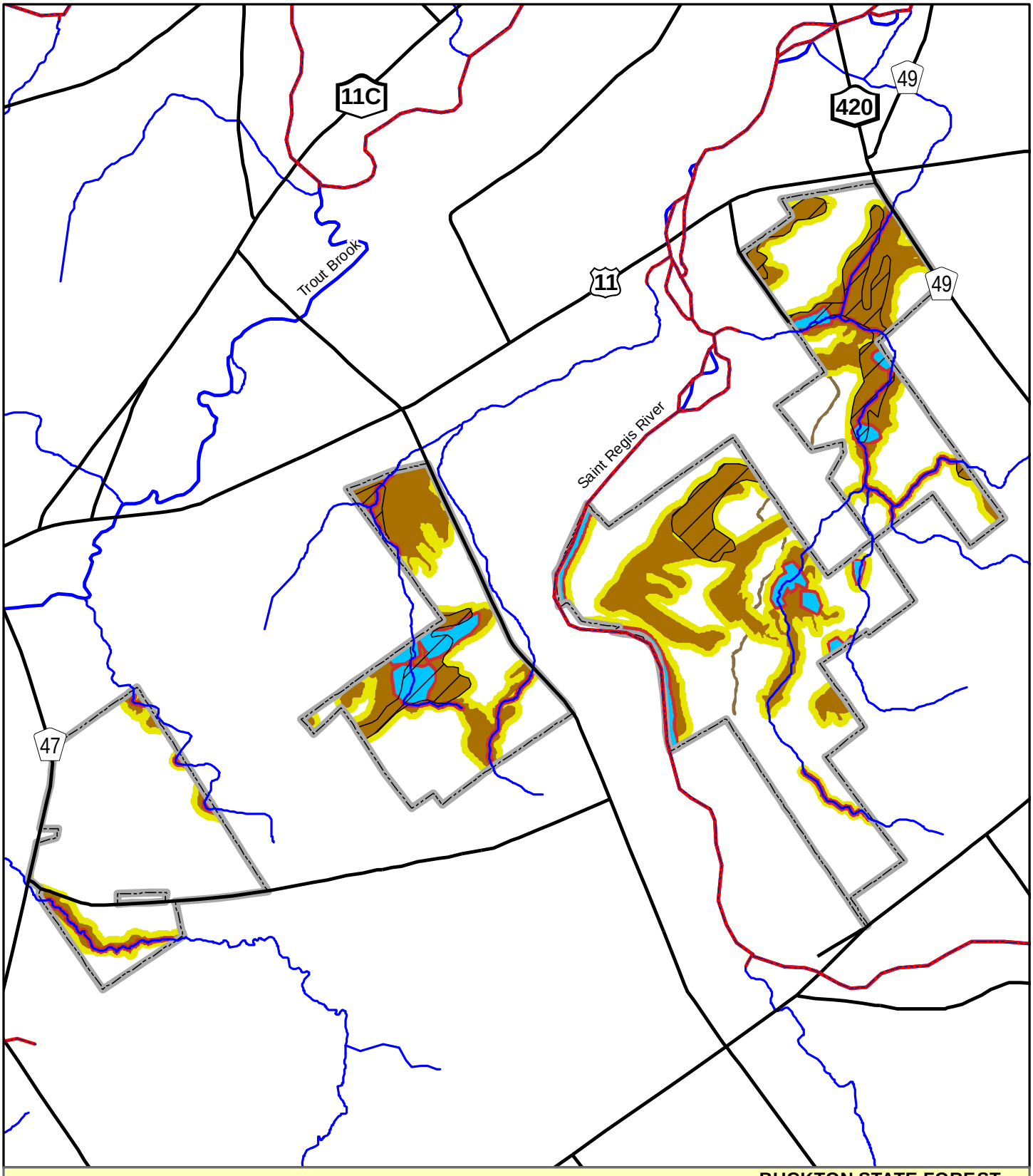


Protected Stream
Named Streams
Streams
STATE FOREST BOUNDARY
County Forest
Public Roads

NYS Regulated Freshwater Wetlands
OPEN WATER
PROTECTION BUFFER
EQUIPMENT EXCLUSION ZONE
75 PERCENT CROWN COVER/ BASAL AREA RETENTION SMZ
TOP AND SLASH EXCLUSION ZONE

0 0.25 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 17
Hydrology and SMZ's
Figure 2

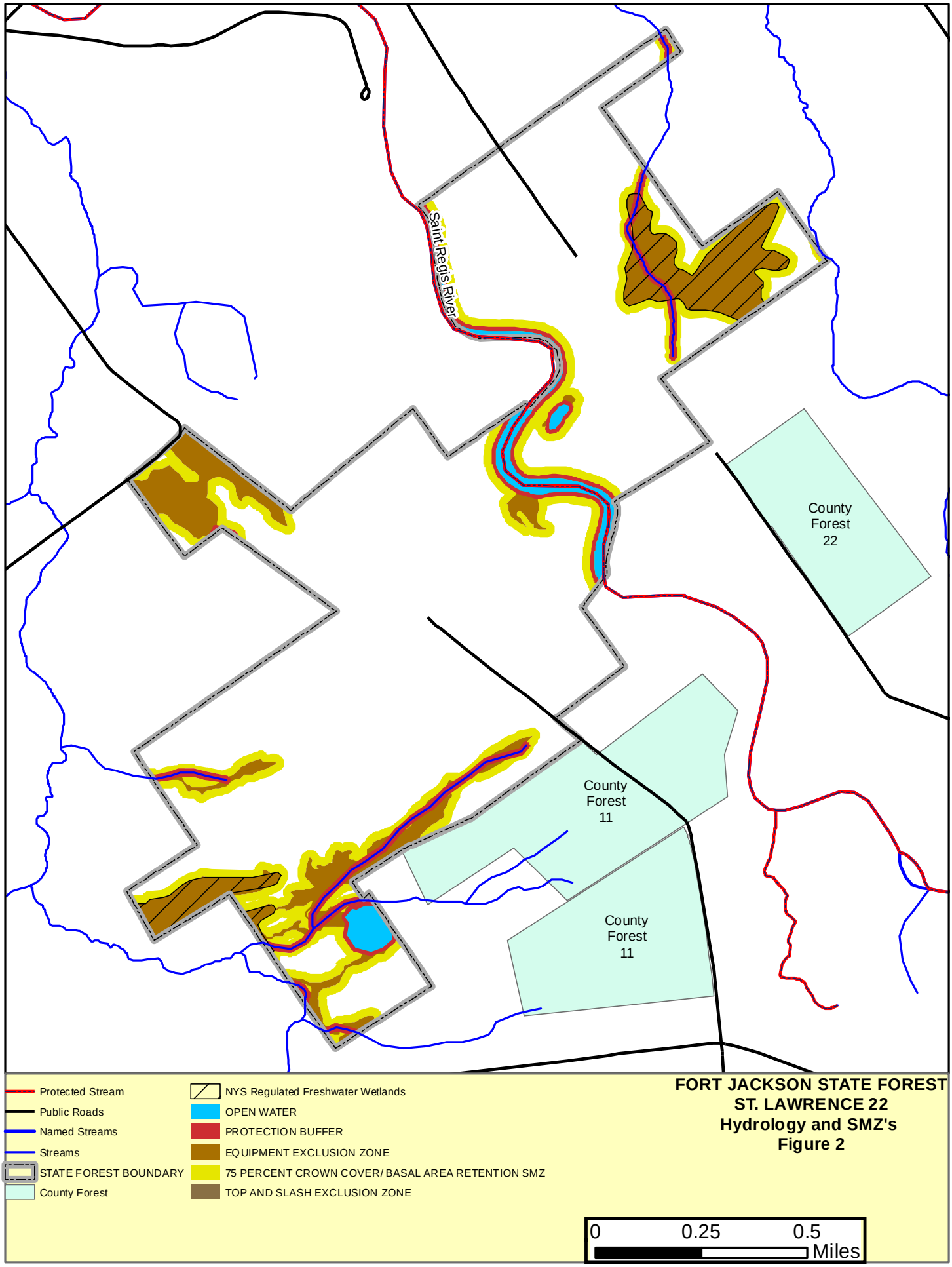


Protected Stream
Public Roads
Named Streams
Streams
STATE FOREST BOUNDARY
County Forest

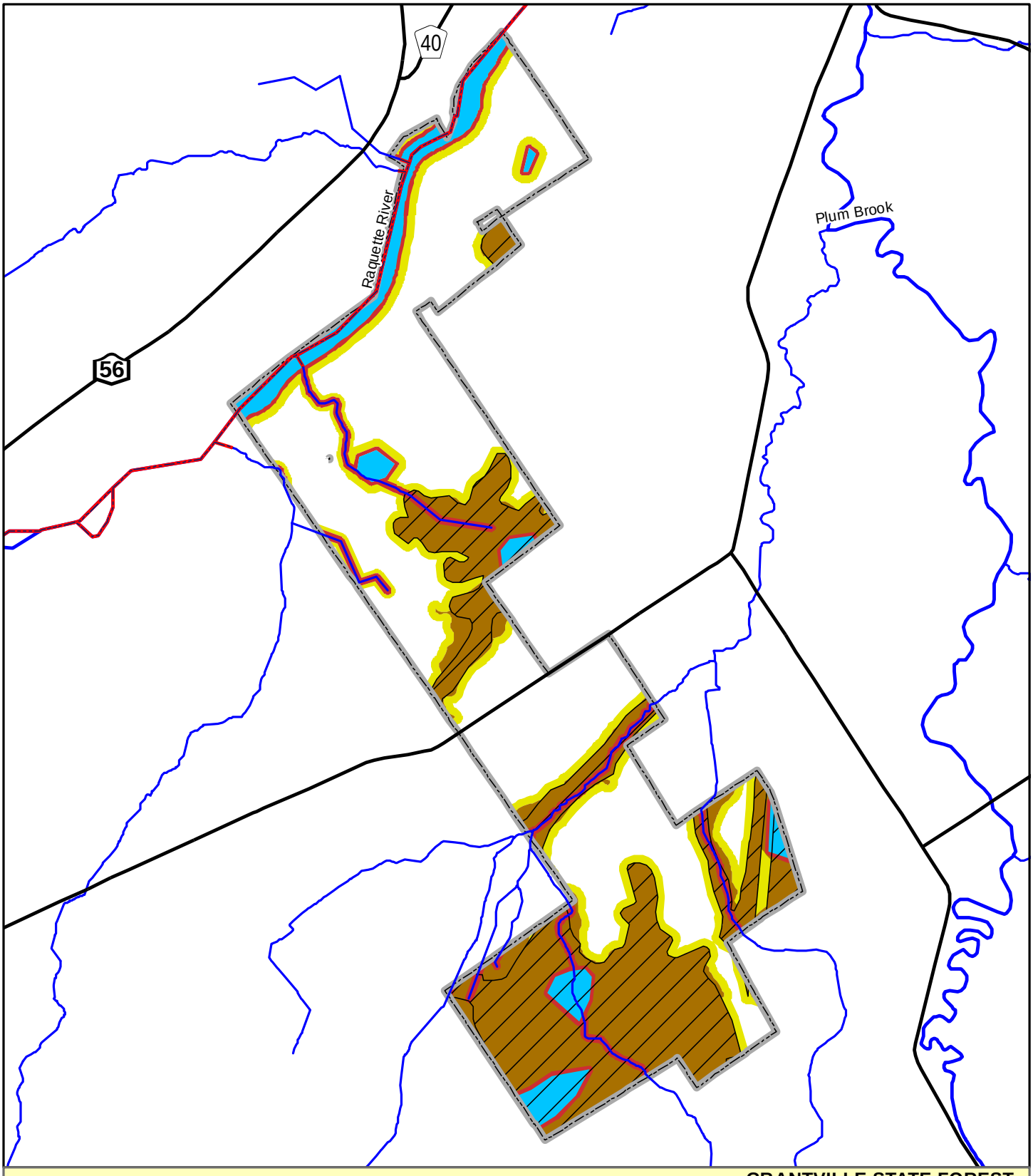
NYS Regulated Freshwater Wetlands
OPEN WATER
PROTECTION BUFFER
EQUIPMENT EXCLUSION ZONE
75 PERCENT CROWN COVER/ BASAL AREA RETENTION SMZ
TOP AND SLASH EXCLUSION ZONE

0 0.25 0.5 Miles

BUCKTON STATE FOREST
ST. LAWRENCE 31
Hydrology and SMZ's
Figure 2



FORT JACKSON STATE FOREST
ST. LAWRENCE 22
Hydrology and SMZ's
Figure 2

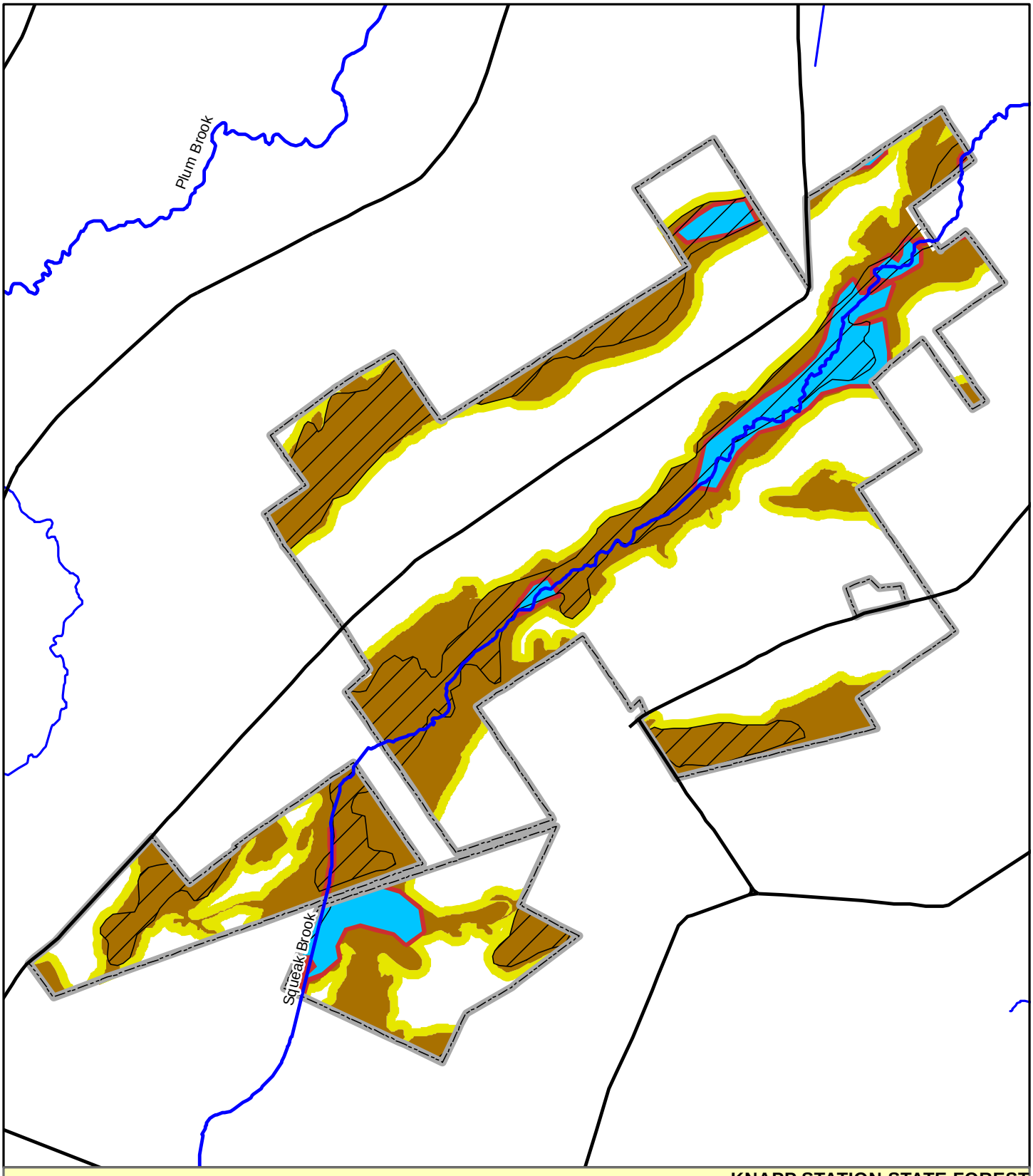


Protected Stream
Named Streams
Streams
STATE FOREST BOUNDARY
County Forest
Public Roads

NYS Regulated Freshwater Wetlands
OPEN WATER
PROTECTION BUFFER
EQUIPMENT EXCLUSION ZONE
75 PERCENT CROWN COVER/ BASAL AREA RETENTION SMZ
TOP AND SLASH EXCLUSION ZONE

0 0.25 0.5 Miles

GRANTVILLE STATE FOREST
ST. LAWRENCE 15
Hydrology and SMZ's
Figure 2

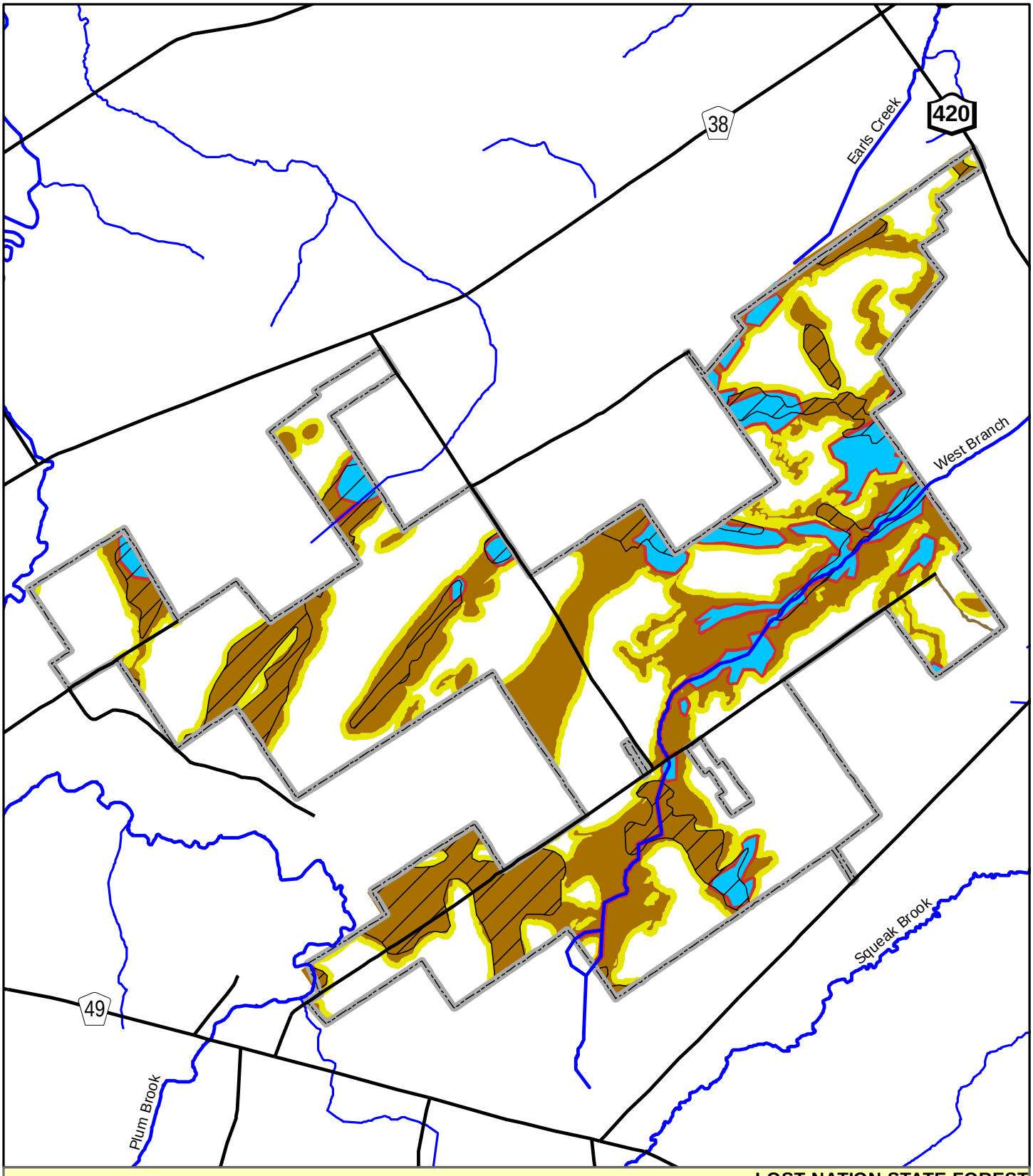


Protected Stream
Named Streams
Streams
STATE FOREST BOUNDARY
County Forest
Public Roads

NYS Regulated Freshwater Wetlands
OPEN WATER
PROTECTION BUFFER
EQUIPMENT EXCLUSION ZONE
75 PERCENT CROWN COVER/ BASAL AREA RETENTION SMZ
TOP AND SLASH EXCLUSION ZONE

0 0.25 0.5 Miles

KNAPP STATION STATE FOREST
ST. LAWRENCE 11
Hydrology and SMZ's
Figure 2

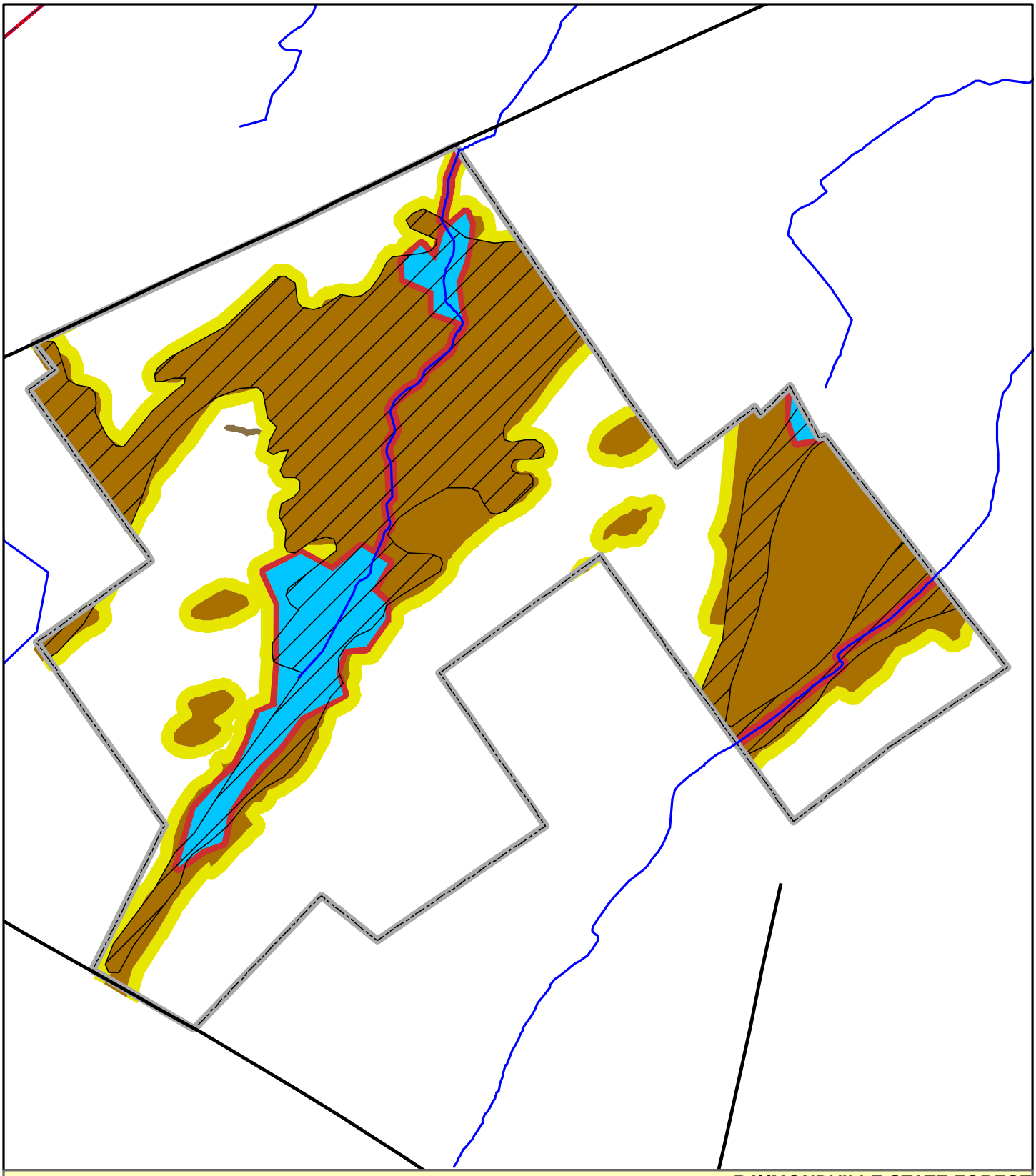


Protected Stream
Named Streams
Streams
STATE FOREST BOUNDARY
County Forest
Public Roads

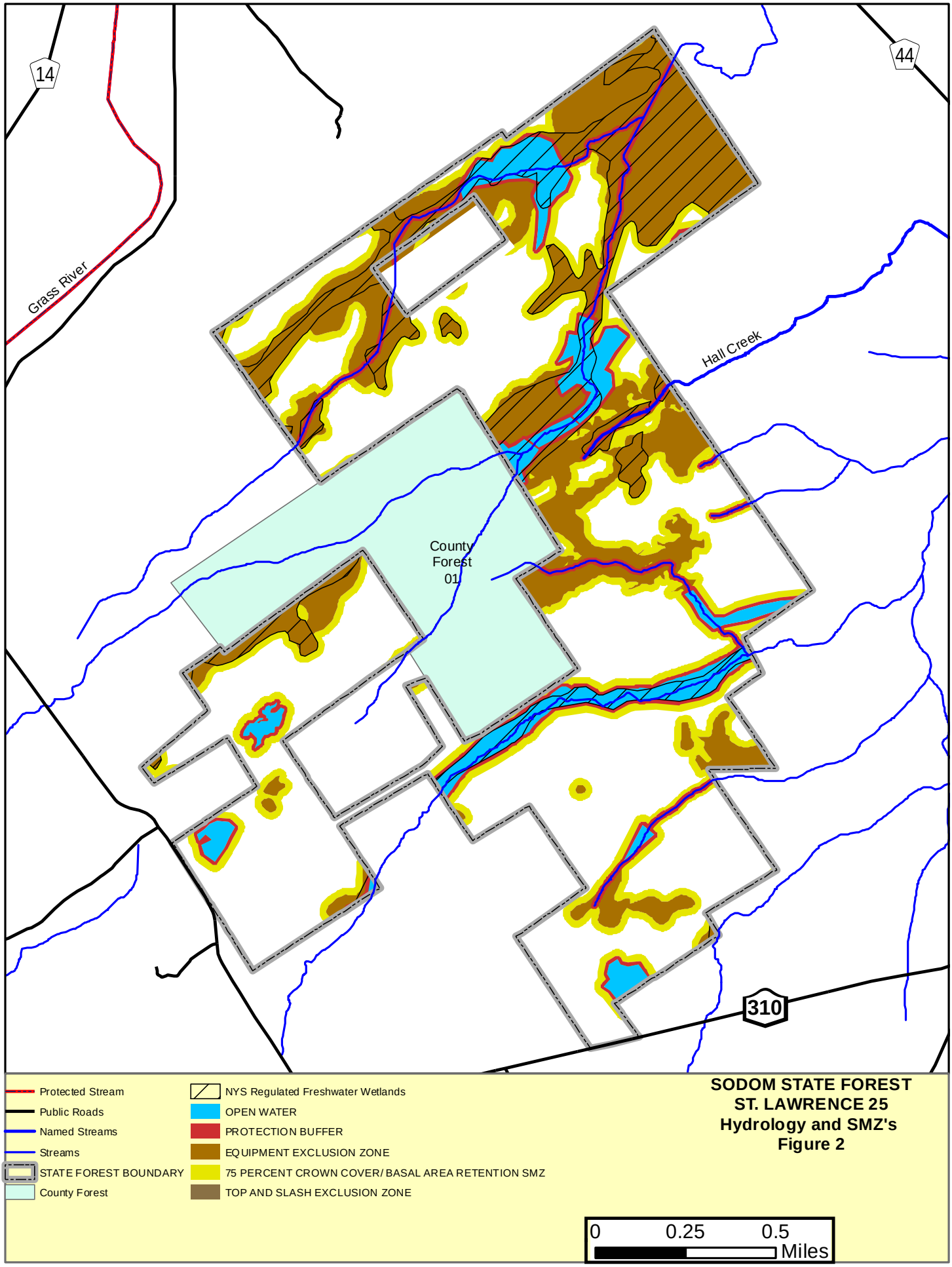
NYS Regulated Freshwater Wetlands
OPEN WATER
PROTECTION BUFFER
EQUIPMENT EXCLUSION ZONE
75 PERCENT CROWN COVER/ BASAL AREA RETENTION SMZ
TOP AND SLASH EXCLUSION ZONE

0 0.25 0.5 Miles

LOST NATION STATE FOREST
ST. LAWRENCE 9
Hydrology and SMZ's
Figure 2



RAYMONDVILLE STATE FOREST
ST. LAWRENCE 33
Hydrology and SMZ's
Figure 2


14
44
Grass River
Hall Creek
County
Forest
01
310
Protected Stream
Public Roads
Named Streams
Streams
STATE FOREST BOUNDARY
County Forest
NYS Regulated Freshwater Wetlands
OPEN WATER
PROTECTION BUFFER
EQUIPMENT EXCLUSION ZONE
75 PERCENT CROWN COVER/ BASAL AREA RETENTION SMZ
TOP AND SLASH EXCLUSION ZONE
SODOM STATE FOREST
ST. LAWRENCE 25
Hydrology and SMZ's
Figure 2
0
0.25
0.5
Miles

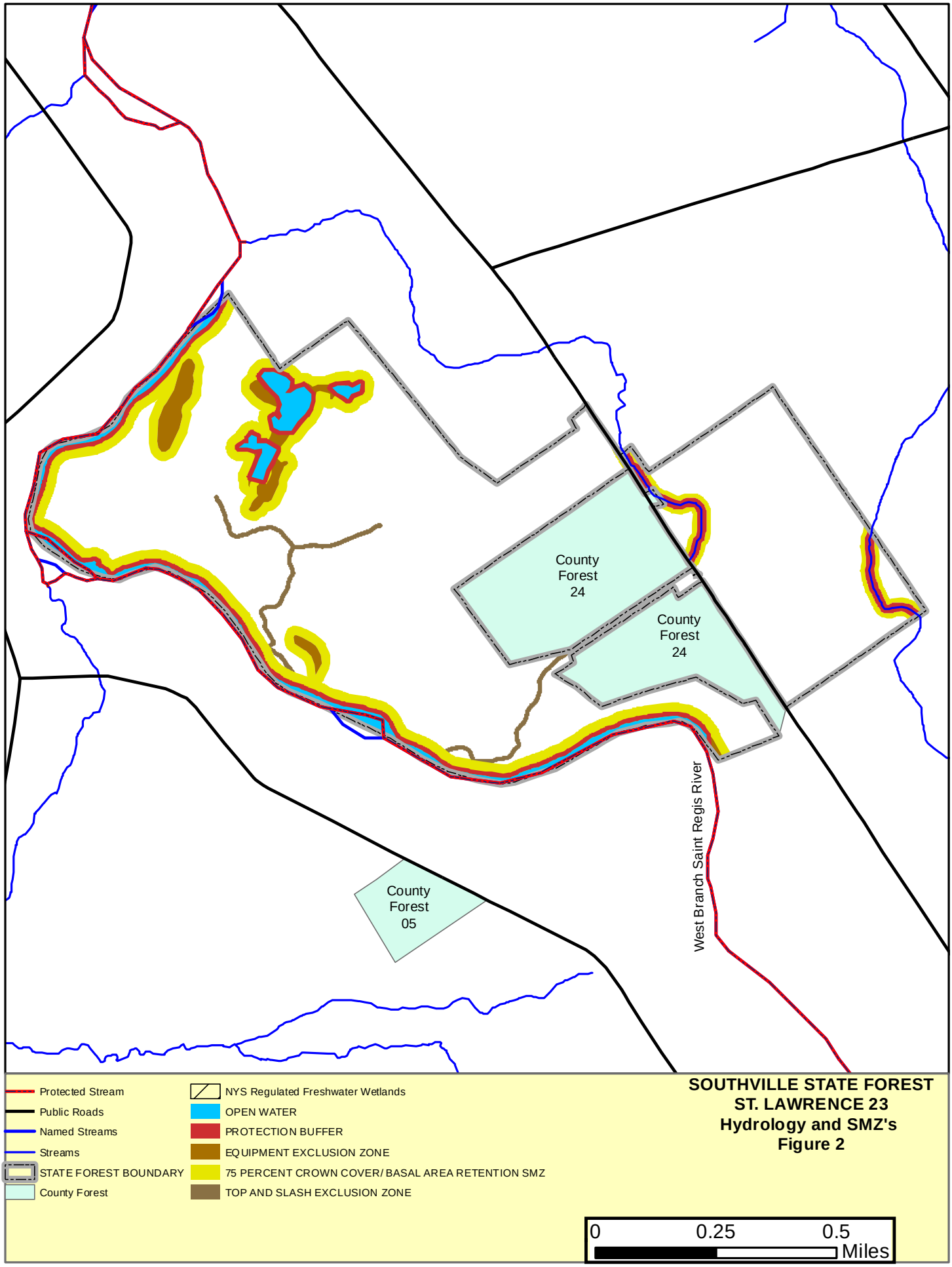
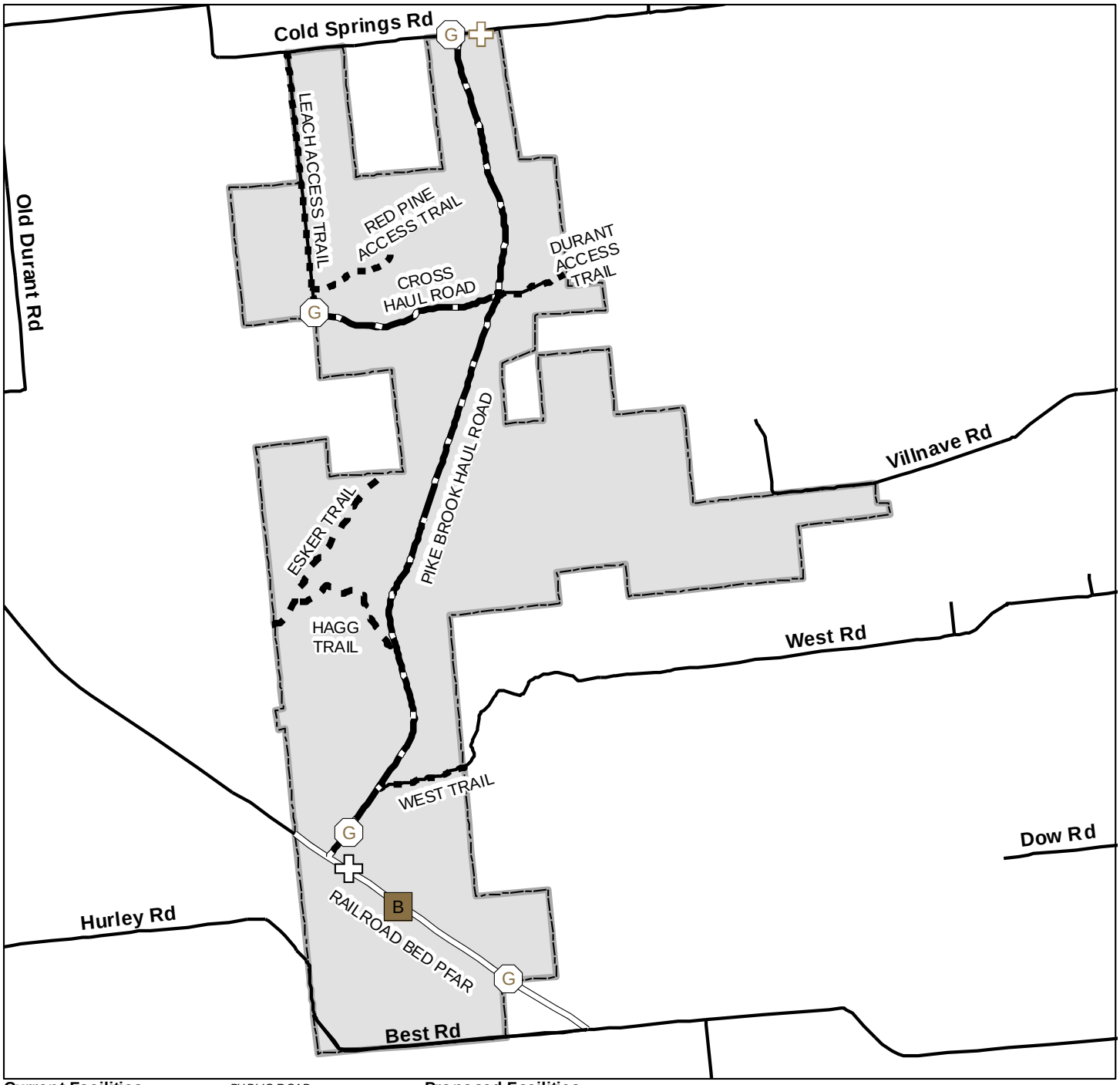

County Forest 24
County Forest 24
County Forest 05
West Branch Saint Regis River
Protected Stream
Public Roads
Named Streams
Streams
STATE FOREST BOUNDARY
County Forest
NYS Regulated Freshwater Wetlands
OPEN WATER
PROTECTION BUFFER
EQUIPMENT EXCLUSION ZONE
75 PERCENT CROWN COVER/ BASAL AREA RETENTION SMZ
TOP AND SLASH EXCLUSION ZONE
SOUTHVILLE STATE FOREST
ST. LAWRENCE 23
Hydrology and SMZ's
Figure 2
0
0.25
0.5
Miles

FIGURE 3. – INFRASTRUCTURE AND RECREATION MAPS

(see appendices and figures)



Current Facilities

- BRIDGE
- CULVERT PIPE
- FACILITY ID SIGN
- FISHING ACCESS
- GATE
- PARKING
- PRIMITIVE CAMPSITE
- TRAILHEAD REGISTER
- CCC WATERHOLE

- PUBLIC ROAD
- ACCESS TRAIL
- HAUL ROAD
- PUBLIC FOREST ACCESS ROAD
- RECREATIONAL TRAIL
- RIGHT-OF-WAY
- FOREST BOUNDARY
- County Forest

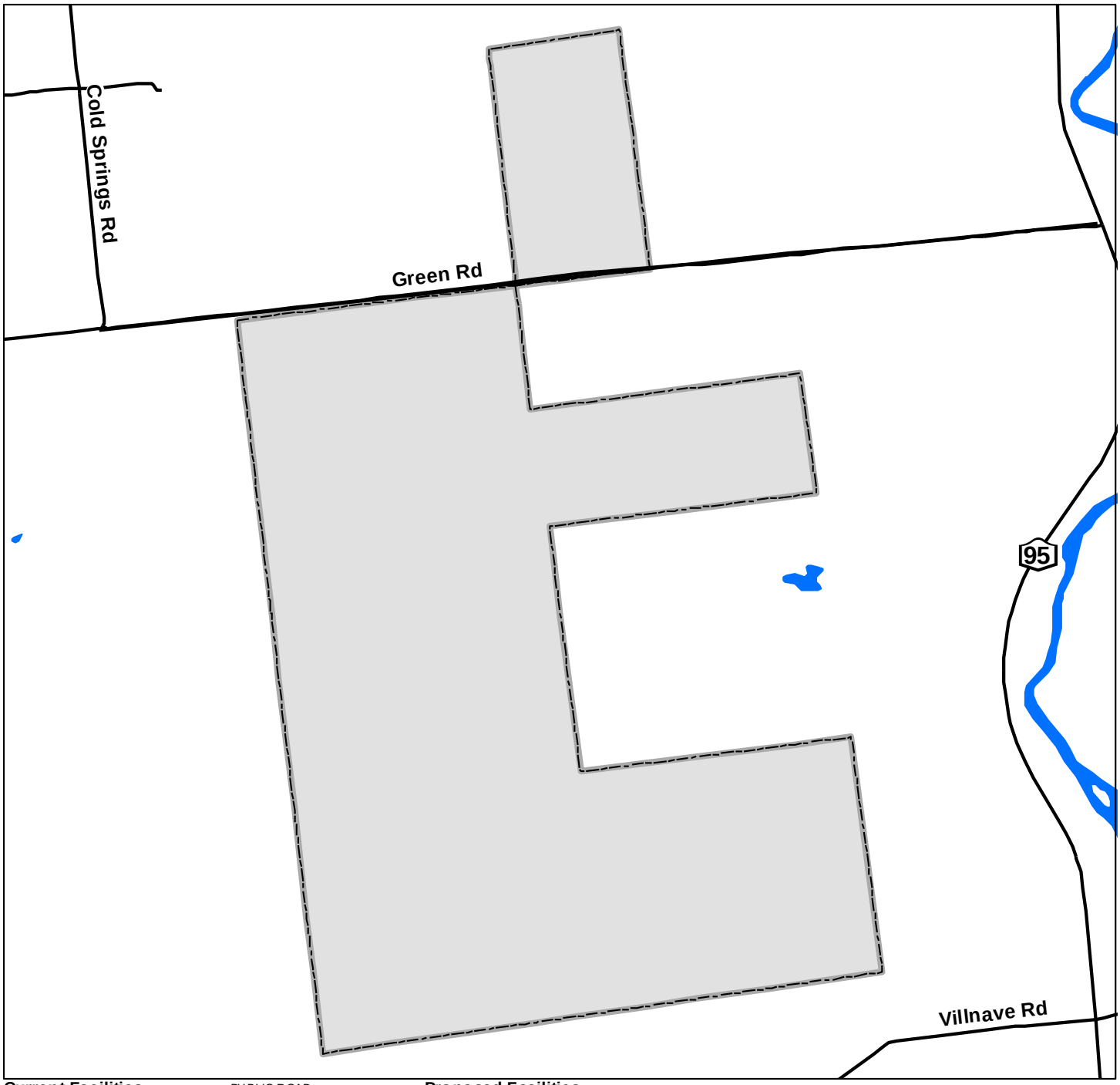
Proposed Facilities

- CANOE LAUNCH
- FACILITY ID SIGN
- GATE
- KIOSK
- LEAN TO
- UNPAVED PARKING LOT

BOMBAY STATE FOREST
FRANKLIN 02
INFRASTRUCTURE & RECREATION
Figure 3

N

0 0.25 0.5 Miles



Current Facilities

- BRIDGE
- CULVERT PIPE
- FACILITY ID SIGN
- FISHING ACCESS
- GATE
- PARKING
- PRIMITIVE CAMPSITE
- TRAILHEAD REGISTER
- CCC WATERHOLE

- PUBLIC ROAD
- ACCESS TRAIL
- HAUL ROAD
- PUBLIC FOREST ACCESS ROAD
- RECREATIONAL TRAIL
- RIGHT-OF-WAY
- FOREST BOUNDARY
- Water

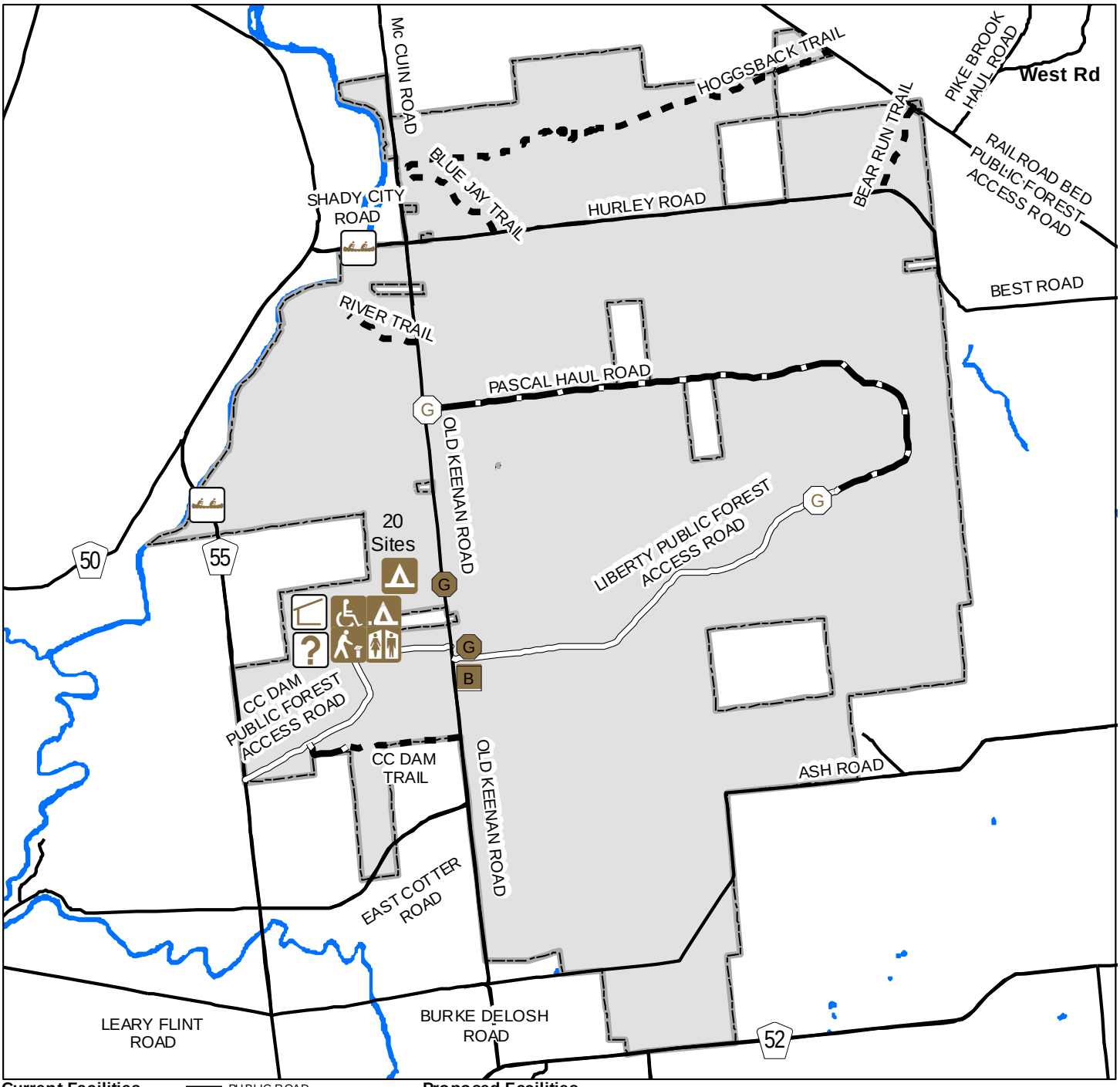
Proposed Facilities

- CANOE LAUNCH
- FACILITY ID SIGN
- GATE
- KIOSK
- LEAN TO
- UNPAVED PARKING LOT

BOMBAY STATE FOREST
FRANKLIN 04
INFRASTRUCTURE & RECREATION
Figure 3

N

0 0.25 0.5 Miles



Current Facilities

- BRIDGE
- CULVERT PIPE
- FACILITY ID SIGN
- FISHING ACCESS
- GATE
- PARKING
- PRIMITIVE CAMPSITE
- TRAILHEAD REGISTER
- CCC WATERHOLE

- PUBLIC ROAD
- ACCESS TRAIL
- HAUL ROAD
- PUBLIC FOREST ACCESS ROAD
- RECREATIONAL TRAIL
- RIGHT-OF-WAY
- FOREST BOUNDARY
- Water
- County Forest
- Utility Lines

Proposed Facilities

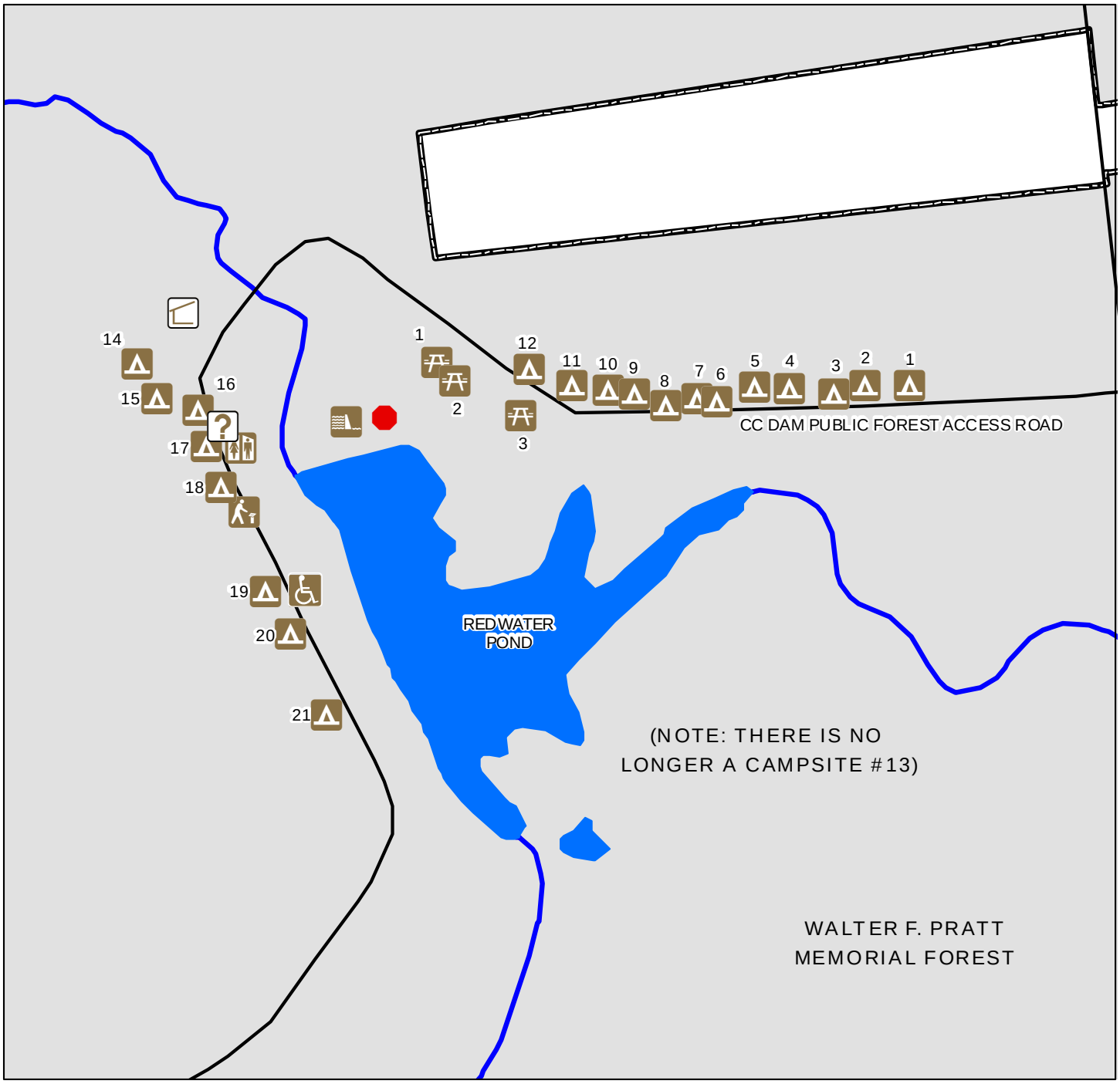
- CANOE LAUNCH
- FACILITY ID SIGN
- GATE
- KIOSK
- LEAN TO
- UNPAVED PARKING LOT

BRASHER STATE FOREST
ST. LAWRENCE 01
INFRASTRUCTURE & RECREATION

Figure 3

N

0 0.25 0.5 Miles



Current Facilities

- ACCESSIBLE BATHROOM
- BARRIER
- DAM
- PICNIC SITE
- PRIMITIVE CAMPSITE
- TRAILHEAD REGISTER

- State Land Transportation
- Water
- Stream
- FOREST BOUNDARY

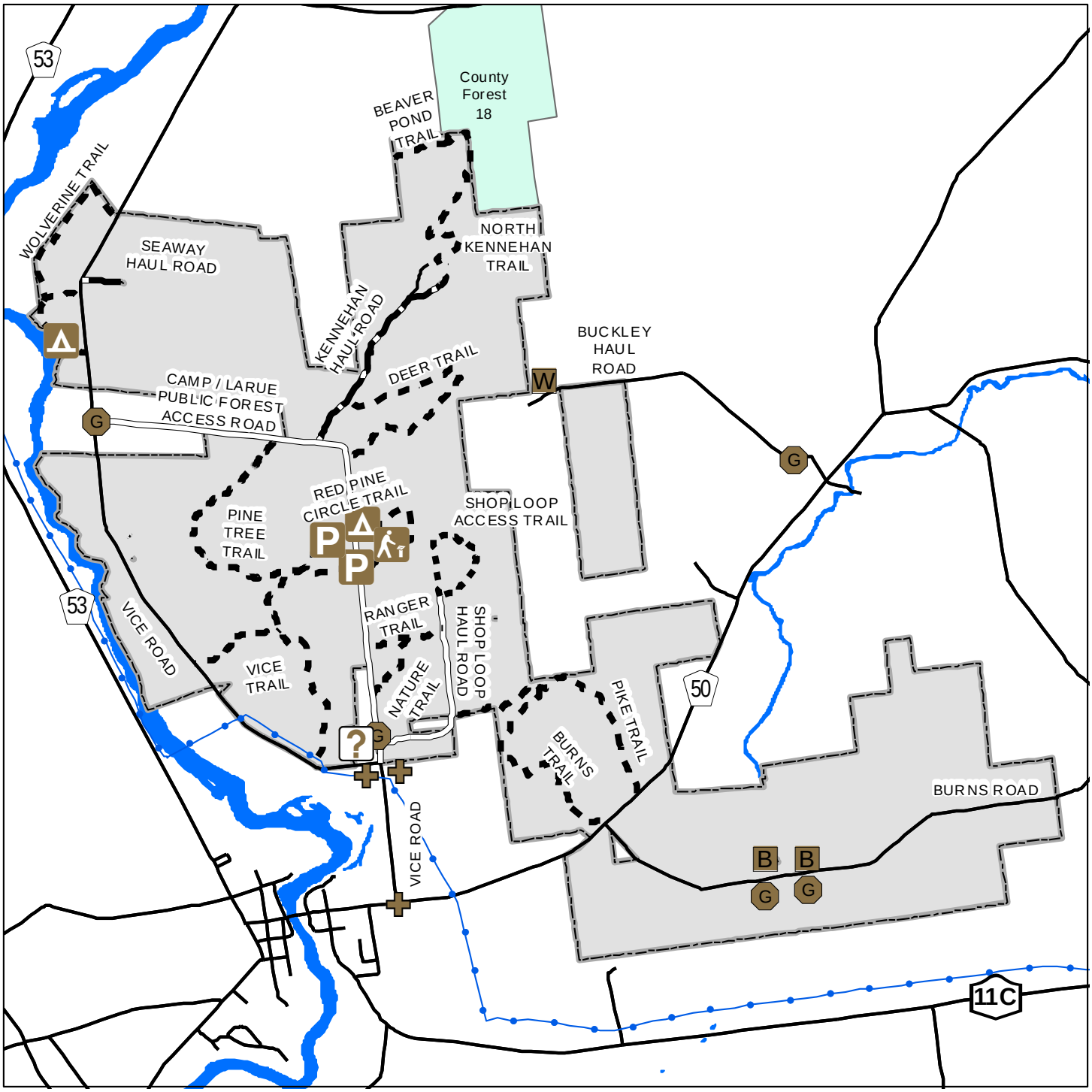
Proposed Facilities

- CANOE LAUNCH
- FACILITY ID SIGN
- GATE
- KIOSK
- LEAN TO
- UNPAVED PARKING LOT

0 250 500 Feet

N

BRASHER STATE FOREST
ST. LAWRENCE 1
INFRASTRUCTURE & RECREATION
Figure 3



Current Facilities

- BRIDGE
- CULVERT
- FACILITY ID SIGN
- FISHING ACCESS
- GATE
- PARKING
- PRIMITIVE CAMPSITE

- PUBLIC ROAD
- ACCESS TRAIL
- HAUL ROAD
- PUBLIC FOREST ACCESS ROAD
- RECREATIONAL TRAIL
- RIGHT-OF-WAY
- FOREST BOUNDARY
- County Forest
- Water

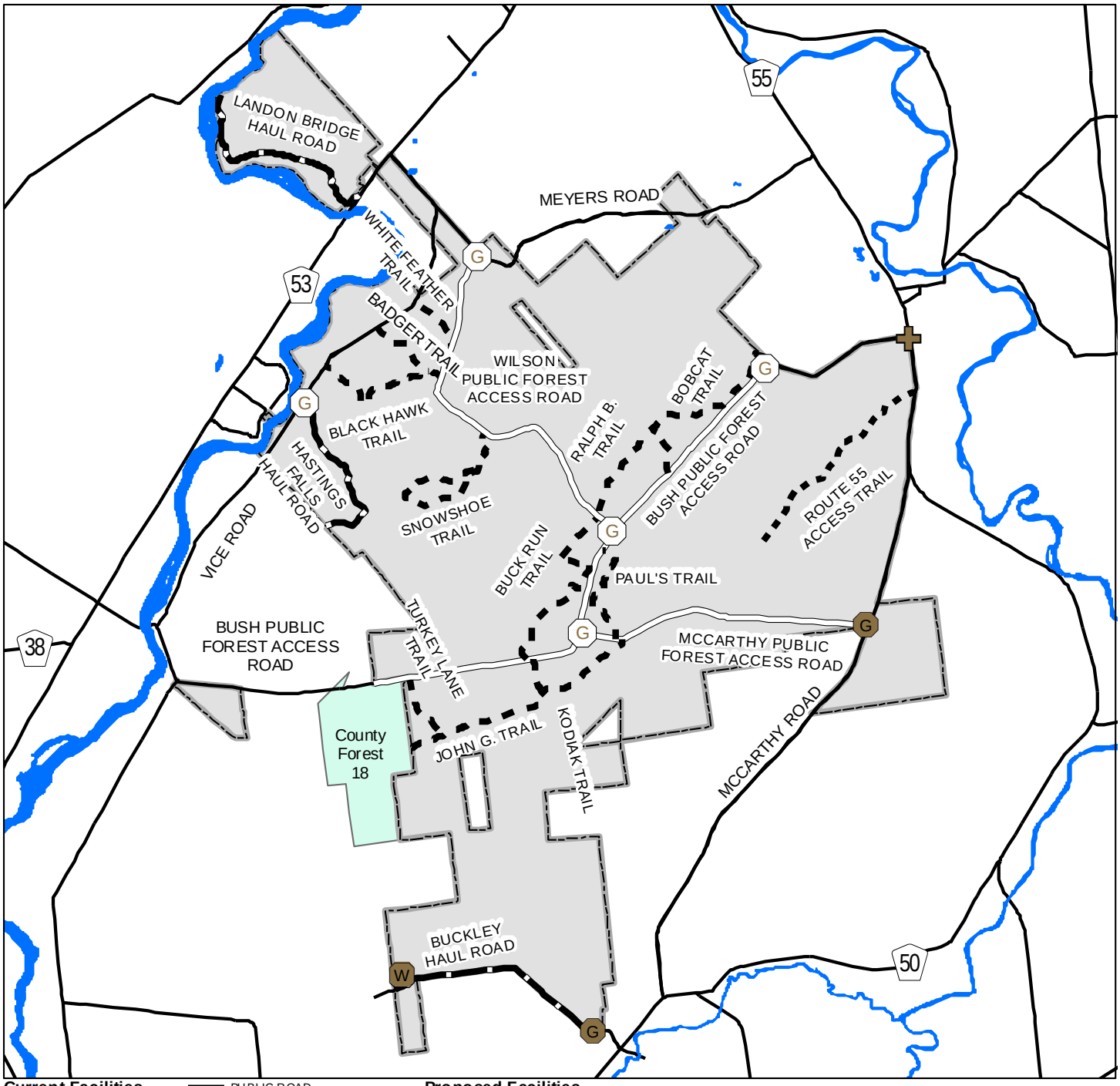
Proposed Facilities

- CANOE LAUNCH
- FACILITY ID SIGN
- GATE
- KIOSK
- LEAN TO
- UNPAVED PARKING LOT

BRASHER STATE FOREST
ST. LAWRENCE 05
INFRASTRUCTURE & RECREATION
Figure 3

0 0.25 0.5 Miles

N



Current Facilities

- BRIDGE
- CULVERT PIPE
- FACILITY ID SIGN
- FISHING ACCESS
- GATE
- PARKING
- PRIMITIVE CAMPSITE
- TRAILHEAD REGISTER
- CCC WATERHOLE

- PUBLIC ROAD
- ACCESS TRAIL
- HAUL ROAD
- PUBLIC FOREST ACCESS ROAD
- RECREATIONAL TRAIL
- RIGHT-OF-WAY
- FOREST BOUNDARY
- County Forest
- Water

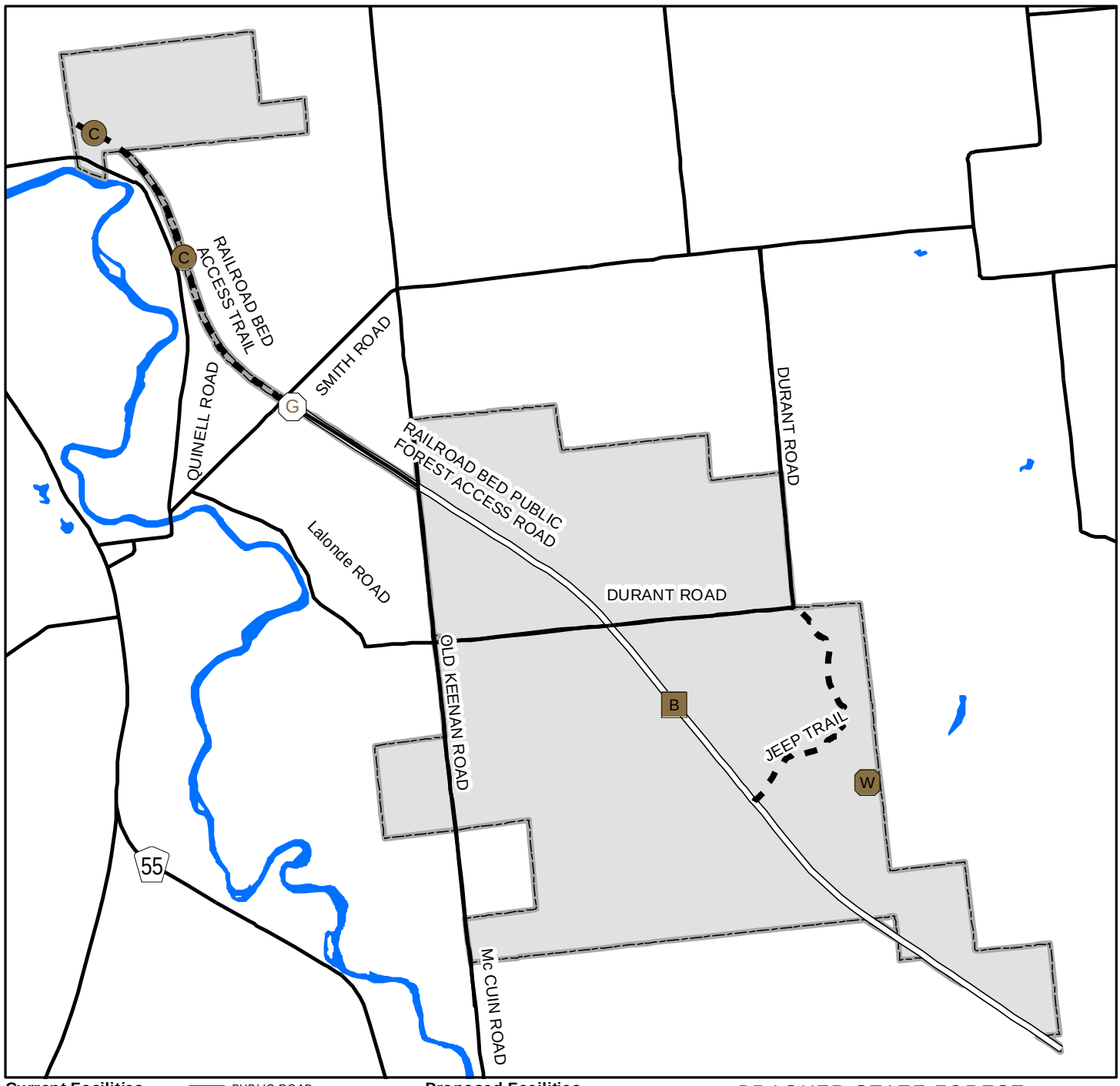
Proposed Facilities

- CANOE LAUNCH
- FACILITY ID SIGN
- GATE
- KIOSK
- LEAN TO
- UNPAVED PARKING LOT

BRASHER STATE FOREST
ST. LAWRENCE 06
INFRASTRUCTURE & RECREATION
Figure 3

N

0 0.25 0.5 Miles



Current Facilities

- B — BRIDGE
- C — CULVERT PIPE
- FACILITY ID SIGN
- FISHING ACCESS
- G — GATE
- P — PARKING
- PRIMITIVE CAMPSITE
- TRAILHEAD REGISTER
- W — CCC WATERHOLE

- PUBLIC ROAD
- ACCESS TRAIL
- HAUL ROAD
- PUBLIC FOREST ACCESS ROAD
- RECREATIONAL TRAIL
- RIGHT-OF-WAY
- FOREST BOUNDARY
- County Forest
- Water

Proposed Facilities

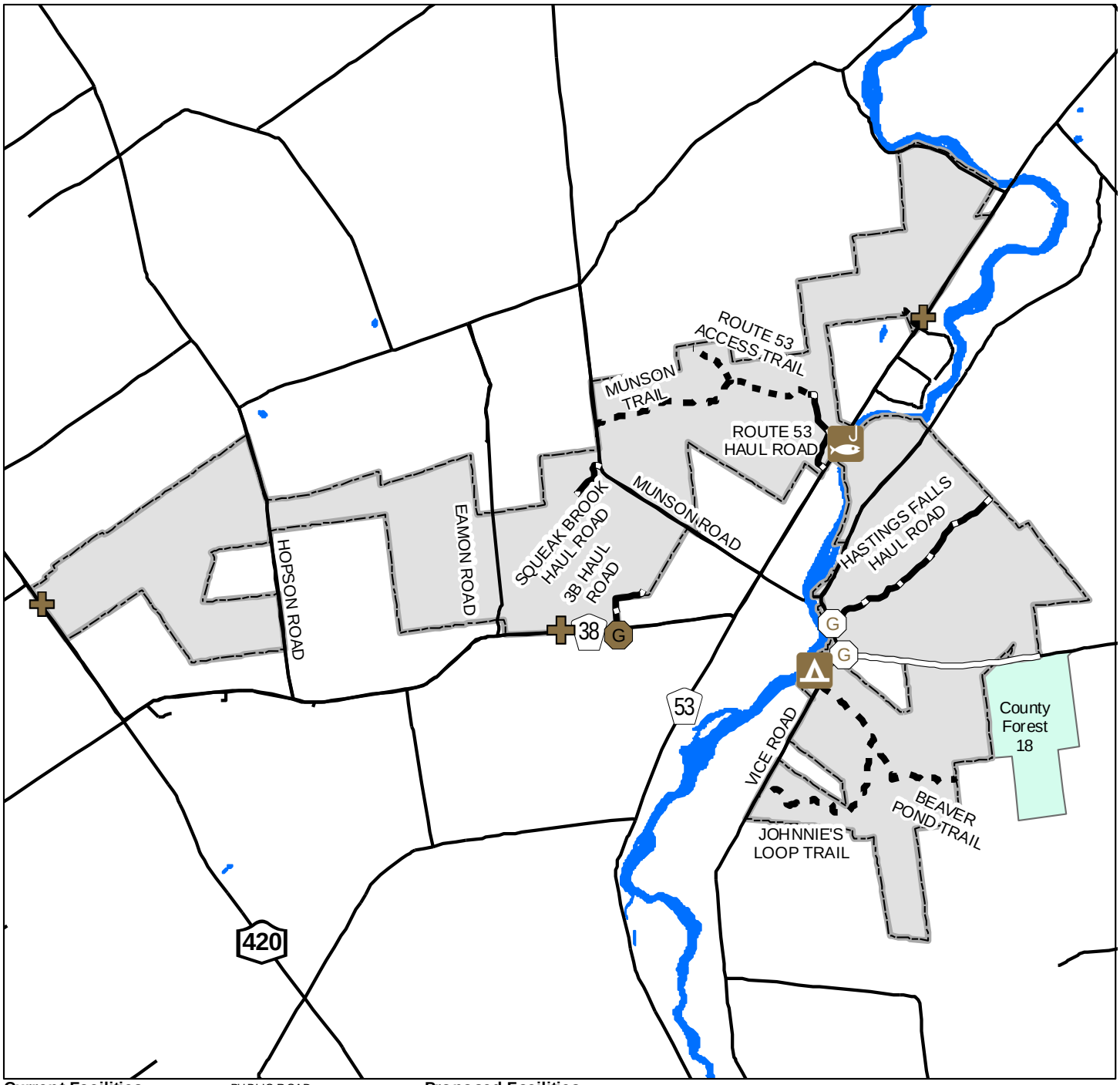
- CANOE LAUNCH
- FACILITY ID SIGN
- G — GATE
- KIOSK
- LEAN TO
- P — UNPAVED PARKING LOT

BRASHER STATE FOREST
ST. LAWRENCE 7
INFRASTRUCTURE & RECREATION

Figure 3

N

0 0.25 0.5 Miles



Current Facilities

- BRIDGE
- CULVERT PIPE
- FACILITY ID SIGN
- FISHING ACCESS
- GATE
- PARKING
- PRIMITIVE CAMPSITE
- TRAILHEAD REGISTER
- CCC WATERHOLE

- PUBLIC ROAD
- ACCESS TRAIL
- HAUL ROAD
- PUBLIC FOREST ACCESS ROAD
- RECREATIONAL TRAIL
- RIGHT-OF-WAY
- FOREST BOUNDARY
- County Forest
- Water

Proposed Facilities

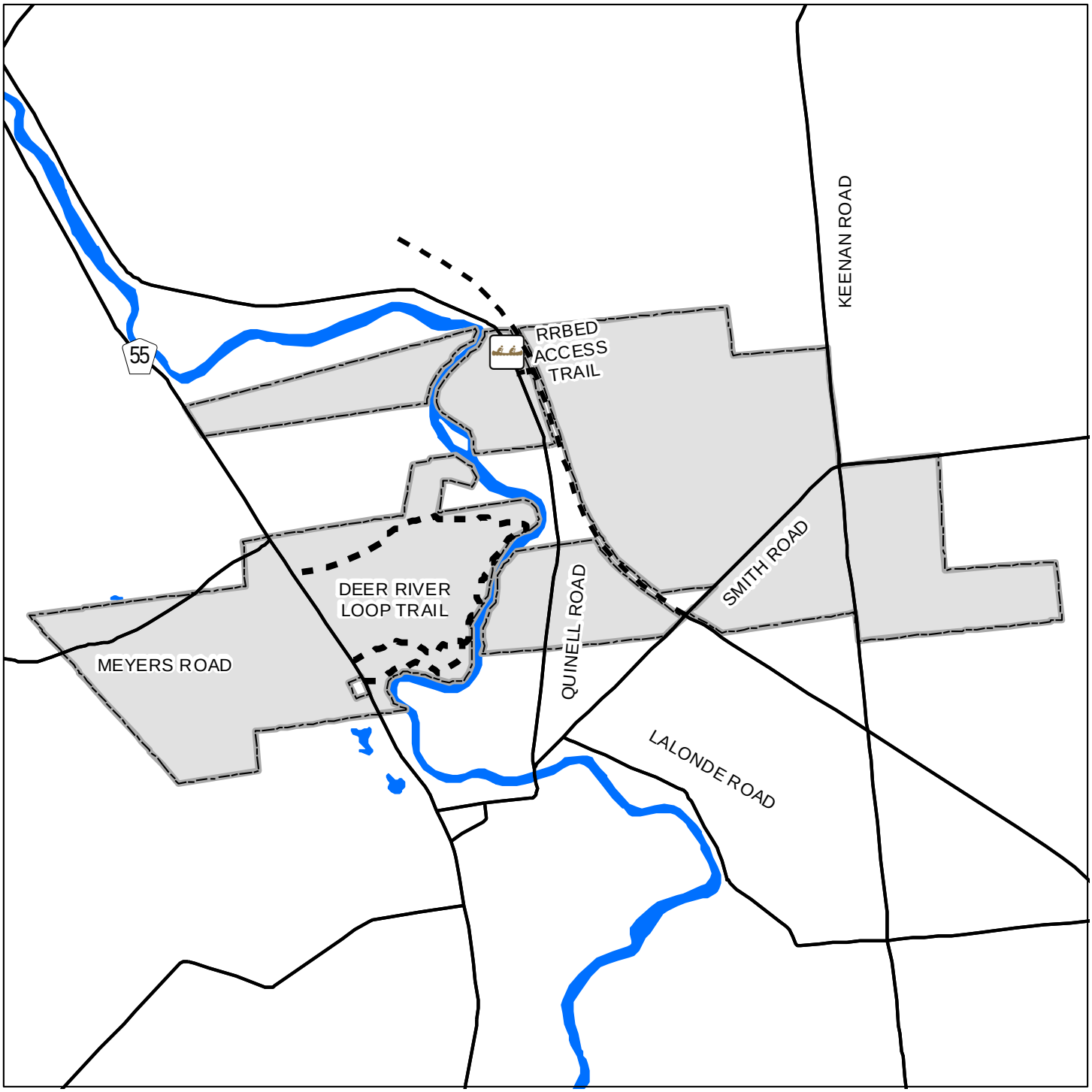
- CANOE LAUNCH
- FACILITY ID SIGN
- GATE
- KIOSK
- LEAN TO
- UNPAVED PARKING LOT

BRASHER STATE FOREST
ST. LAWRENCE 10
INFRASTRUCTURE & RECREATION

Figure 3

N

0 0.25 0.5 Miles



Current Facilities

- BRIDGE
- CULVERT
- FACILITY ID SIGN
- FISHING ACCESS
- GATE
- PARKING
- PRIMITIVE CAMPSITE

- PUBLIC ROAD
- ACCESS TRAIL
- HAUL ROAD
- PUBLIC FOREST ACCESS ROAD
- RECREATIONAL TRAIL
- RIGHT-OF-WAY
- FOREST BOUNDARY
- County Forest
- Water

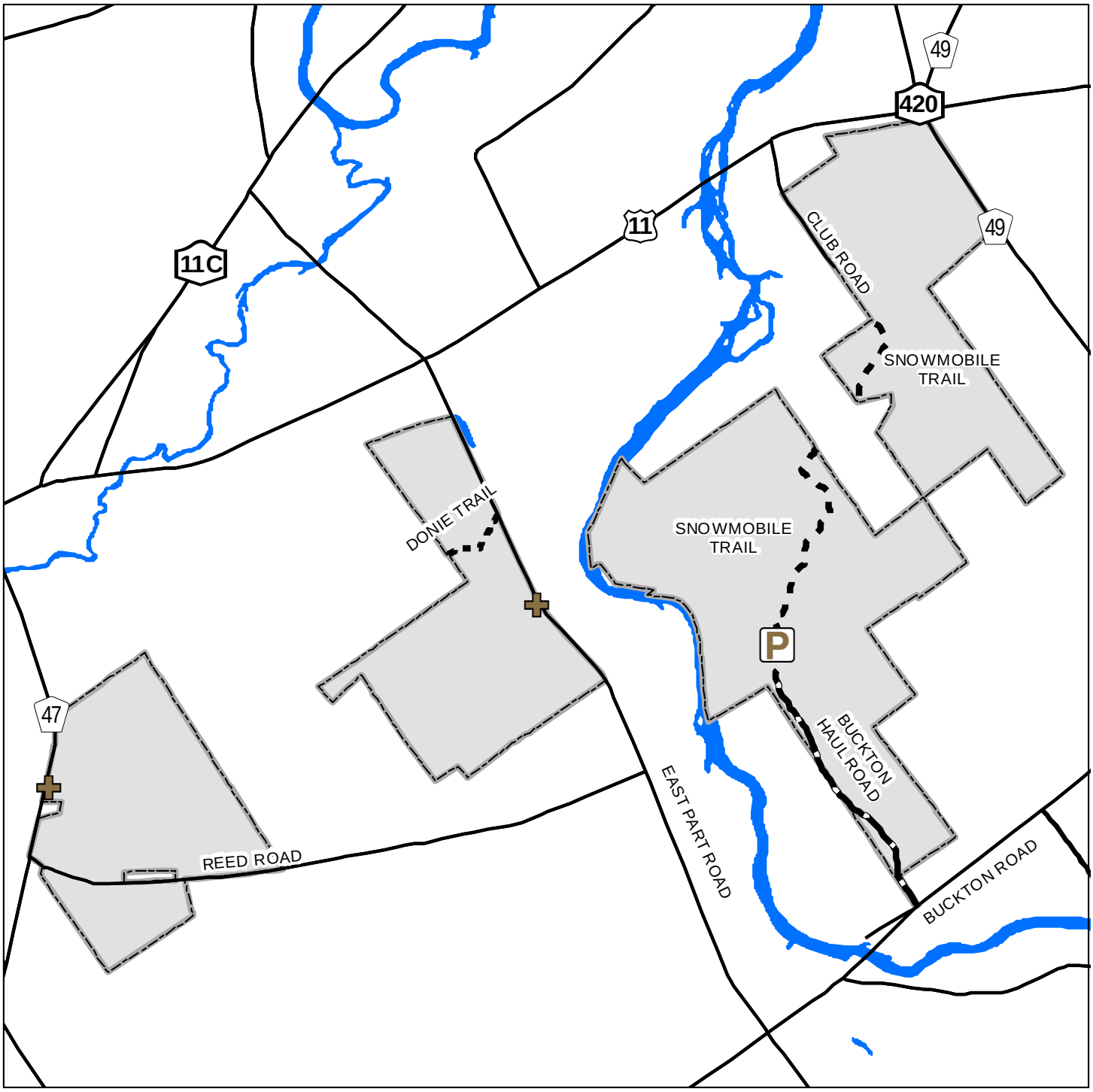
Proposed Facilities

- CANOE LAUNCH
- FACILITY ID SIGN
- GATE
- KIOSK
- LEAN TO
- UNPAVED PARKING LOT

BRASHER STATE FOREST
ST. LAWRENCE 17
INFRASTRUCTURE & RECREATION
Figure 3

0 0.25 0.5 Miles

N



Current Facilities

- BRIDGE
- CULVERT
- FACILITY ID SIGN
- FISHING ACCESS
- GATE
- PARKING
- PRIMITIVE CAMPSITE

- PUBLIC ROAD
- ACCESS TRAIL
- HAUL ROAD
- PUBLIC FOREST ACCESS ROAD
- RECREATIONAL TRAIL
- RIGHT-OF-WAY
- FOREST BOUNDARY
- County Forest
- Water

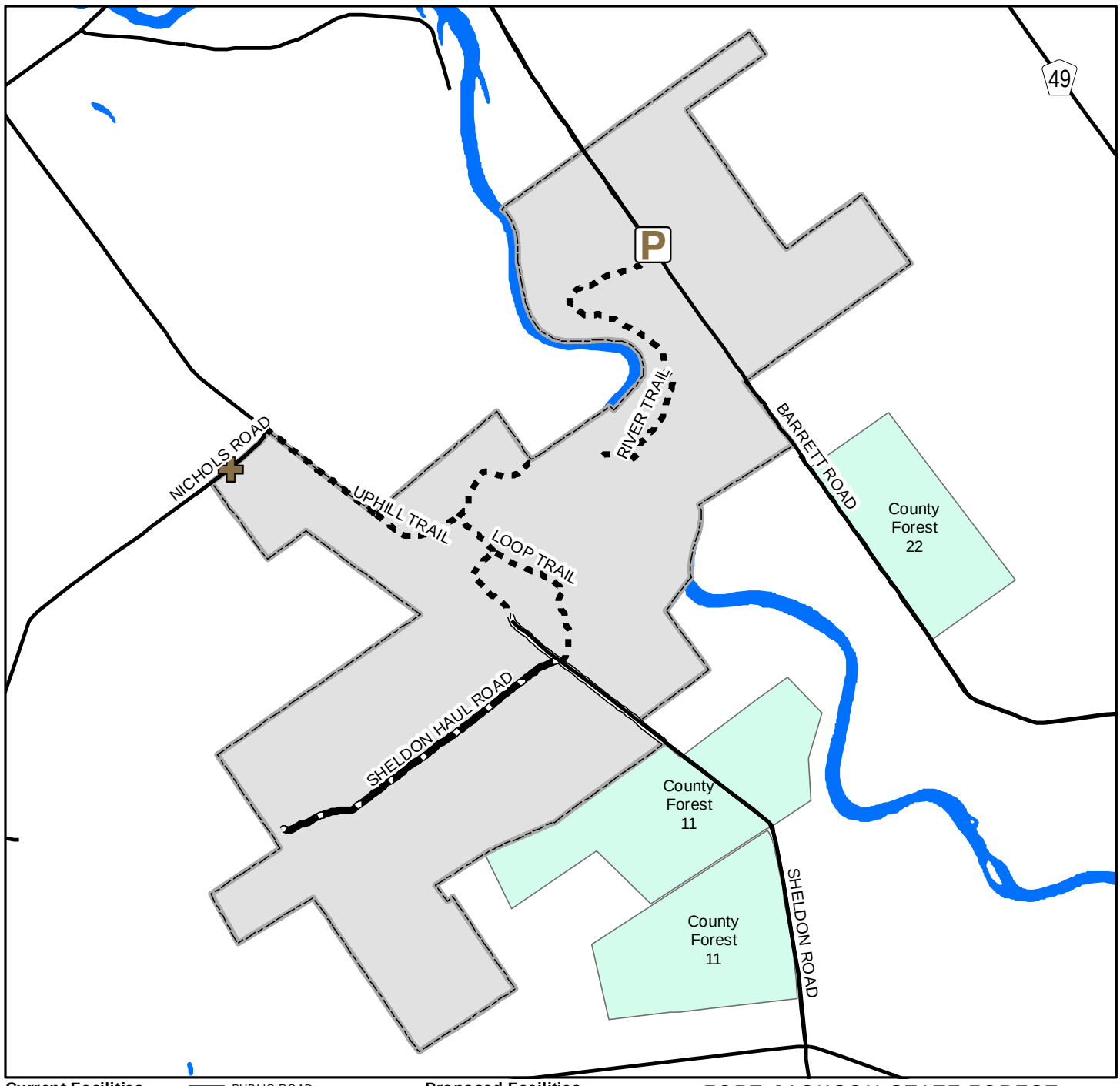
Proposed Facilities

- CANOE LAUNCH
- FACILITY ID SIGN
- GATE
- KIOSK
- LEAN TO
- UNPAVED PARKING LOT

BUCKTON STATE FOREST
ST. LAWRENCE 31
INFRASTRUCTURE & RECREATION
Figure 3

0 0.25 0.5 Miles

N



Current Facilities

- B BRIDGE
- C CULVERT PIPE
- FACILITY ID SIGN
- FISHING ACCESS
- G GATE
- P PARKING
- PRIMITIVE CAMPSITE
- TRAILHEAD REGISTER
- W CCC WATERHOLE

- PUBLIC ROAD
- ACCESS TRAIL
- HAUL ROAD
- PUBLIC FOREST ACCESS ROAD
- RECREATIONAL TRAIL
- RIGHT-OF-WAY
- FOREST BOUNDARY
- County Forest
- Water

Proposed Facilities

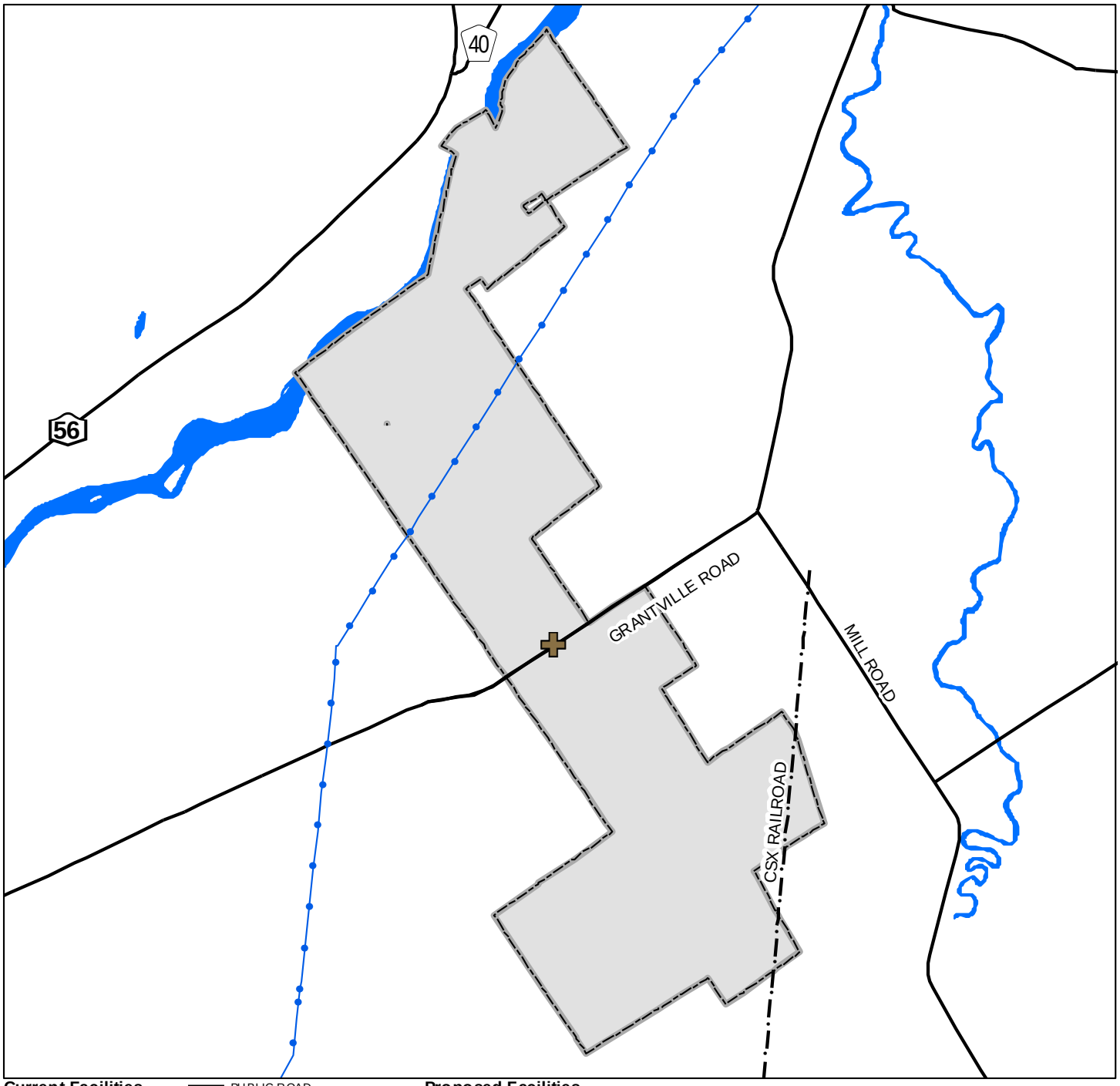
- CANOE LAUNCH
- FACILITY ID SIGN
- G GATE
- KIOSK
- LEAN TO
- P UNPAVED PARKING LOT

FORT JACKSON STATE FOREST
ST. LAWRENCE 22
INFRASTRUCTURE & RECREATION

Figure 3

N

0 0.25 0.5 Miles



Current Facilities

- BRIDGE
- CULVERT PIPE
- FACILITY ID SIGN
- FISHING ACCESS
- GATE
- PARKING
- PRIMITIVE CAMPSITE
- TRAILHEAD REGISTER
- CCC WATERHOLE

- PUBLIC ROAD
- ACCESS TRAIL
- HAUL ROAD
- PUBLIC FOREST ACCESS ROAD
- RECREATIONAL TRAIL
- RIGHT-OF-WAY
- FOREST BOUNDARY
- County Forest
- Water
- Utility Lines

Proposed Facilities

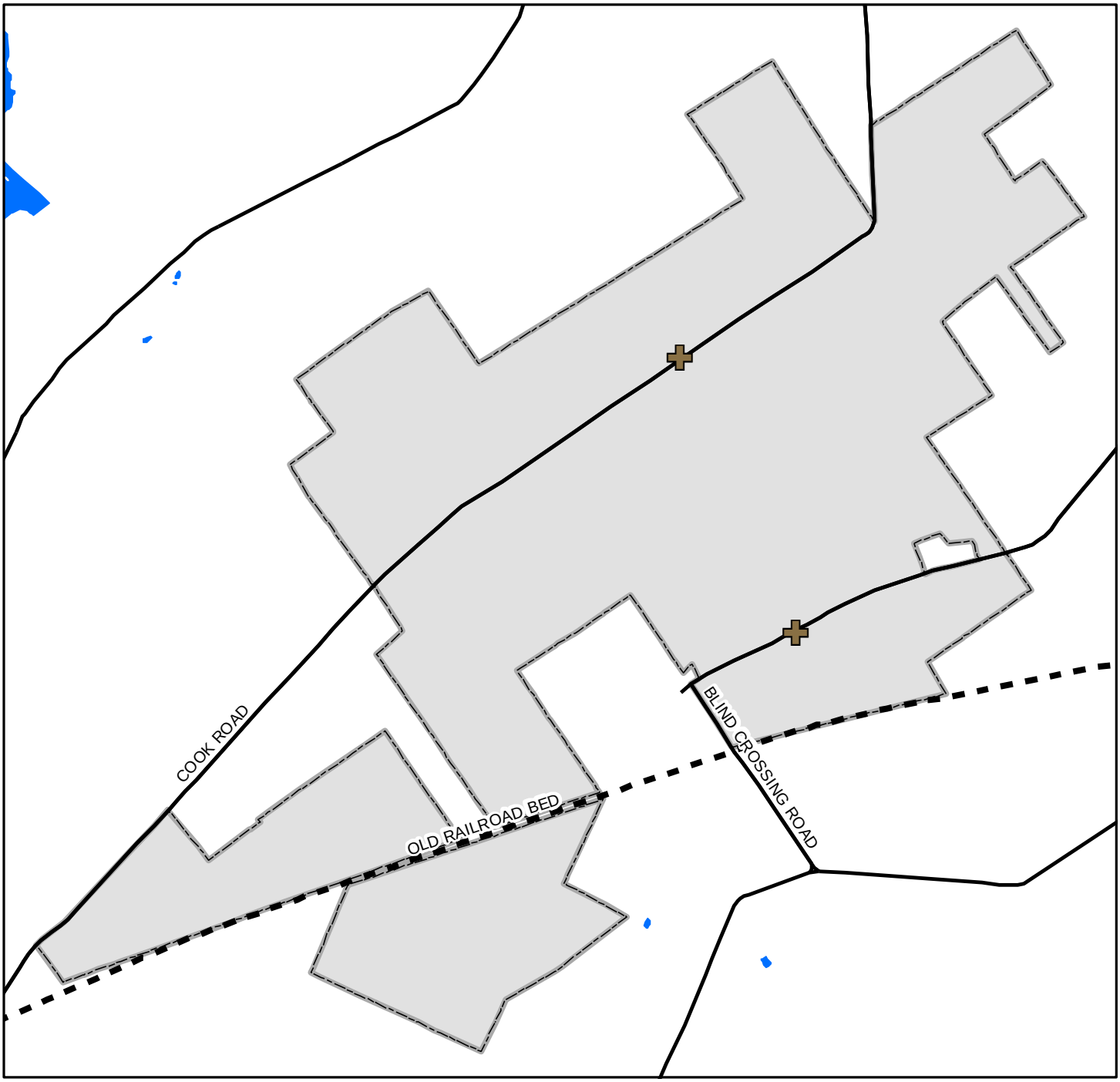
- CANOE LAUNCH
- FACILITY ID SIGN
- GATE
- KIOSK
- LEAN TO
- UNPAVED PARKING LOT

GRANTVILLE STATE FOREST
ST. LAWRENCE 15
INFRASTRUCTURE & RECREATION

Figure 3

N

0 0.25 0.5 Miles



Current Facilities

- BRIDGE
- CULVERT PIPE
- FACILITY ID SIGN
- FISHING ACCESS
- GATE
- PARKING
- PRIMITIVE CAMPSITE
- CCC WATERHOLE

- PUBLIC ROAD
- ACCESS TRAIL
- HAUL ROAD
- PUBLIC FOREST ACCESS ROAD
- RECREATIONAL TRAIL
- RIGHT-OF-WAY
- FOREST BOUNDARY
- County Forest
- Water

Proposed Facilities

- CANOE LAUNCH
- FACILITY ID SIGN
- GATE
- KIOSK
- LEAN TO
- UNPAVED PARKING LOT

KNAPP STATION STATE FOREST
ST. LAWRENCE 11
INFRASTRUCTURE & RECREATION
Figure 3

N

0 0.25 0.5 Miles



Current Facilities

- BRIDGE
- CULVERT
- FACILITY ID SIGN
- FISHING ACCESS
- GATE
- PARKING
- PRIMITIVE CAMPSITE

- PUBLIC ROAD
- ACCESS TRAIL
- HAUL ROAD
- PUBLIC FOREST ACCESS ROAD
- RECREATIONAL TRAIL
- RIGHT-OF-WAY
- FOREST BOUNDARY
- County Forest
- Water

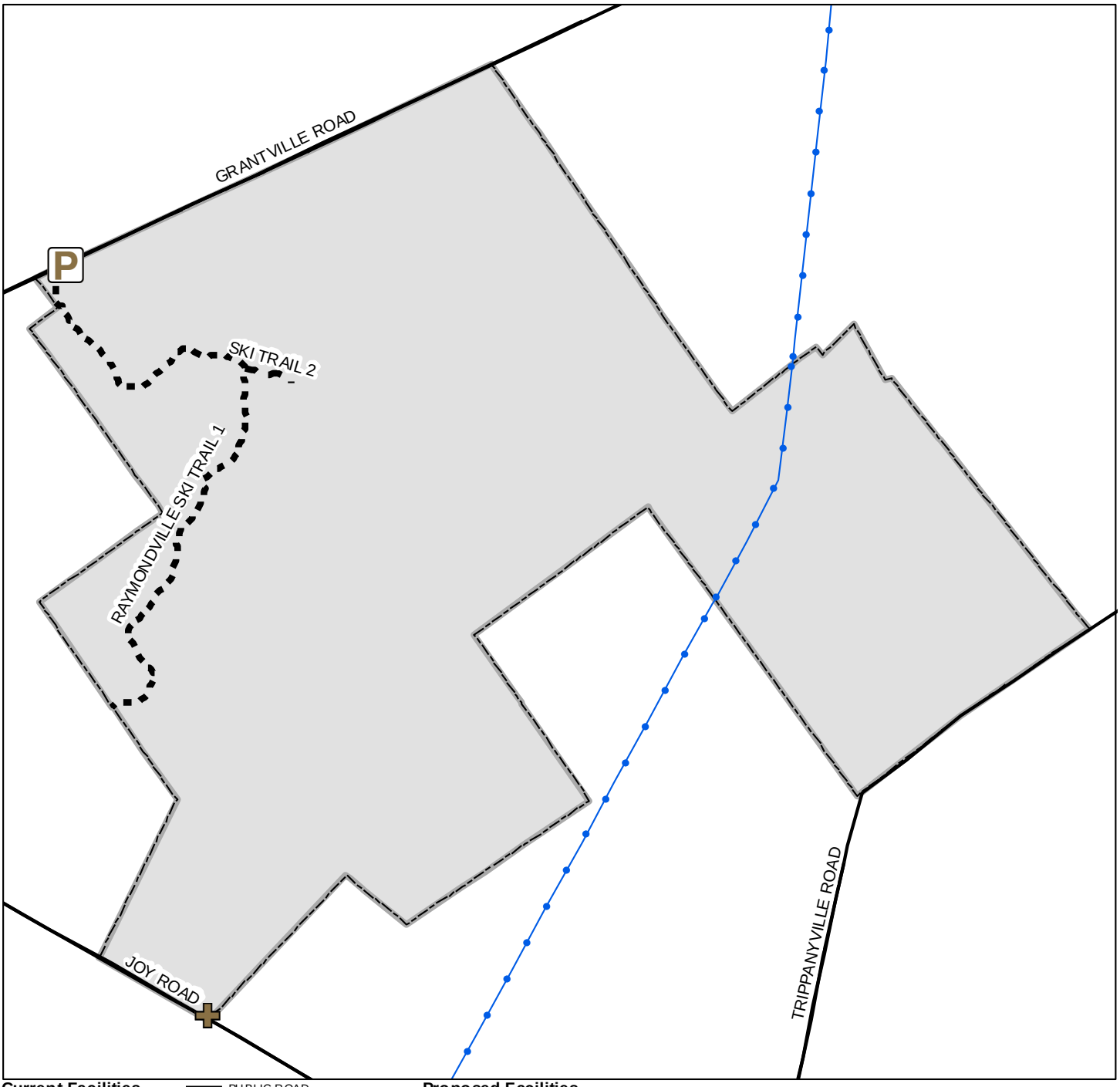
Proposed Facilities

- CANOE LAUNCH
- FACILITY ID SIGN
- GATE
- KIOSK
- LEAN TO
- UNPAVED PARKING LOT

LOST NATION STATE FOREST
ST. LAWRENCE 09
INFRASTRUCTURE & RECREATION
Figure 3

0 0.25 0.5 Miles

N



Current Facilities

- BRIDGE
- CULVERT PIPE
- FACILITY ID SIGN
- FISHING ACCESS
- GATE
- PARKING
- PRIMITIVE CAMPSITE
- TRAILHEAD REGISTER
- CCC WATERHOLE

- PUBLIC ROAD
- ACCESS TRAIL
- HAUL ROAD
- PUBLIC FOREST ACCESS ROAD
- RECREATIONAL TRAIL
- RIGHT-OF-WAY
- FOREST BOUNDARY
- County Forest
- Water
- Utility Lines

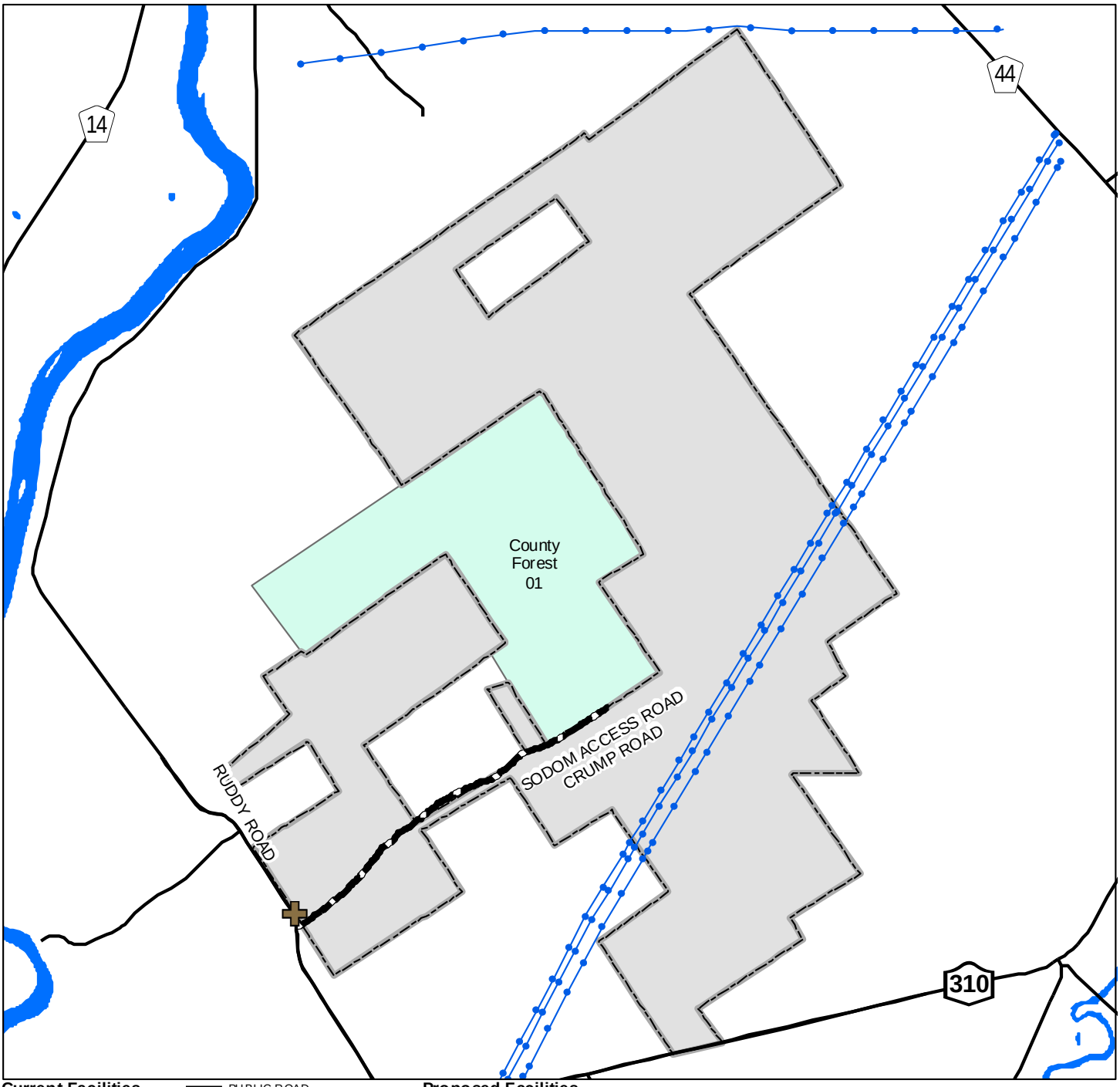
Proposed Facilities

- CANOE LAUNCH
- FACILITY ID SIGN
- GATE
- KIOSK
- LEAN TO
- UNPAVED PARKING LOT

RAYMONDVILLE STATE FOREST
ST. LAWRENCE 33
INFRASTRUCTURE & RECREATION
Figure 3

N

0 0.25 0.5 Miles



Current Facilities

- BRIDGE
- CULVERT PIPE
- FACILITY ID SIGN
- FISHING ACCESS
- GATE
- PARKING
- PRIMITIVE CAMPSITE
- TRAILHEAD REGISTER
- CCC WATERHOLE

- PUBLIC ROAD
- ACCESS TRAIL
- HAUL ROAD
- PUBLIC FOREST ACCESS ROAD
- RECREATIONAL TRAIL
- RIGHT-OF-WAY
- FOREST BOUNDARY
- County Forest
- Water
- Utility Lines

Proposed Facilities

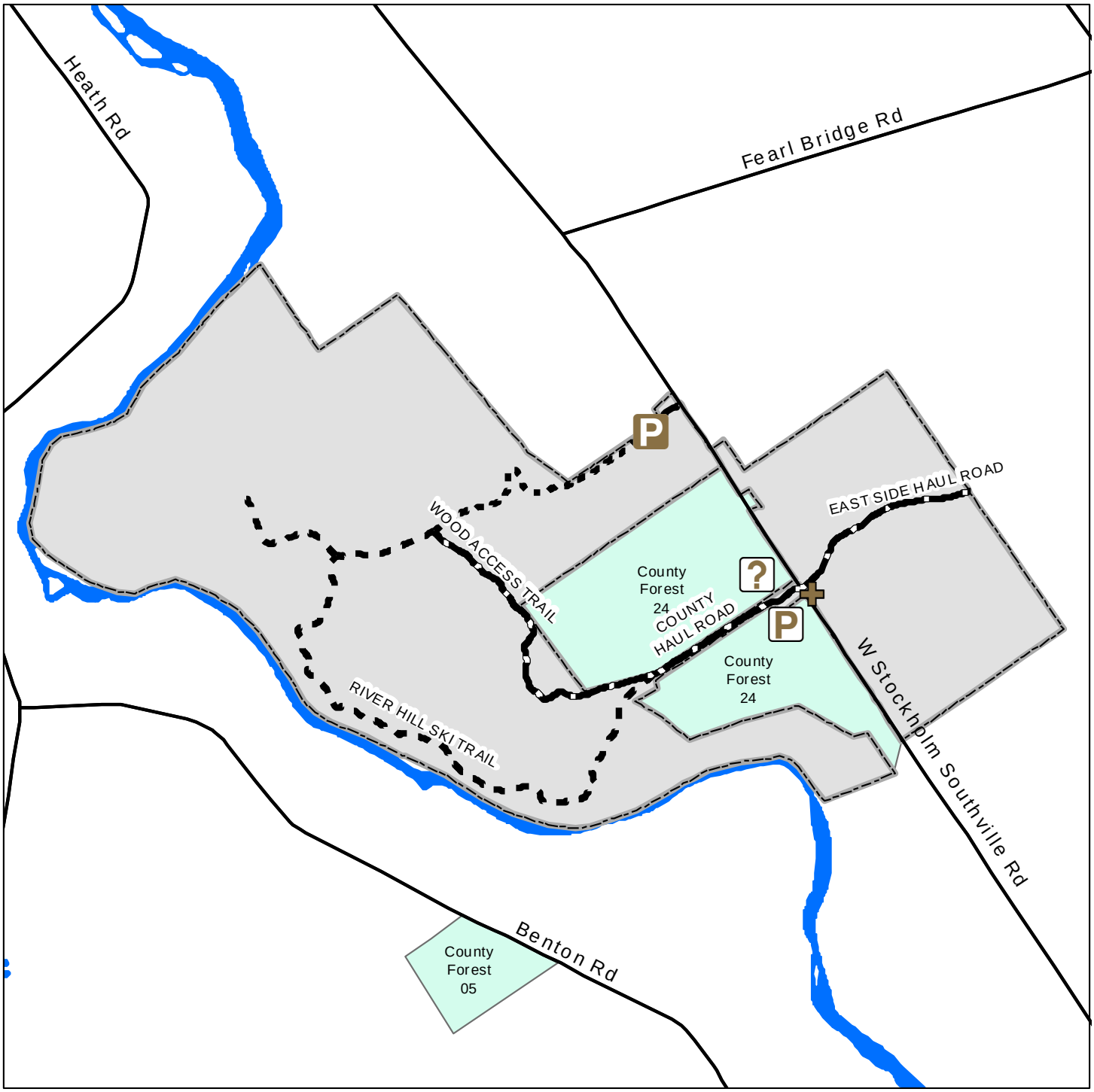
- CANOE LAUNCH
- FACILITY ID SIGN
- GATE
- KIOSK
- LEAN TO
- UNPAVED PARKING LOT

SODOM STATE FOREST
ST. LAWRENCE 25
INFRASTRUCTURE & RECREATION

Figure 3

N

0 0.25 0.5 Miles



Current Facilities

- BRIDGE
- CULVERT
- FACILITY ID SIGN
- FISHING ACCESS
- GATE
- PARKING
- PRIMITIVE CAMPSITE

- PUBLIC ROAD
- ACCESS TRAIL
- HAUL ROAD
- PUBLIC FOREST ACCESS ROAD
- RECREATIONAL TRAIL
- RIGHT-OF-WAY
- FOREST BOUNDARY
- County Forest
- Water

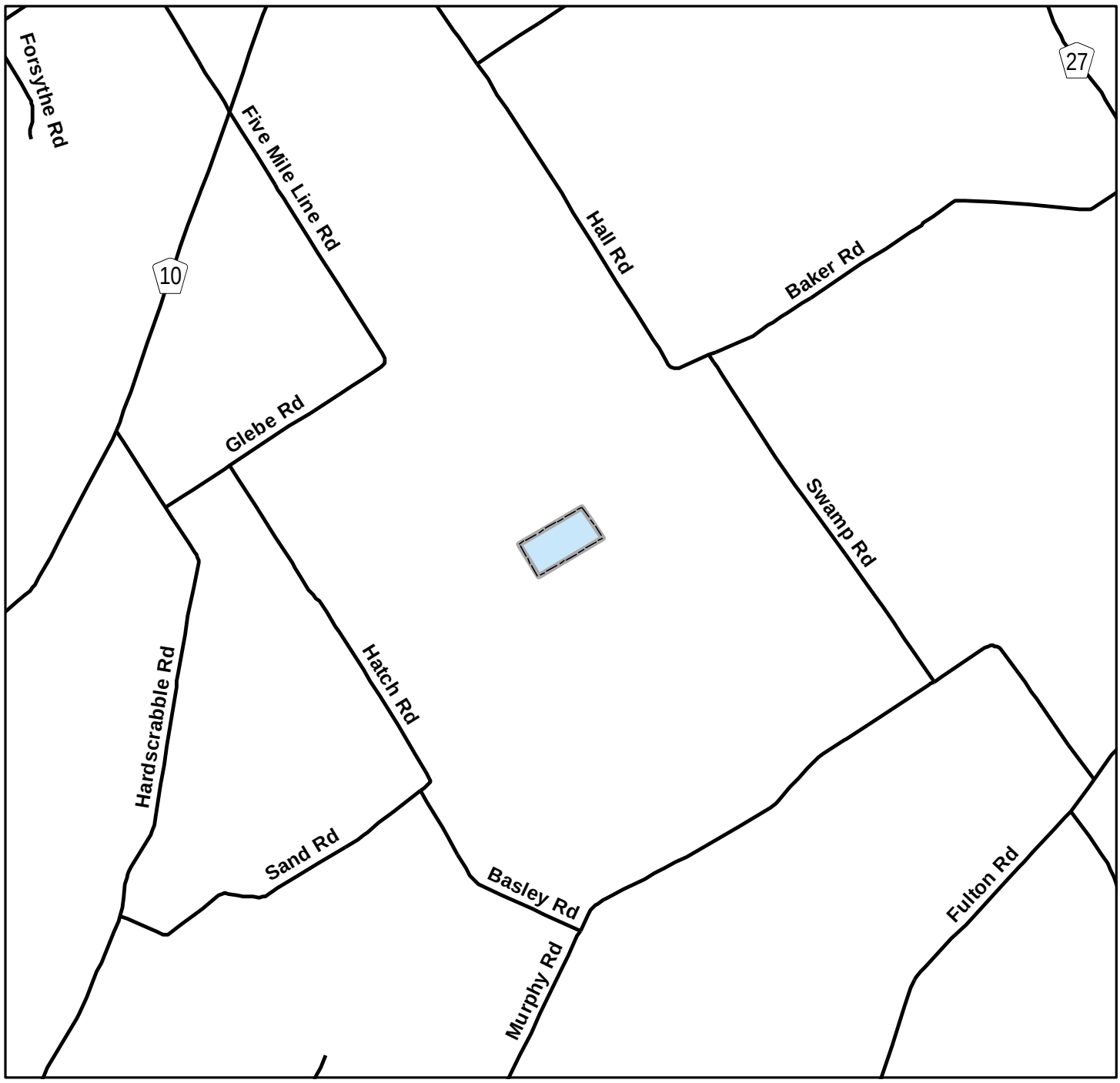
Proposed Facilities

- CANOE LAUNCH
- FACILITY ID SIGN
- GATE
- KIOSK
- LEAN TO
- UNPAVED PARKING LOT

SOUTHVILLE STATE FOREST
ST. LAWRENCE 23
INFRASTRUCTURE & RECREATION
Figure 3

0 0.25 0.5 Miles

N



Current Facilities

- BRIDGE
- CULVERT
- FACILITY ID SIGN
- FISHING ACCESS
- GATE
- PARKING
- PRIMITIVE CAMPSITE

- PUBLIC ROAD
- ACCESS TRAIL
- HAUL ROAD
- PUBLIC FOREST ACCESS ROAD
- RECREATIONAL TRAIL
- RIGHT-OF-WAY
- FOREST BOUNDARY
- County Forest
- RIVER

Proposed Facilities

- CANOE LAUNCH
- FACILITY ID SIGN
- GATE
- KIOSK
- LEAN TO
- UNPAVED PARKING LOT

LISBON DETACHED FOREST PRESERVE 12

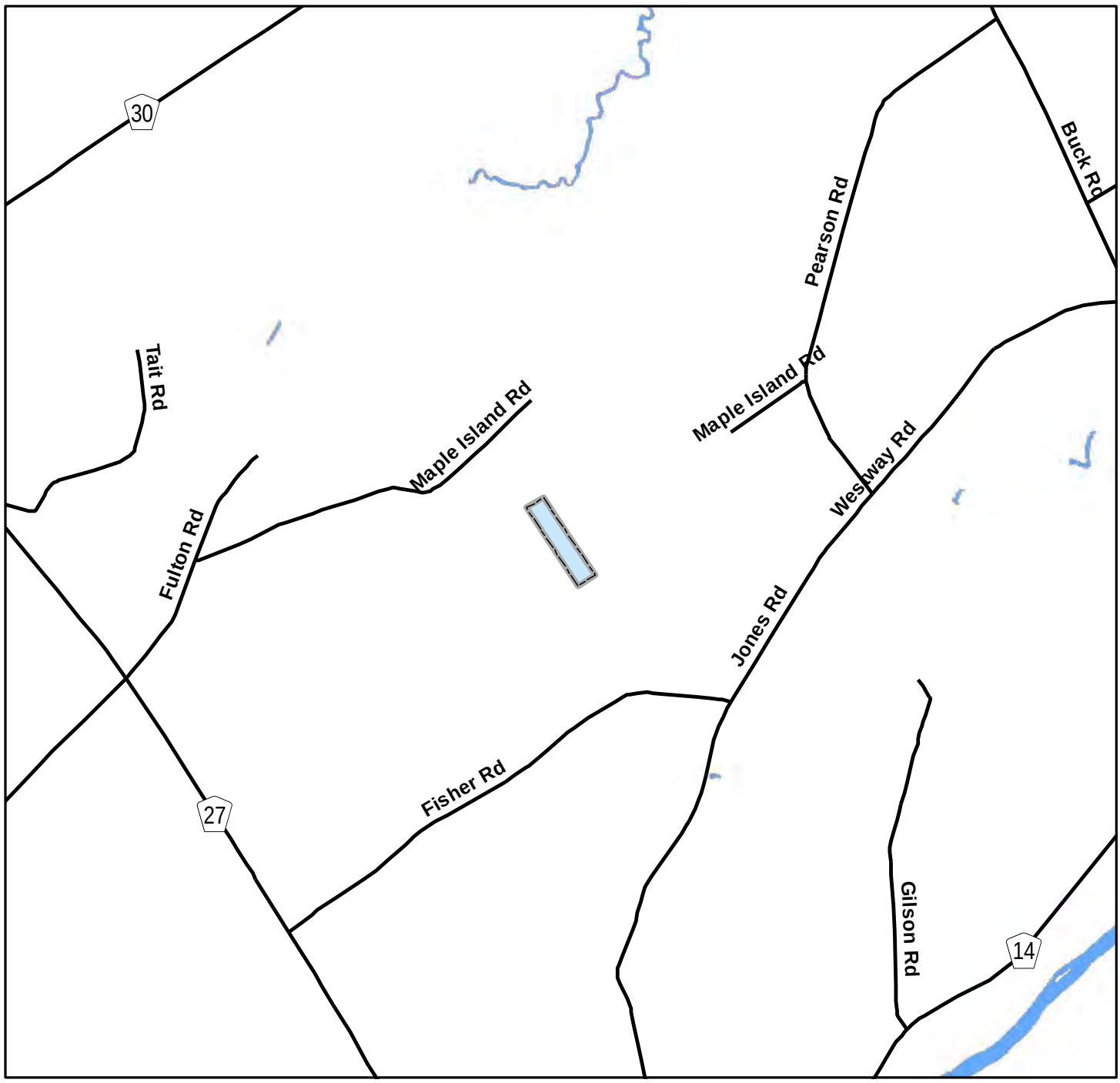
FP SL 12

INFRASTRUCTURE & RECREATION

Figure 3

N

0 0.25 0.5 Miles



Current Facilities

- BRIDGE
- CULVERT
- FACILITY ID SIGN
- FISHING ACCESS
- GATE
- PARKING
- PRIMITIVE CAMPSITE

- PUBLIC ROAD
- ACCESS TRAIL
- HAUL ROAD
- PUBLIC FOREST ACCESS ROAD
- RECREATIONAL TRAIL
- RIGHT-OF-WAY
- FOREST BOUNDARY
- County Forest
- RIVER

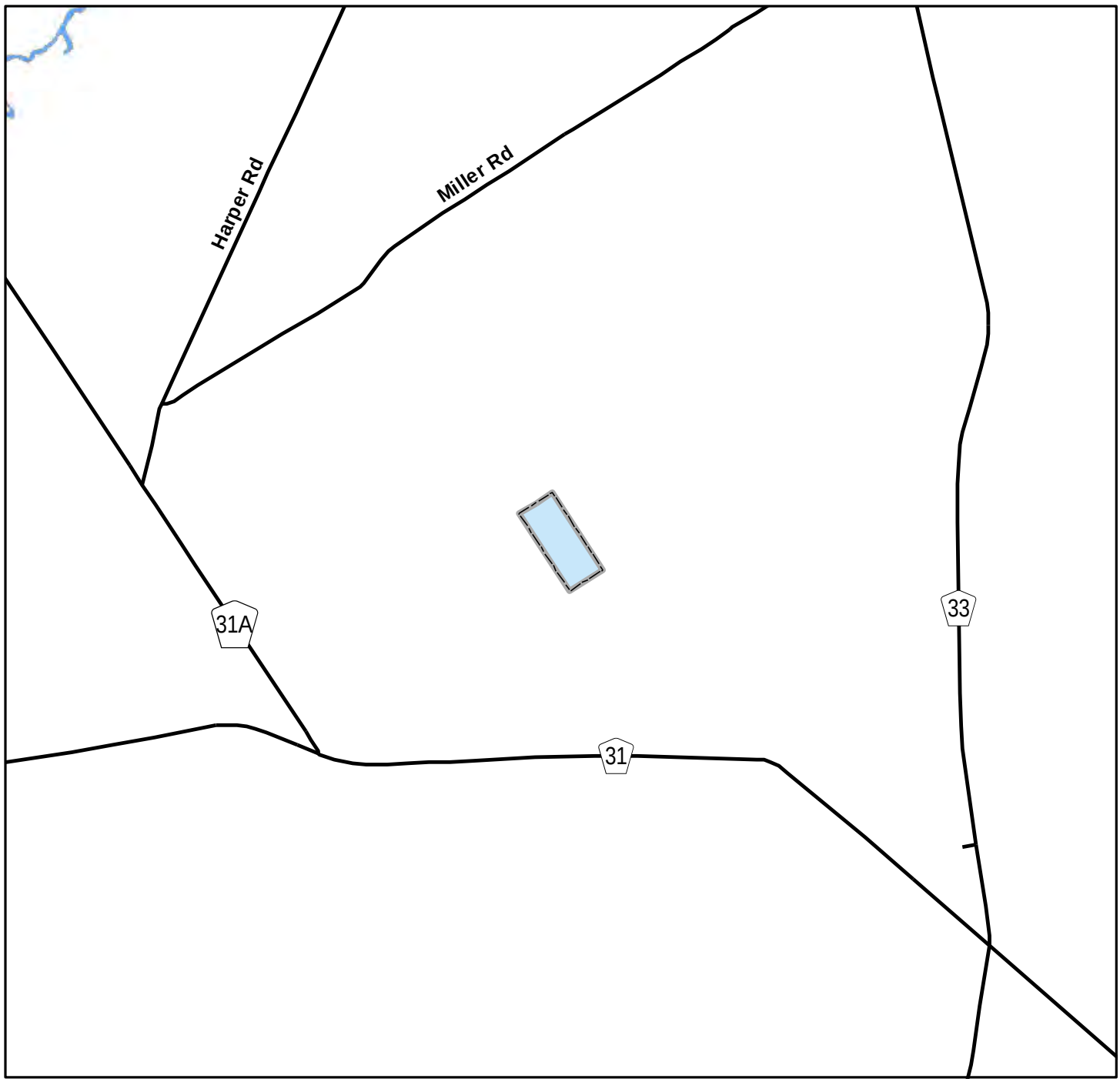
Proposed Facilities

- CANOE LAUNCH
- FACILITY ID SIGN
- GATE
- KIOSK
- LEAN TO
- UNPAVED PARKING LOT

LISBON DETACHED FOREST PRESERVE 13
FP SL 13
INFRASTRUCTURE & RECREATION
Figure 3

N

0 0.25 0.5 Miles



Current Facilities

- BRIDGE
- CULVERT
- FACILITY ID SIGN
- FISHING ACCESS
- GATE
- PARKING
- PRIMITIVE CAMPSITE

- PUBLIC ROAD
- ACCESS TRAIL
- HAUL ROAD
- PUBLIC FOREST ACCESS ROAD
- RECREATIONAL TRAIL
- RIGHT-OF-WAY
- FOREST BOUNDARY
- County Forest
- RIVER

Proposed Facilities

- CANOE LAUNCH
- FACILITY ID SIGN
- GATE
- KIOSK
- LEAN TO
- UNPAVED PARKING LOT

WADDINGTON DETACHED FOREST PRESERVE 14

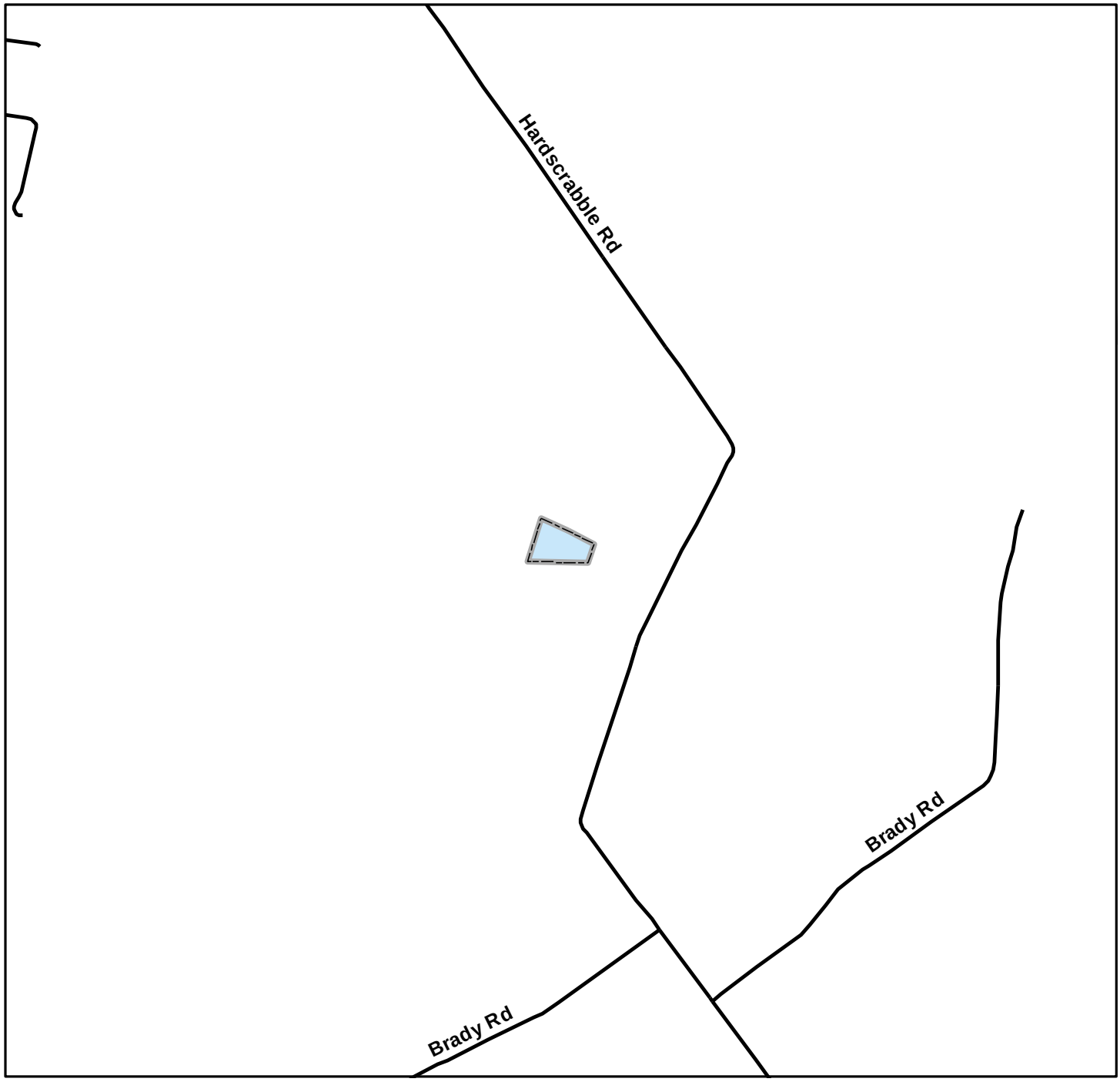
FP SL 14

INFRASTRUCTURE & RECREATION

Figure 3

N

0 0.25 0.5 Miles



Current Facilities

- BRIDGE
- CULVERT
- FACILITY ID SIGN
- FISHING ACCESS
- GATE
- PARKING
- PRIMITIVE CAMPSITE

- PUBLIC ROAD
- ACCESS TRAIL
- HAUL ROAD
- PUBLIC FOREST ACCESS ROAD
- RECREATIONAL TRAIL
- RIGHT-OF-WAY
- FOREST BOUNDARY
- County Forest
- RIVER

Proposed Facilities

- CANOE LAUNCH
- FACILITY ID SIGN
- GATE
- KIOSK
- LEAN TO
- UNPAVED PARKING LOT

WADDINGTON DETACHED FOREST PRESERVE 15

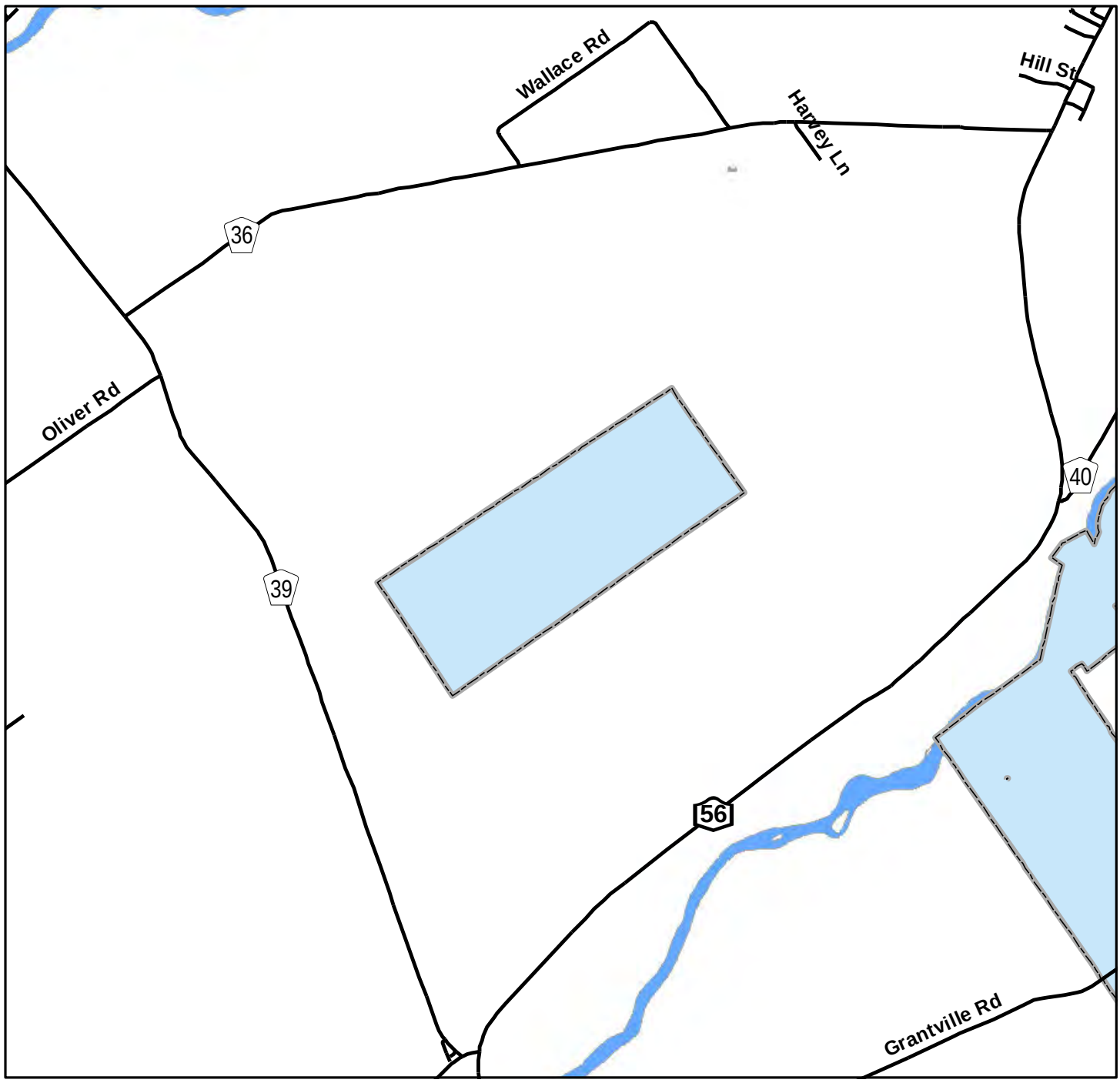
FP SL 15

INFRASTRUCTURE & RECREATION

Figure 3

N

0 0.25 0.5 Miles



Current Facilities

- BRIDGE
- CULVERT
- FACILITY ID SIGN
- FISHING ACCESS
- GATE
- PARKING
- PRIMITIVE CAMPSITE

- PUBLIC ROAD
- ACCESS TRAIL
- HAUL ROAD
- PUBLIC FOREST ACCESS ROAD
- RECREATIONAL TRAIL
- RIGHT-OF-WAY
- FOREST BOUNDARY
- County Forest
- RIVER

Proposed Facilities

- CANOE LAUNCH
- FACILITY ID SIGN
- GATE
- KIOSK
- LEAN TO
- UNPAVED PARKING LOT

LOUISVILLE DETACHED FOREST PRESERVE 17

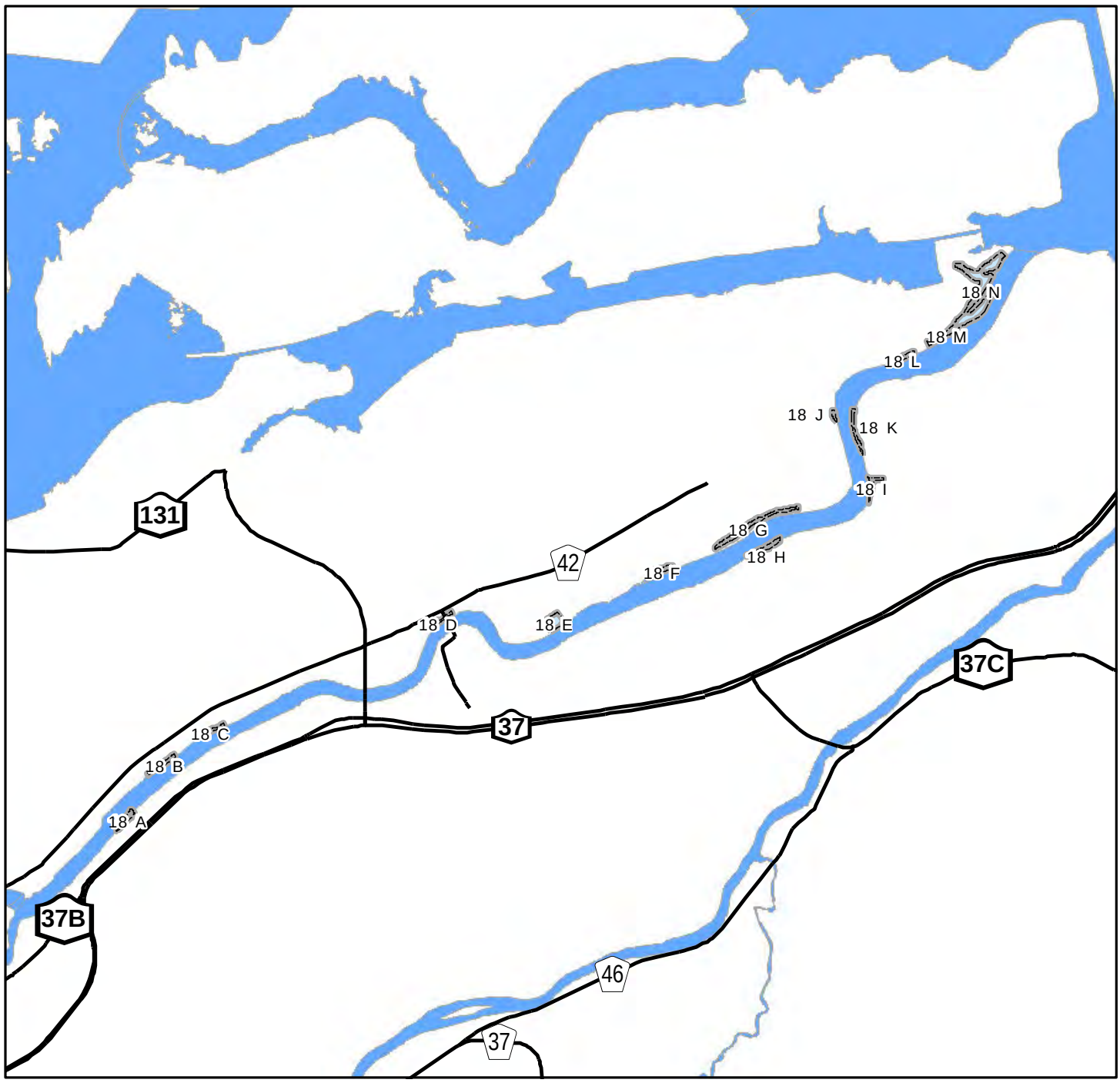
FP SL 17

INFRASTRUCTURE & RECREATION

Figure 3

N

0 0.25 0.5 Miles



Current Facilities

- BRIDGE
- CULVERT
- FACILITY ID SIGN
- FISHING ACCESS
- GATE
- PARKING
- PRIMITIVE CAMPSITE

- PUBLIC ROAD
- ACCESS TRAIL
- HAUL ROAD
- PUBLIC FOREST ACCESS ROAD
- RECREATIONAL TRAIL
- RIGHT-OF-WAY
- FOREST BOUNDARY
- County Forest
- RIVER

Proposed Facilities

- CANOE LAUNCH
- FACILITY ID SIGN
- GATE
- KIOSK
- LEAN TO
- UNPAVED PARKING LOT

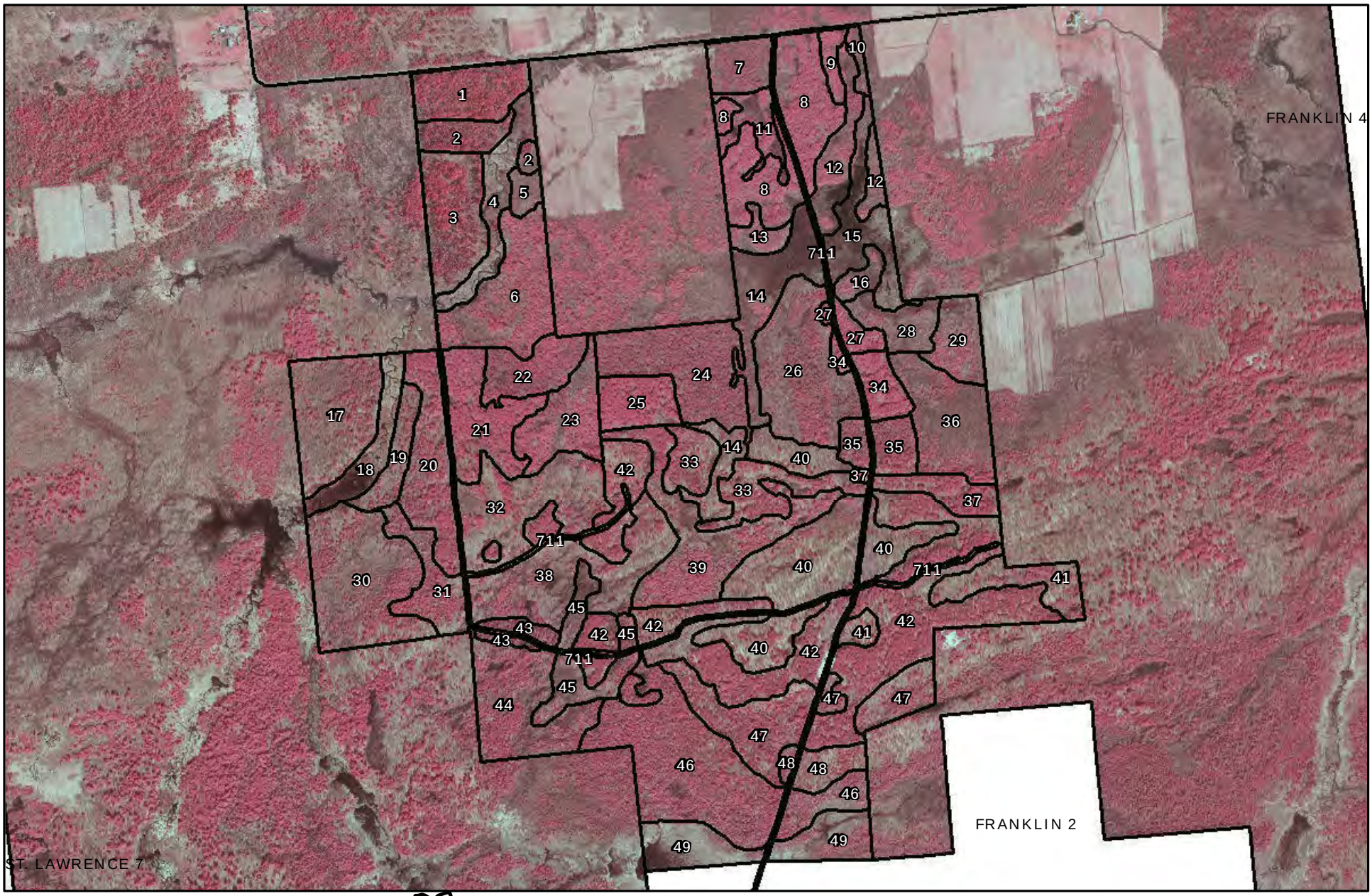
DETACHED FOREST PRESERVE 18A - N
FP SL 18 A - N
INFRASTRUCTURE & RECREATION
Figure 3

N

0 0.25 0.5
Miles

FIGURE 4. – STAND IDENTIFICATION MAPS

(see appendices and figures)



PUBLIC FOREST ACCESS ROAD

Public Roads

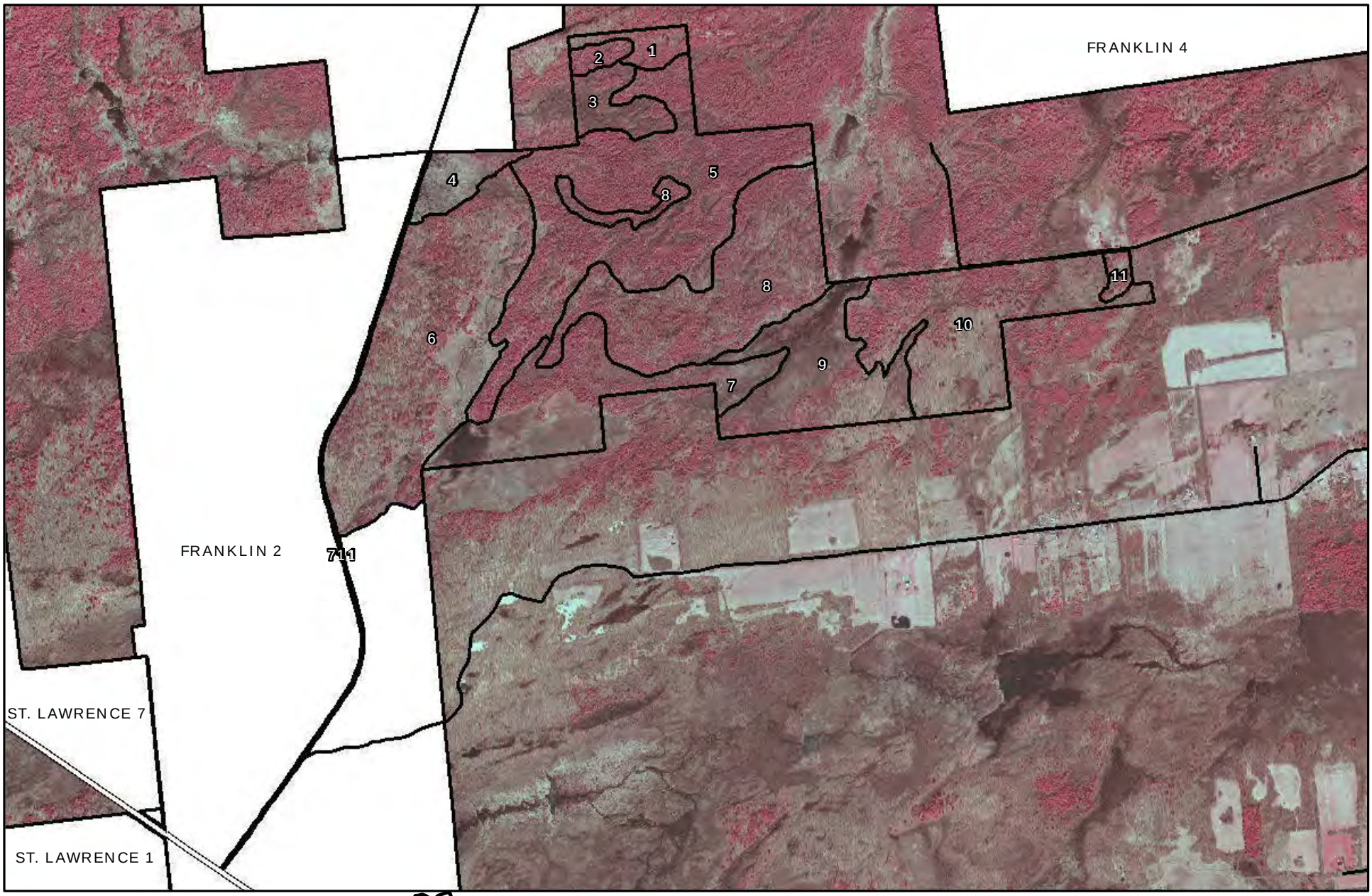
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BOMBAY STATE FOREST
FRANKLIN 2
COMPARTMENT 1
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

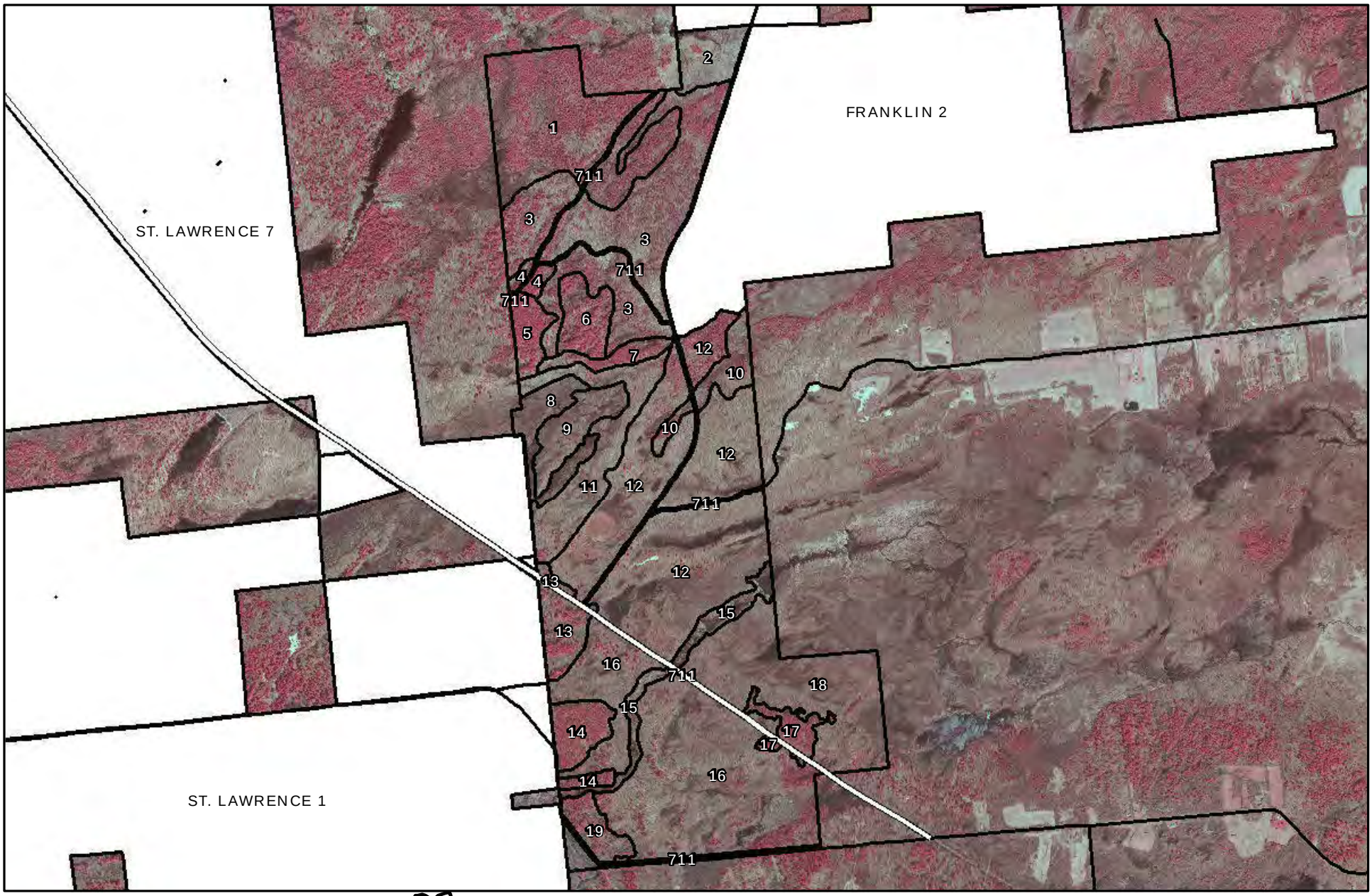
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BOMBAY STATE FOREST
FRANKLIN 2
COMPARTMENT 2
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

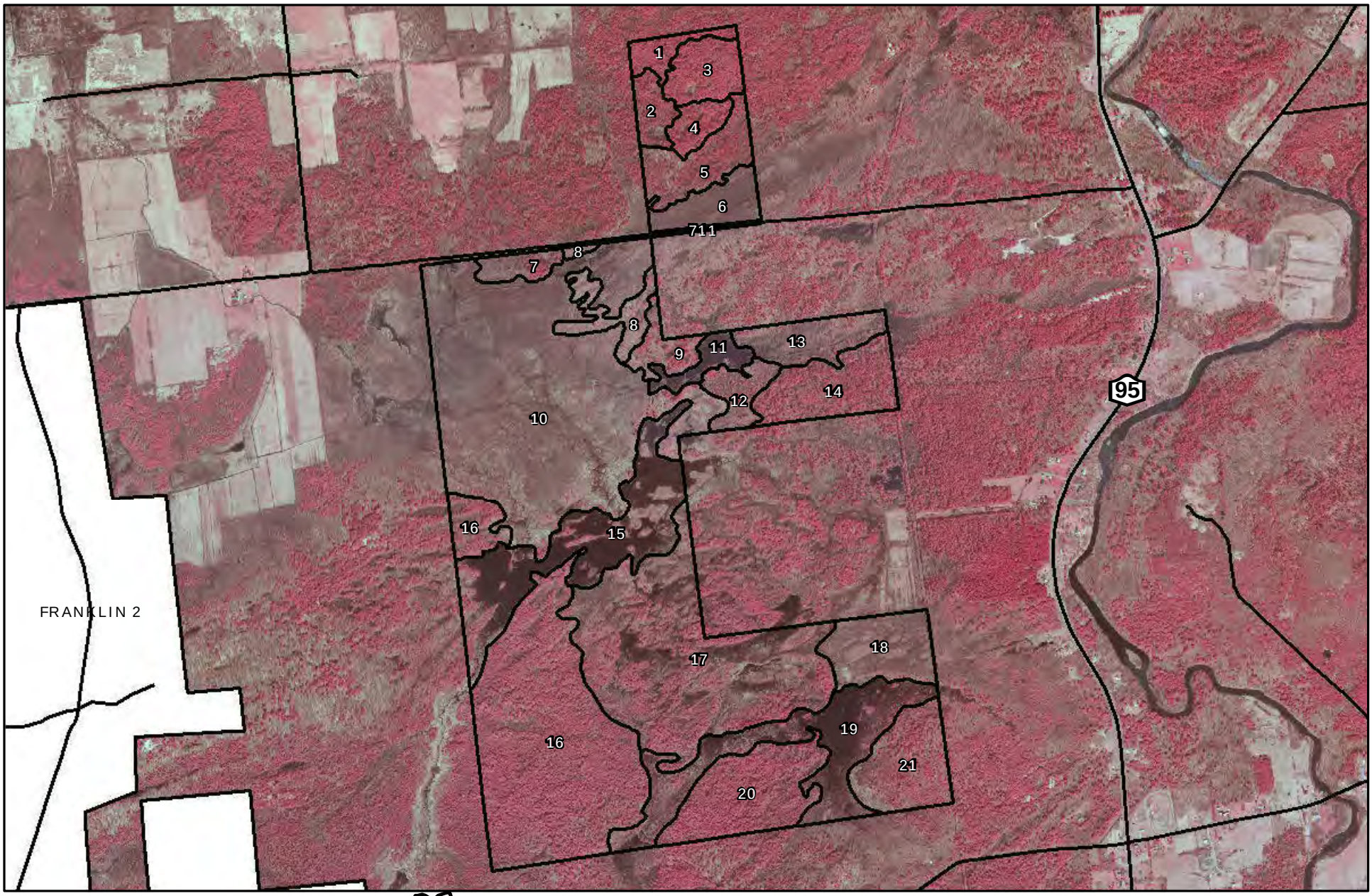
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BOMBAY STATE FOREST
FRANKLIN 2
COMPARTMENT 3
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BOMBAY STATE FOREST
FRANKLIN 4
COMPARTMENT 1
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 1
COMPARTMENT 1
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

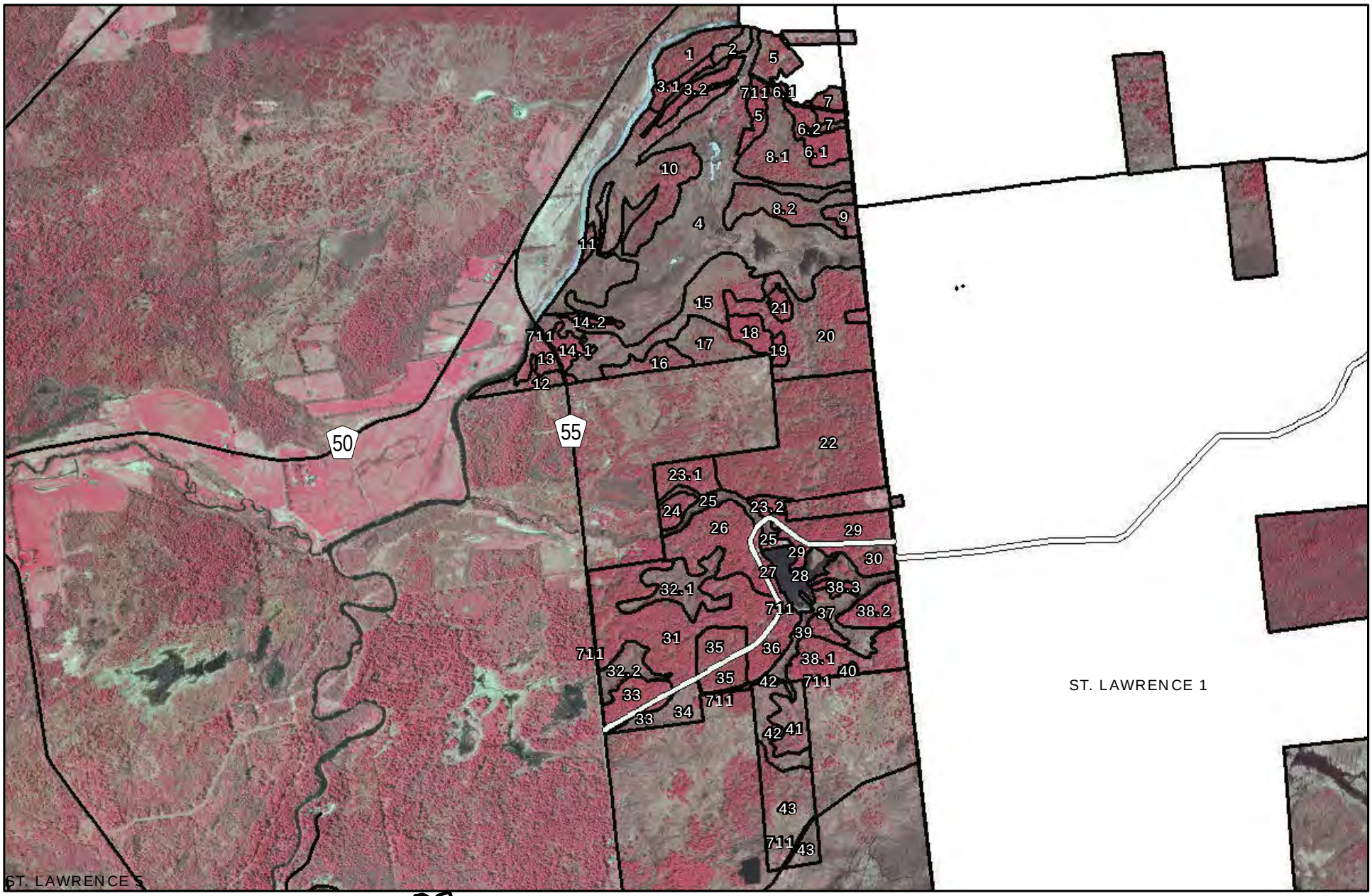
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 1
COMPARTMENT 2
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

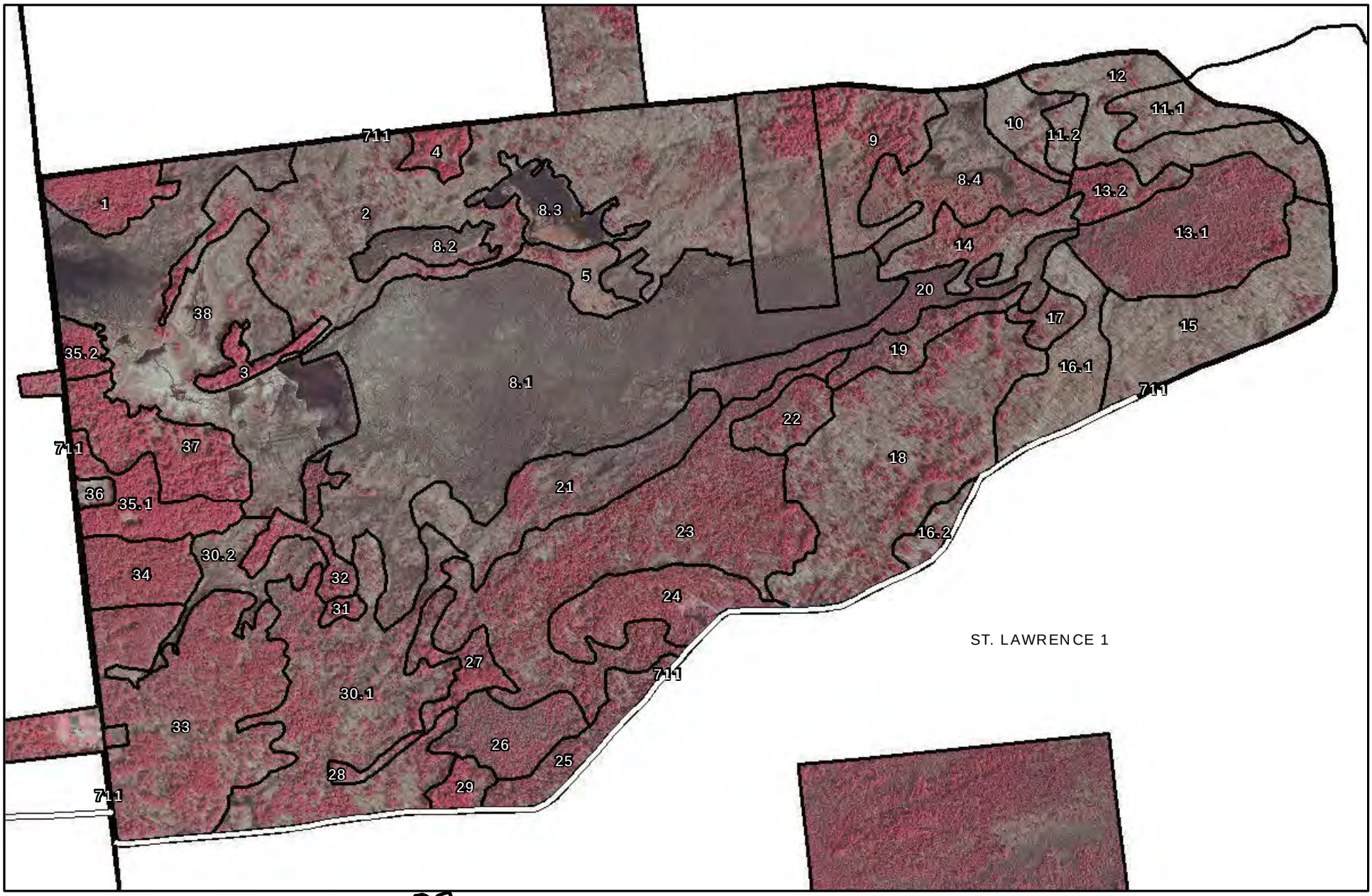
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 1
COMPARTMENT 3
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

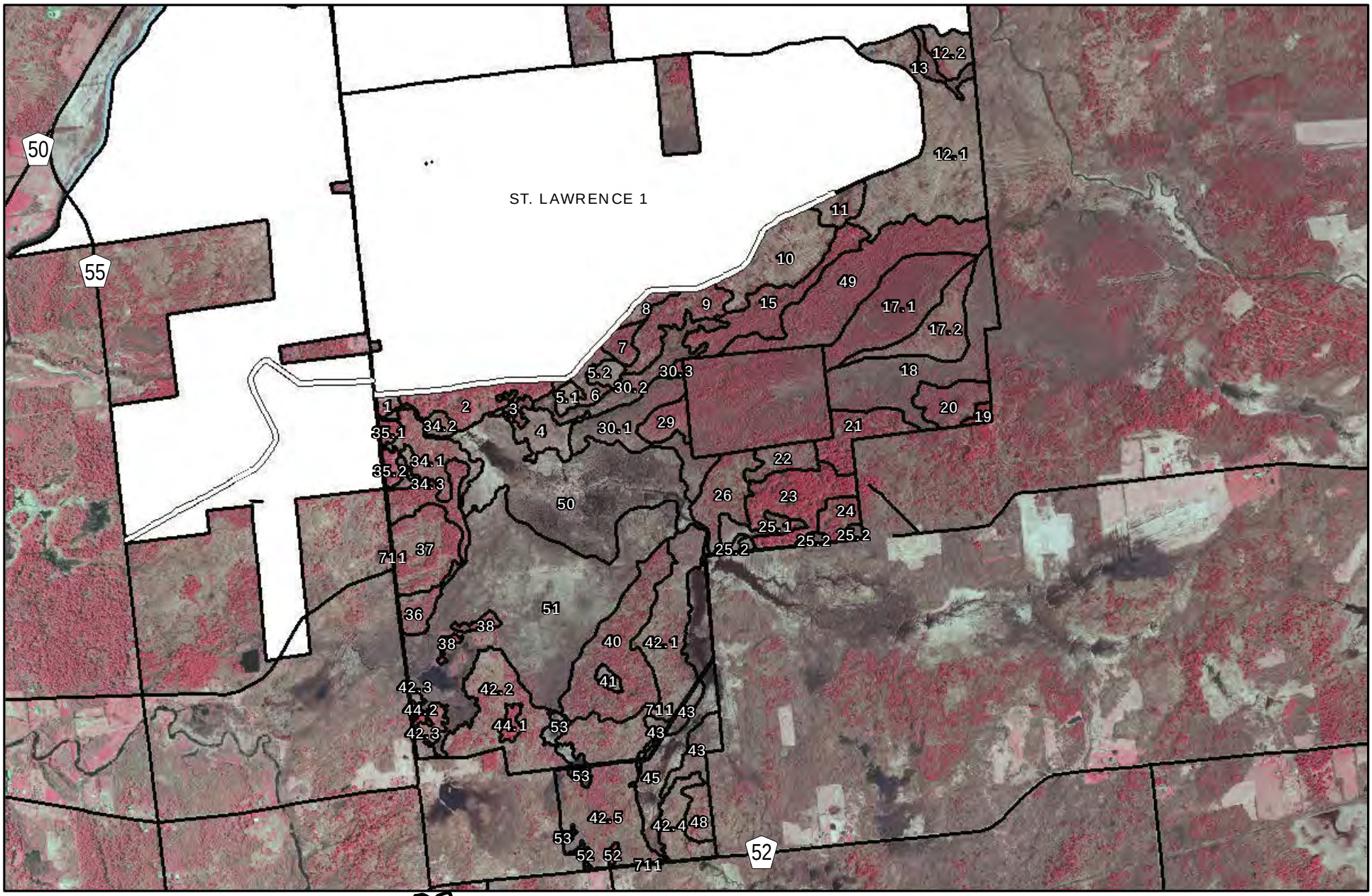
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 1
COMPARTMENT 4
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

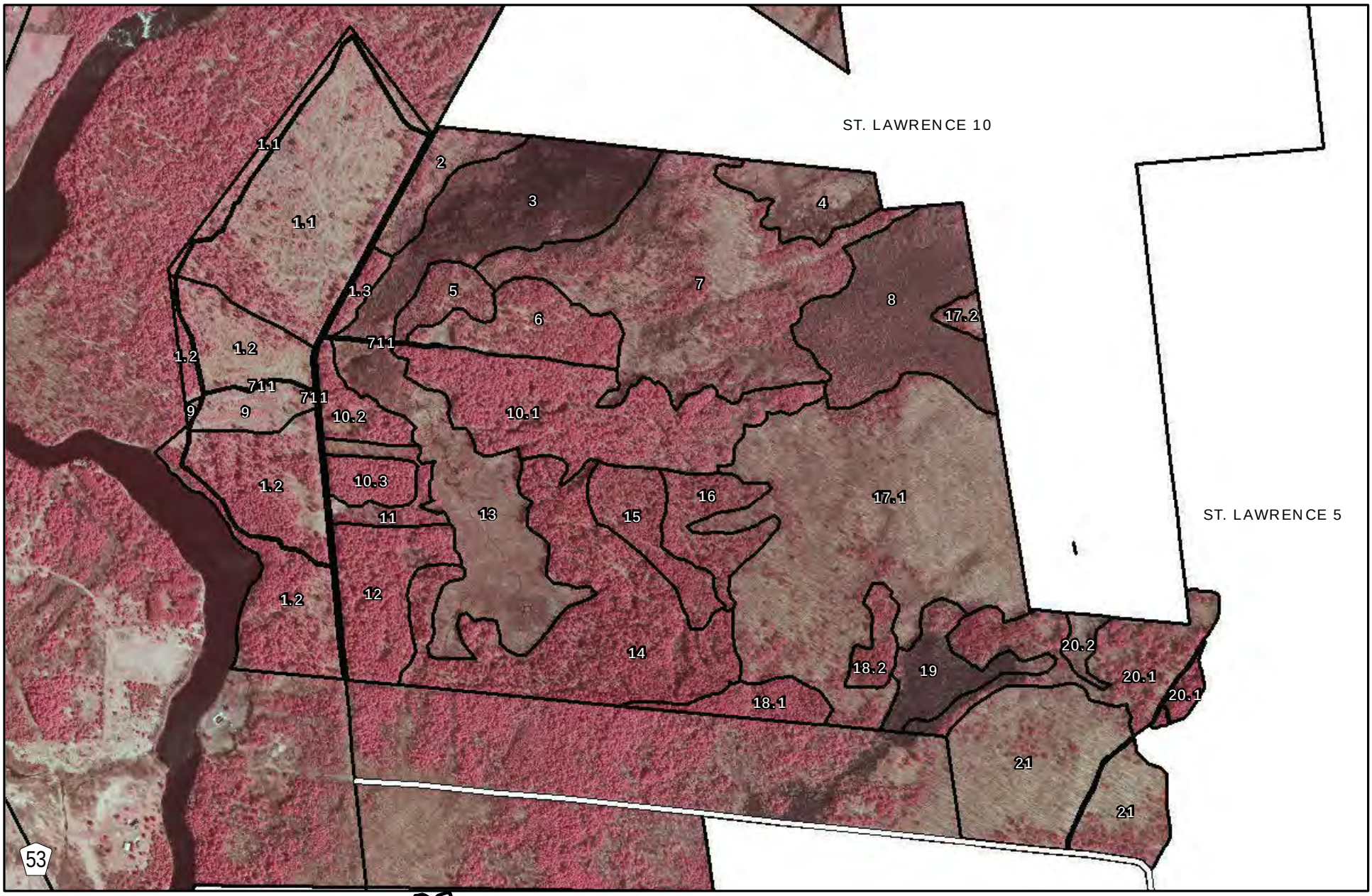
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 1
COMPARTMENT 5
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 5
COMPARTMENT 1
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 5
COMPARTMENT 2
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

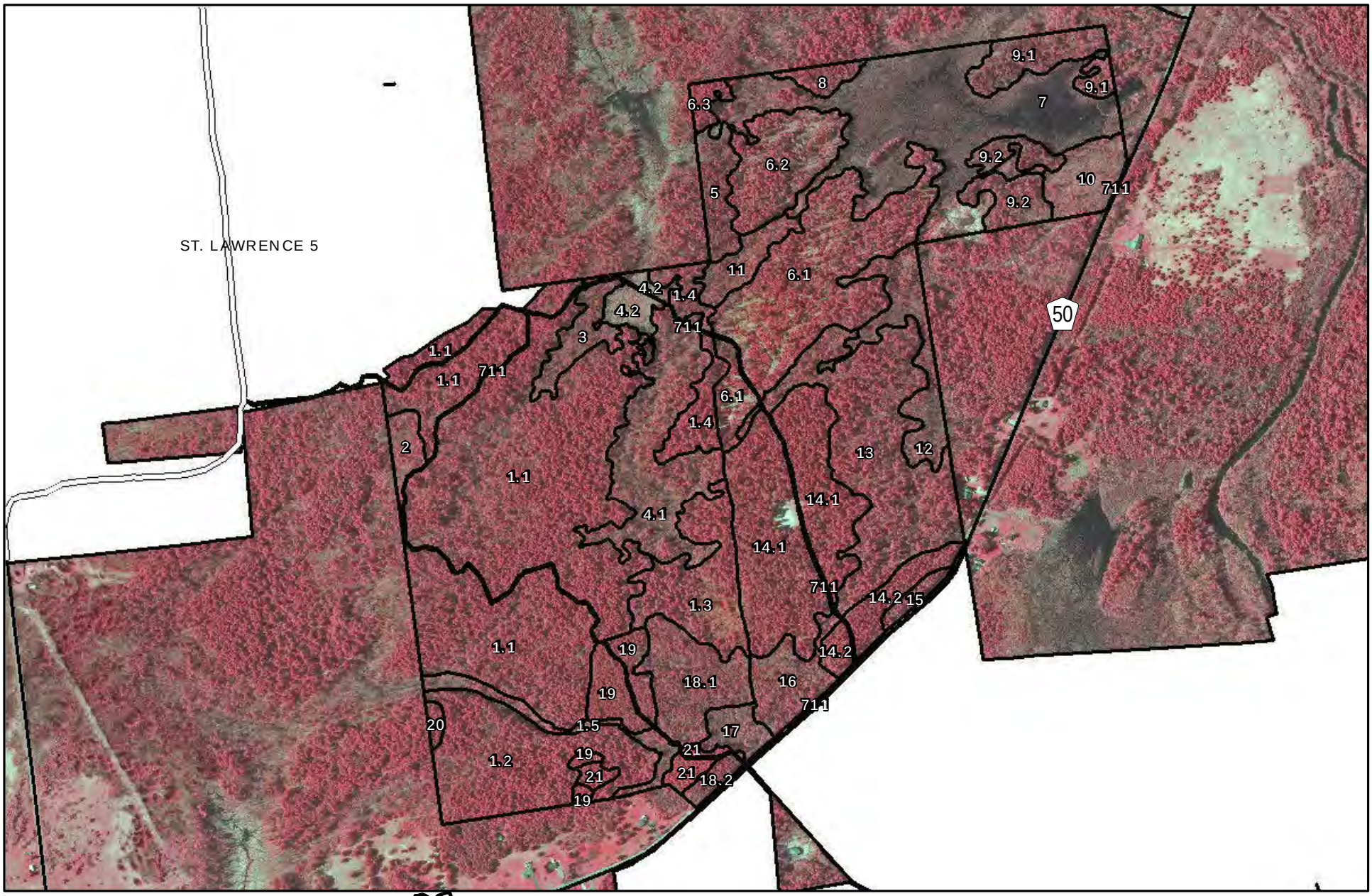
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 5
COMPARTMENT 3
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

STAND BOUNDARY

ADJACENT STATE FOREST

BRASHER STATE FOREST
ST. LAWRENCE 5
COMPARTMENT 4
STAND IDENTIFICATION
Figure 4

0 0.5 Miles

N



PUBLIC FOREST ACCESS ROAD

Public Roads

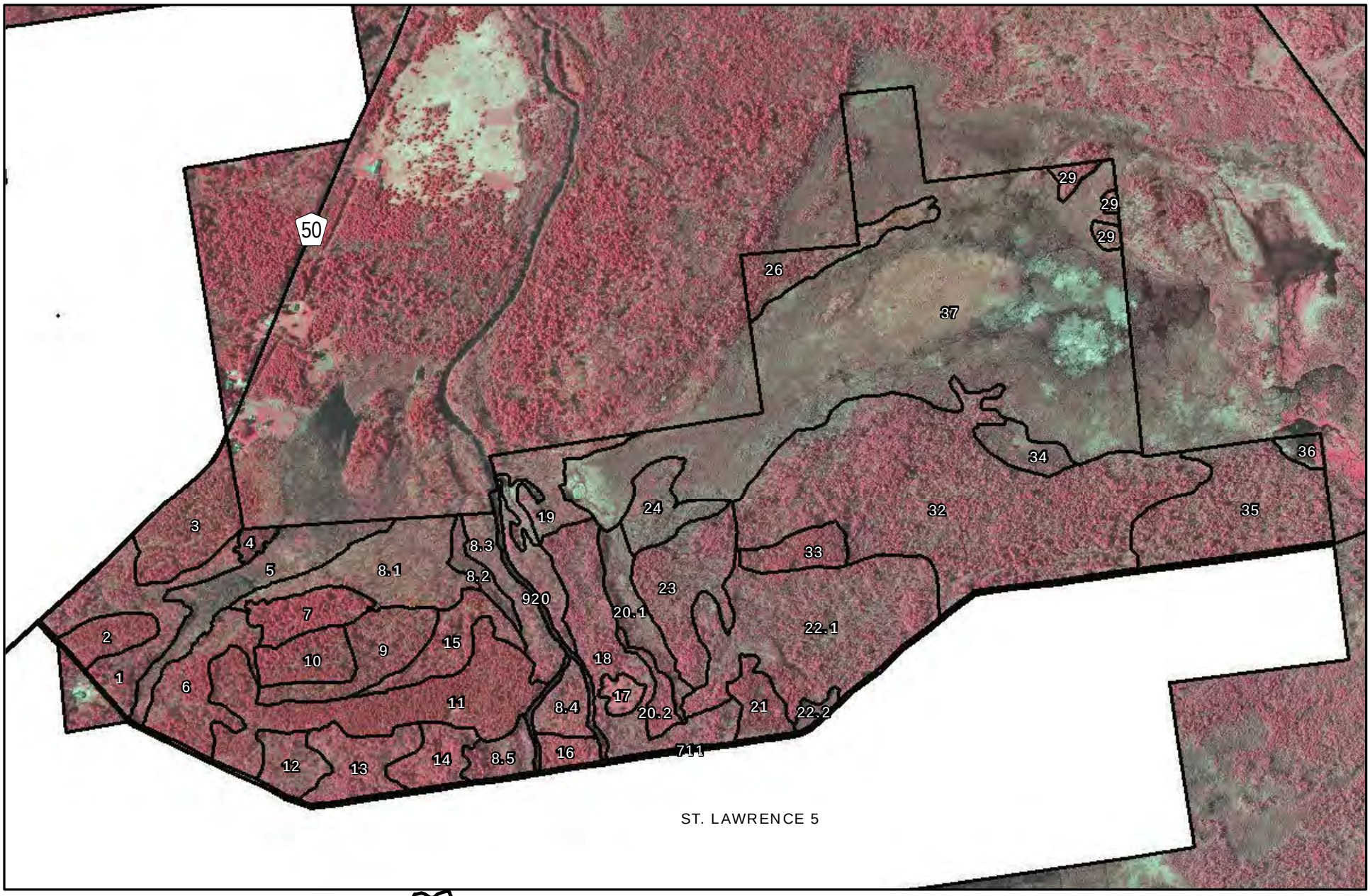
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 5
COMPARTMENT 5
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

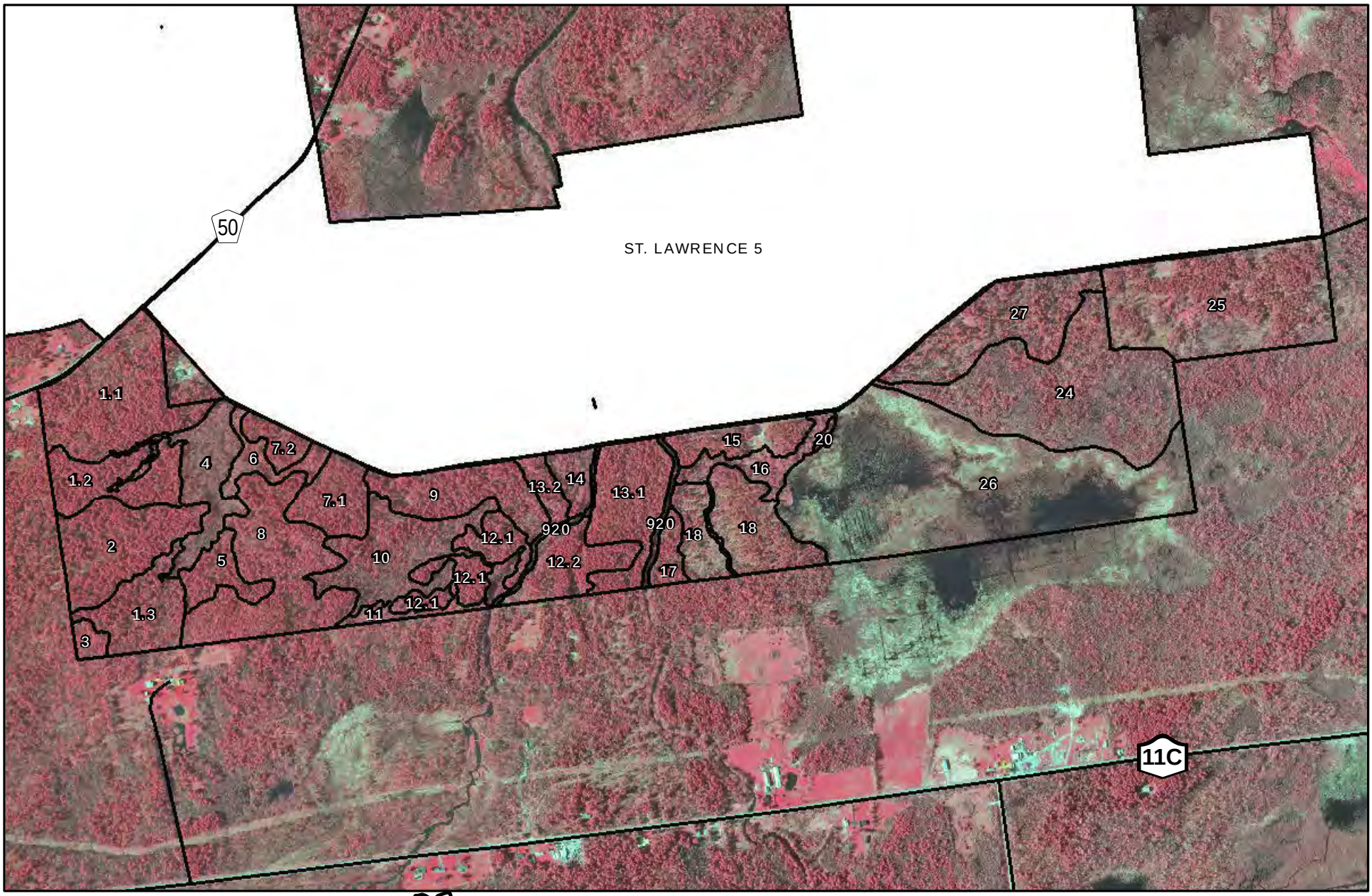
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 5
COMPARTMENT 6
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

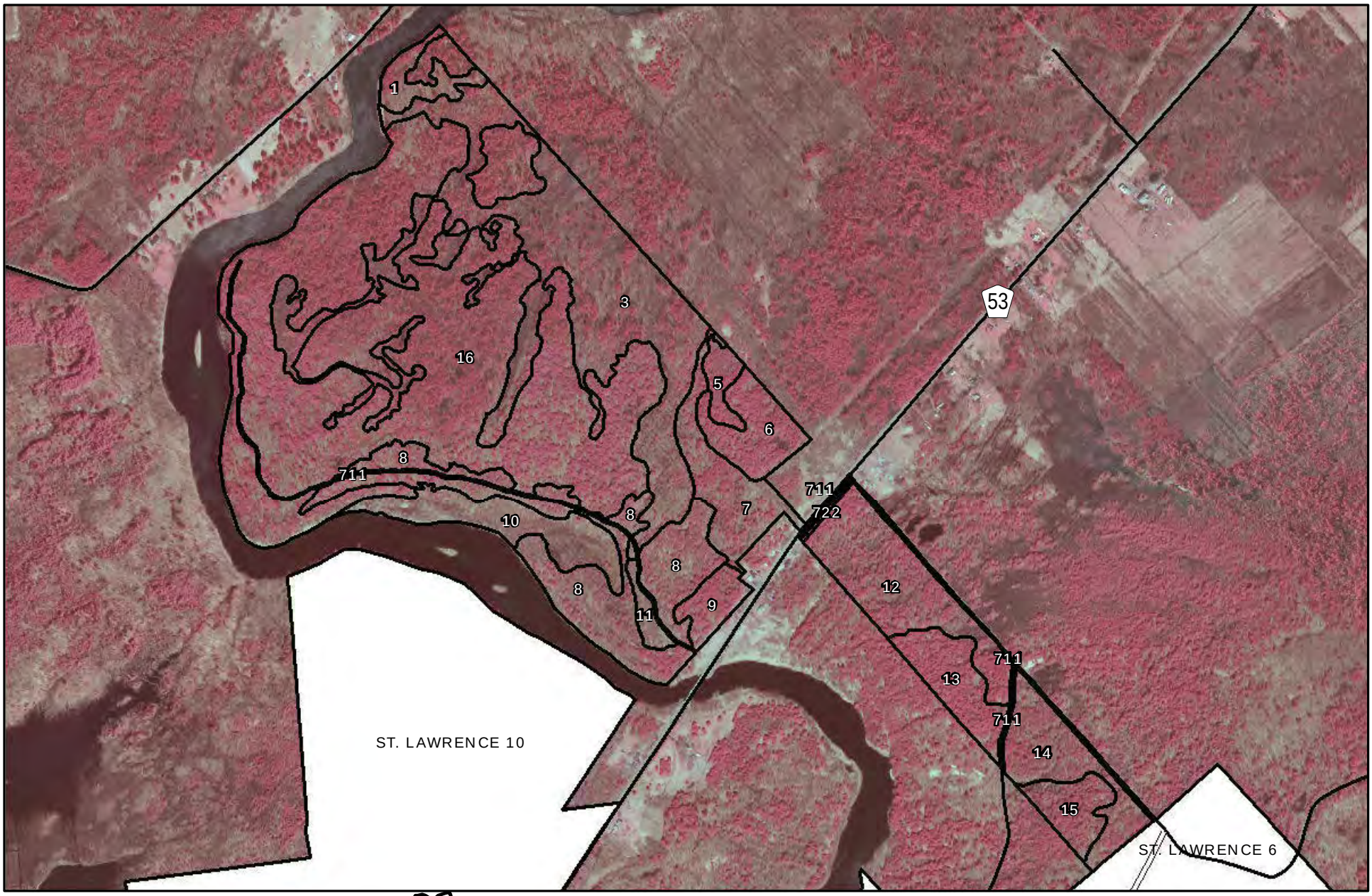
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 5
COMPARTMENT 7
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

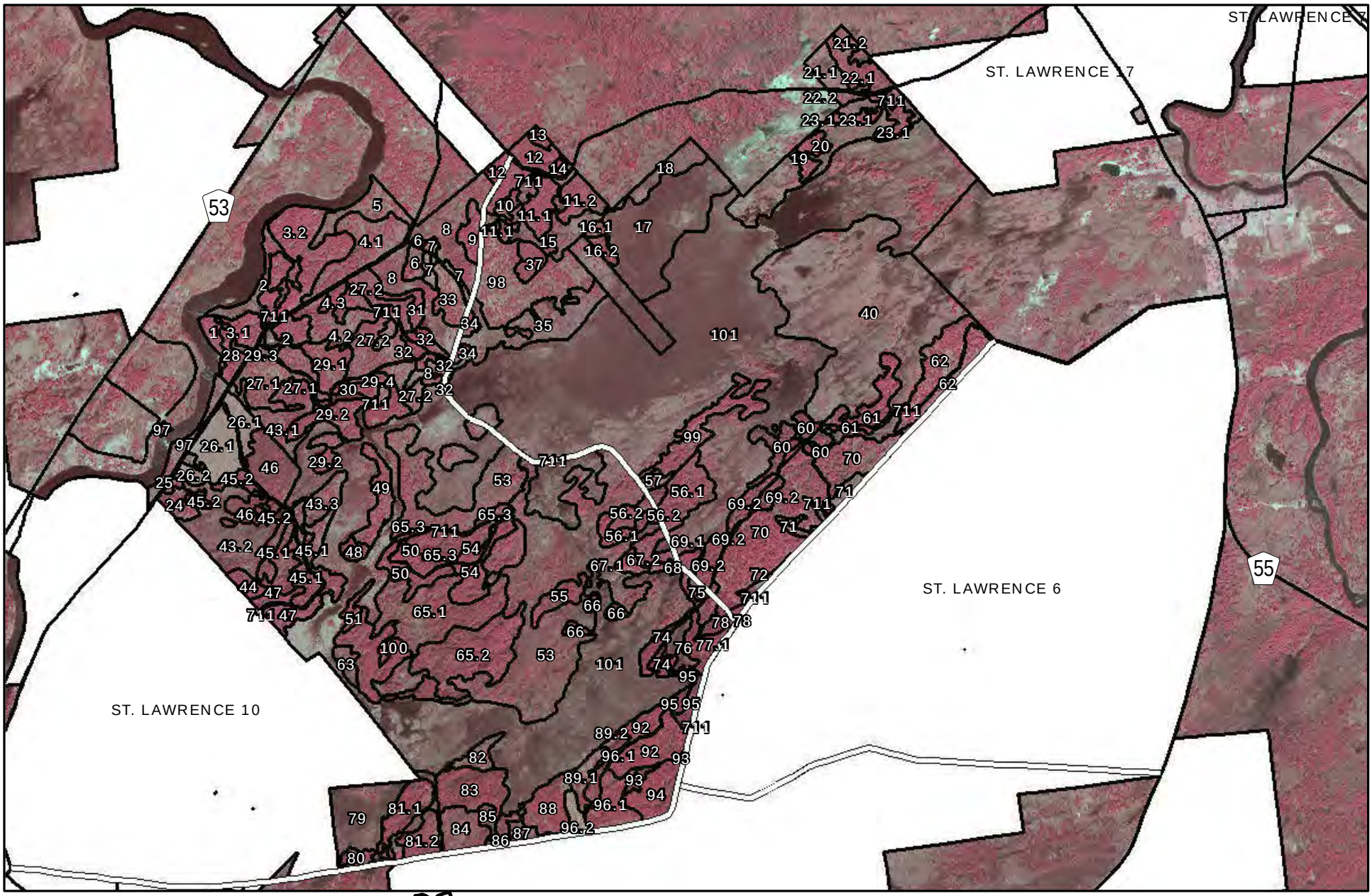
STAND BOUNDARY

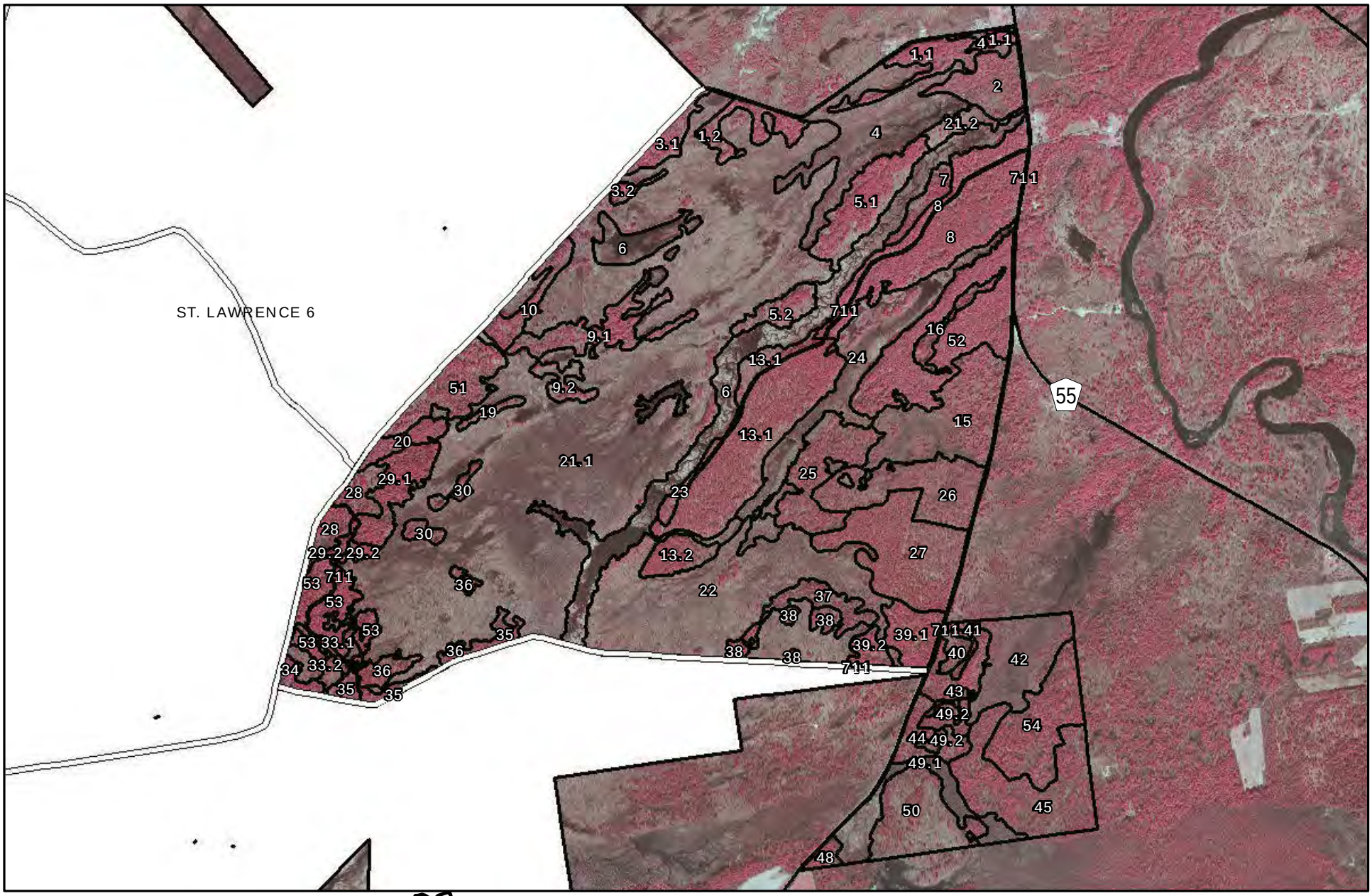
ADJACENT STATE FOREST

0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 6
COMPARTMENT 1
STAND IDENTIFICATION
Figure 4

N


ST. LAWRENCE 7
ST. LAWRENCE 7
ST. LAWRENCE 6
ST. LAWRENCE 10
53
55
PUBLIC FOREST ACCESS ROAD
Public Roads
STAND BOUNDARY
ADJACENT STATE FOREST
0
0.5
Miles
BRASHER STATE FOREST
ST. LAWRENCE 6
COMPARTMENT 2
STAND IDENTIFICATION
Figure 4
N



PUBLIC FOREST ACCESS ROAD

Public Roads

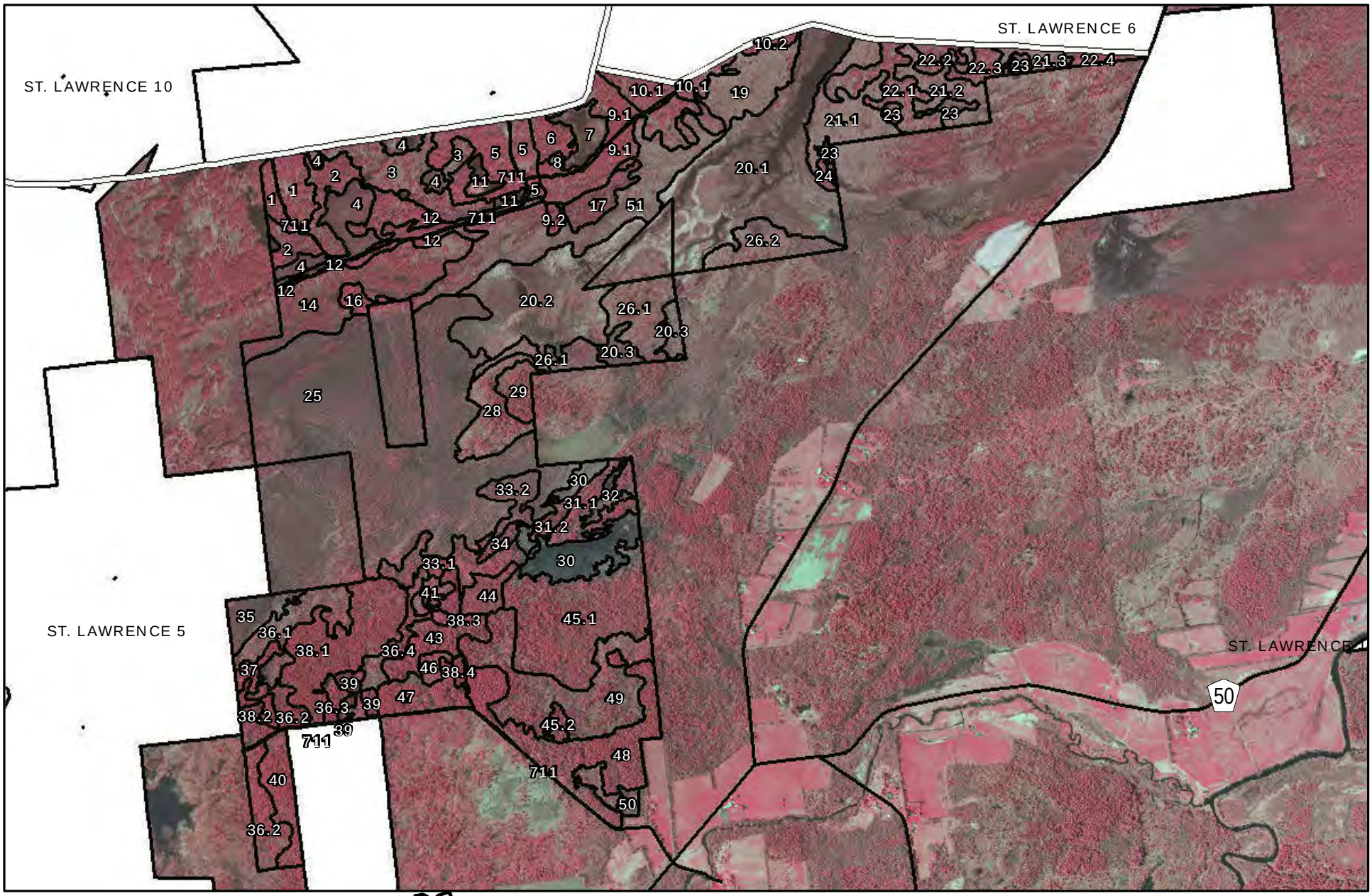
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 6
COMPARTMENT 3
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 6
COMPARTMENT 4
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

STAND BOUNDARY

ADJACENT STATE FOREST

0 0.1 Miles

BRASHER STATE FOREST
ST. LAWRENCE 6
COMPARTMENT 5
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

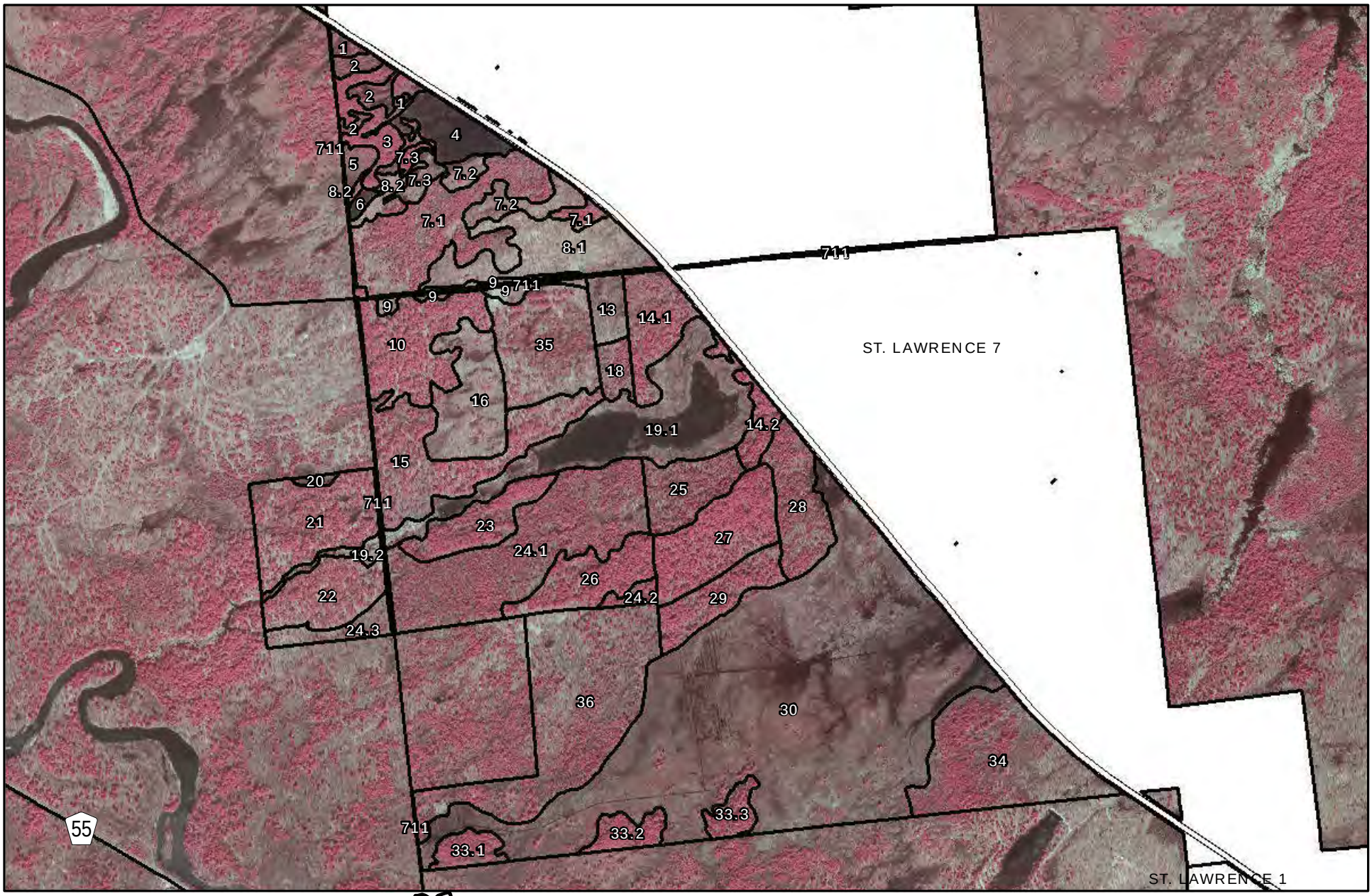
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 7
COMPARTMENT 2
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

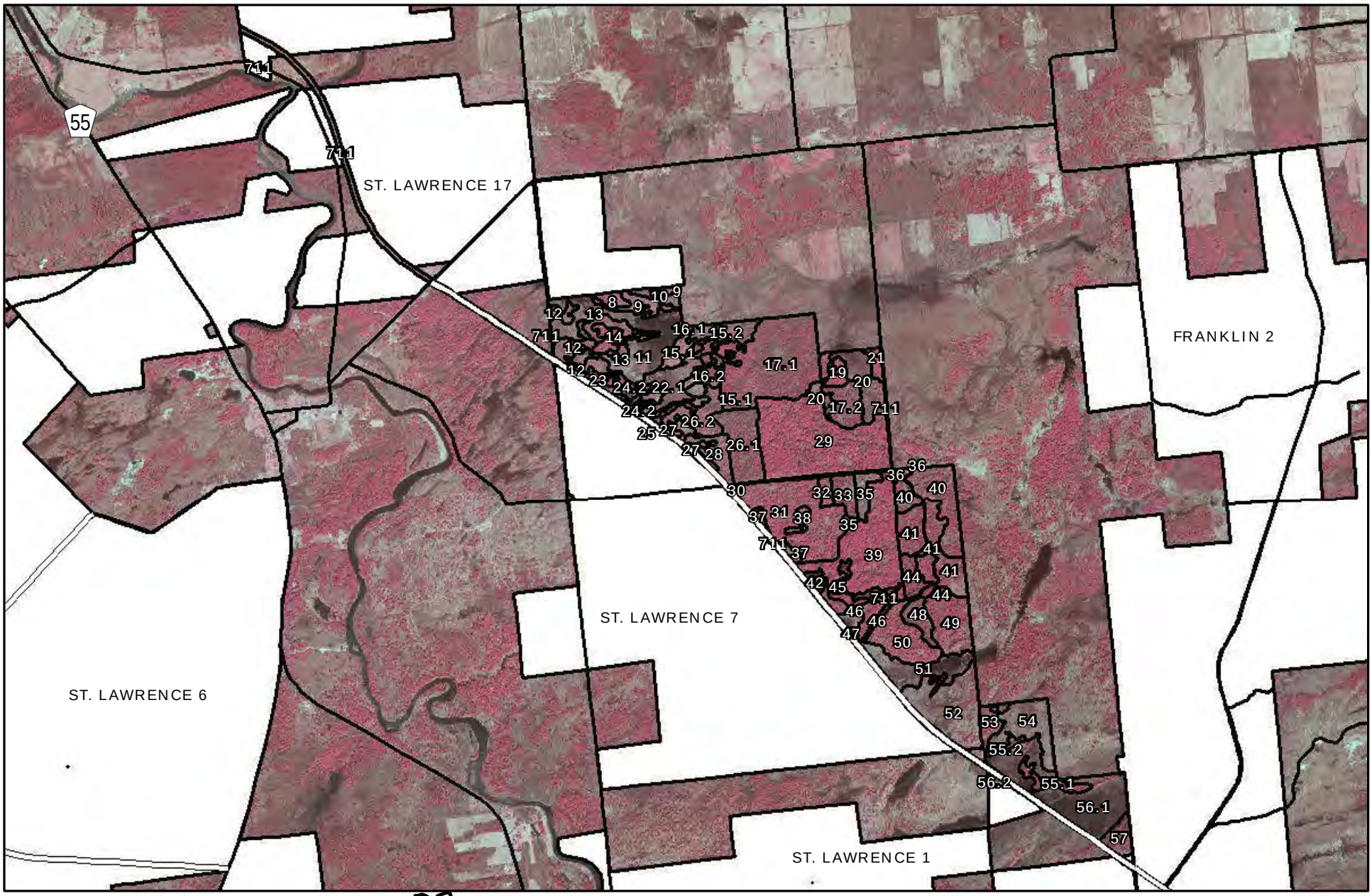
STAND BOUNDARY

ADJACENT STATE FOREST

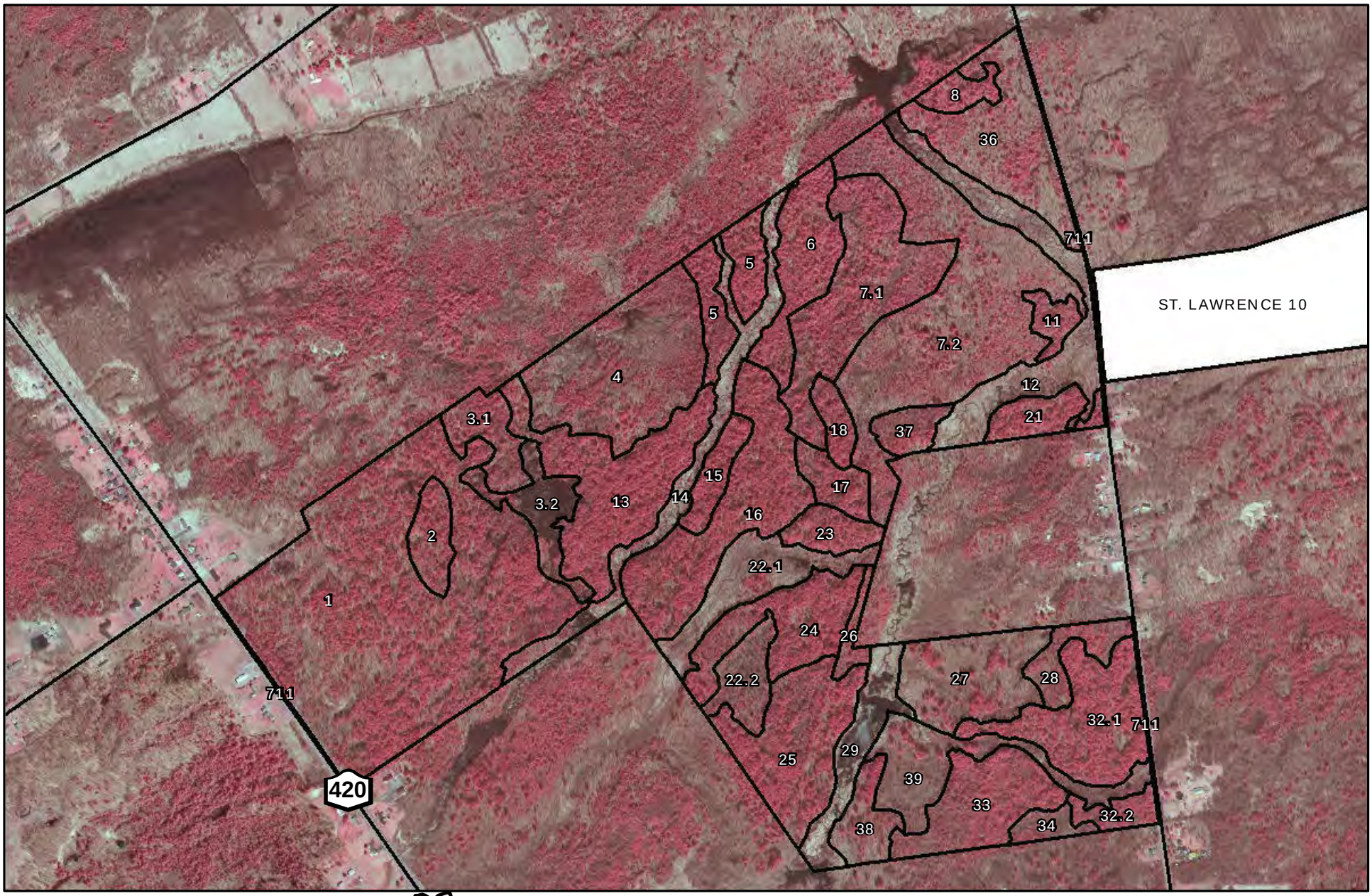
0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 7
COMPARTMENT 3
STAND IDENTIFICATION
Figure 4

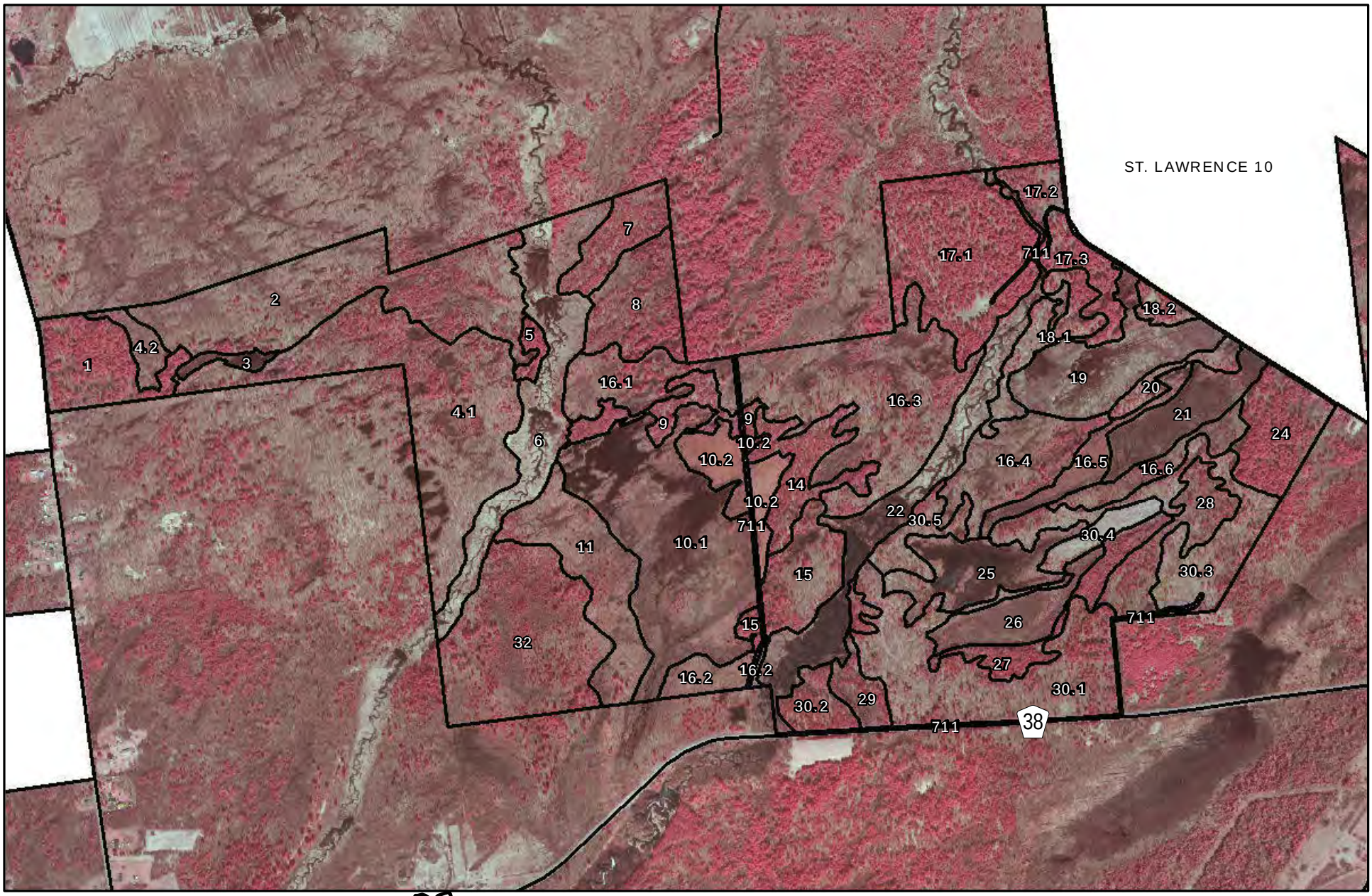
N



BRASHER STATE FOREST
ST. LAWRENCE 7
COMPARTMENT 4
STAND IDENTIFICATION
Figure 4



BRASHER STATE FOREST
ST. LAWRENCE 10
COMPARTMENT 1
STAND IDENTIFICATION
Figure 4



PUBLIC FOREST ACCESS ROAD

Public Roads

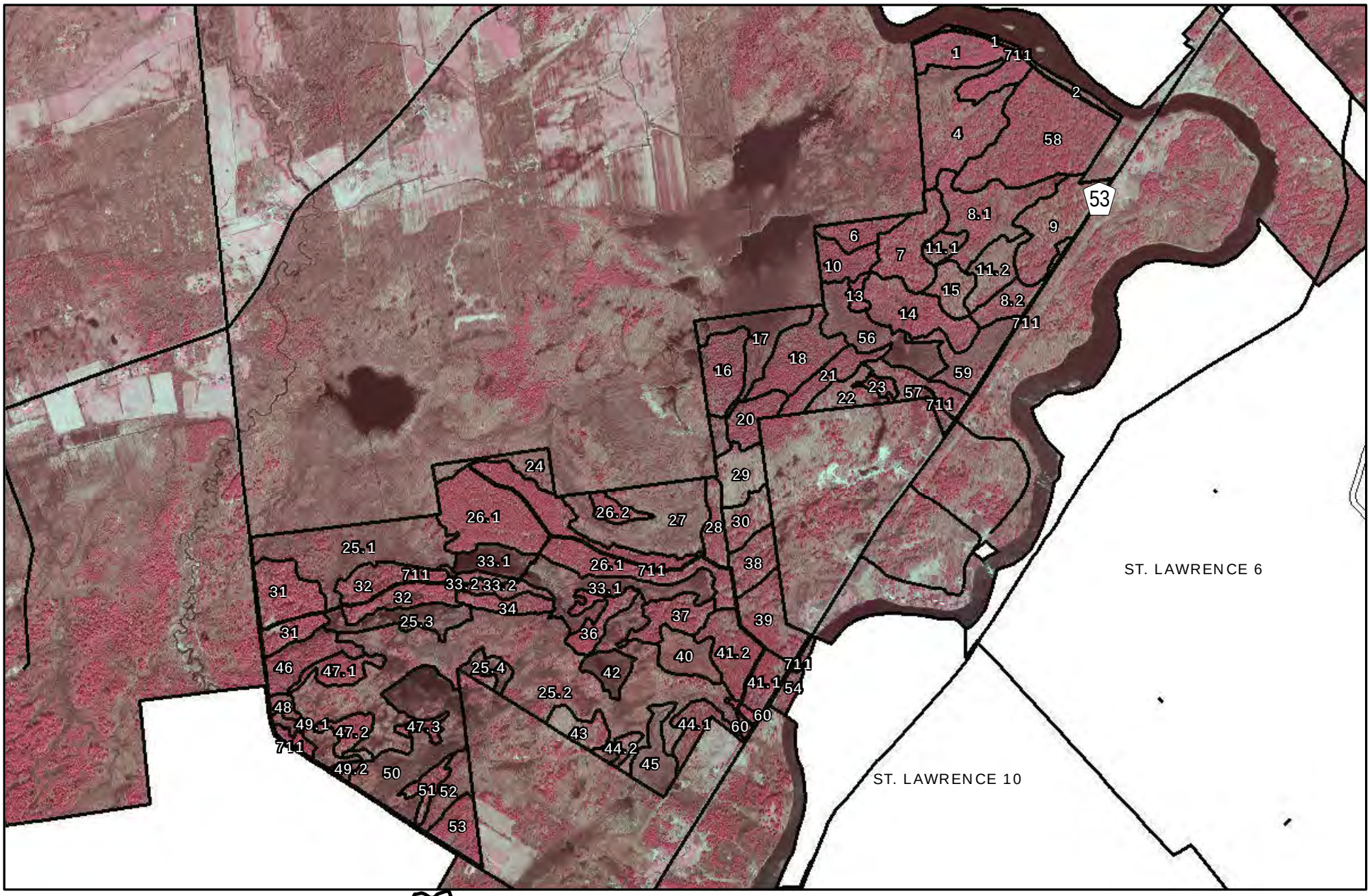
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 10
COMPARTMENT 2
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 10
COMPARTMENT 3
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 10
COMPARTMENT 4
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 10
COMPARTMENT 5
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

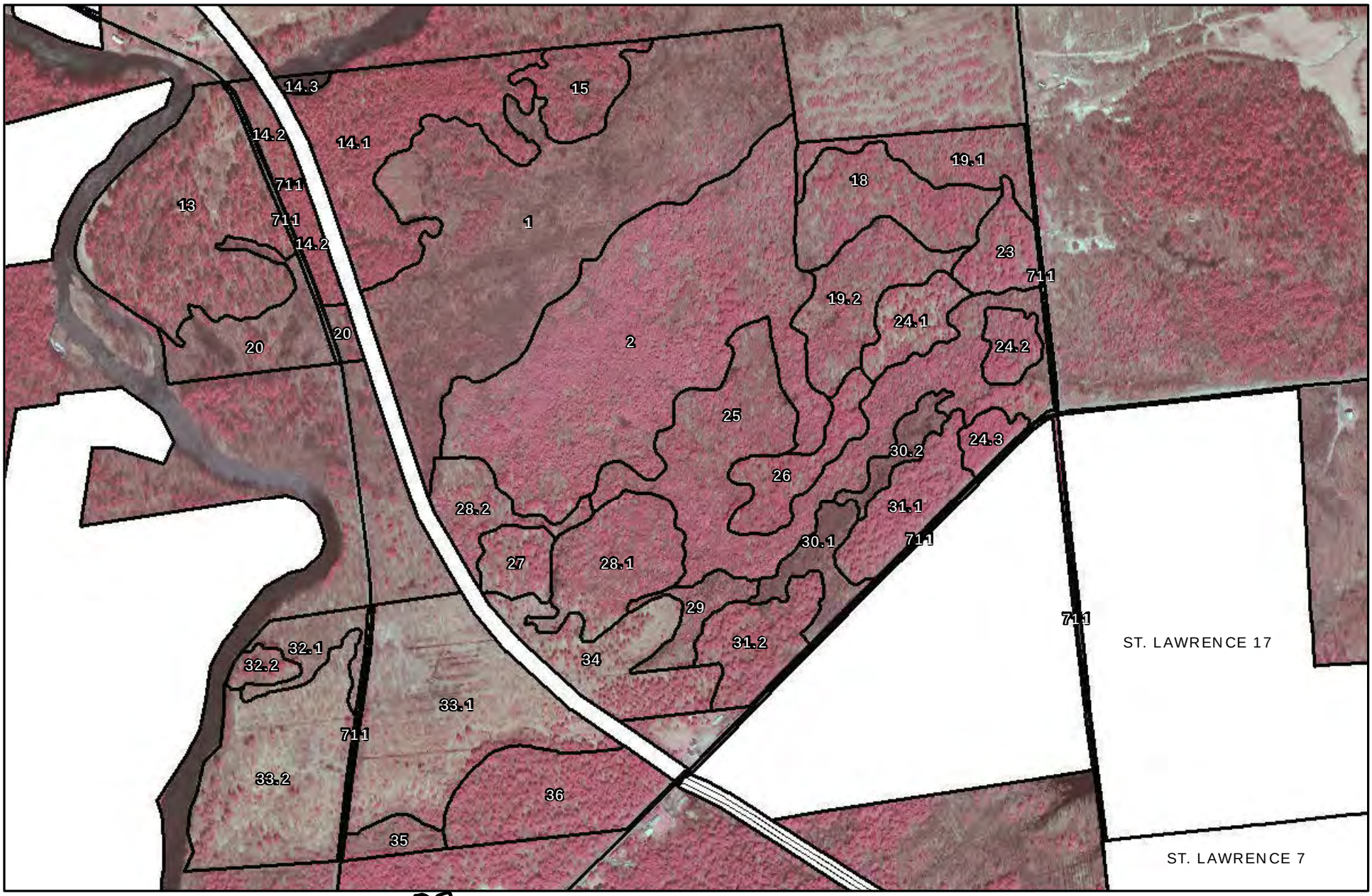
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 17
COMPARTMENT 1
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

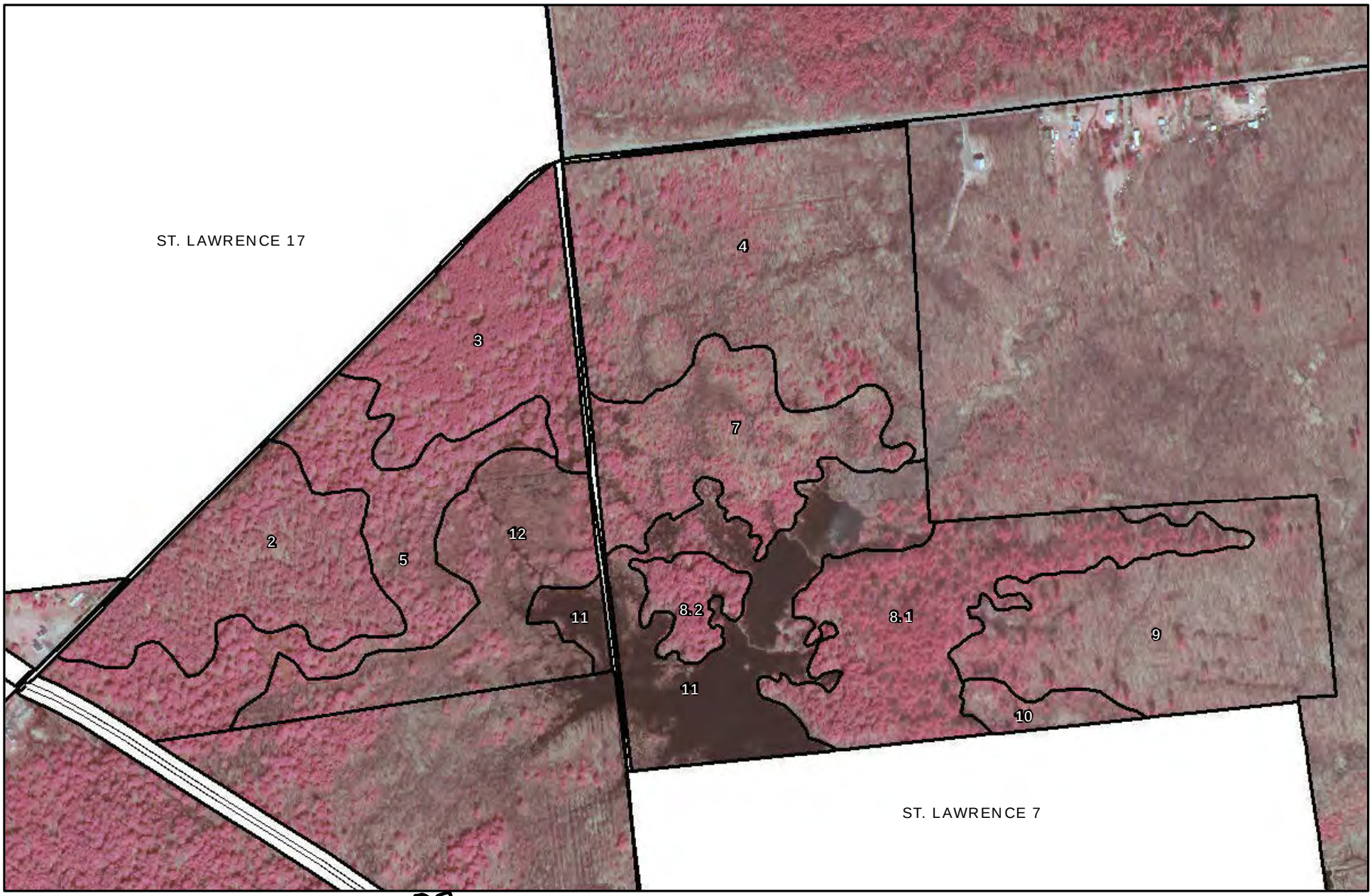
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 17
COMPARTMENT 2
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

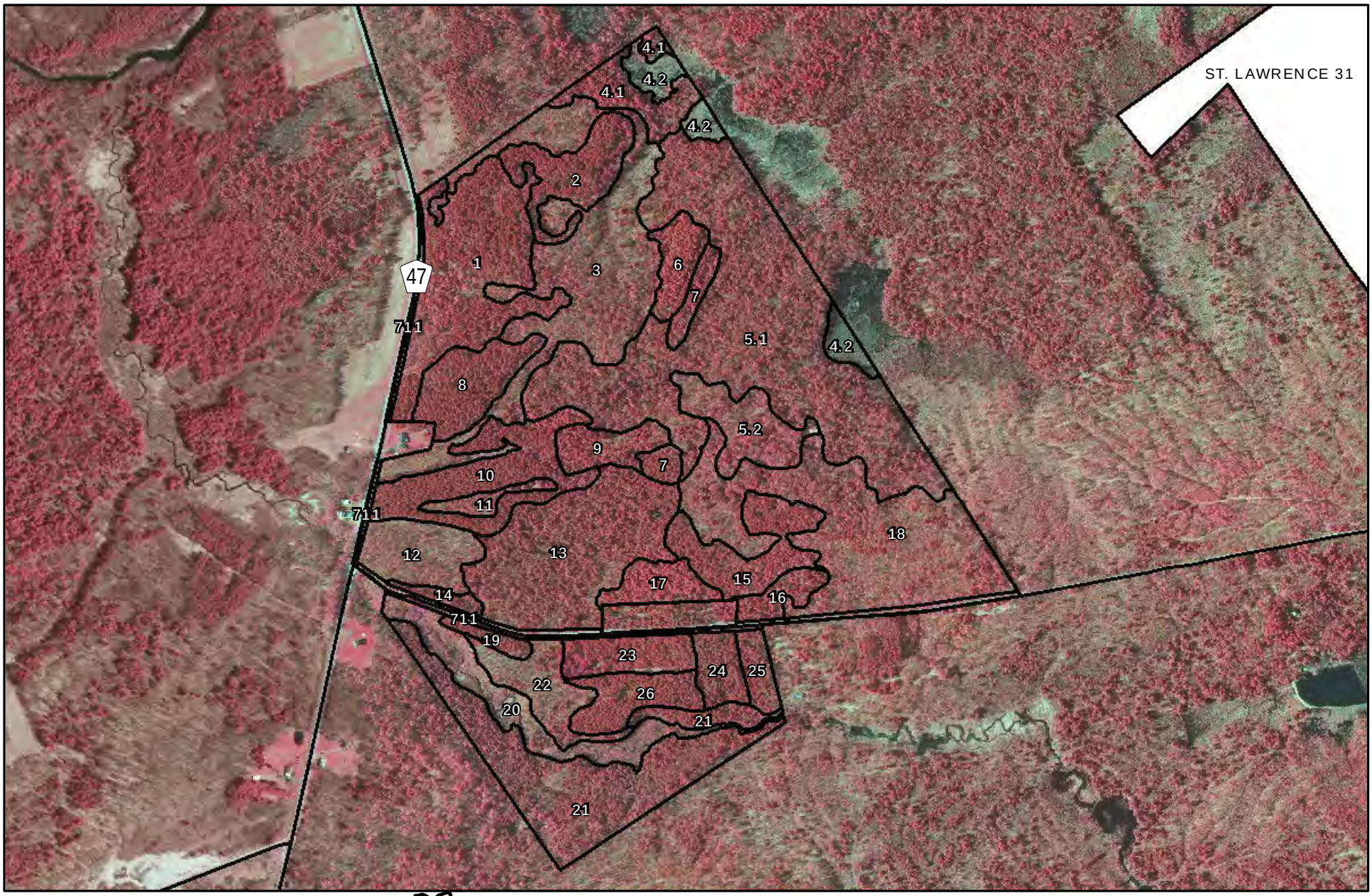
STAND BOUNDARY

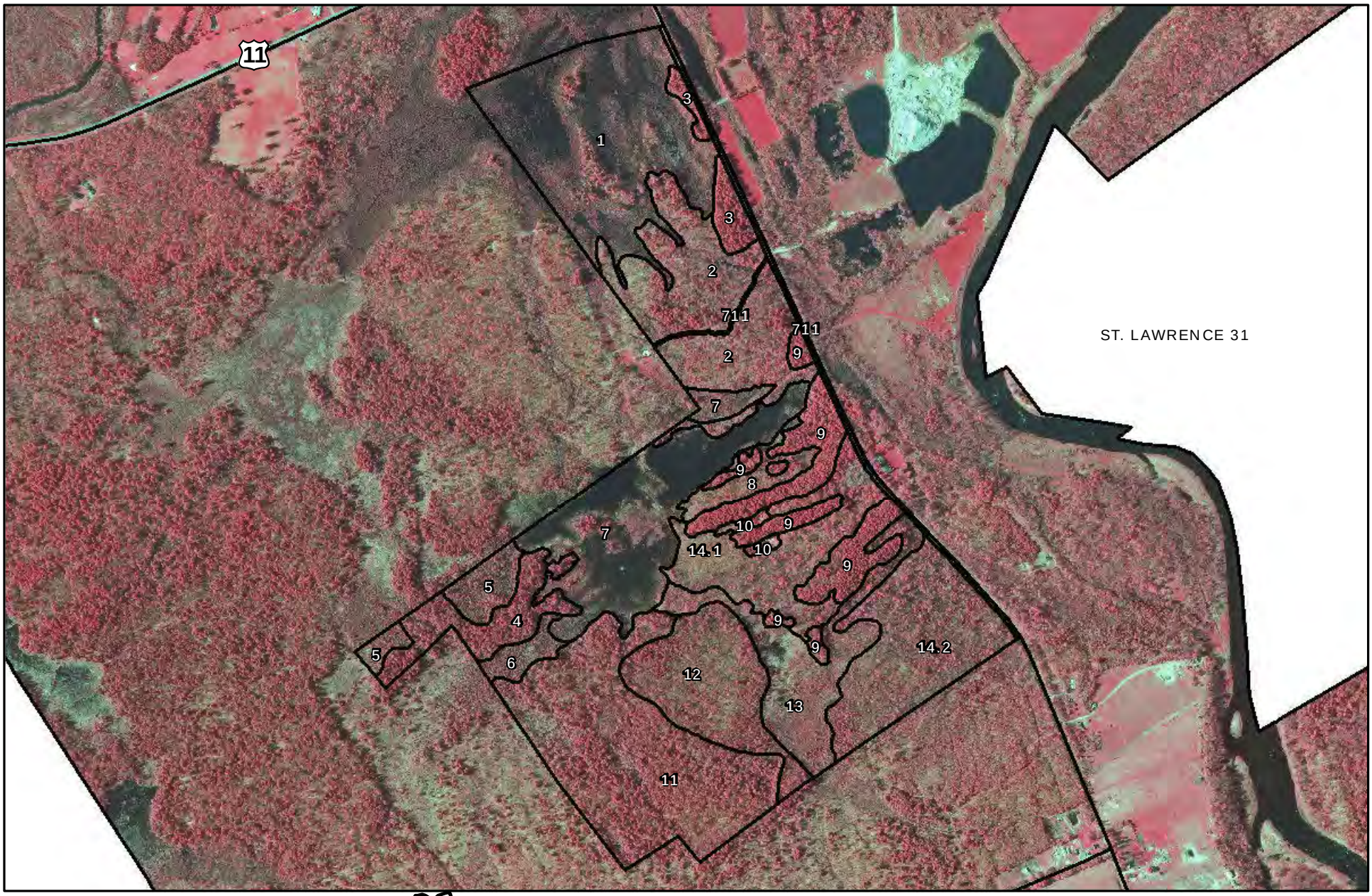
ADJACENT STATE FOREST

0 0.5 Miles

BRASHER STATE FOREST
ST. LAWRENCE 17
COMPARTMENT 4
STAND IDENTIFICATION
Figure 4

N


ST. LAWRENCE 31
47
4.1
4.2
4.1
4.2
2
1
3
6
7
711
5.1
4.2
8
5.2
9
7
10
11
711
18
12
13
17
15
16
14
711
19
23
24
25
22
26
20
21
21
PUBLIC FOREST ACCESS ROAD
Public Roads
STAND BOUNDARY
ADJACENT STATE FOREST
0
0.5
Miles
BUCKTON STATE FOREST
ST. LAWRENCE 31
COMPARTMENT 1
STAND IDENTIFICATION
Figure 4
N



PUBLIC FOREST ACCESS ROAD

Public Roads

STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BUCKTON STATE FOREST
ST. LAWRENCE 31
COMPARTMENT 2
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

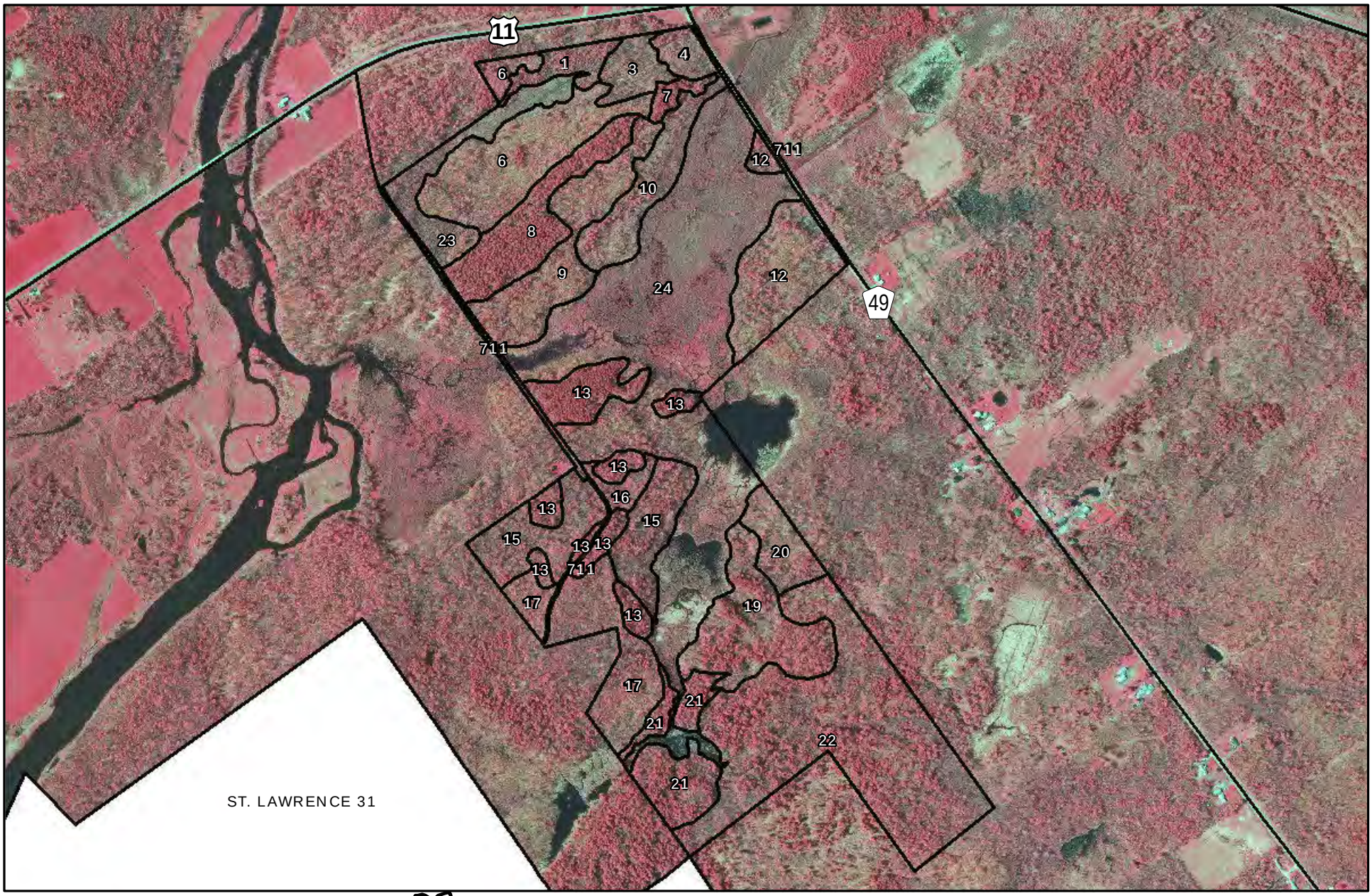
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BUCKTON STATE FOREST
ST. LAWRENCE 31
COMPARTMENT 3
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

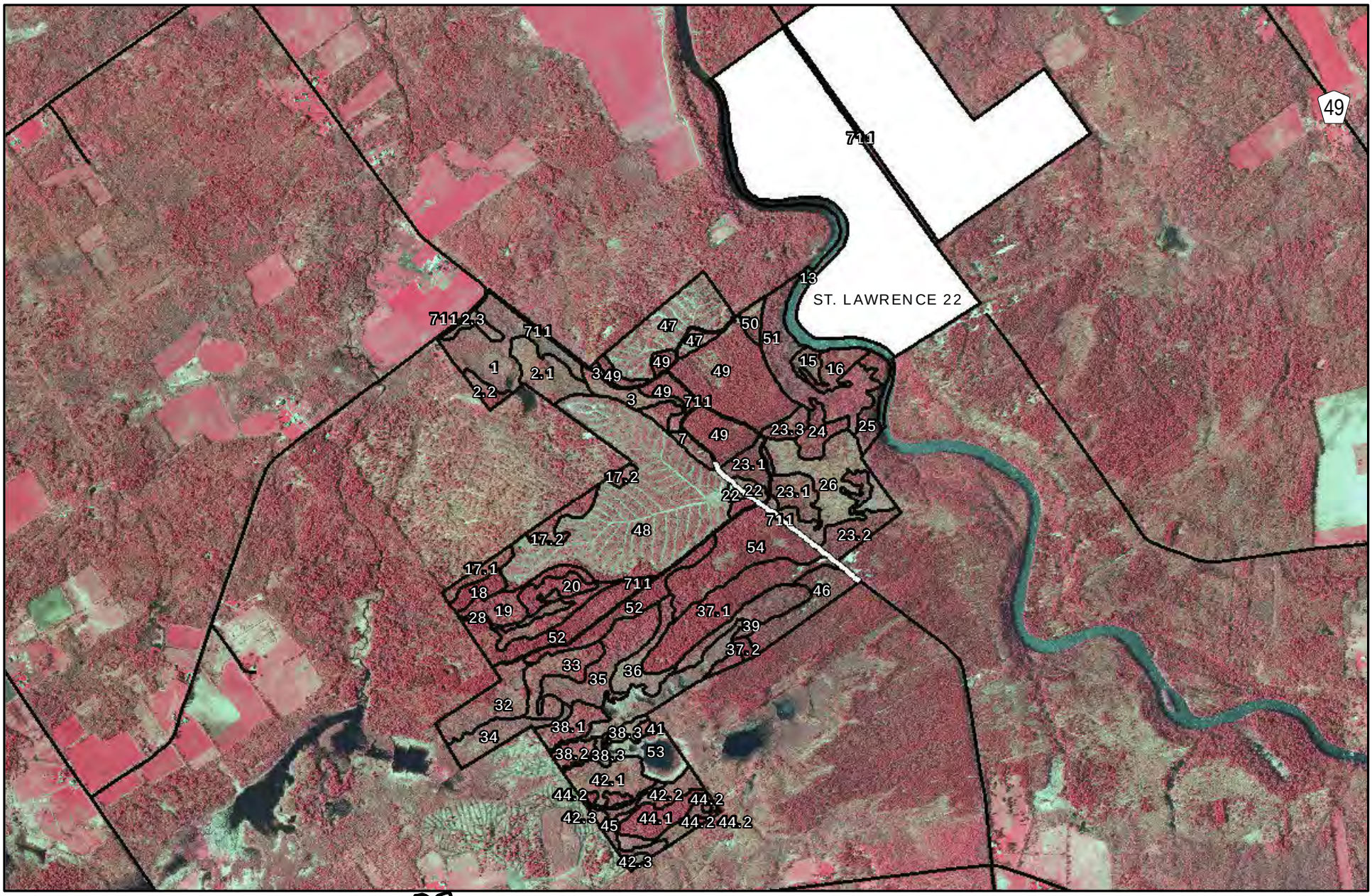
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

BUCKTON STATE FOREST
ST. LAWRENCE 31
COMPARTMENT 4
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

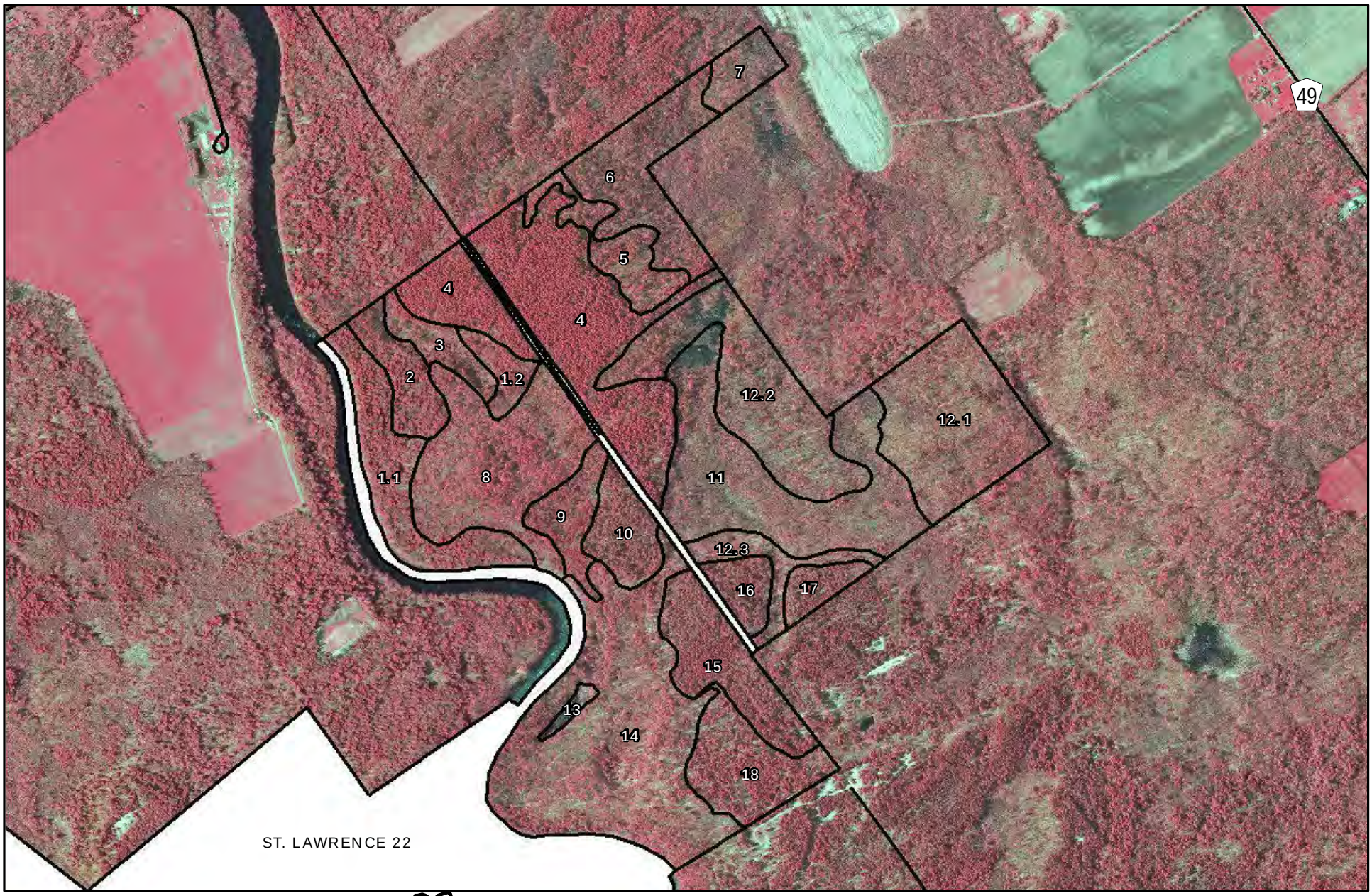
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

FORT JACKSON STATE FOREST
ST. LAWRENCE 22
COMPARTMENT 1
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

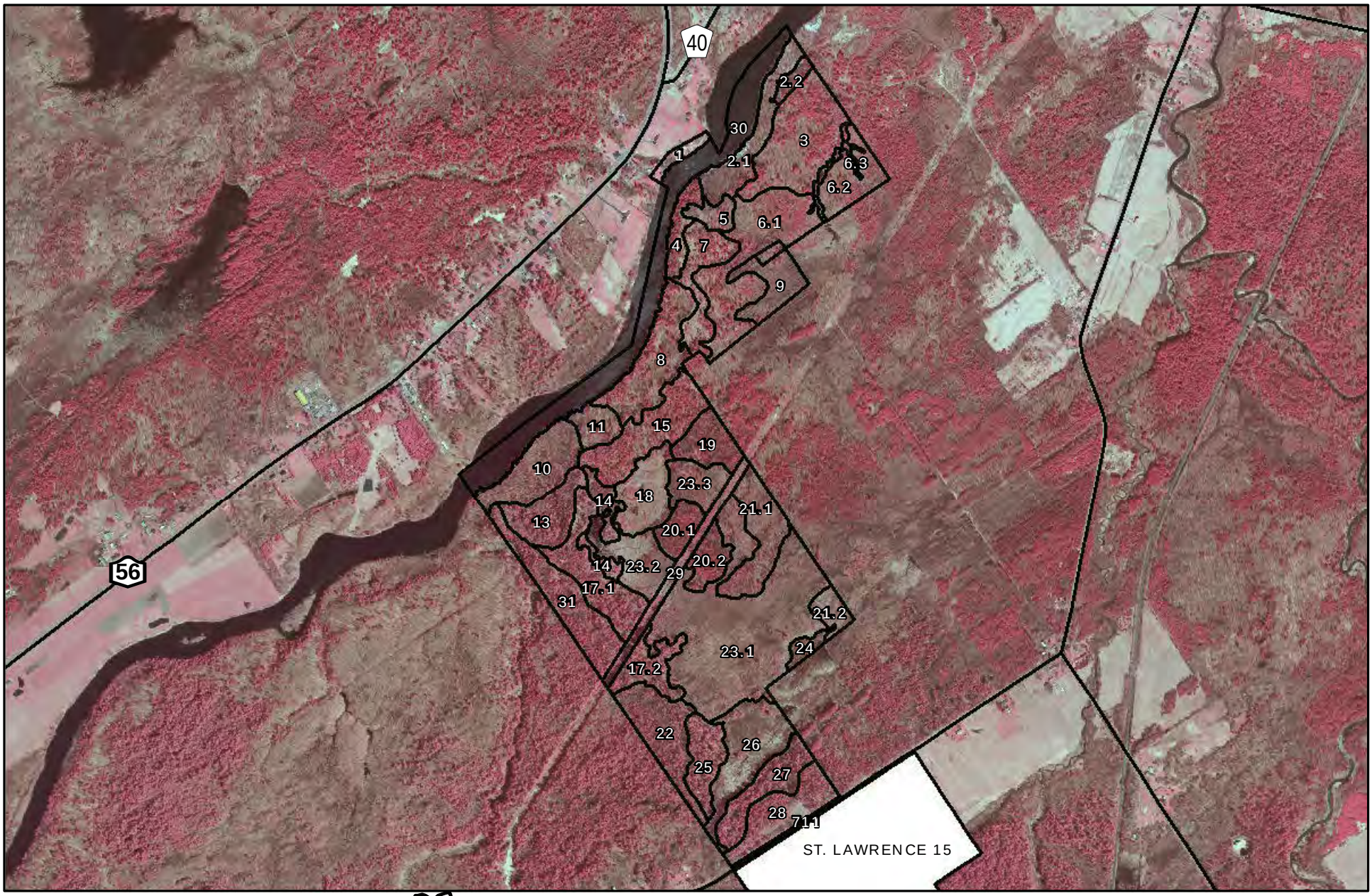
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

FORT JACKSON STATE FOREST
ST. LAWRENCE 22
COMPARTMENT 2
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

GRANTVILLE STATE FOREST
ST. LAWRENCE 15
COMPARTMENT 1
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

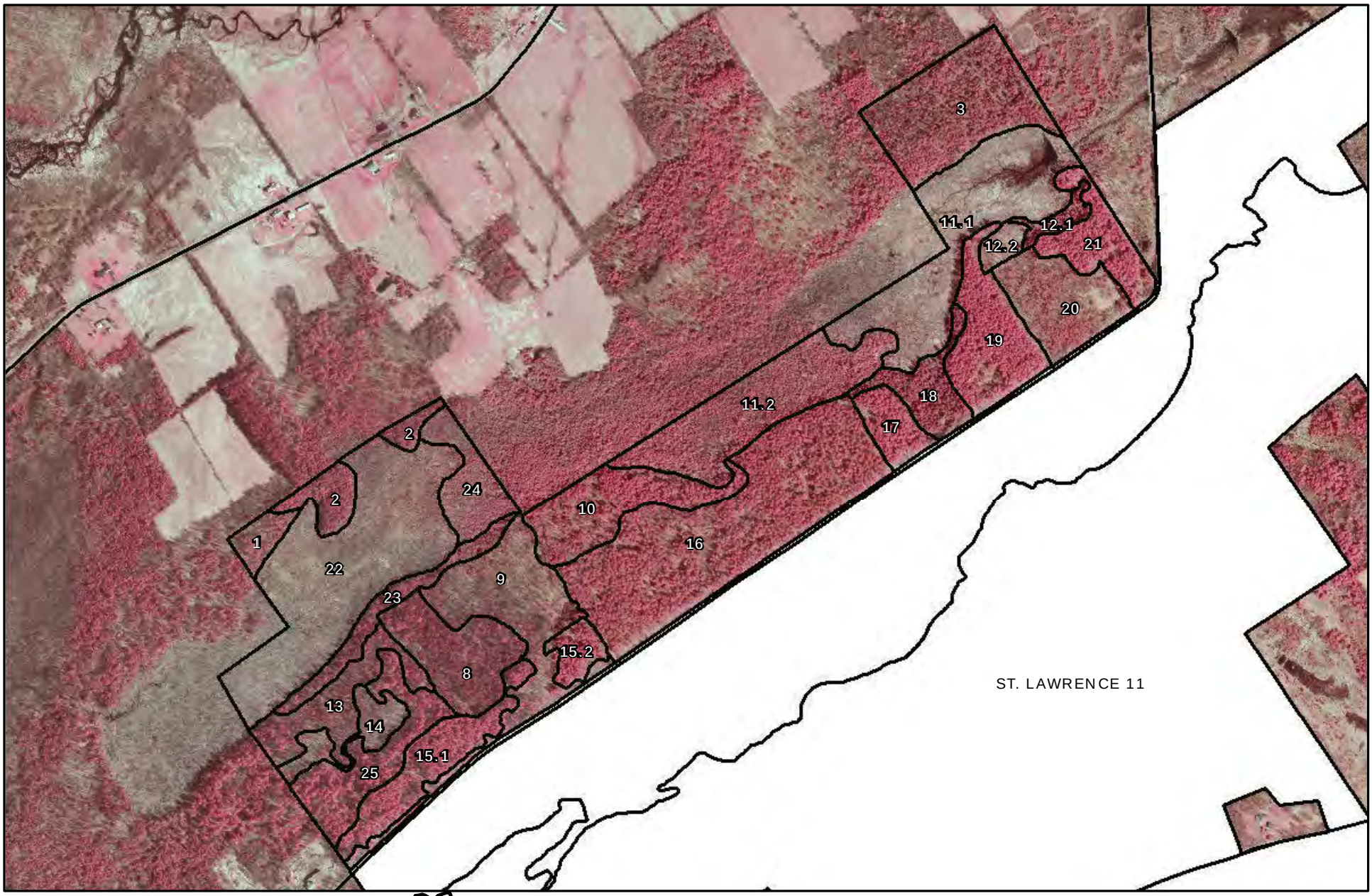
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

GRANTVILLE STATE FOREST
ST. LAWRENCE 15
COMPARTMENT 2
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

STAND BOUNDARY

ADJACENT STATE FOREST

KNAPP STATION STATE FOREST
ST. LAWRENCE 11
COMPARTMENT 1
STAND IDENTIFICATION
Figure 4

0 0.5 Miles

N



PUBLIC FOREST ACCESS ROAD

Public Roads

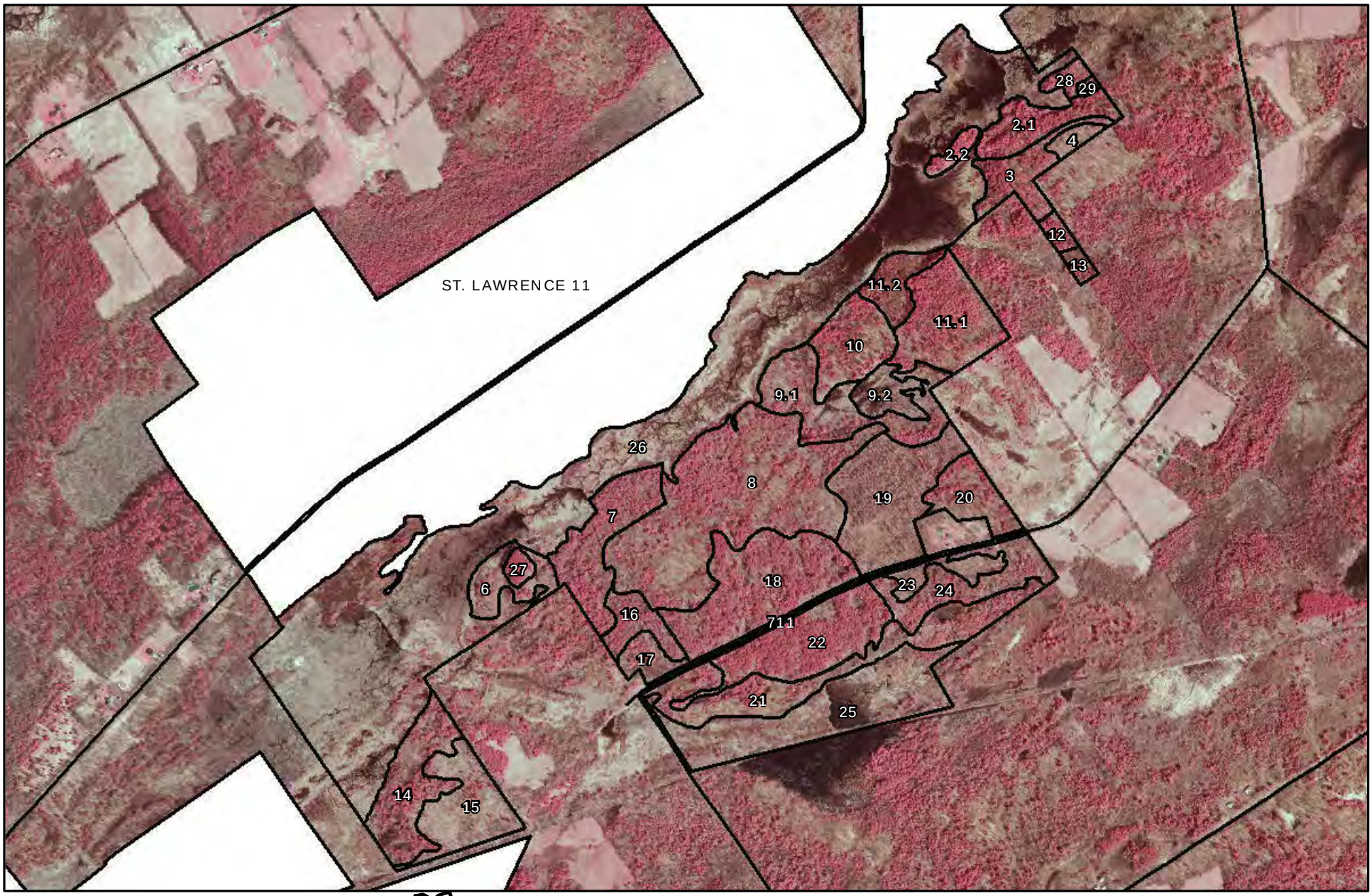
STAND BOUNDARY

ADJACENT STATE FOREST

KNAPP STATION STATE FOREST
ST. LAWRENCE 11
COMPARTMENT 2
STAND IDENTIFICATION
Figure 4

0 0.5 Miles

N



PUBLIC FOREST ACCESS ROAD

Public Roads

STAND BOUNDARY

ADJACENT STATE FOREST

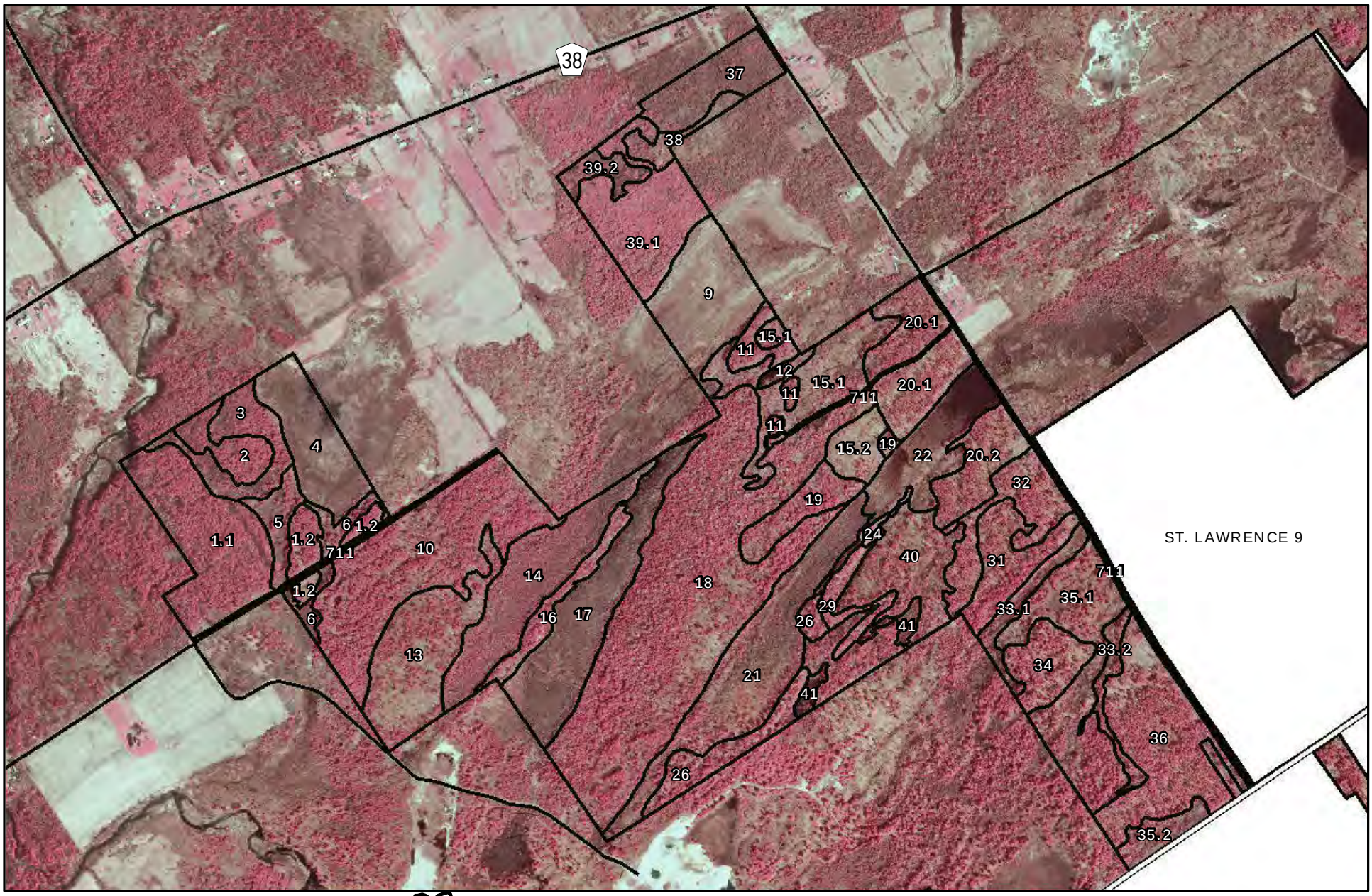
0 0.5 Miles

KNAPP STATION STATE FOREST
ST. LAWRENCE 11
COMPARTMENT 3
STAND IDENTIFICATION
Figure 4

N


ST. LAWRENCE 11
22
7.1
6
12
711
1
7.2
18.2
11
18.3
18.1
9
14.2
14.1
17
3
21
16
15
13
19
20.1
20.2
PUBLIC FOREST ACCESS ROAD
Public Roads
STAND BOUNDARY
ADJACENT STATE FOREST
KNAPP STATION STATE FOREST
ST. LAWRENCE 11
COMPARTMENT 4
STAND IDENTIFICATION
0
0.5
Miles
N

Figure 4



PUBLIC FOREST ACCESS ROAD

Public Roads

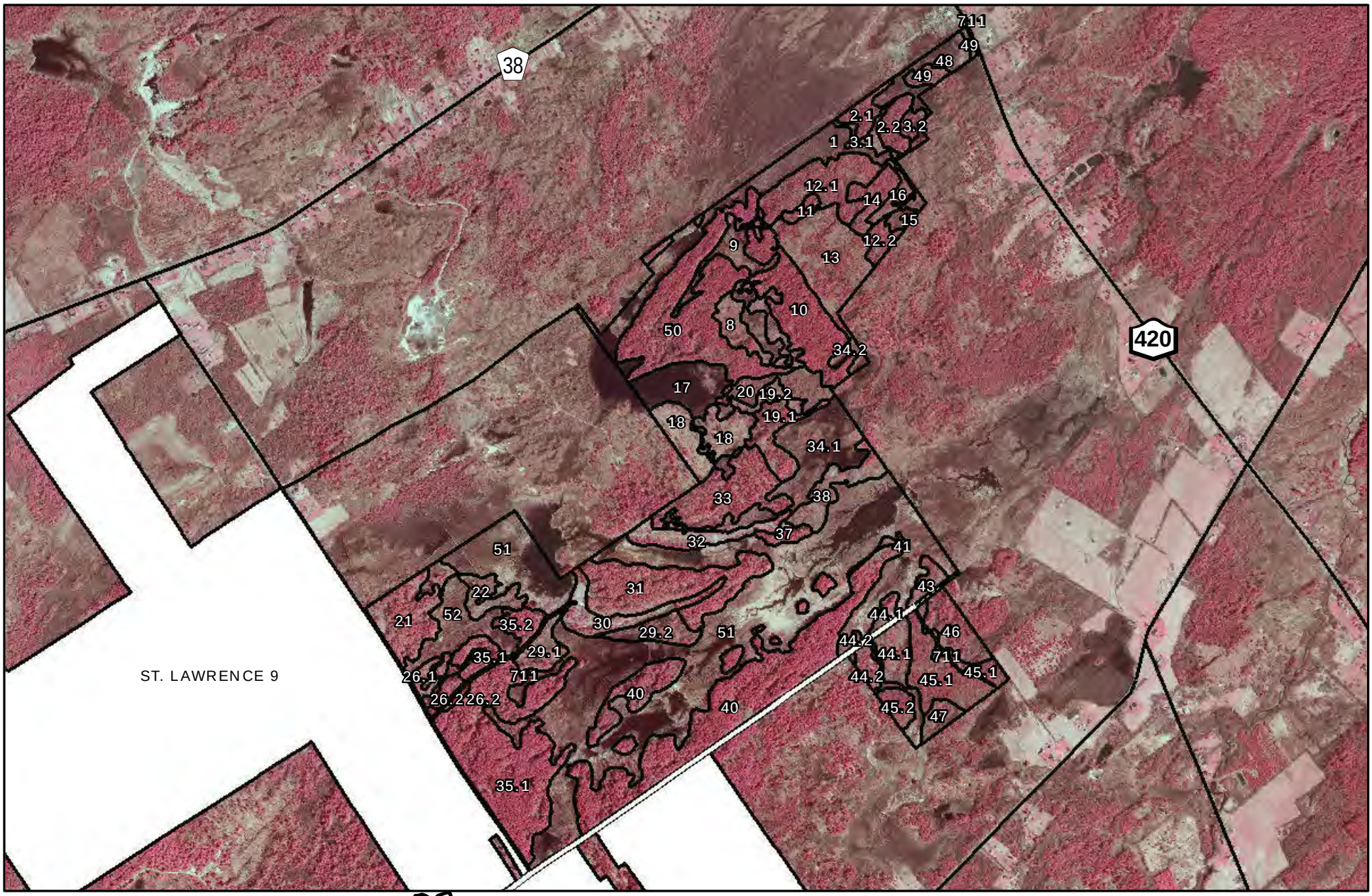
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

LOST NATION STATE FOREST
ST. LAWRENCE 9
COMPARTMENT 1
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

LOST NATION STATE FOREST
ST. LAWRENCE 9
COMPARTMENT 2
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

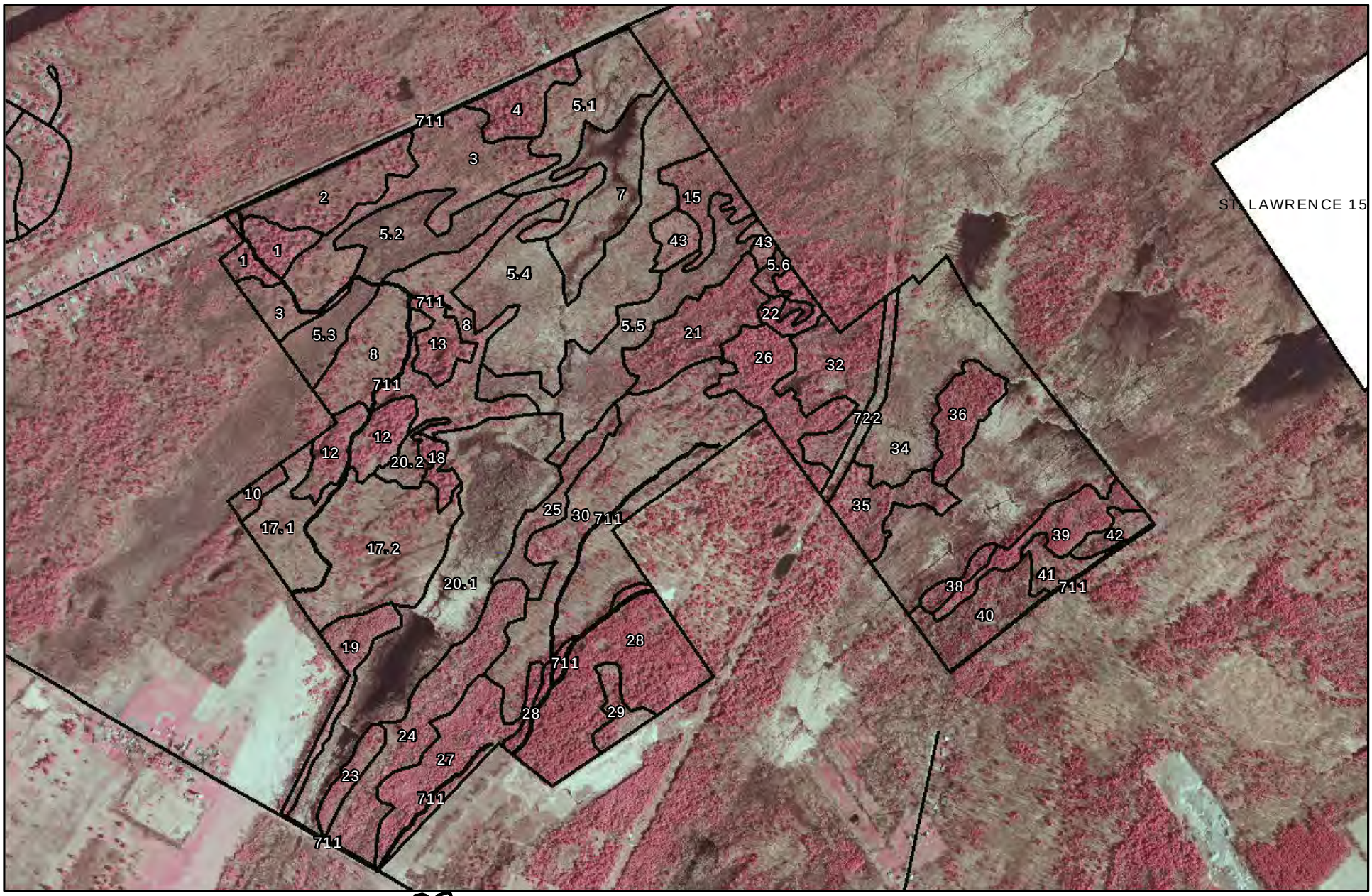
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

LOST NATION STATE FOREST
ST. LAWRENCE 9
COMPARTMENT 3
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

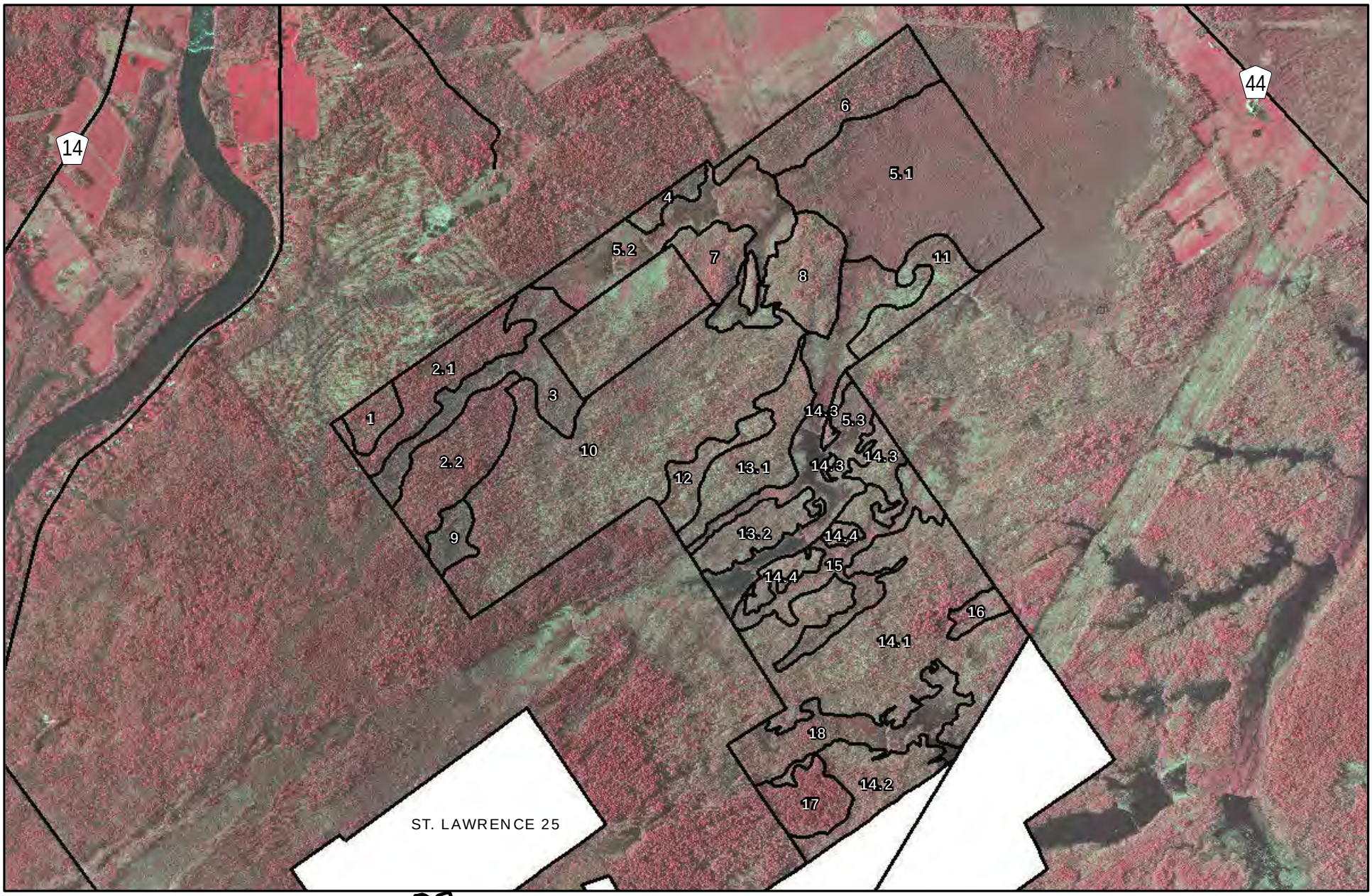
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

RAYMONDVILLE STATE FOREST
ST. LAWRENCE 33
COMPARTMENT 1
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

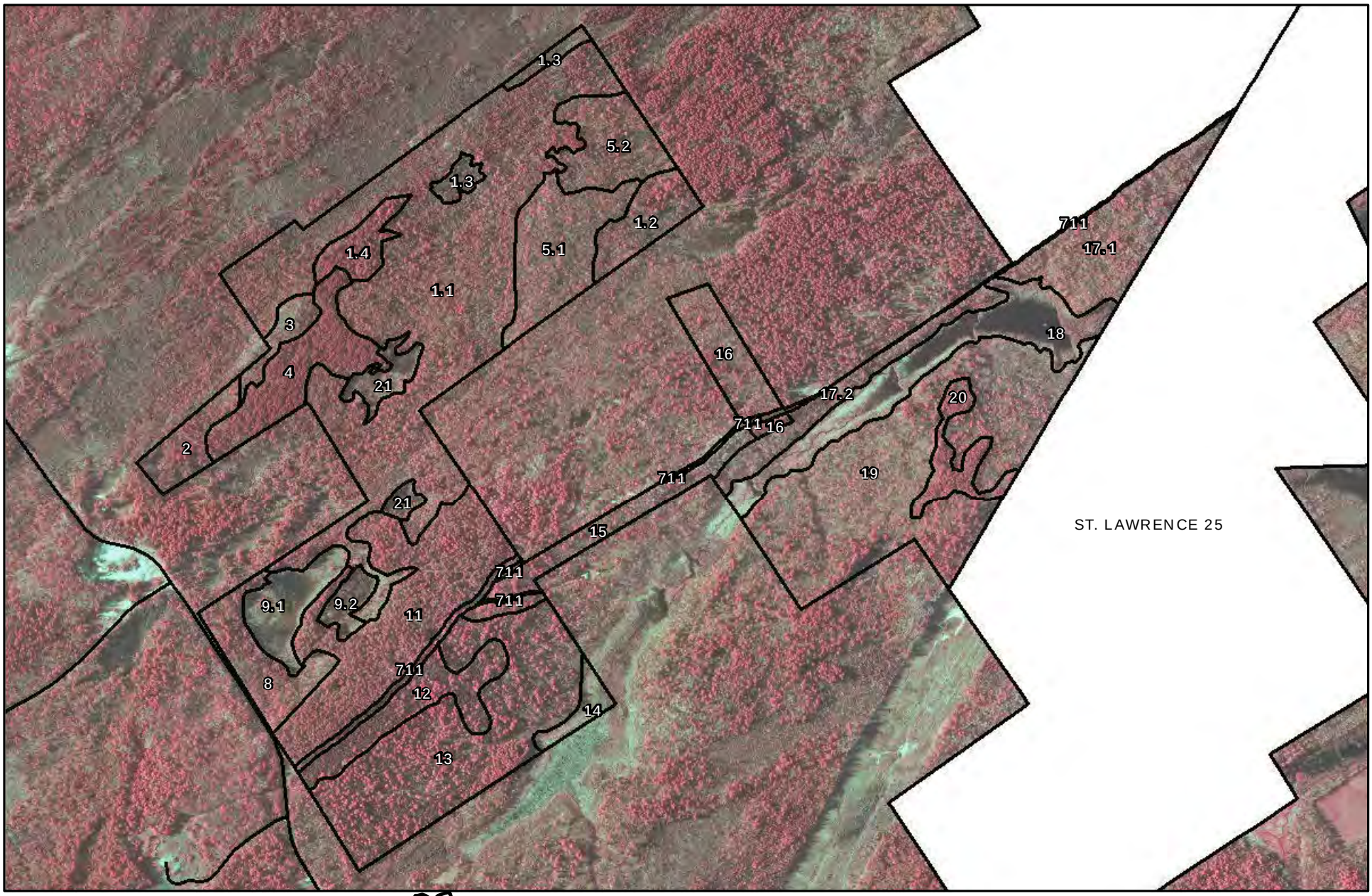
STAND BOUNDARY

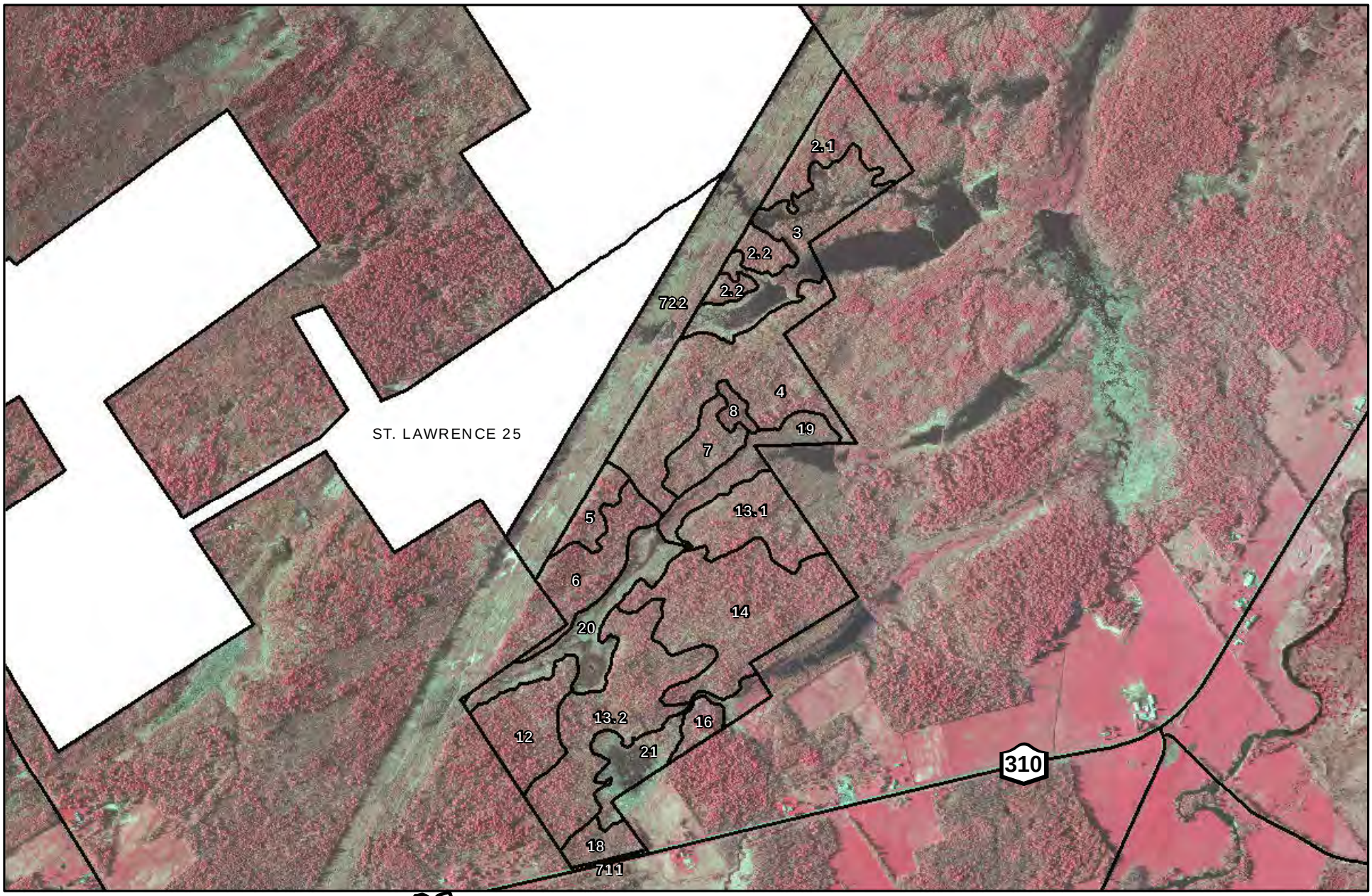
ADJACENT STATE FOREST

0 0.5 Miles

SODOM STATE FOREST
ST. LAWRENCE 25
COMPARTMENT 1
STAND IDENTIFICATION
Figure 4

N


1.3
5.2
1.3
1.2
1.4
5.1
1.1
3
4
21
2
16
711
17.1
18
17.2
20
711
16
19
711
21
15
ST. LAWRENCE 25
711
711
9.1
9.2
11
711
8
12
14
13
PUBLIC FOREST ACCESS ROAD
Public Roads
STAND BOUNDARY
ADJACENT STATE FOREST
0
0.5
Miles
SODOM STATE FOREST
ST. LAWRENCE 25
COMPARTMENT 2
STAND IDENTIFICATION
Figure 4
N



PUBLIC FOREST ACCESS ROAD

Public Roads

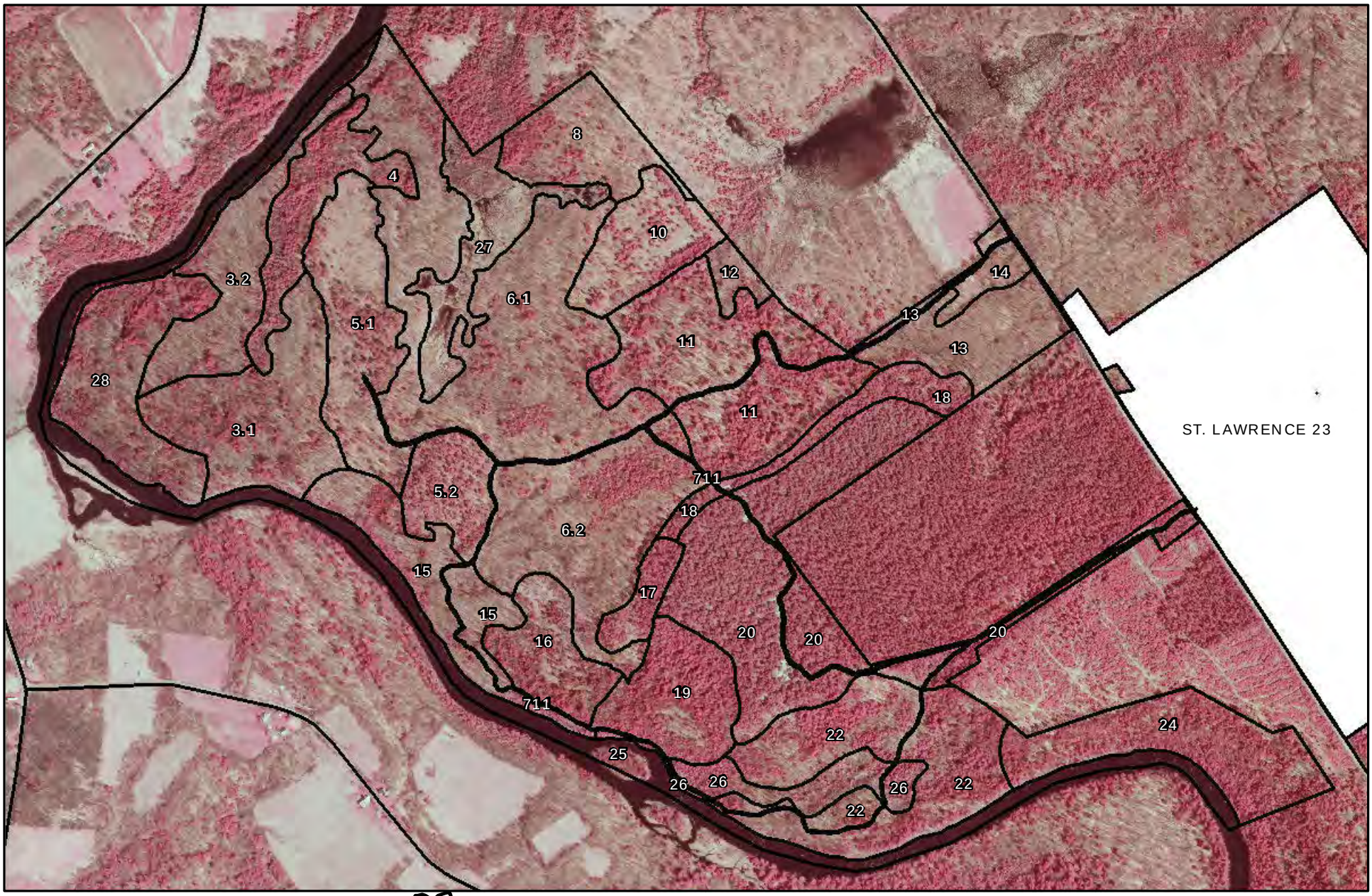
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

SODOM STATE FOREST
ST. LAWRENCE 25
COMPARTMENT 3
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

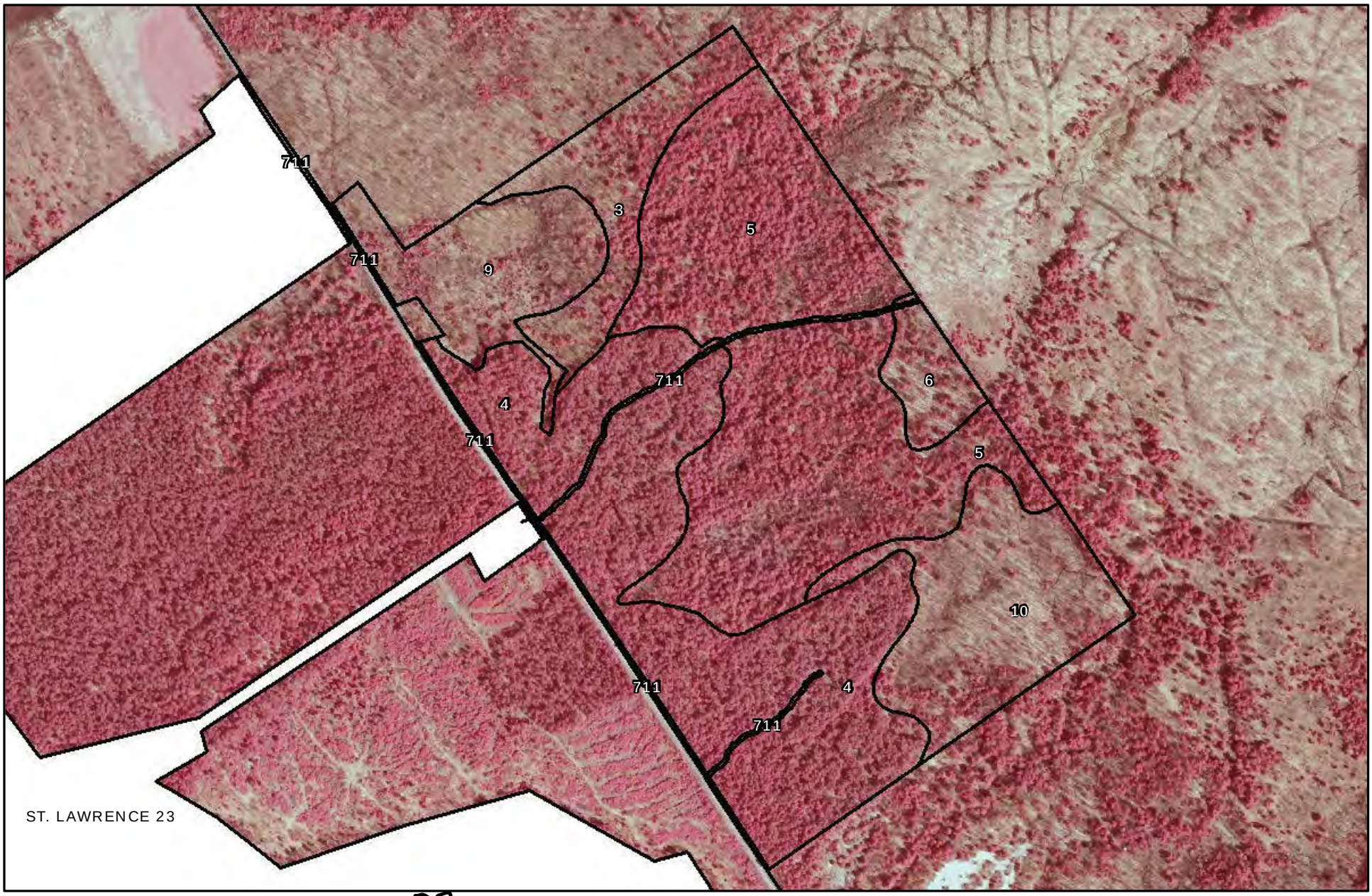
STAND BOUNDARY

ADJACENT STATE FOREST

0 0.5 Miles

SOUTHVILLE STATE FOREST
ST. LAWRENCE 23
COMPARTMENT 1
STAND IDENTIFICATION
Figure 4

N



PUBLIC FOREST ACCESS ROAD

Public Roads

STAND BOUNDARY

ADJACENT STATE FOREST

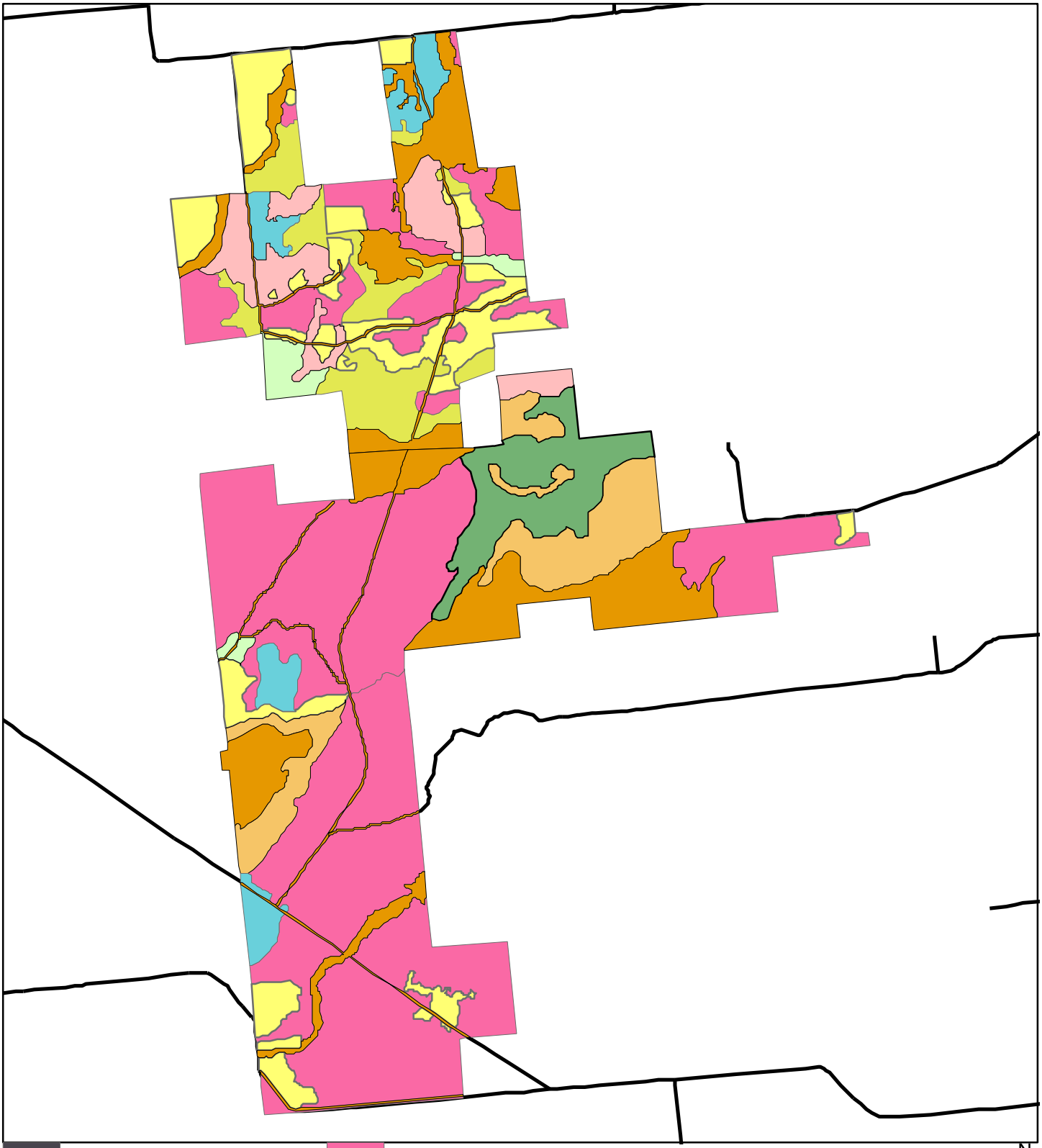
0 0.5 Miles

SOUTHVILLE STATE FOREST
ST. LAWRENCE 23
COMPARTMENT 2
STAND IDENTIFICATION
Figure 4

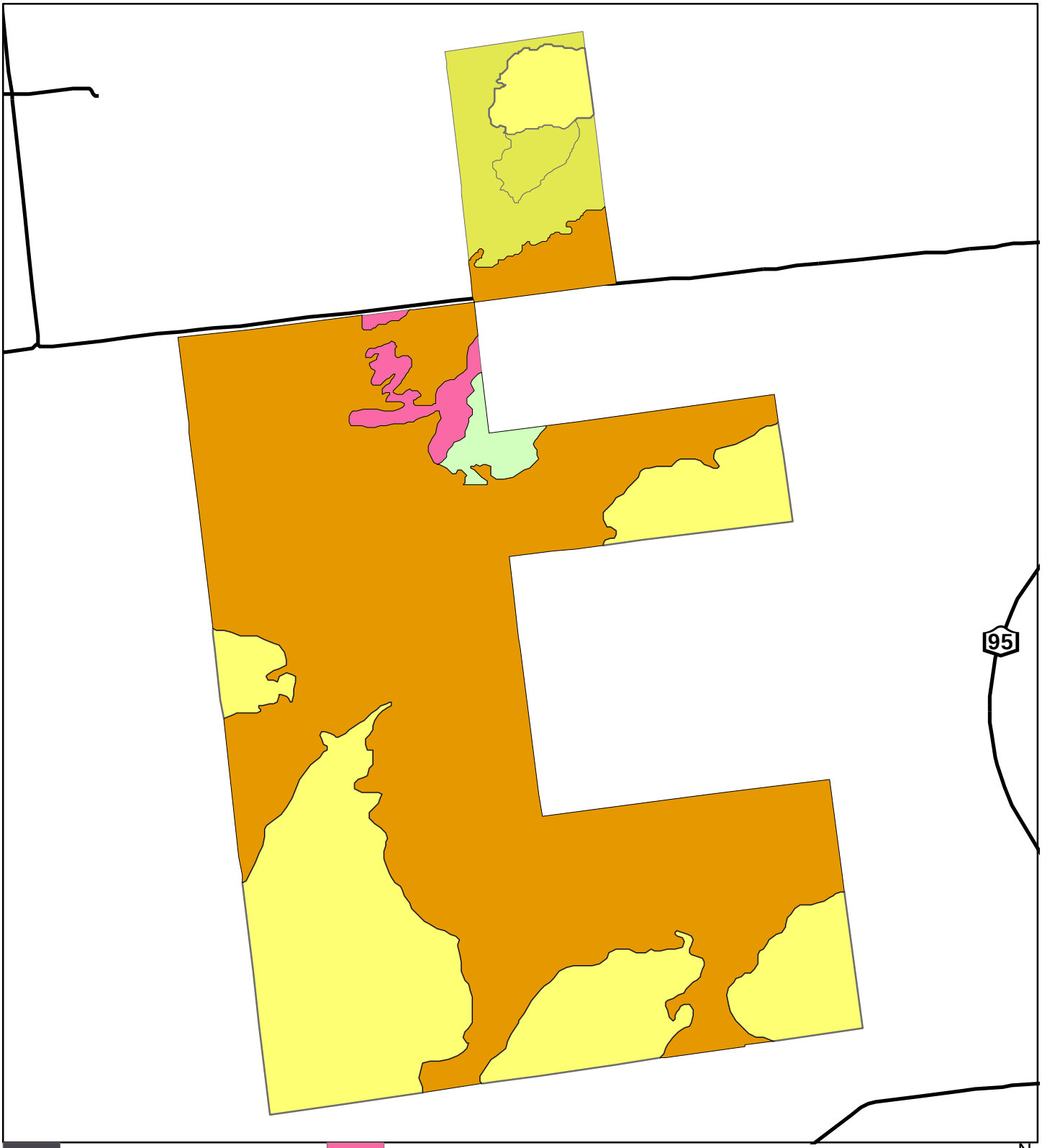
N

FIGURE 5. – CURRENT FOREST COVER TYPE MAPS

(see appendices and figures)



BOMBAY STATE FOREST
FRANKLIN 2
CURRENT FOREST COVER TYPE
FIGURE 5

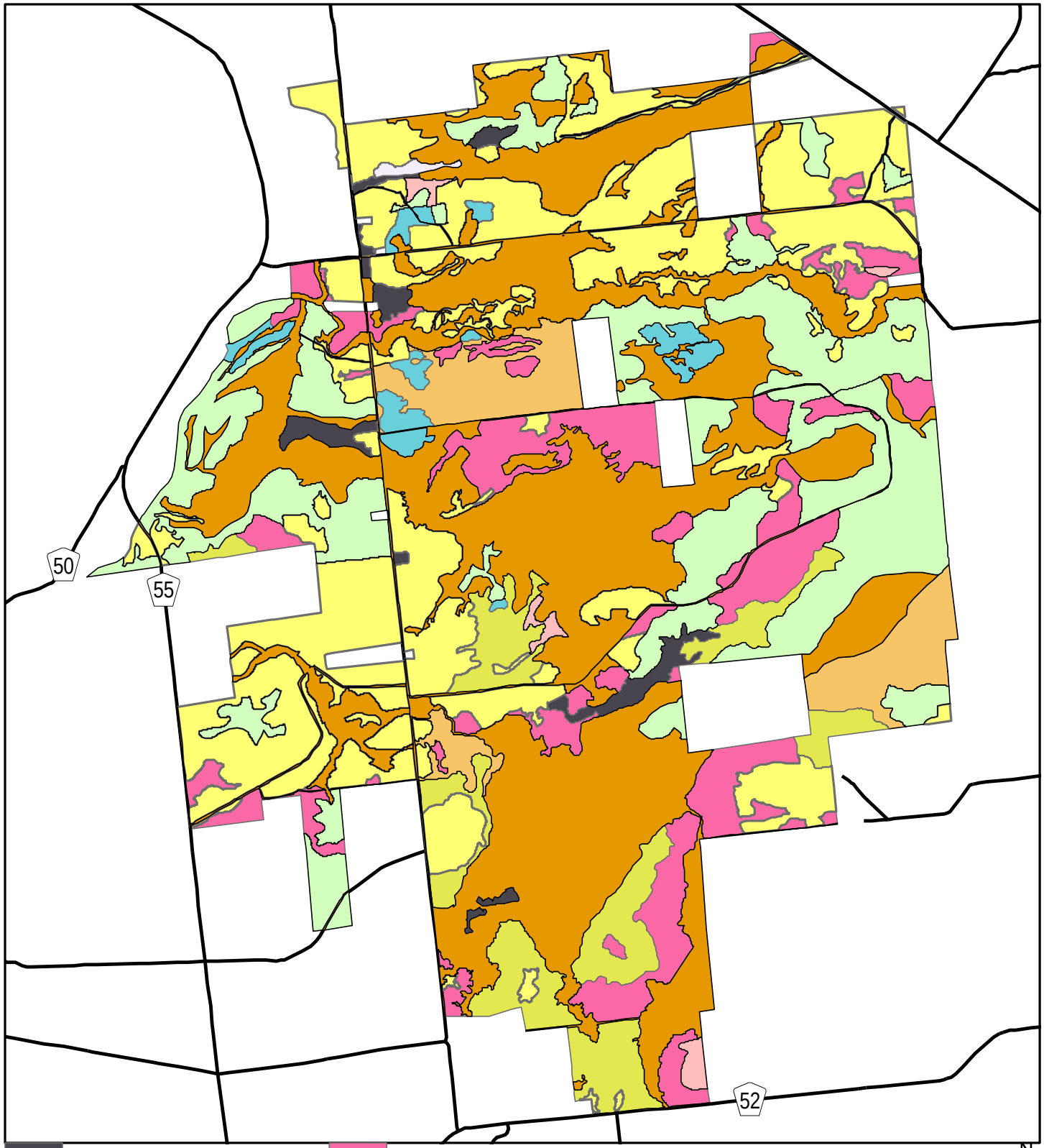


Early Successional Forest
Hemlock
Non Forest
Northern Hardwood
Other Conifer
Other Hardwood
Plantation
Spruce - Fir
Swamp Hardwood
White Cedar
White Pine

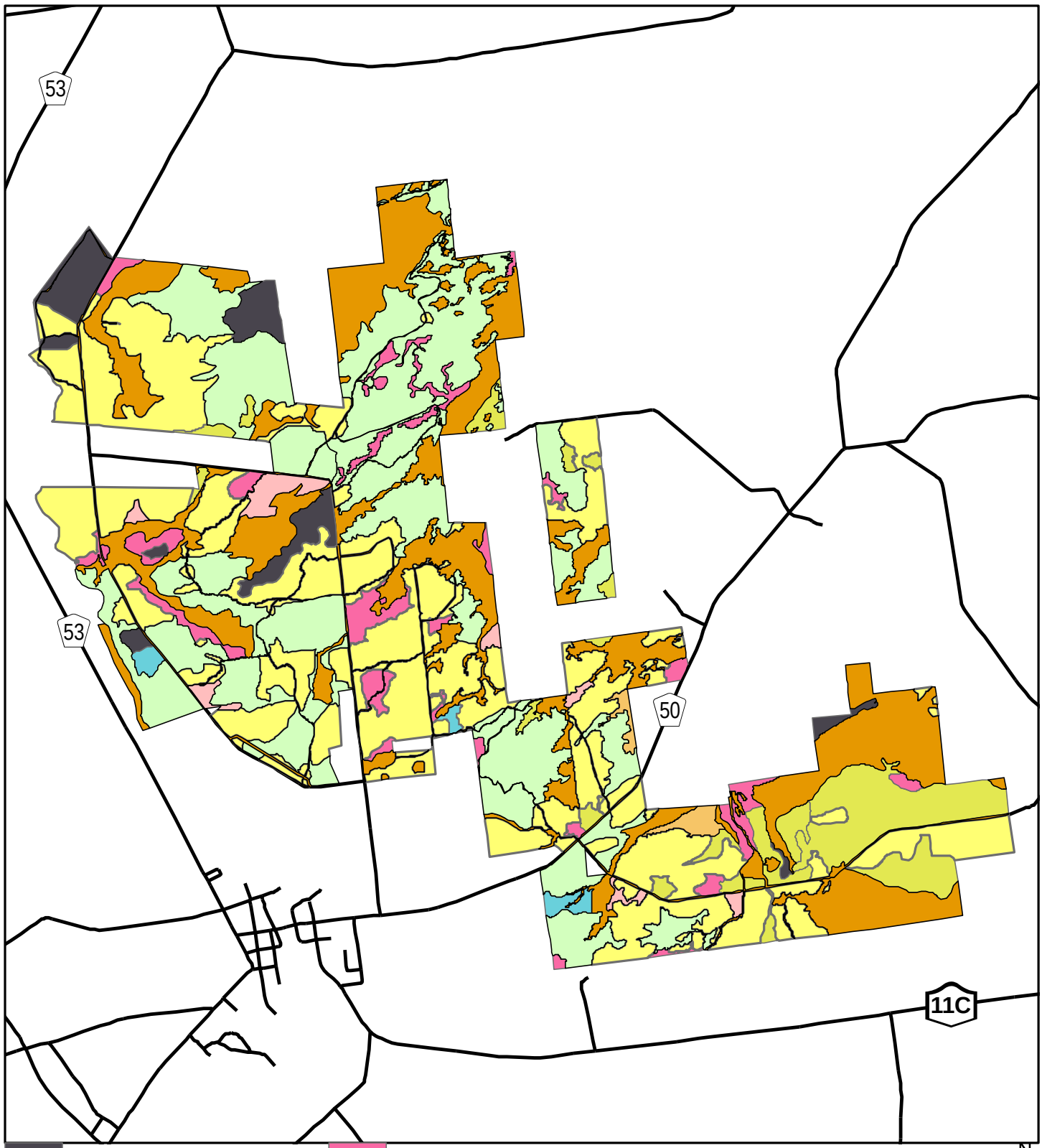
BOMBAY STATE FOREST
FRANKLIN 4
CURRENT FOREST COVER TYPE
FIGURE 5

N

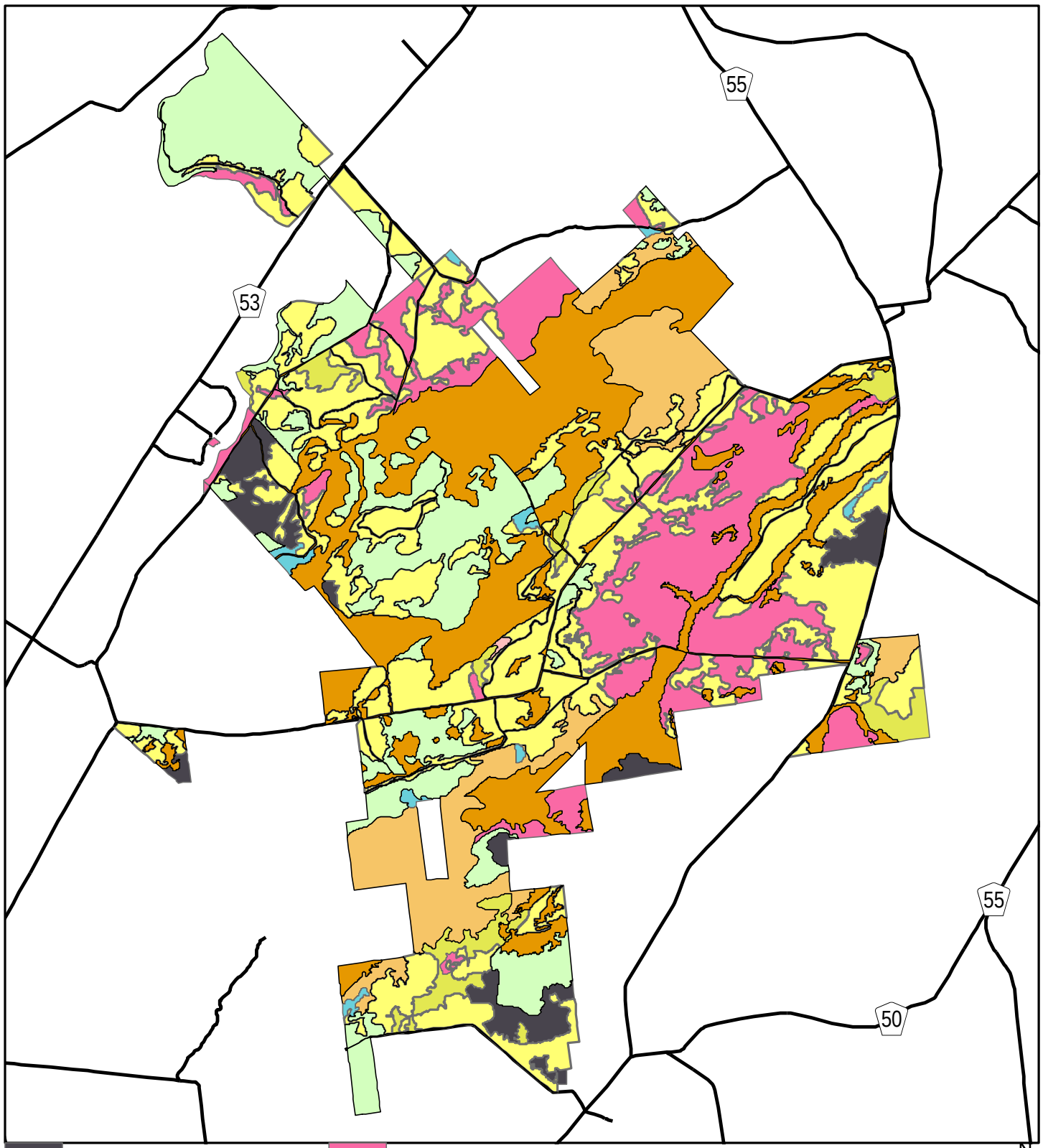
0 0.25 0.5
Miles



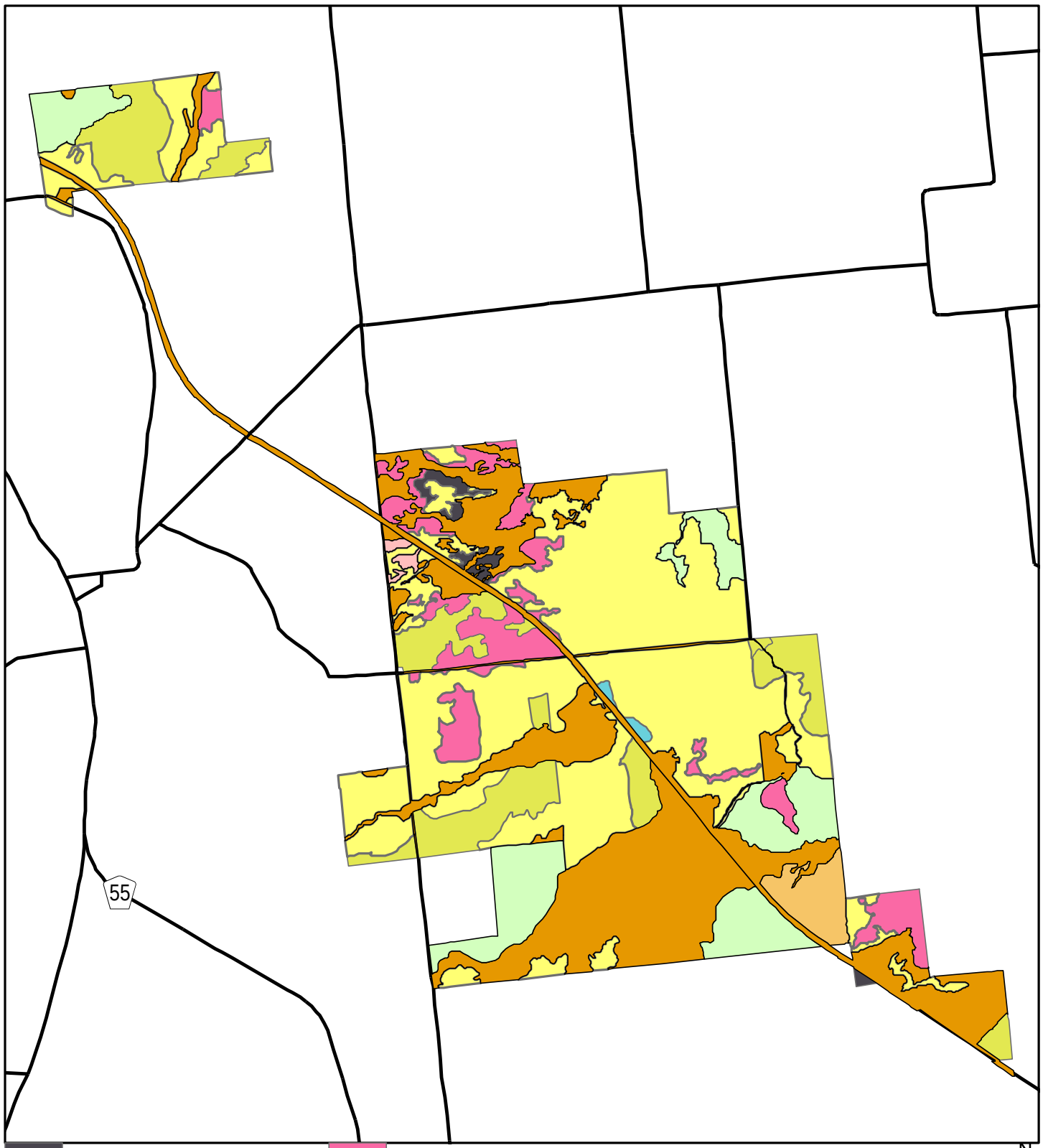
BRASHER STATE FOREST
ST. LAWRENCE 1
CURRENT FOREST COVER TYPE
FIGURE 5



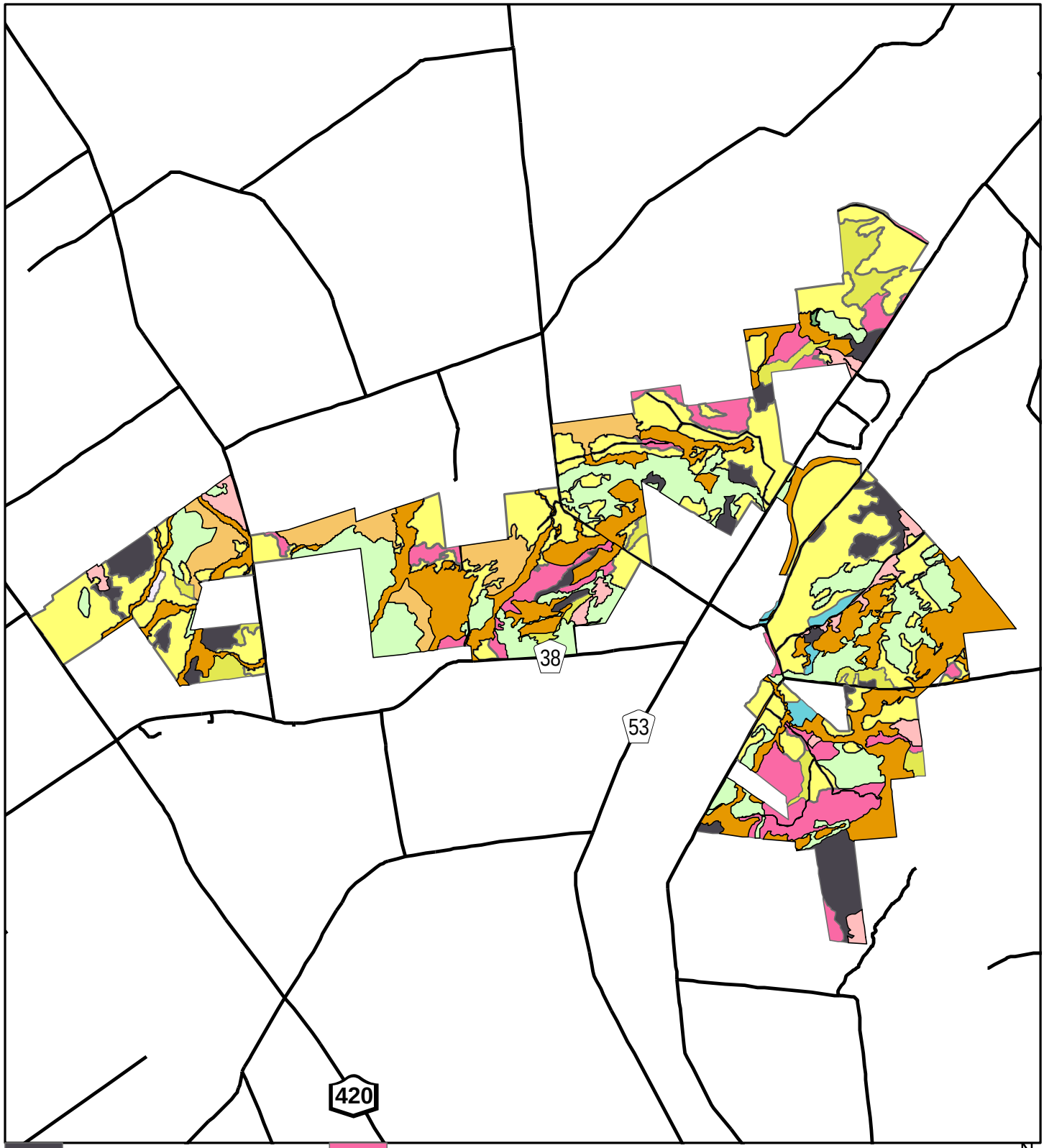
BRASHER STATE FOREST
ST. LAWRENCE 5
CURRENT FOREST COVER TYPE
FIGURE 5



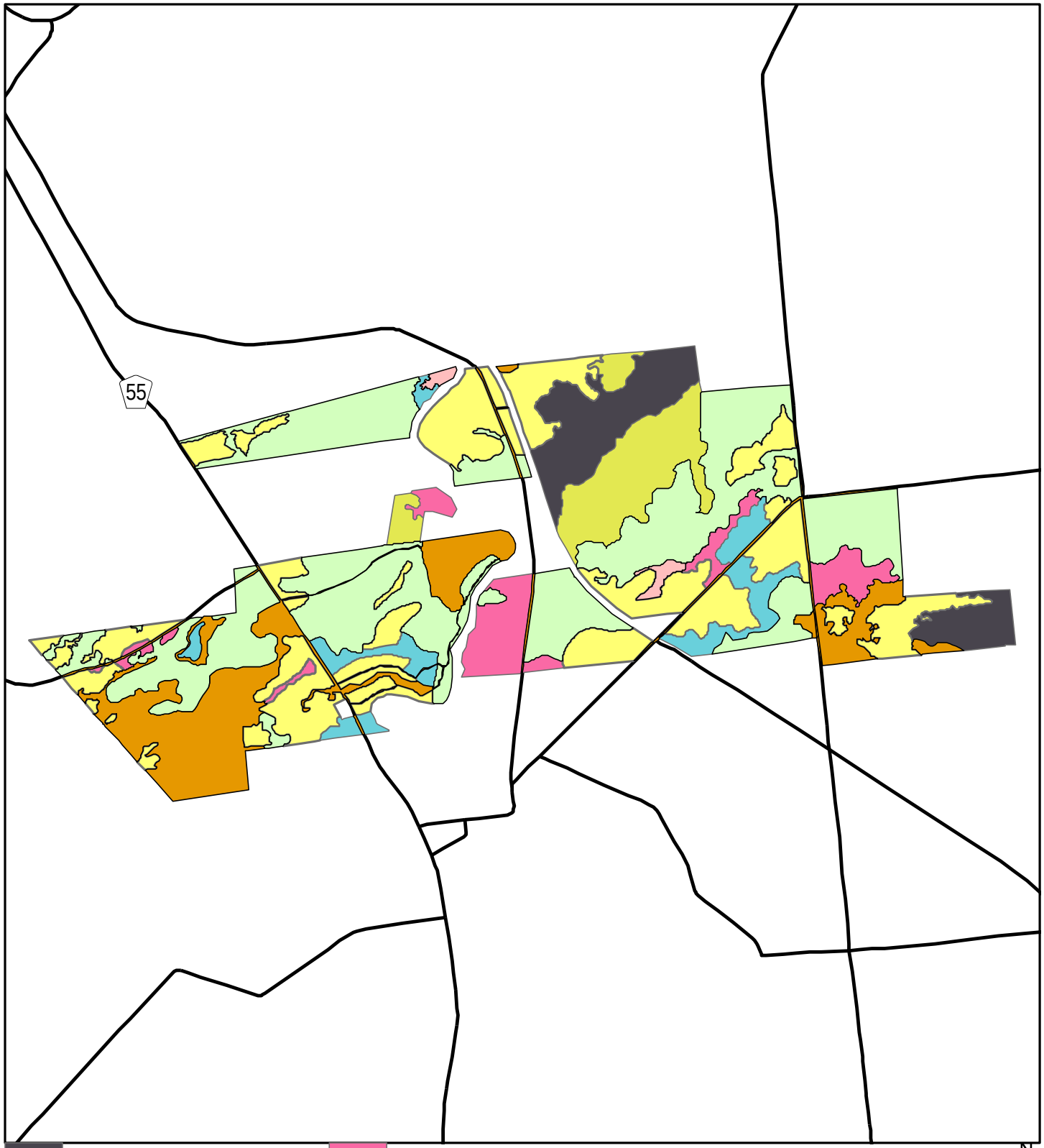
BRASHER STATE FOREST
ST. LAWRENCE 6
CURRENT FOREST COVER TYPE
FIGURE 5



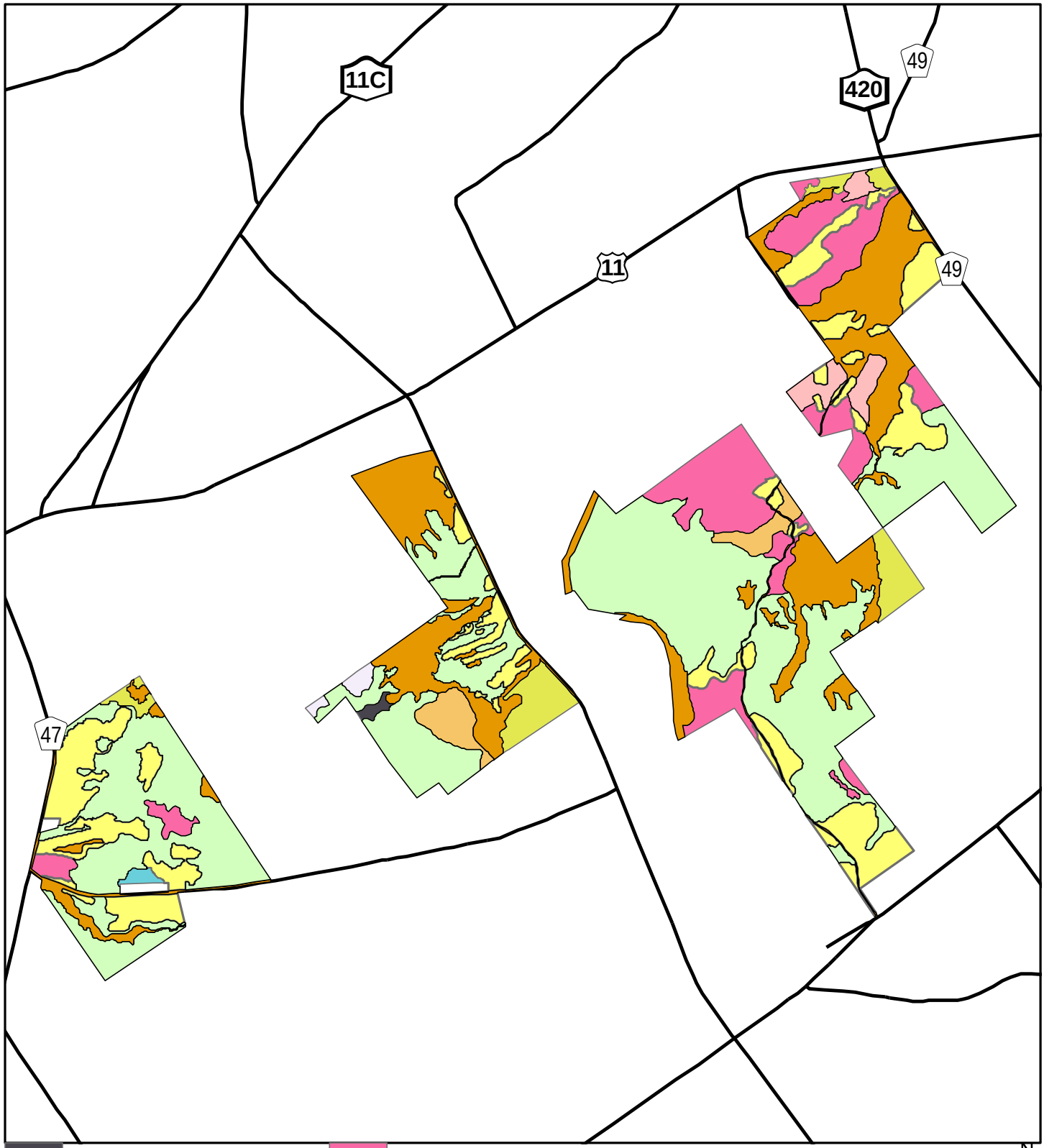
BRASHER STATE FOREST
ST. LAWRENCE 7
CURRENT FOREST COVER TYPE
FIGURE 5



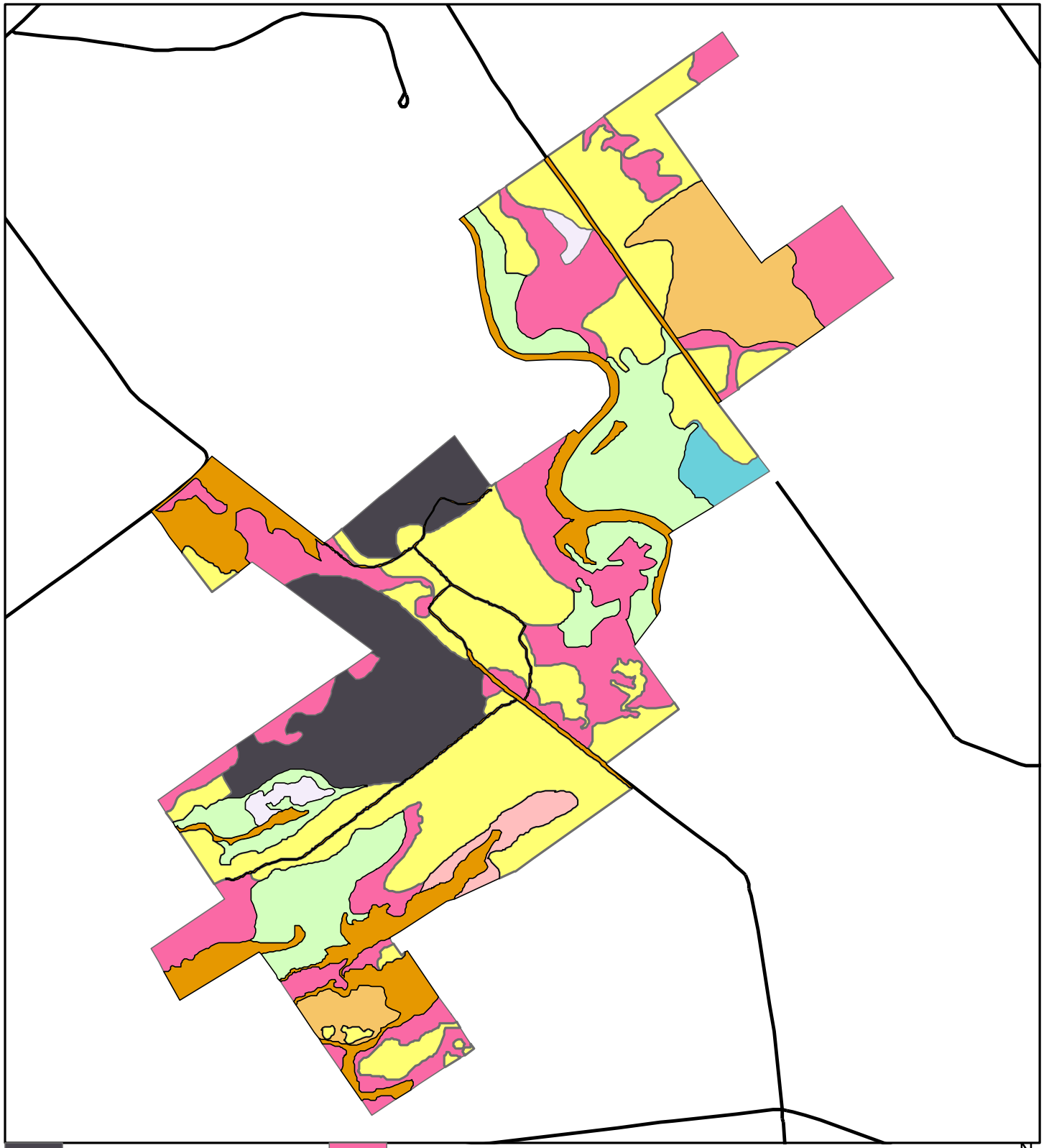
BRASHER STATE FOREST
ST. LAWRENCE 10
CURRENT FOREST COVER TYPE
FIGURE 5



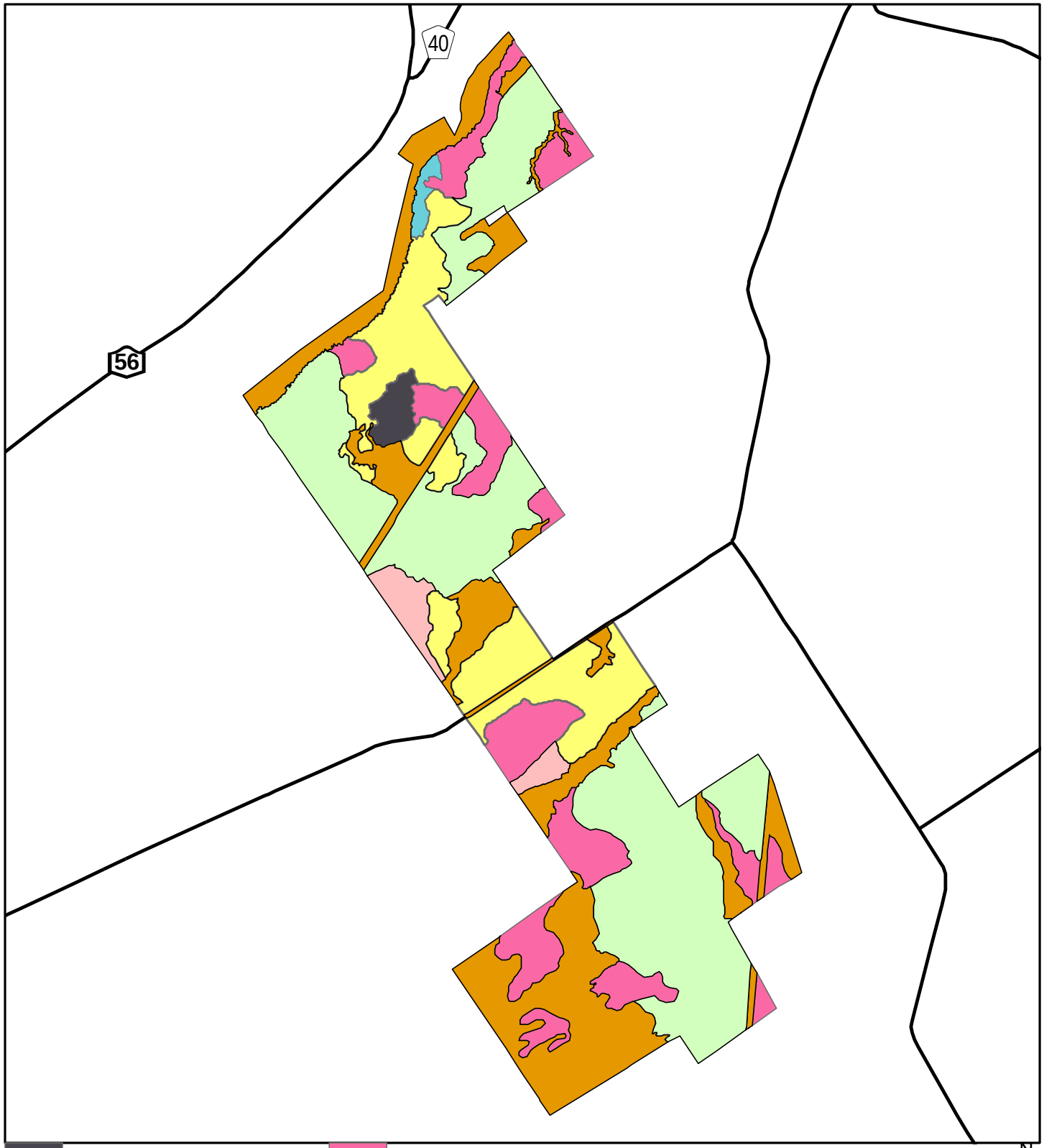
BRASHER STATE FOREST
ST. LAWRENCE 17
CURRENT FOREST COVER TYPE
FIGURE 5



BUCKTON STATE FOREST
ST. LAWRENCE 31
CURRENT FOREST COVER TYPE
FIGURE 5



FORT JACKSON STATE FOREST
ST. LAWRENCE 22
CURRENT FOREST COVER TYPE
FIGURE 5

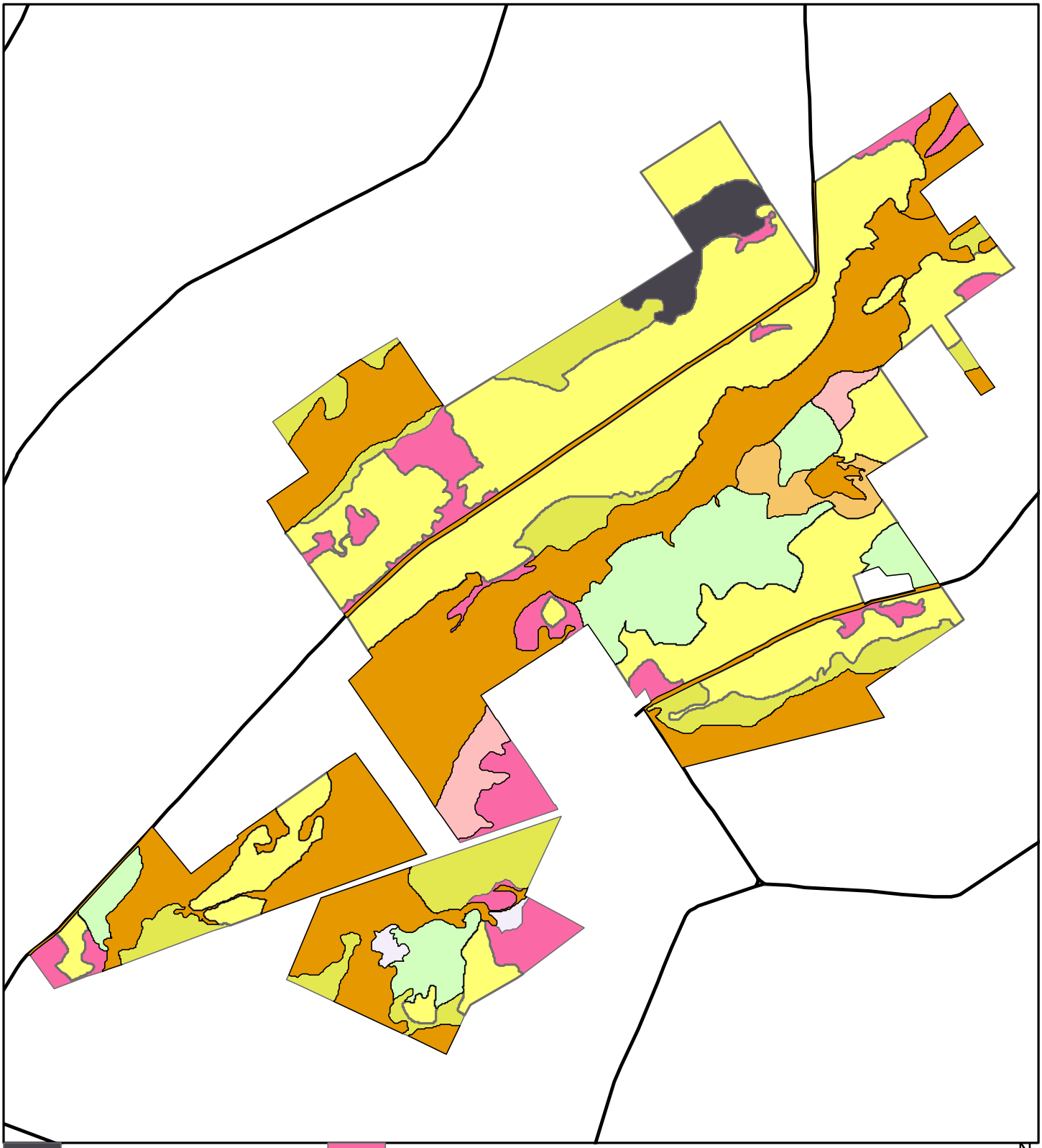


Early Successional Forest
Hemlock
Non Forest
Northern Hardwood
Other Conifer
Other Hardwood
Plantation
Spruce - Fir
Swamp Hardwood
White Cedar
White Pine

0 0.25 0.5 Miles

N

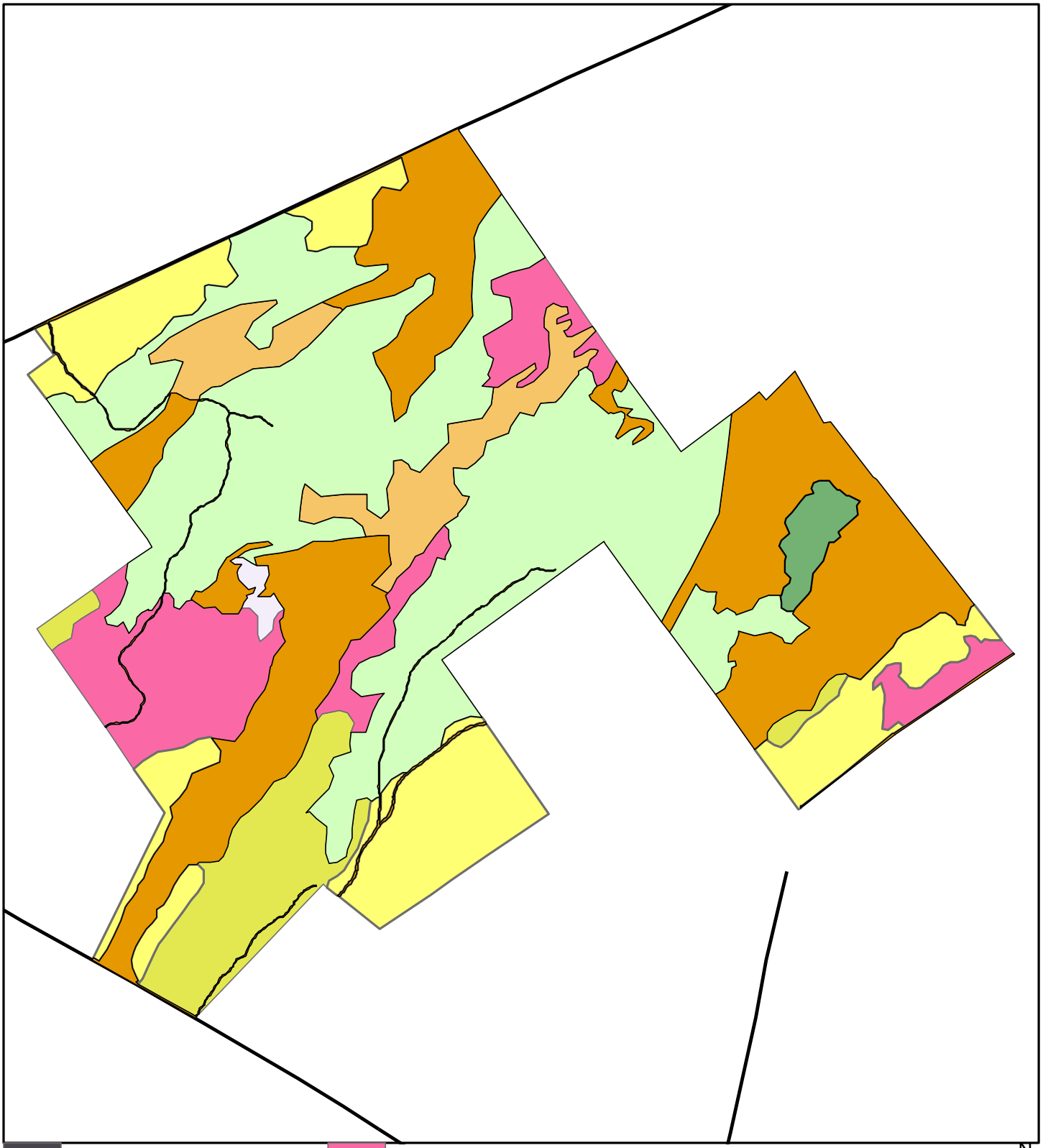
GRANTVILLE STATE FOREST
ST. LAWRENCE 15
CURRENT FOREST COVER TYPE
FIGURE 5



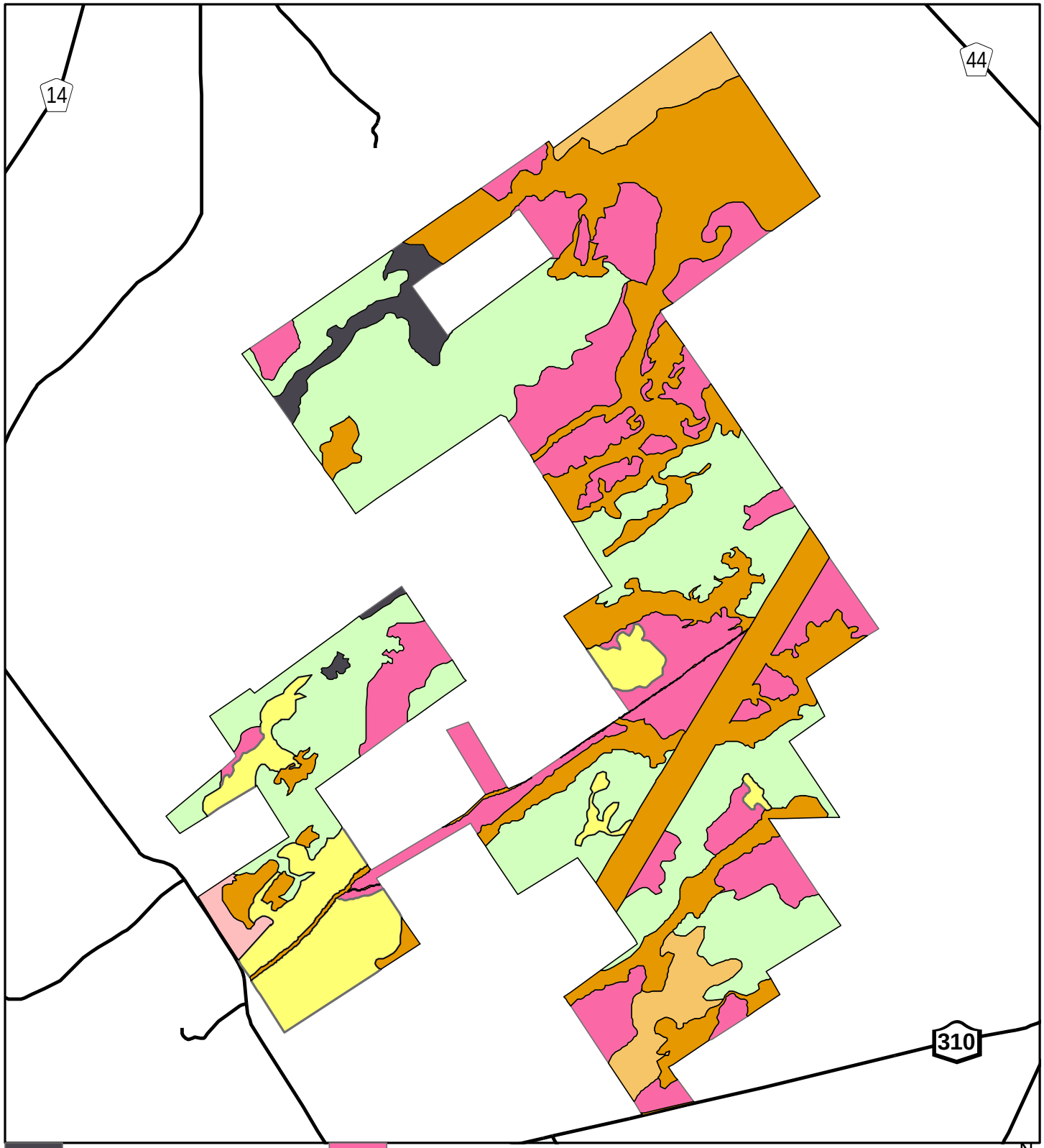
KNAPP STATION STATE FOREST
ST. LAWRENCE 11
CURRENT FOREST COVER TYPE
FIGURE 5



LOST NATION STATE FOREST
ST. LAWRENCE 9
CURRENT FOREST COVER TYPE
FIGURE 5



RAYMONDVILLE STATE FOREST
ST. LAWRENCE 33
CURRENT FOREST COVER TYPE
FIGURE 5



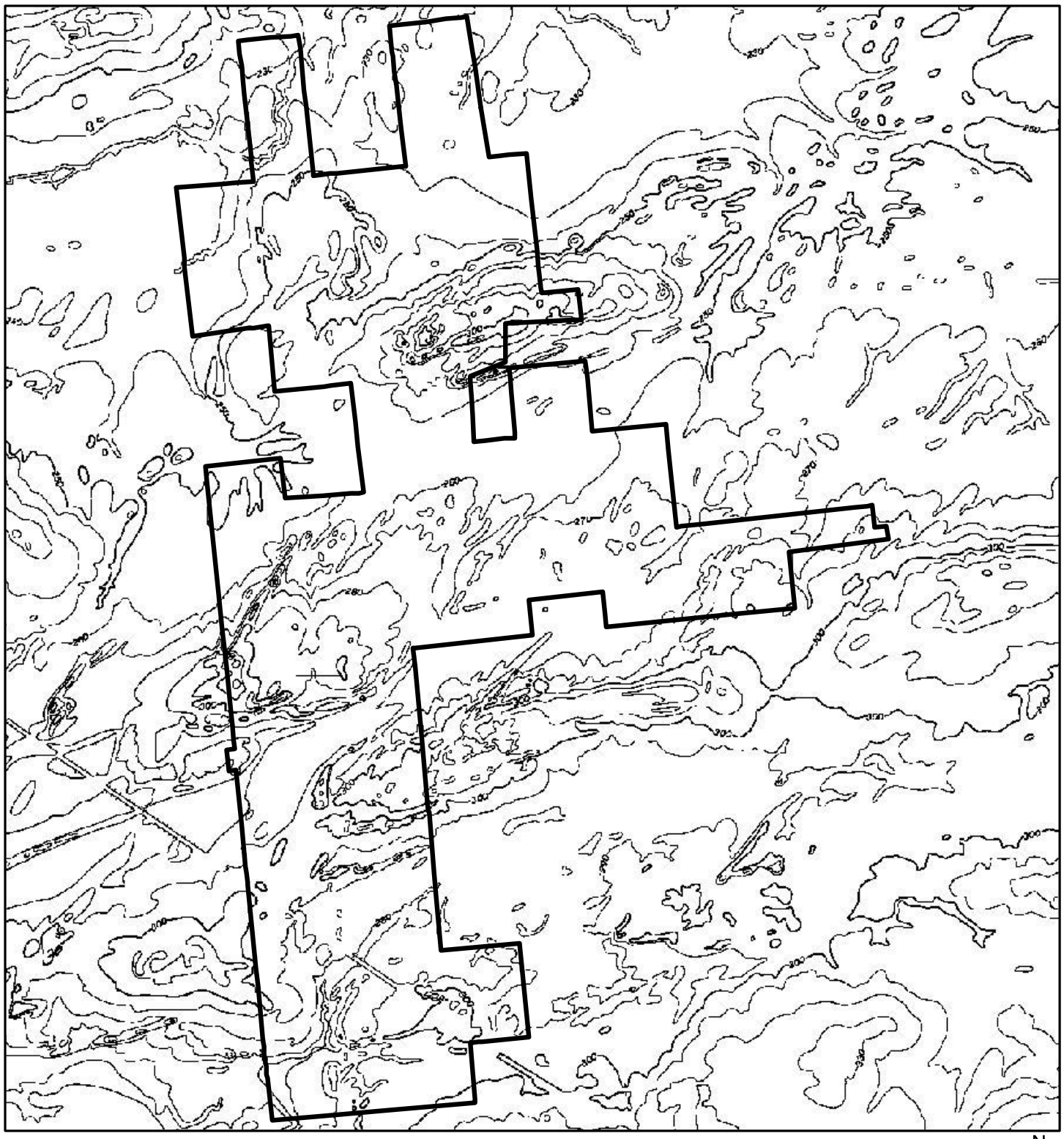
SODOM STATE FOREST
ST. LAWRENCE 25
CURRENT FOREST COVER TYPE
FIGURE 5



SOUTHVILLE STATE FOREST
ST. LAWRENCE 23
CURRENT FOREST COVER TYPE
FIGURE 5

FIGURE 6. – TOPOGRAPHY AND SLOPE MAPS

(see appendices and figures)

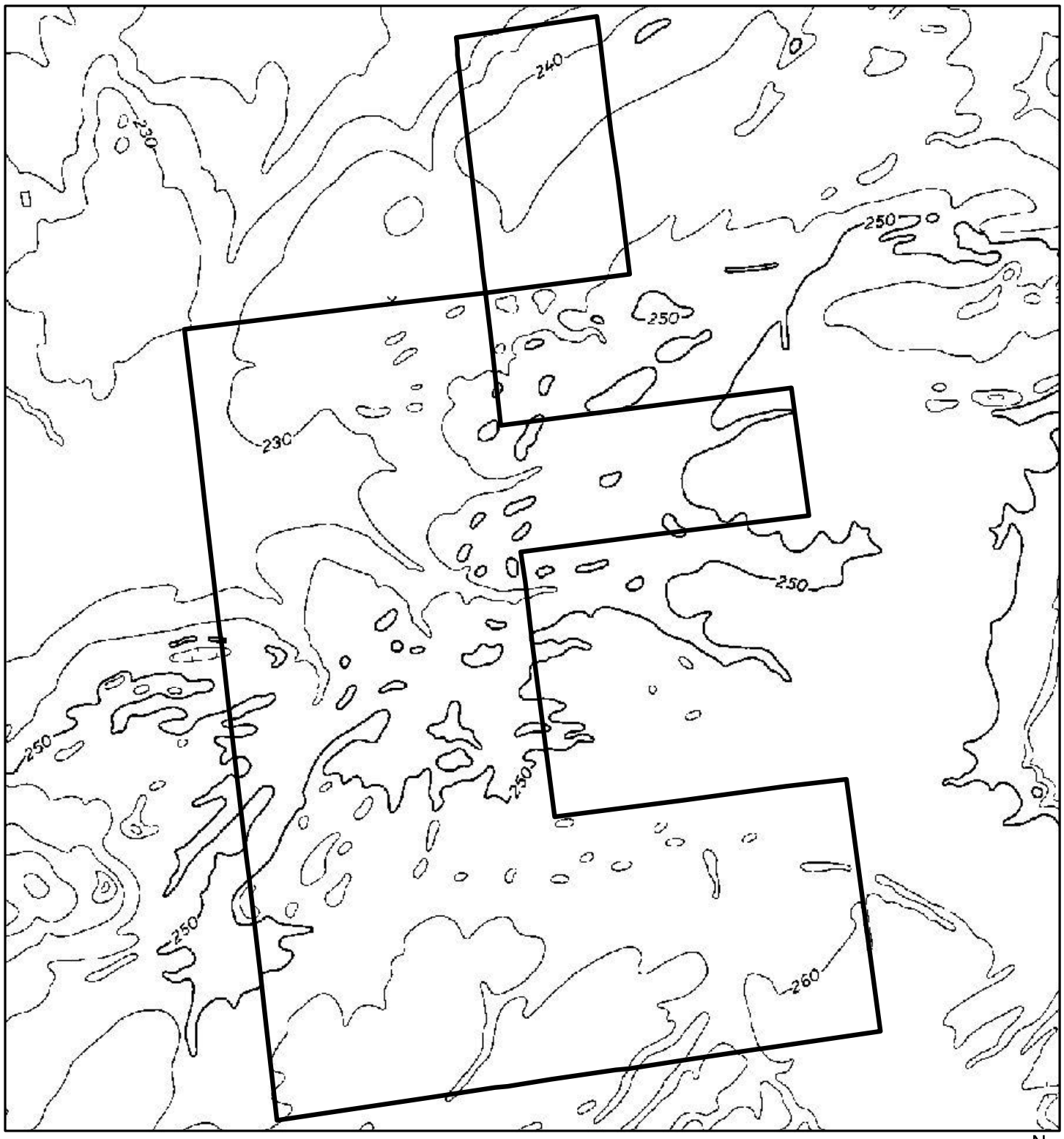


Forest Boundary

BOMBAY STATE FOREST
FRANKLIN 2
Topography and Slope
FIGURE 6

N

0 0.25 0.5
Miles

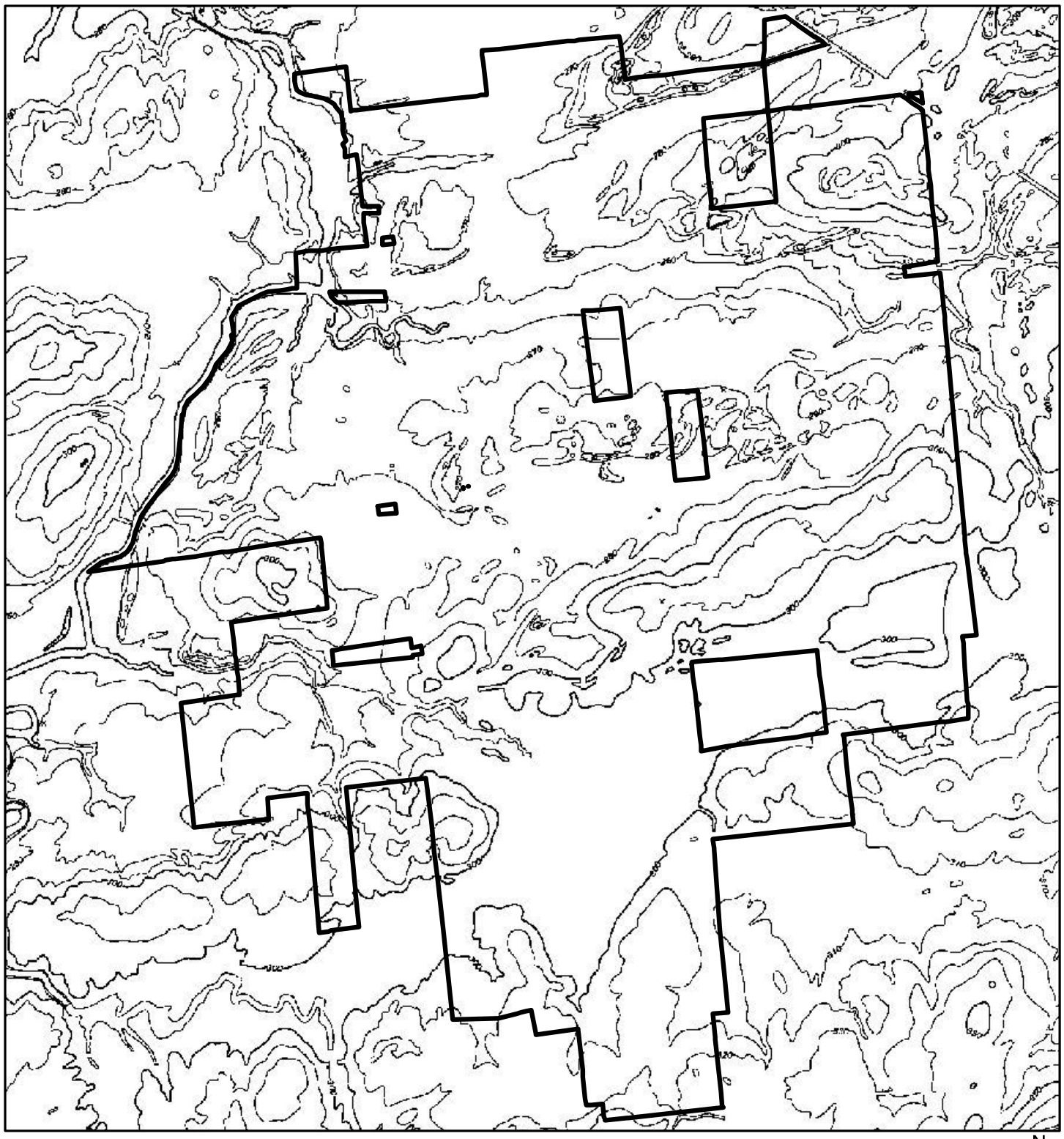


Forest Boundary

BOMBAY STATE FOREST
FRANKLIN 4
Topography and Slope
FIGURE 6

N

0 0.25 0.5
Miles

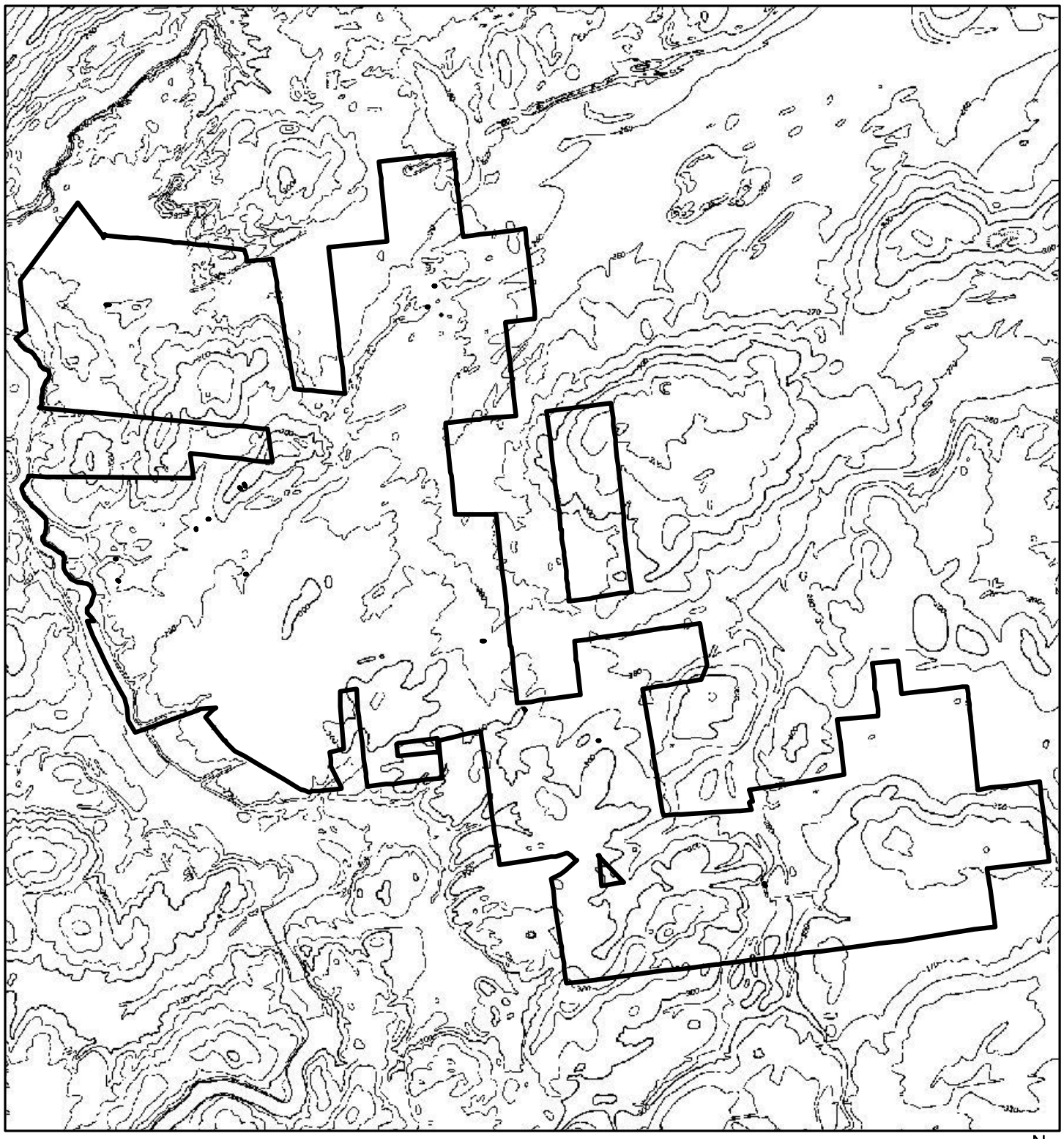


Forest Boundary

BRASHER STATE FOREST
ST. LAWRENCE 1
Topography and Slope
FIGURE 6

N

0 0.25 0.5
Miles

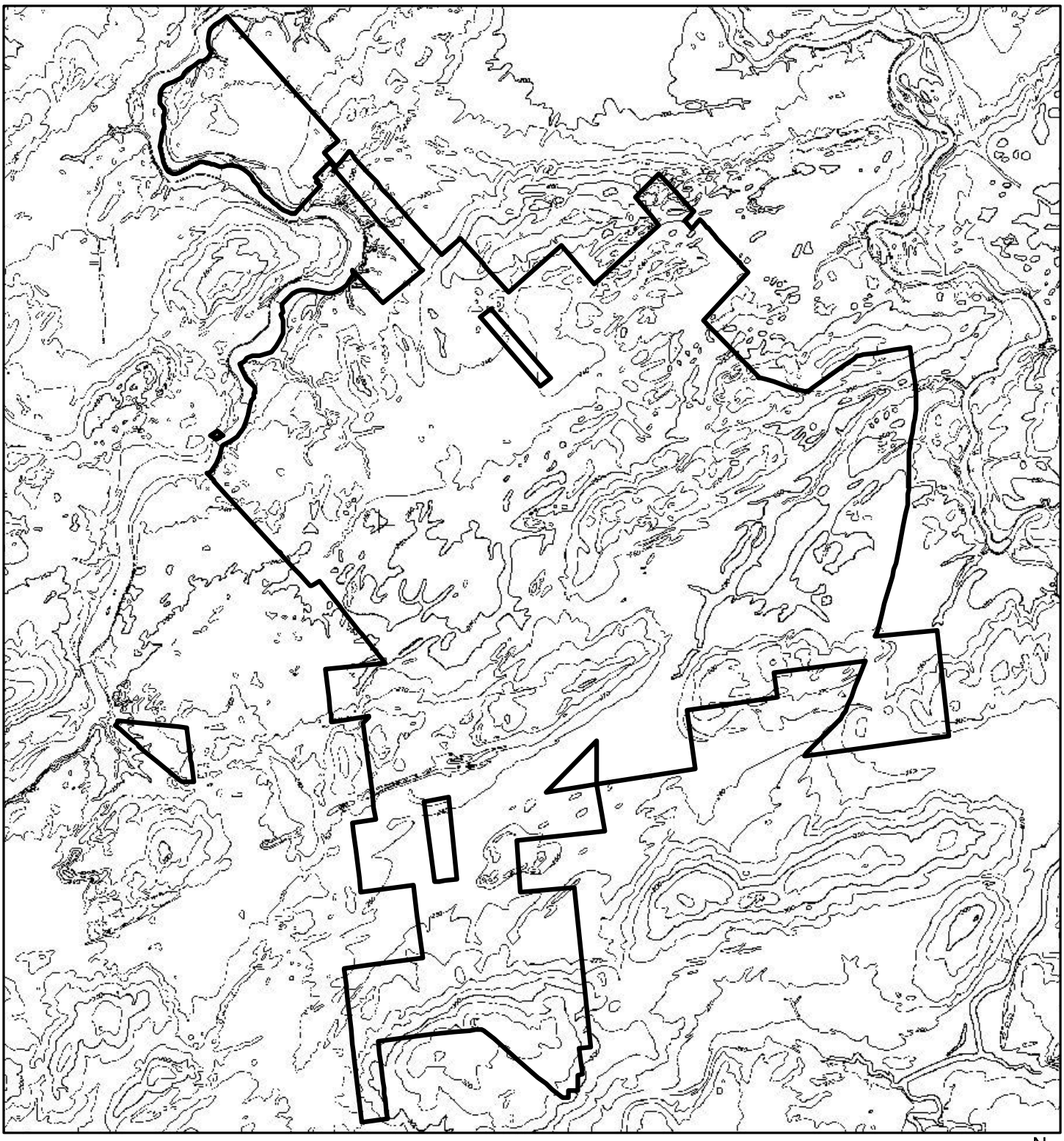


Forest Boundary

BRASHER STATE FOREST
ST. LAWRENCE 5
Topography and Slope
FIGURE 6

N

0 0.25 0.5
Miles

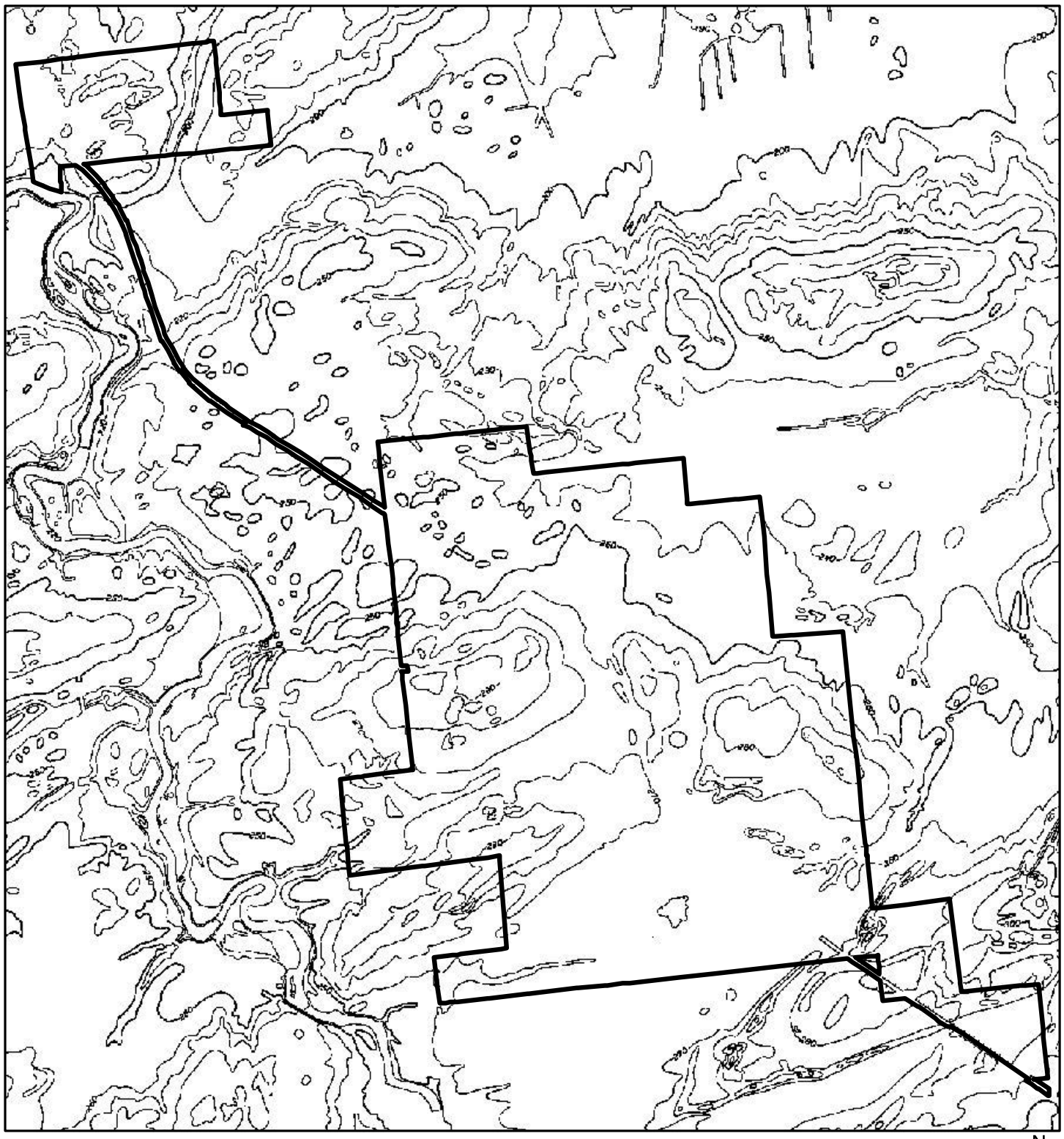


Forest Boundary

BRASHER STATE FOREST
ST. LAWRENCE 6
Topography and Slope
FIGURE 6

N

0 0.25 0.5
Miles

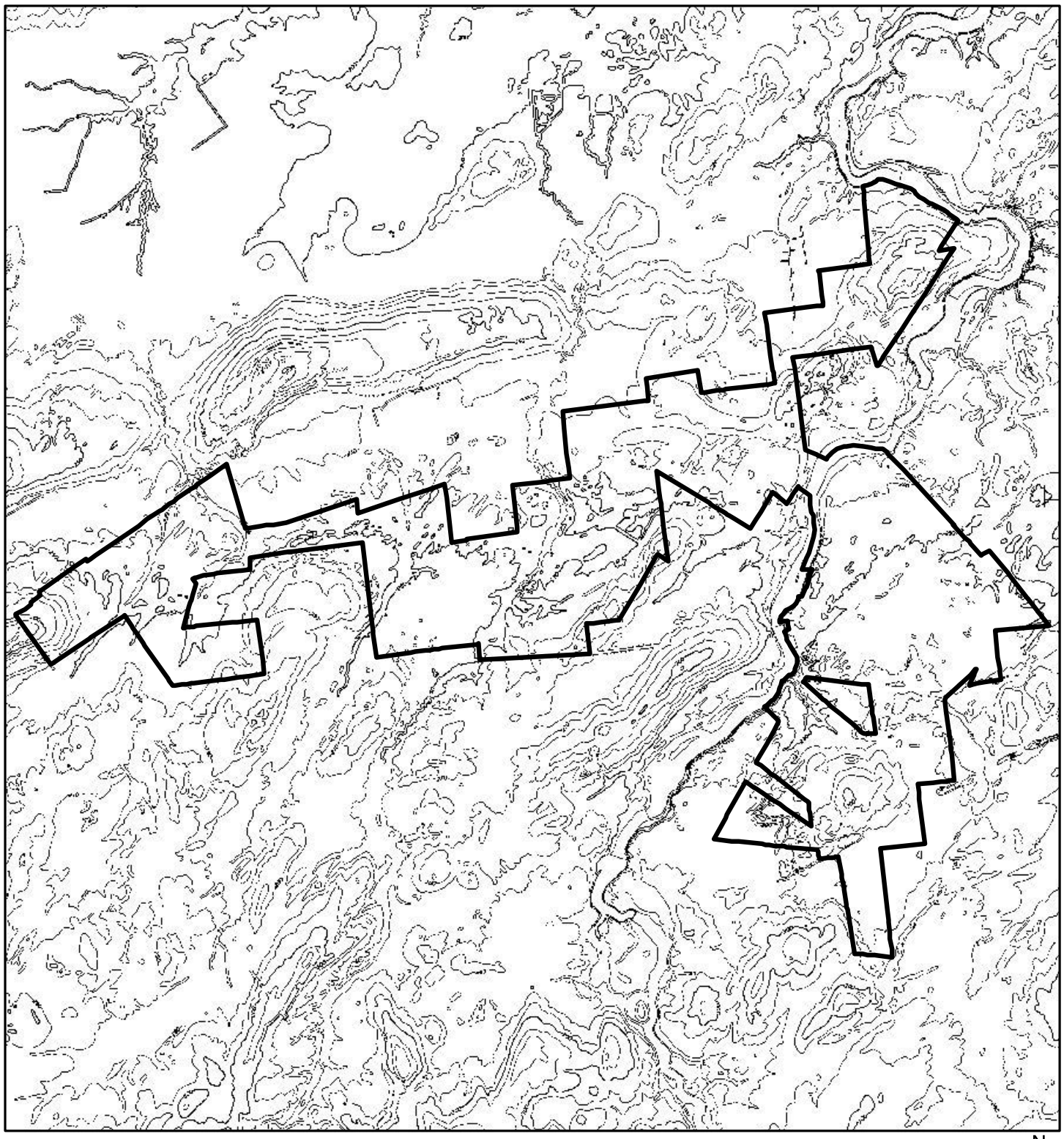


Forest Boundary

BRASHER STATE FOREST
ST. LAWRENCE 7
Topography and Slope
FIGURE 6

N

0 0.25 0.5
Miles

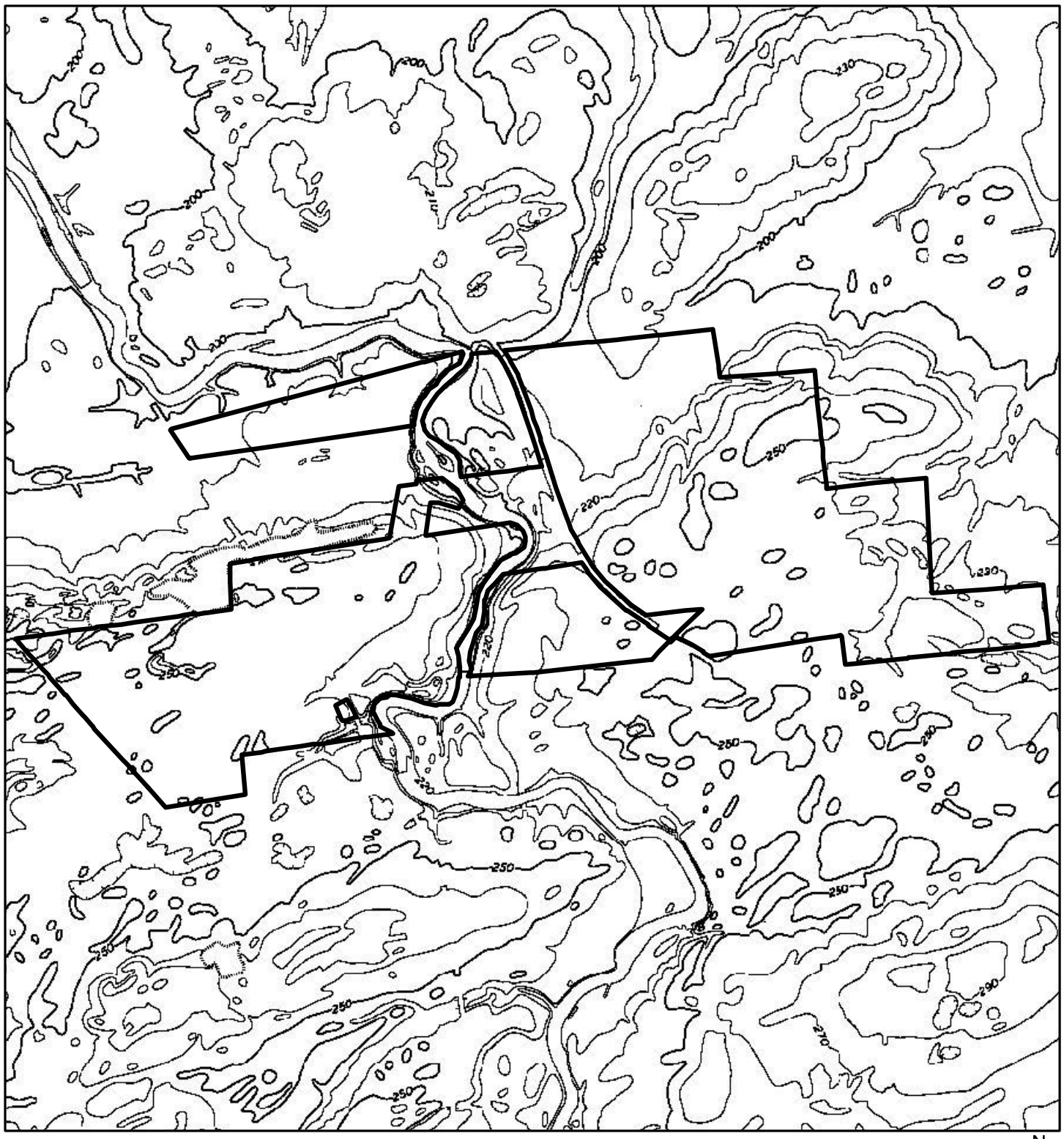


Forest Boundary

BRASHER STATE FOREST
ST. LAWRENCE 10
Topography and Slope
FIGURE 6

N

0 0.25 0.5
Miles



Forest Boundary

BRASHER STATE FOREST
ST. LAWRENCE 17
Topography and Slope
FIGURE 6

N

0 0.25 0.5
Miles

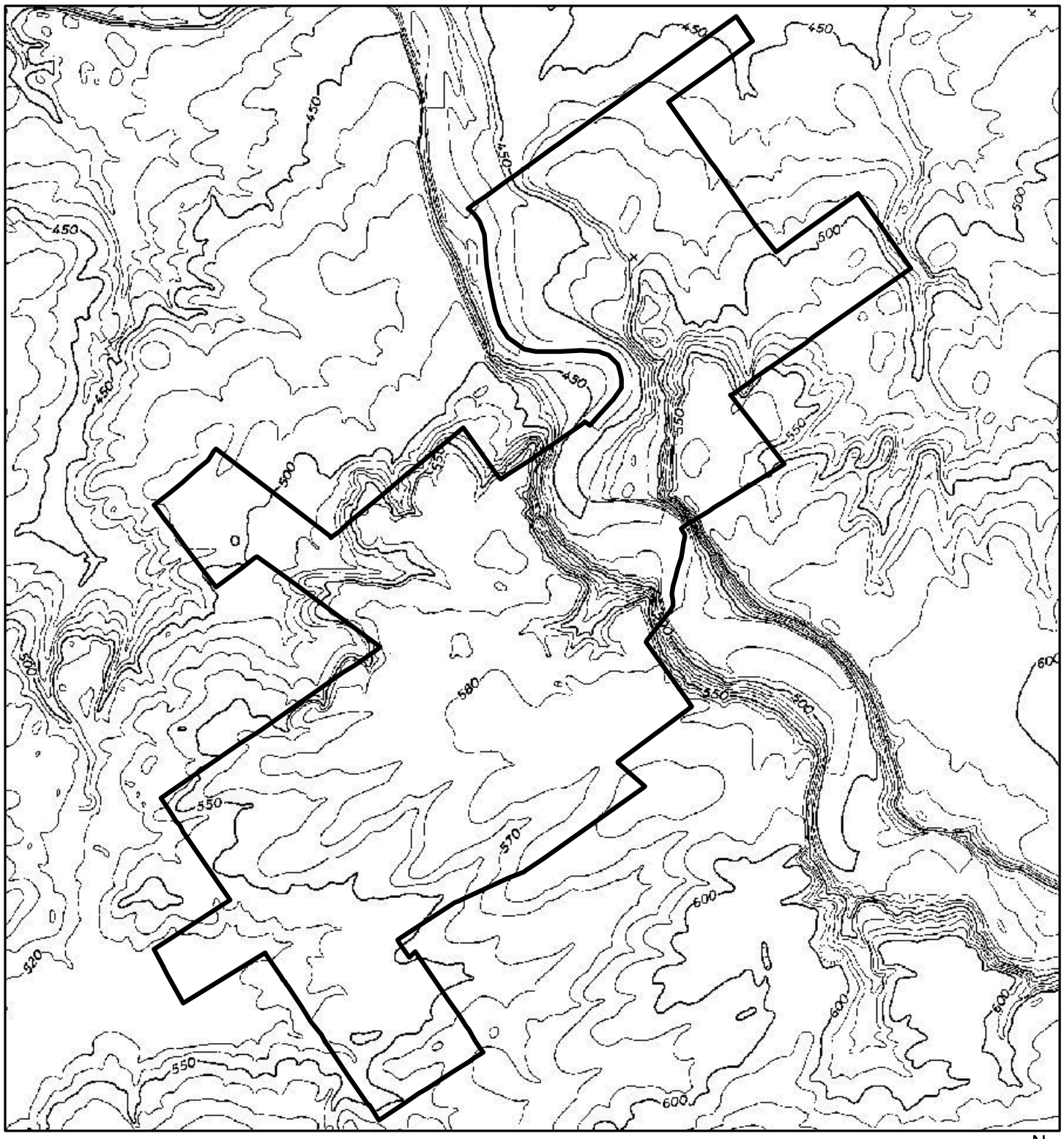


Forest Boundary

BUCKTON STATE FOREST
ST. LAWRENCE 31
Topography and Slope
FIGURE 6

N

0 0.25 0.5
Miles



Forest Boundary

FORT JACKSON STATE FOREST
ST. LAWRENCE 22
Topography and Slope
FIGURE 6

N

0 0.25 0.5 Miles



Forest Boundary

GRANTVILLE STATE FOREST
ST. LAWRENCE 15
Topography and Slope
FIGURE 6

N

0 0.25 0.5
Miles

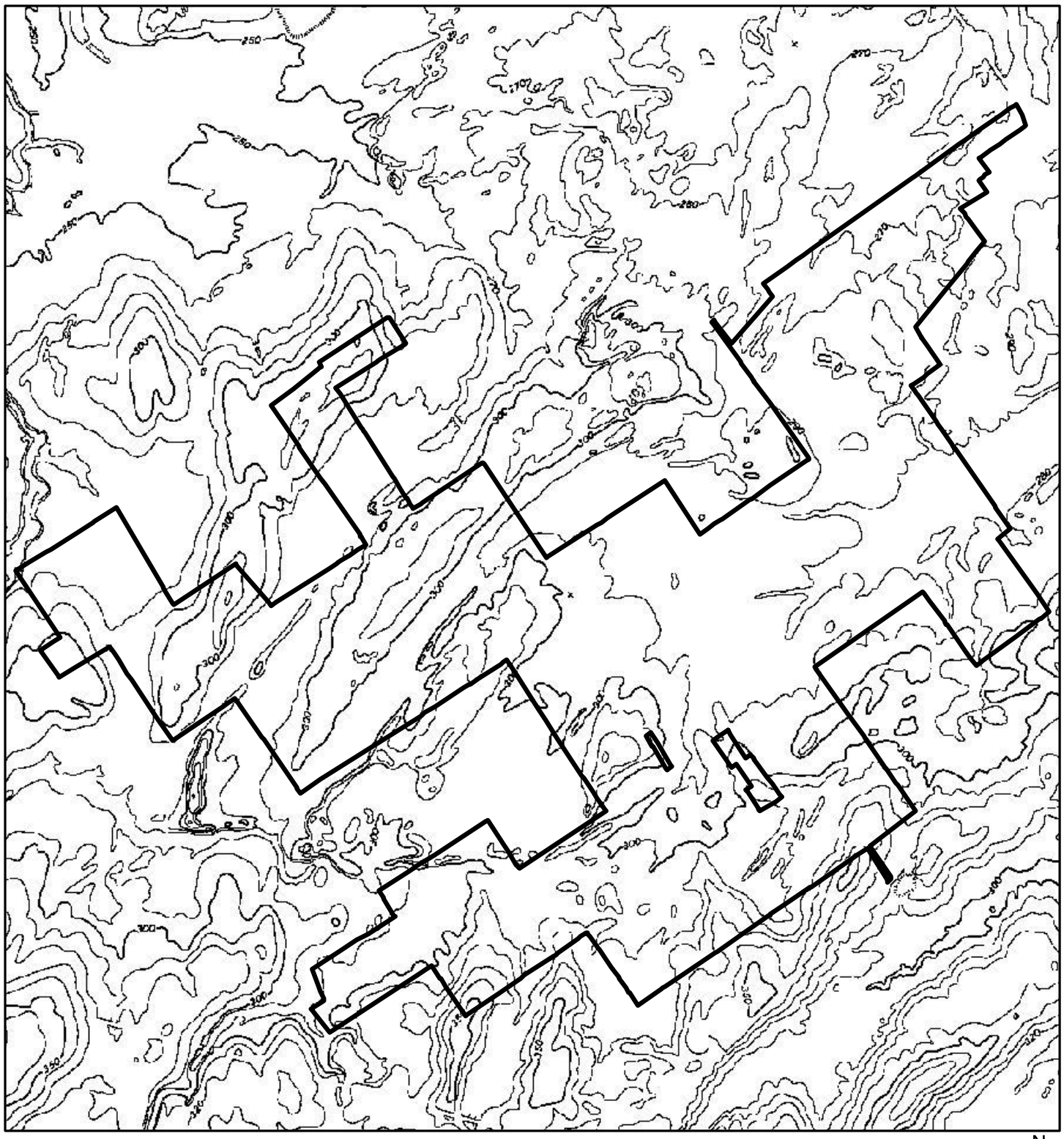


Forest Boundary

KNAPP STATION STATE FOREST
ST. LAWRENCE 11
Topography and Slope
FIGURE 6

N

0 0.25 0.5 Miles

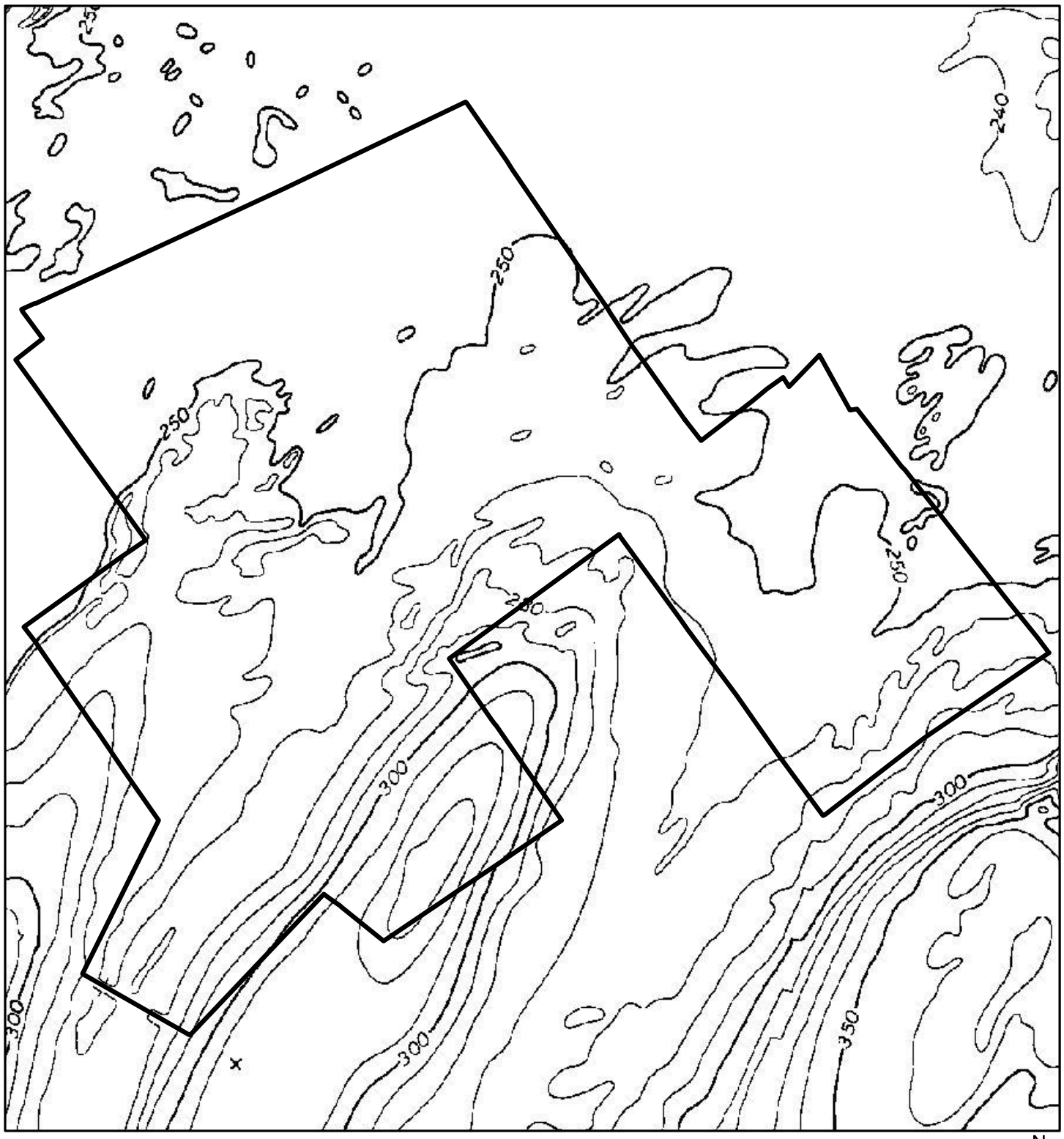


Forest Boundary

LOST NATION STATE FOREST
ST. LAWRENCE 9
Topography and Slope
FIGURE 6

N

0 0.25 0.5
Miles



Forest Boundary

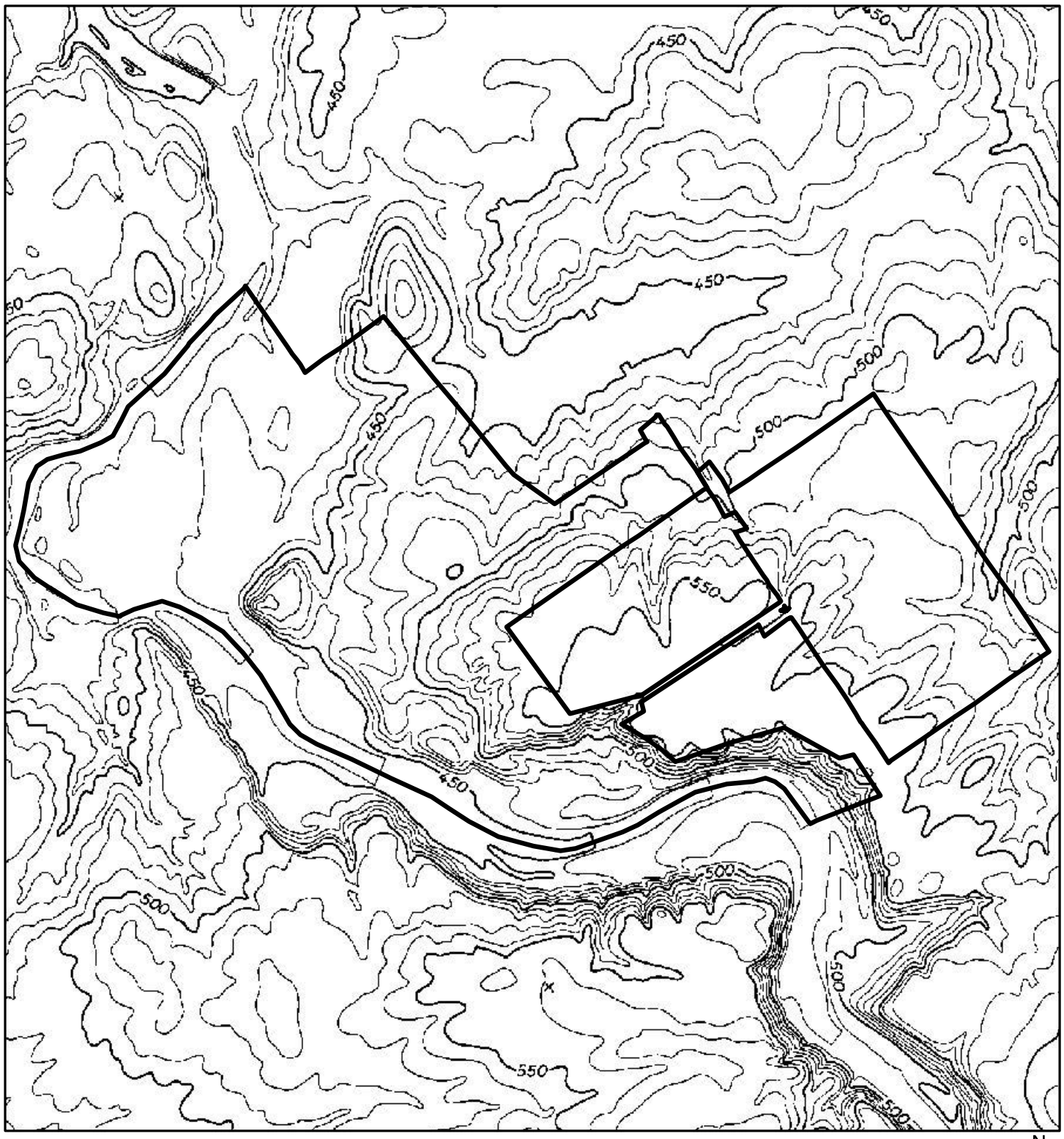
RAYMONDVILLE STATE FOREST
ST. LAWRENCE 33
Topography and Slope
FIGURE 6

N

0 0.25 0.5
Miles



SODOM STATE FOREST
ST. LAWRENCE 25
Topography and Slope
FIGURE 6



Forest Boundary

SOUTHVILLE STATE FOREST
ST. LAWRENCE 23
Topography and Slope
FIGURE 6

N

0 0.25 0.5
Miles

FIGURE 7. – MANAGEMENT DIRECTION MAPS

(see appendices and figures)

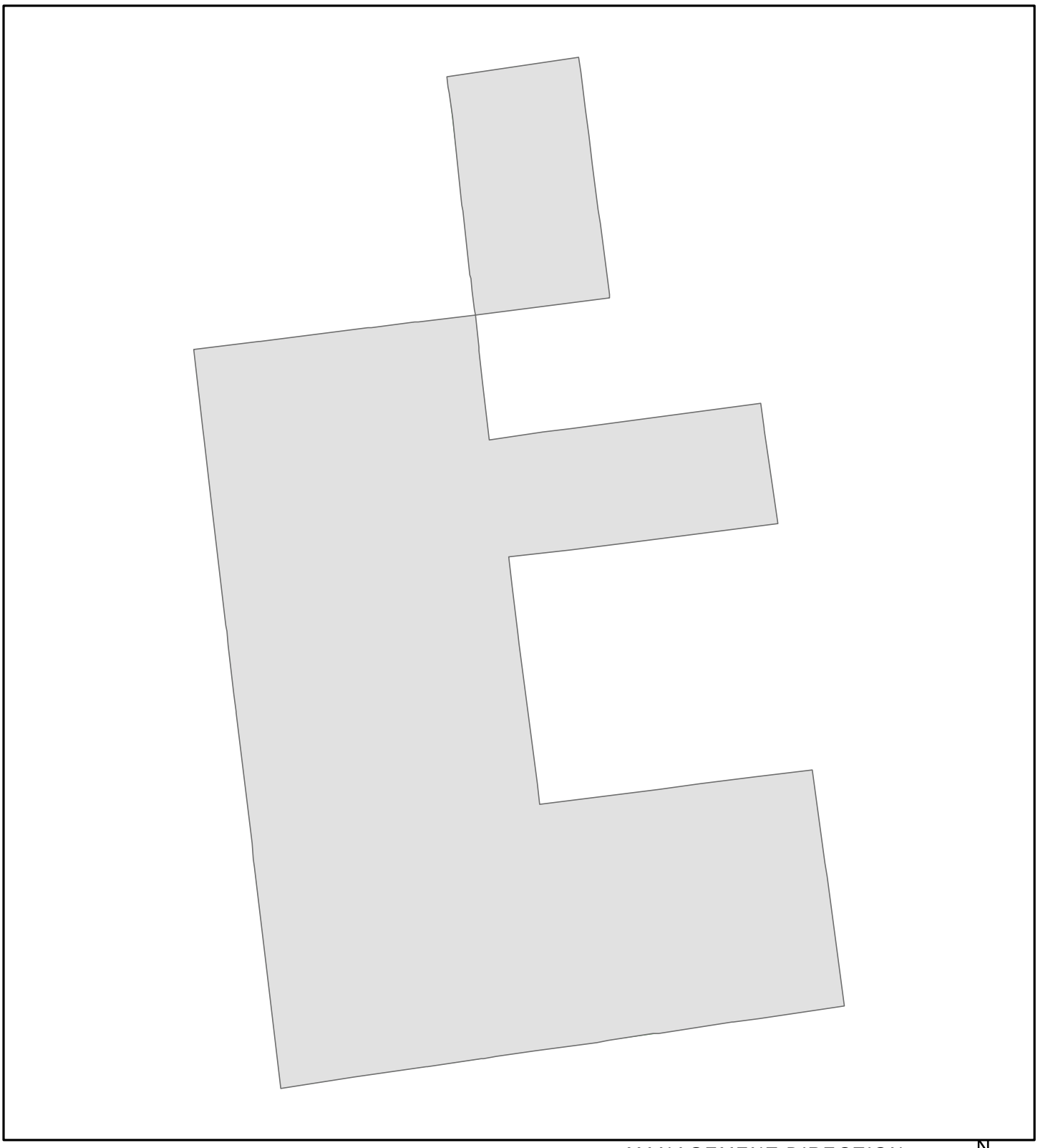


Early Successional
Even Aged / Even Aged
Even Aged / Un-Even Aged
Natural Area
No Scheduled Management 10 Yrs
Un-Even Aged / Un-Even Aged

MANAGEMENT DIRECTION
BOMBAY STATE FOREST
FRANKLIN 2
FIGURE 7

N

0 0.25 0.5
Miles

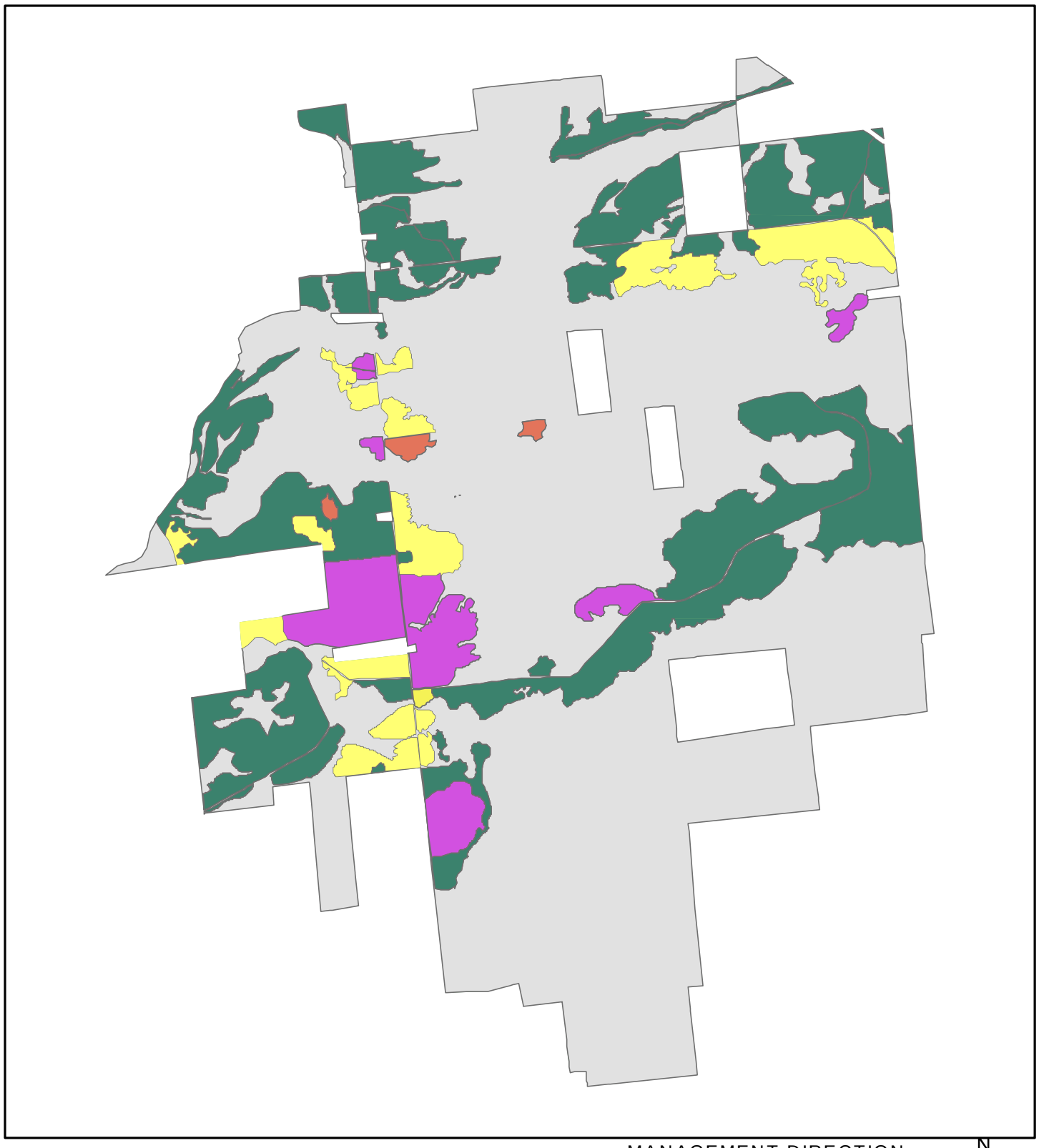


Early Successional
Even Aged / Even Aged
Even Aged / Un-Even Aged
Natural Area
No Scheduled Management 10 Yrs
Un-Even Aged / Un-Even Aged

MANAGEMENT DIRECTION
BOMBAY STATE FOREST
FRANKLIN 4
FIGURE 7

N

0 0.25 0.5
Miles

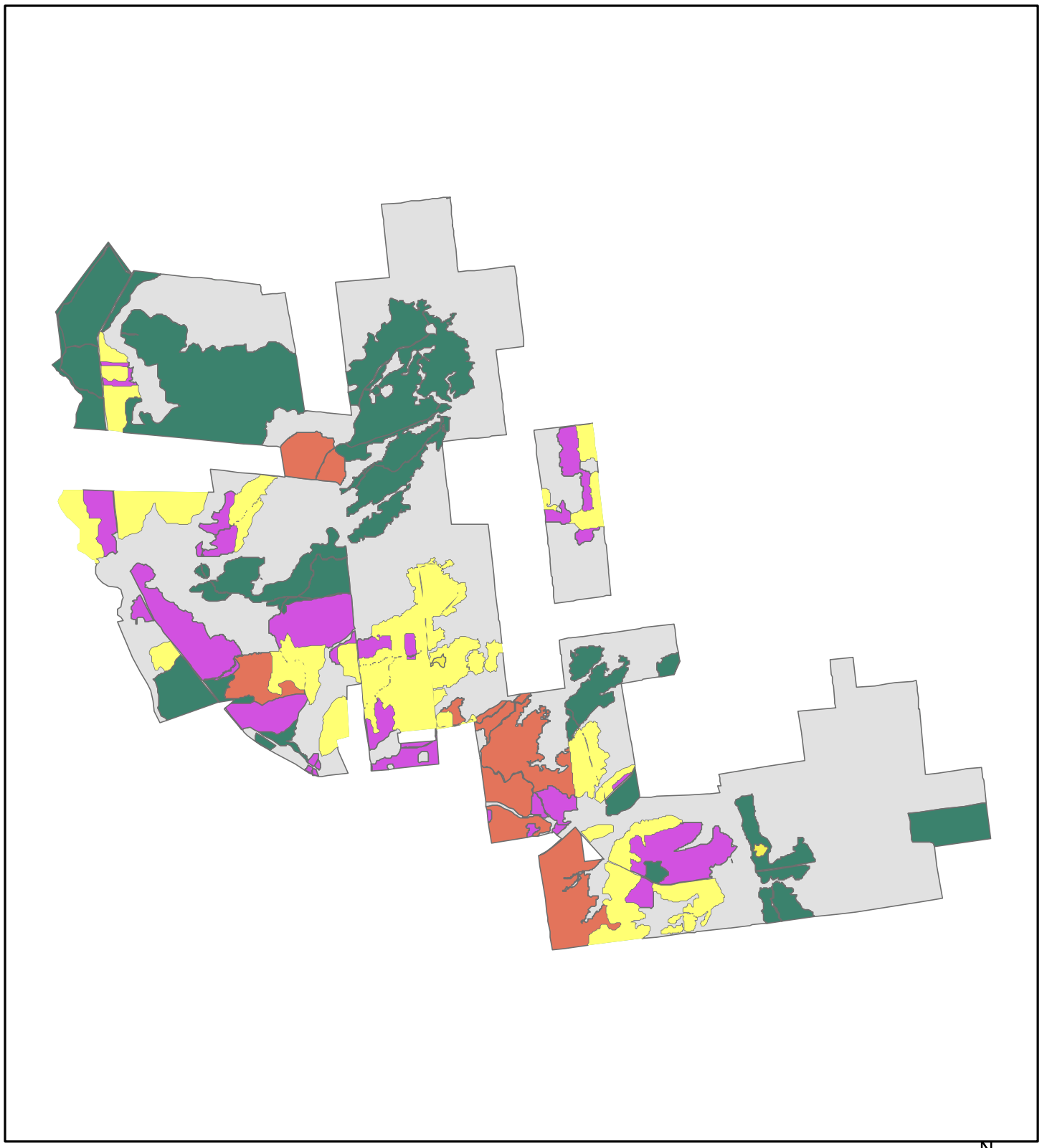


Early Successional
Even Aged / Even Aged
Even Aged / Un-Even Aged
Natural Area
No Scheduled Management 10 Yrs
Un-Even Aged / Un-Even Aged

0 0.25 0.5
Miles

N

MANAGEMENT DIRECTION
BRASHER STATE FOREST
ST. LAWRENCE 1
FIGURE 7

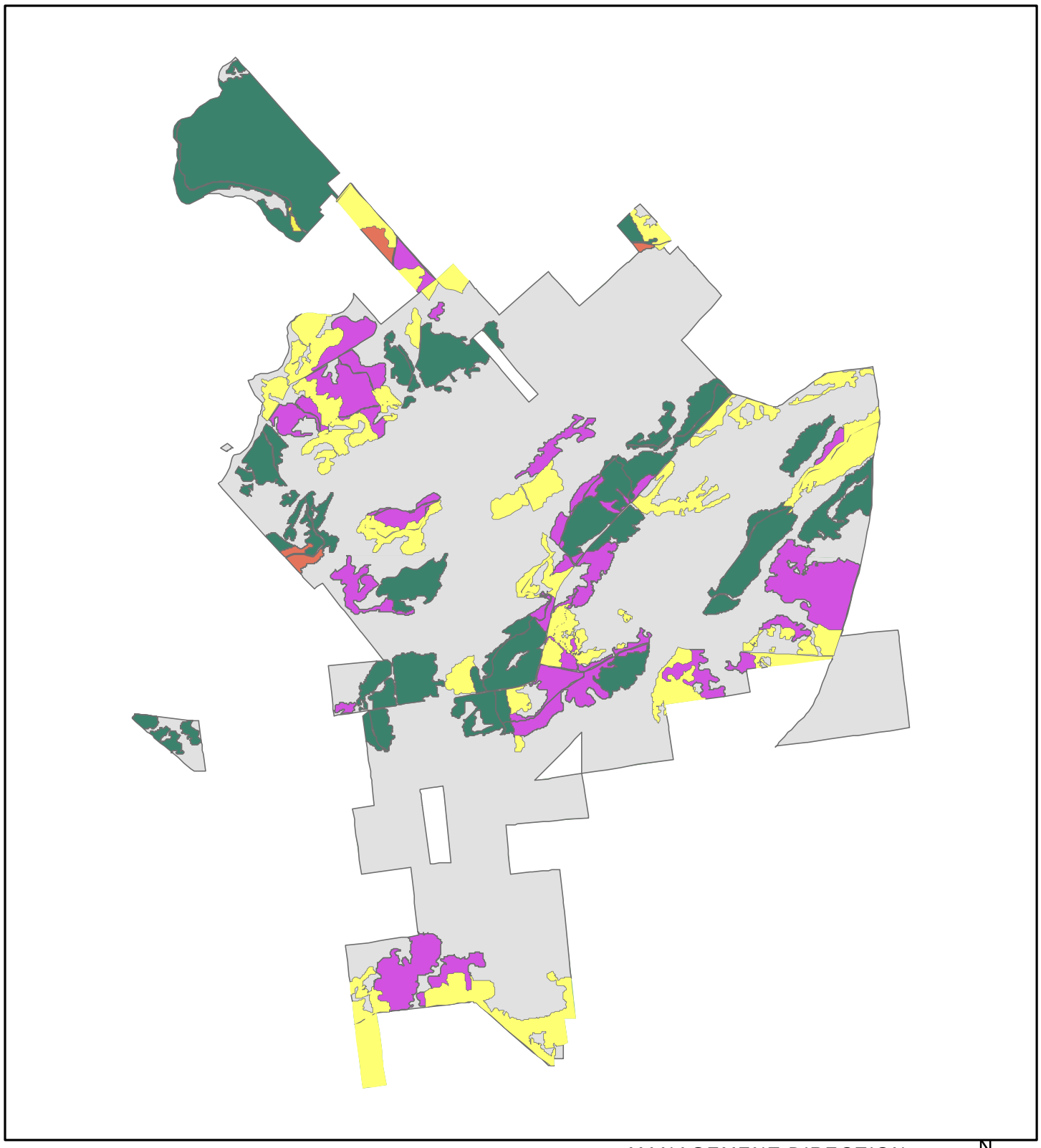


Early Successional
Even Aged / Even Aged
Even Aged / Un-Even Aged
Natural Area
No Scheduled Management 10 Yrs
Un-Even Aged / Un-Even Aged

0 0.25 0.5
Miles

N

MANAGEMENT DIRECTION
BRASHER STATE FOREST
ST. LAWRENCE 5
FIGURE 7

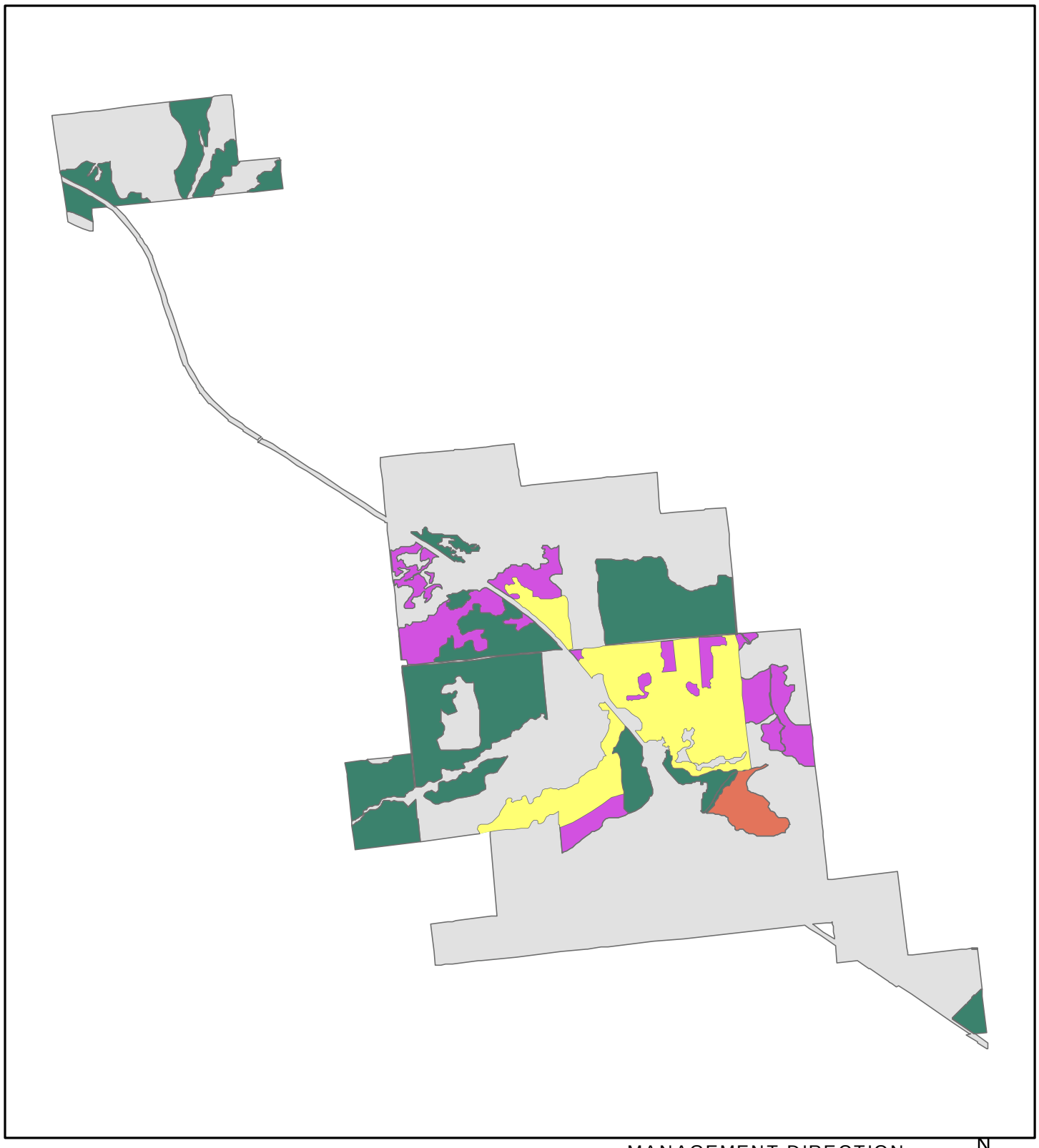


Early Successional
Even Aged / Even Aged
Even Aged / Un-Even Aged
Natural Area
No Scheduled Management 10 Yrs
Un-Even Aged / Un-Even Aged

0 0.25 0.5
Miles

N

MANAGEMENT DIRECTION
BRASHER STATE FOREST
ST. LAWRENCE 6
FIGURE 7

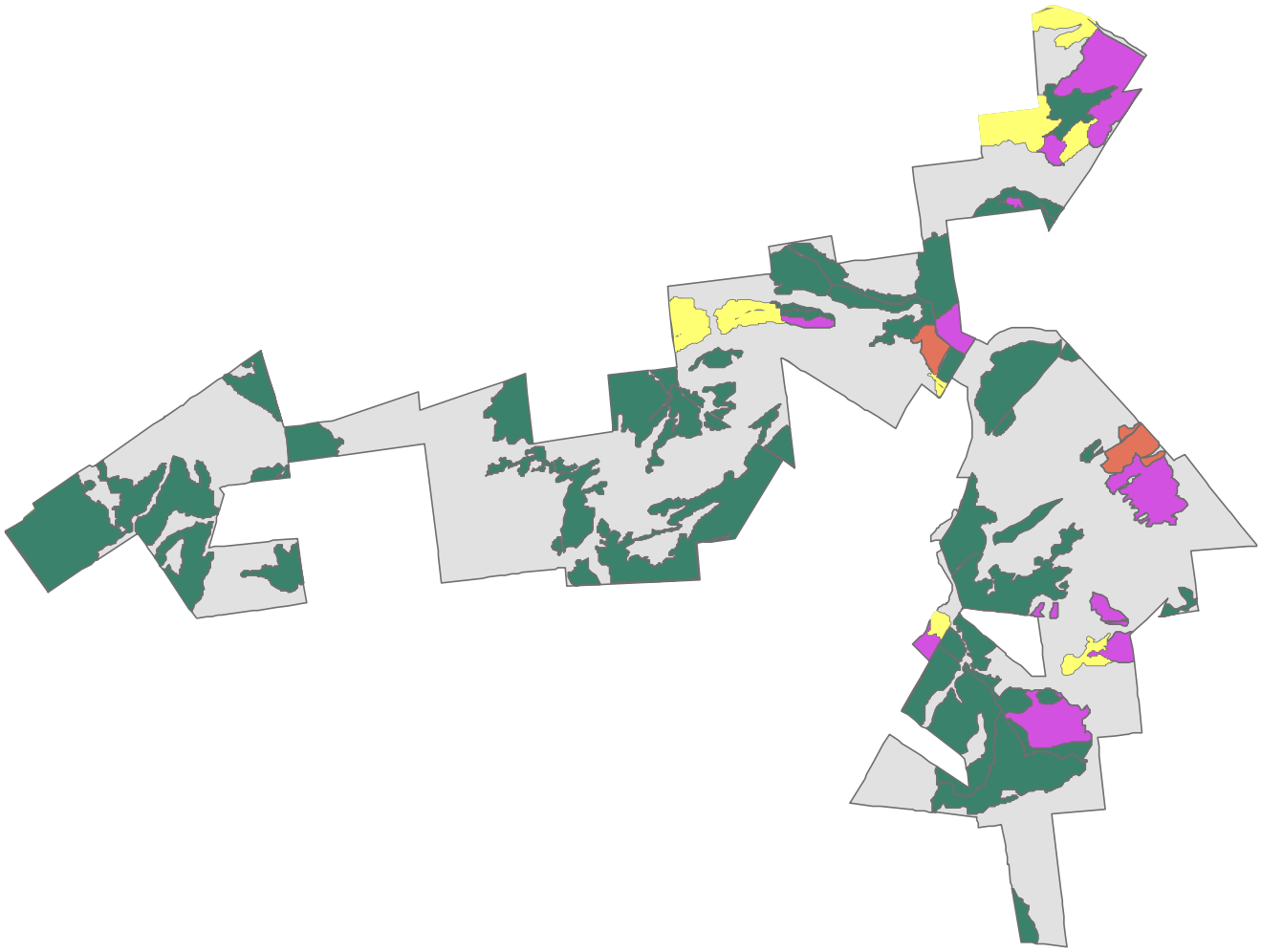


Early Successional
Even Aged / Even Aged
Even Aged / Un-Even Aged
Natural Area
No Scheduled Management 10 Yrs
Un-Even Aged / Un-Even Aged

0 0.25 0.5 Miles

N

MANAGEMENT DIRECTION
BRASHER STATE FOREST
ST. LAWRENCE 7
FIGURE 7

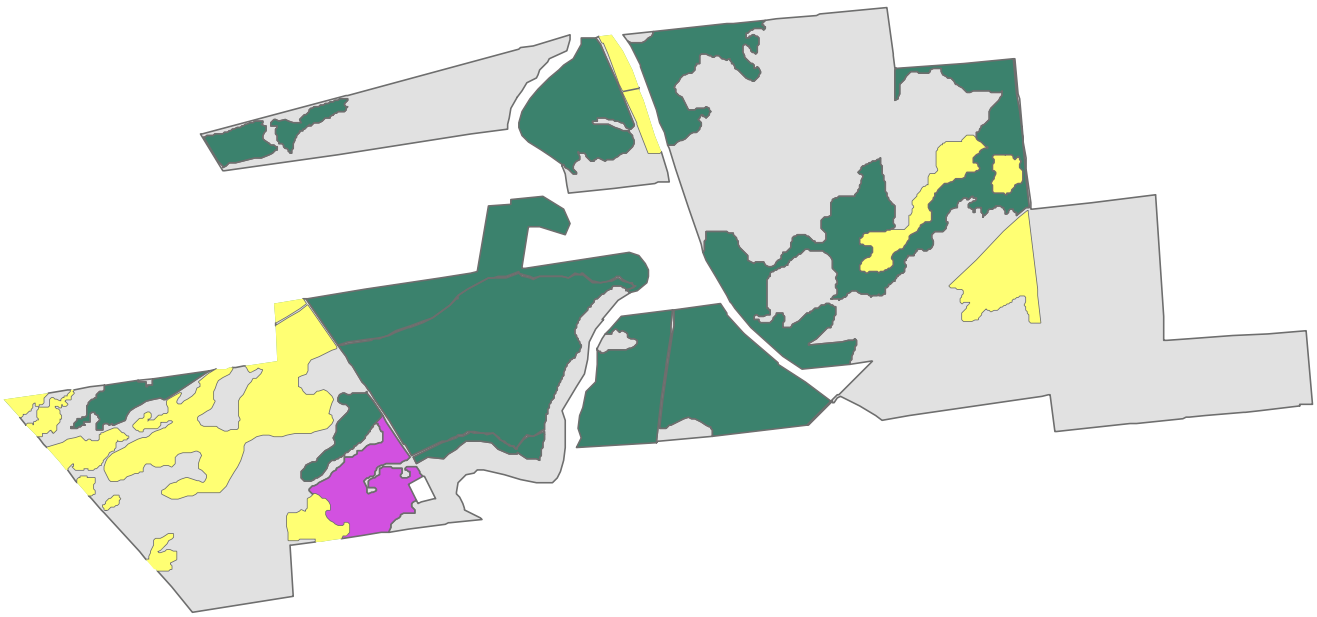


Early Successional
Even Aged / Even Aged
Even Aged / Un-Even Aged
Natural Area
No Scheduled Management 10 Yrs
Un-Even Aged / Un-Even Aged

0 0.25 0.5
Miles

N

MANAGEMENT DIRECTION
BRASHER STATE FOREST
ST. LAWRENCE 10
FIGURE 7



Early Successional
Even Aged / Even Aged
Even Aged / Un-Even Aged
Natural Area
No Scheduled Management 10 Yrs
Un-Even Aged / Un-Even Aged

MANAGEMENT DIRECTION
BRASHER STATE FOREST
ST. LAWRENCE 17
FIGURE 7

N

0 0.25 0.5 Miles

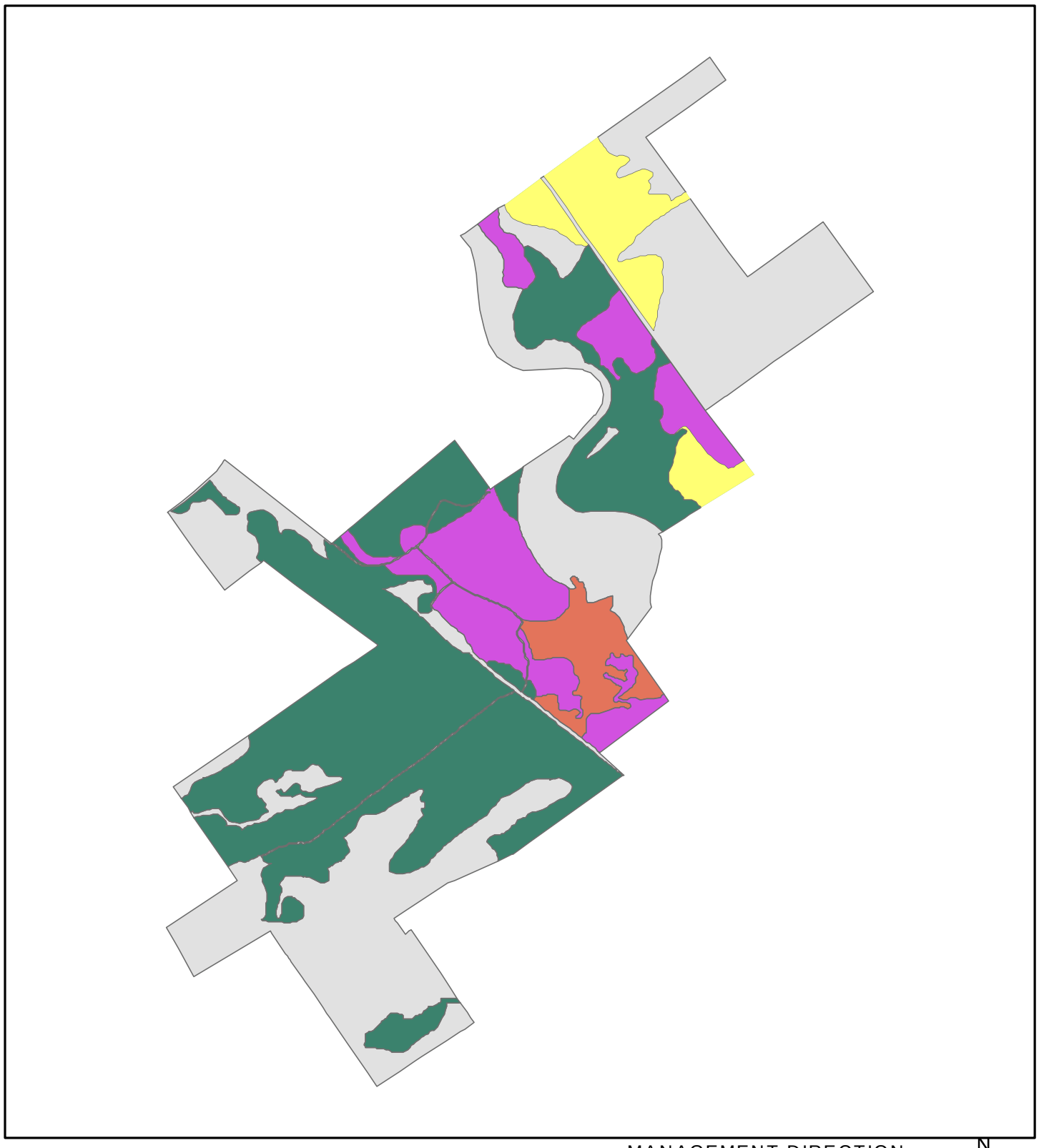


Early Successional
Even Aged / Even Aged
Even Aged / Un-Even Aged
Natural Area
No Scheduled Management 10 Yrs
Un-Even Aged / Un-Even Aged

MANAGEMENT DIRECTION
BUCKTON STATE FOREST
ST. LAWRENCE 31
FIGURE 7

N

0 0.25 0.5
Miles

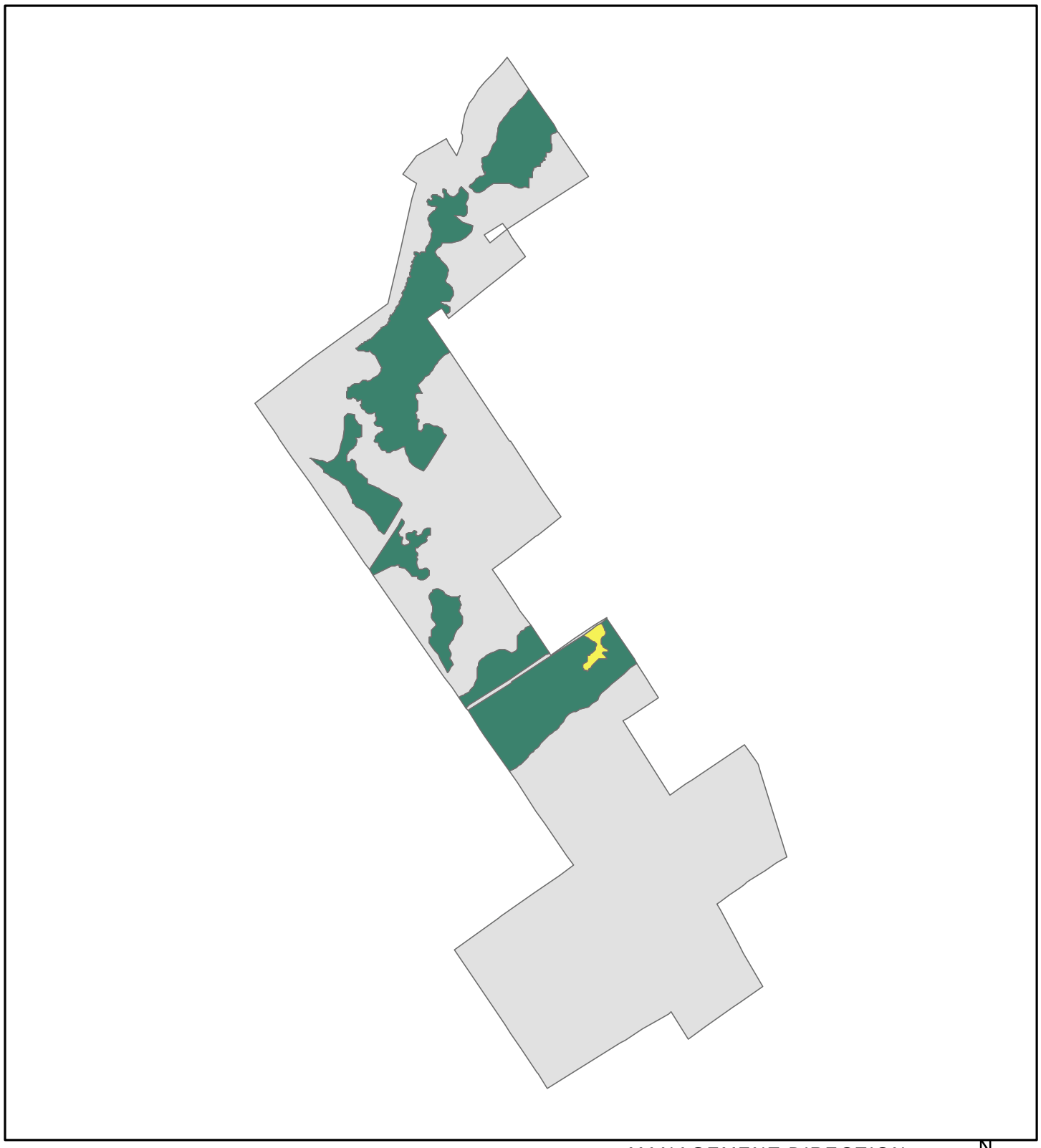


Early Successional
Even Aged / Even Aged
Even Aged / Un-Even Aged
Natural Area
No Scheduled Management 10 Yrs
Un-Even Aged / Un-Even Aged

MANAGEMENT DIRECTION
FORT JACKSON STATE FOREST
ST. LAWRENCE 22
FIGURE 7

N

0 0.25 0.5 Miles

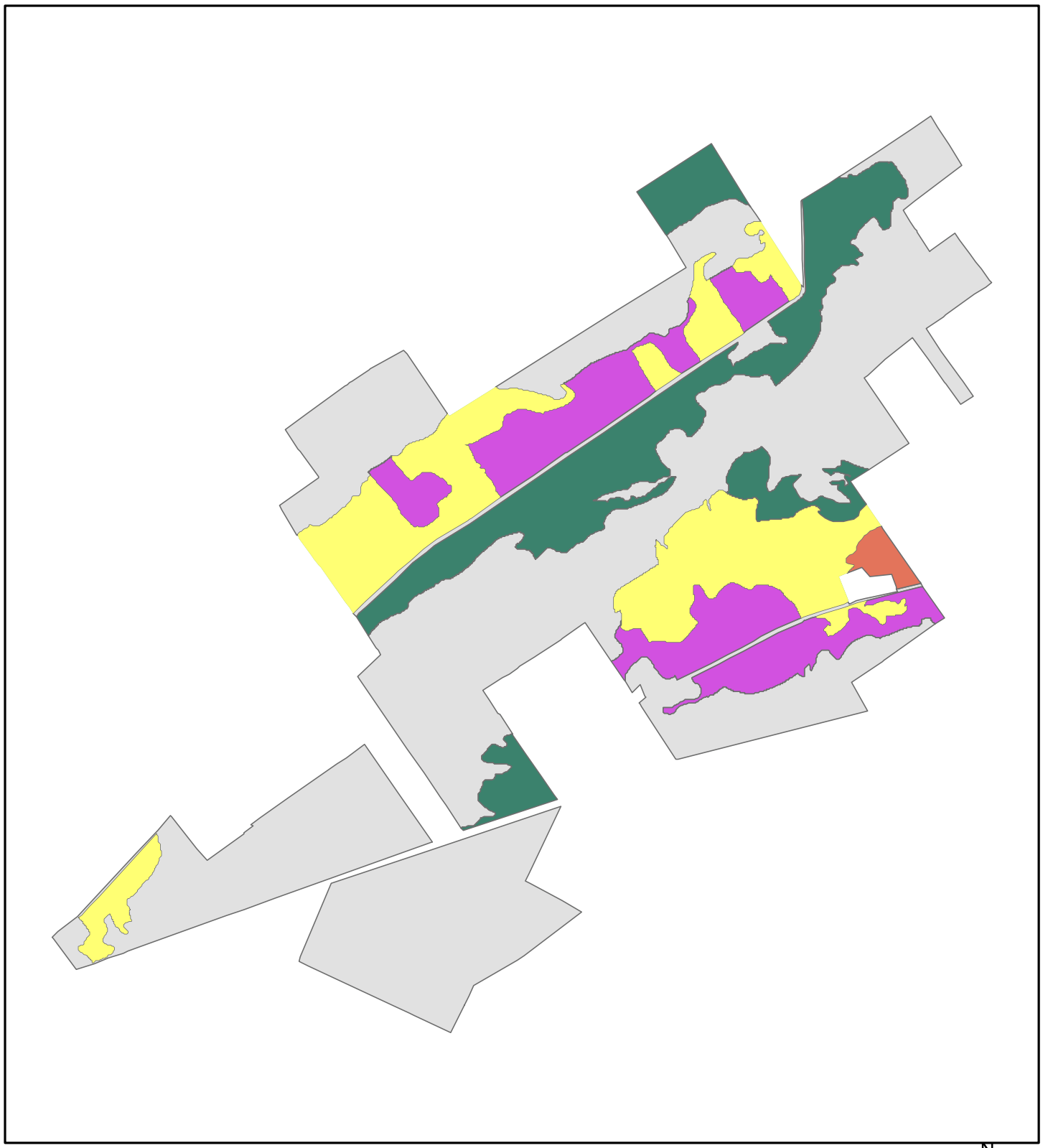


Early Successional
Even Aged / Even Aged
Even Aged / Un-Even Aged
Natural Area
No Scheduled Management 10 Yrs
Un-Even Aged / Un-Even Aged

MANAGEMENT DIRECTION
GRANTVILLE STATE FOREST
ST. LAWRENCE 15
FIGURE 7

N

0 0.25 0.5
Miles

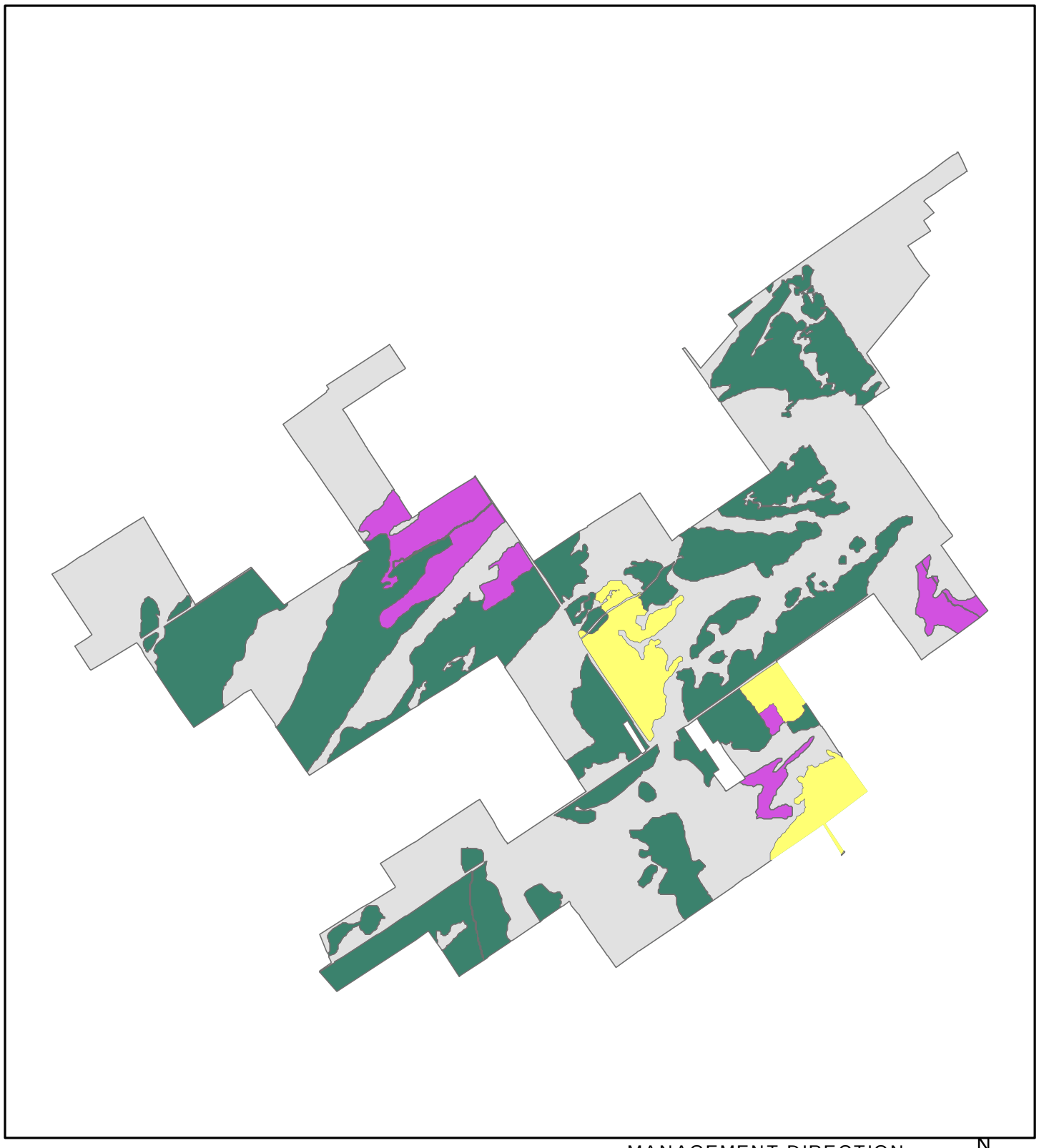


Early Successional
Even Aged / Even Aged
Even Aged / Un-Even Aged
Natural Area
No Scheduled Management 10 Yrs
Un-Even Aged / Un-Even Aged

MANAGEMENT DIRECTION
KNAPP STATION STATE FOREST
ST. LAWRENCE 11
FIGURE 7

N

0 0.25 0.5 Miles

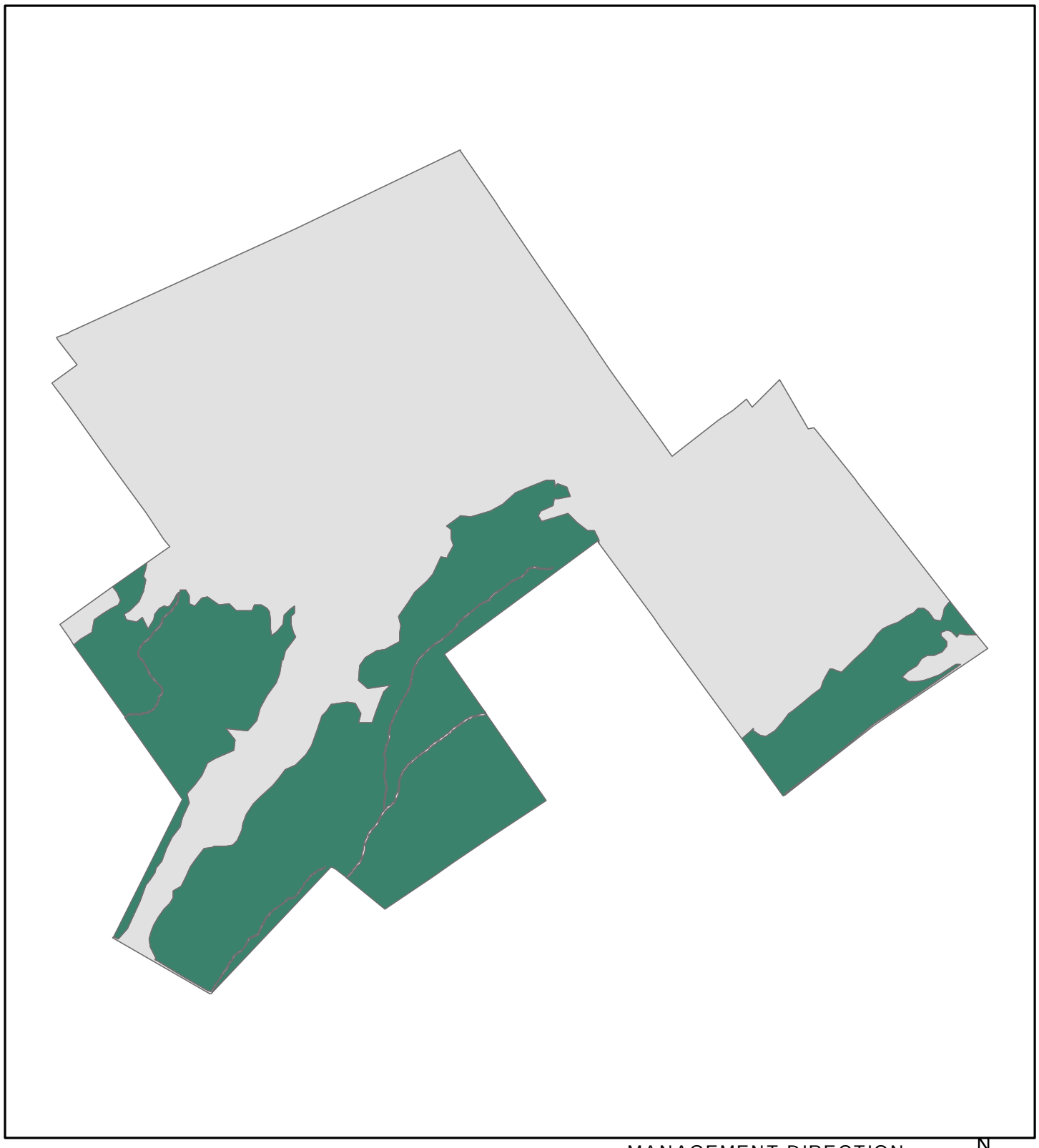


Early Successional
Even Aged / Even Aged
Even Aged / Un-Even Aged
Natural Area
No Scheduled Management 10 Yrs
Un-Even Aged / Un-Even Aged

0 0.25 0.5
Miles

N

MANAGEMENT DIRECTION
LOST NATION STATE FOREST
ST. LAWRENCE 9
FIGURE 7



Early Successional
Even Aged / Even Aged
Even Aged / Un-Even Aged
Natural Area
No Scheduled Management 10 Yrs
Un-Even Aged / Un-Even Aged

MANAGEMENT DIRECTION
RAYMONDVILLE STATE FOREST
ST. LAWRENCE 33
FIGURE 7

N

0 0.25 0.5 Miles

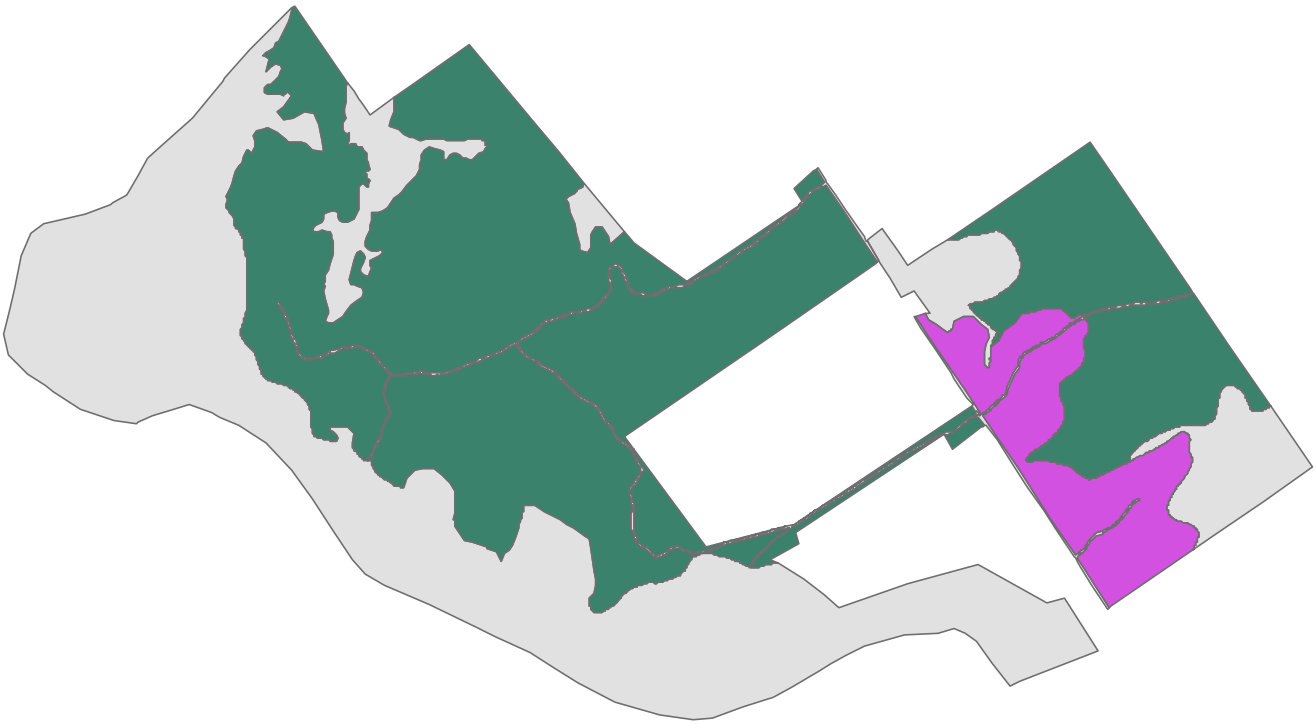


Early Successional
Even Aged / Even Aged
Even Aged / Un-Even Aged
Natural Area
No Scheduled Management 10 Yrs
Un-Even Aged / Un-Even Aged

MANAGEMENT DIRECTION
SODOM STATE FOREST
ST. LAWRENCE 25
FIGURE 7

N

0 0.25 0.5
Miles



Early Successional
Even Aged / Even Aged
Even Aged / Un-Even Aged
Natural Area
No Scheduled Management 10 Yrs
Un-Even Aged / Un-Even Aged

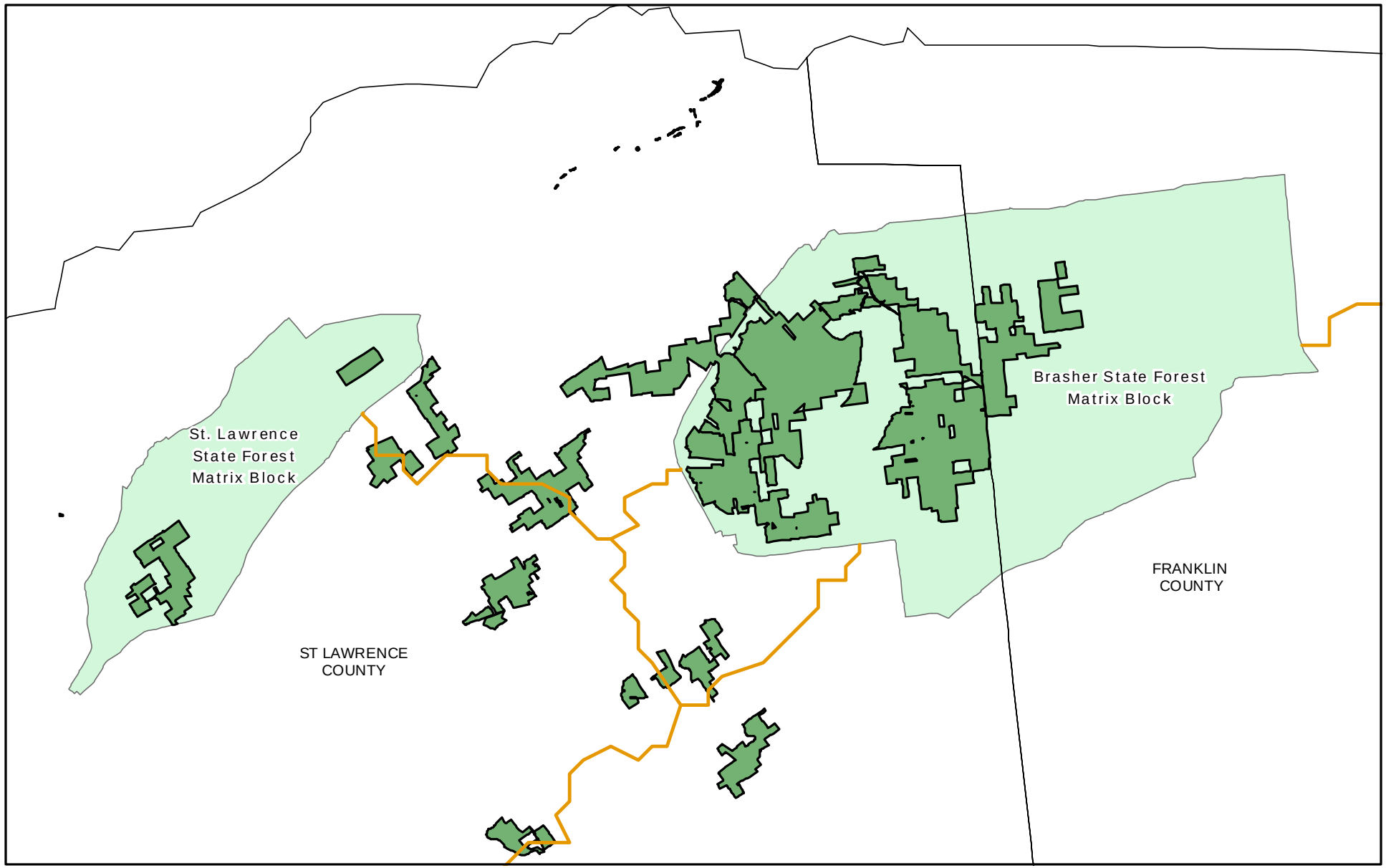
MANAGEMENT DIRECTION
SOUTHVILLE STATE FOREST
ST. LAWRENCE 23
FIGURE 7

N

0 0.25 0.5 Miles

FIGURE 8. – MATRIX FOREST BLOCK AND CONNECTIVITY CORRIDOR MAP

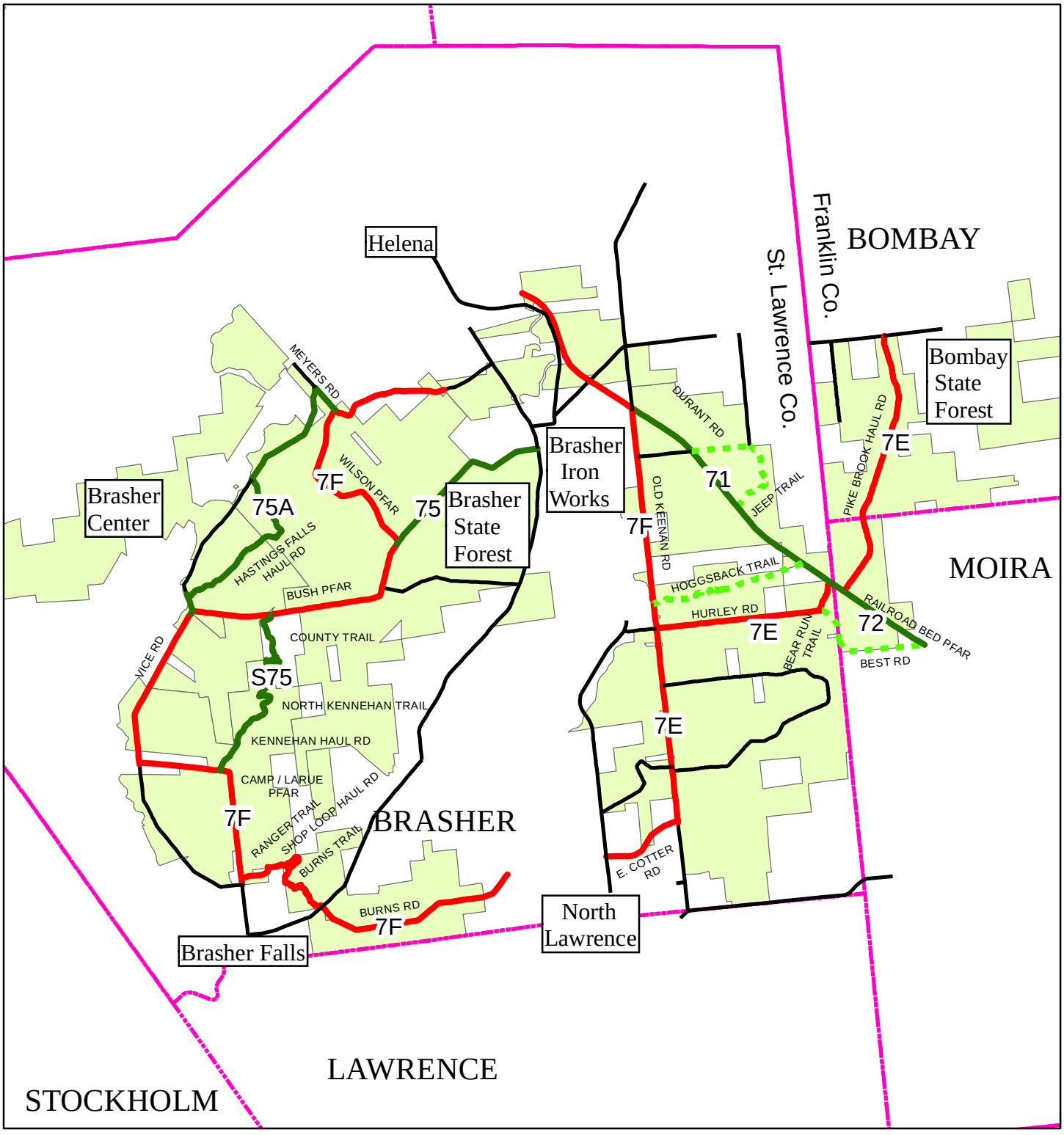
(see appendices and figures)



FOREST MATRIX BLOCKS AND CONNECTIVITY
ST. LAWRENCE FLATLANDS UNIT
FIGURE 8

FIGURE 9. – DESIGNATED SNOWMOBILE TRAIL MAPS

(see appendices and figures)



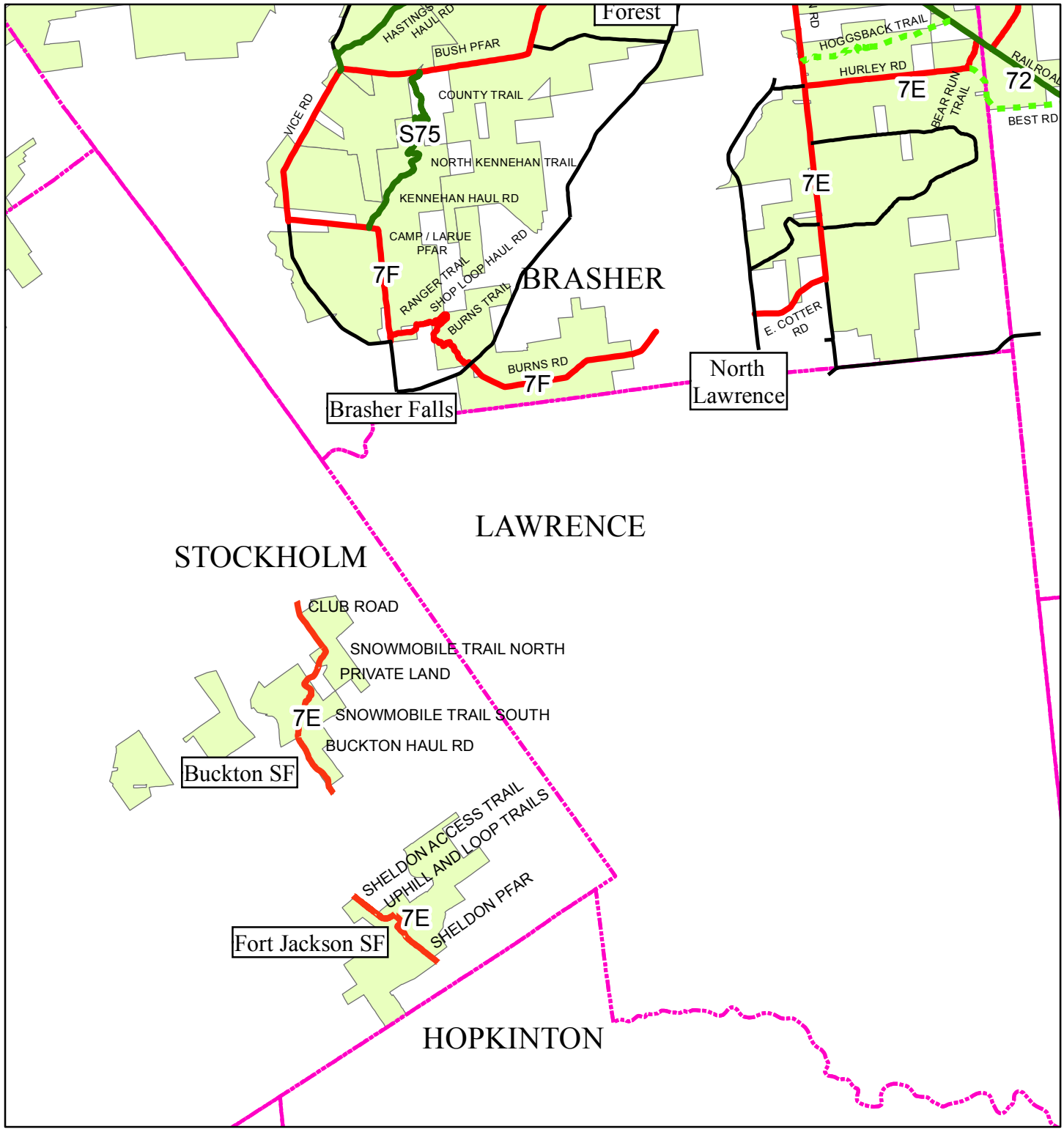
SNOWMOBILE TRAILS

- CORRIDOR
- SECONDARY
- UNFUNDED
- OTHER ROADS
- St Law Flatlands UMP

DESIGNATED SNOWMOBILE TRAILS
ST. LAWRENCE FLATLANDS UNIT
FIGURE 9

N

0 1.9 Miles



SNOWMOBILE TRAILS

- CORRIDOR
- SECONDARY
- UNFUNDED
- OTHER ROADS
- St Law Flatlands UMP

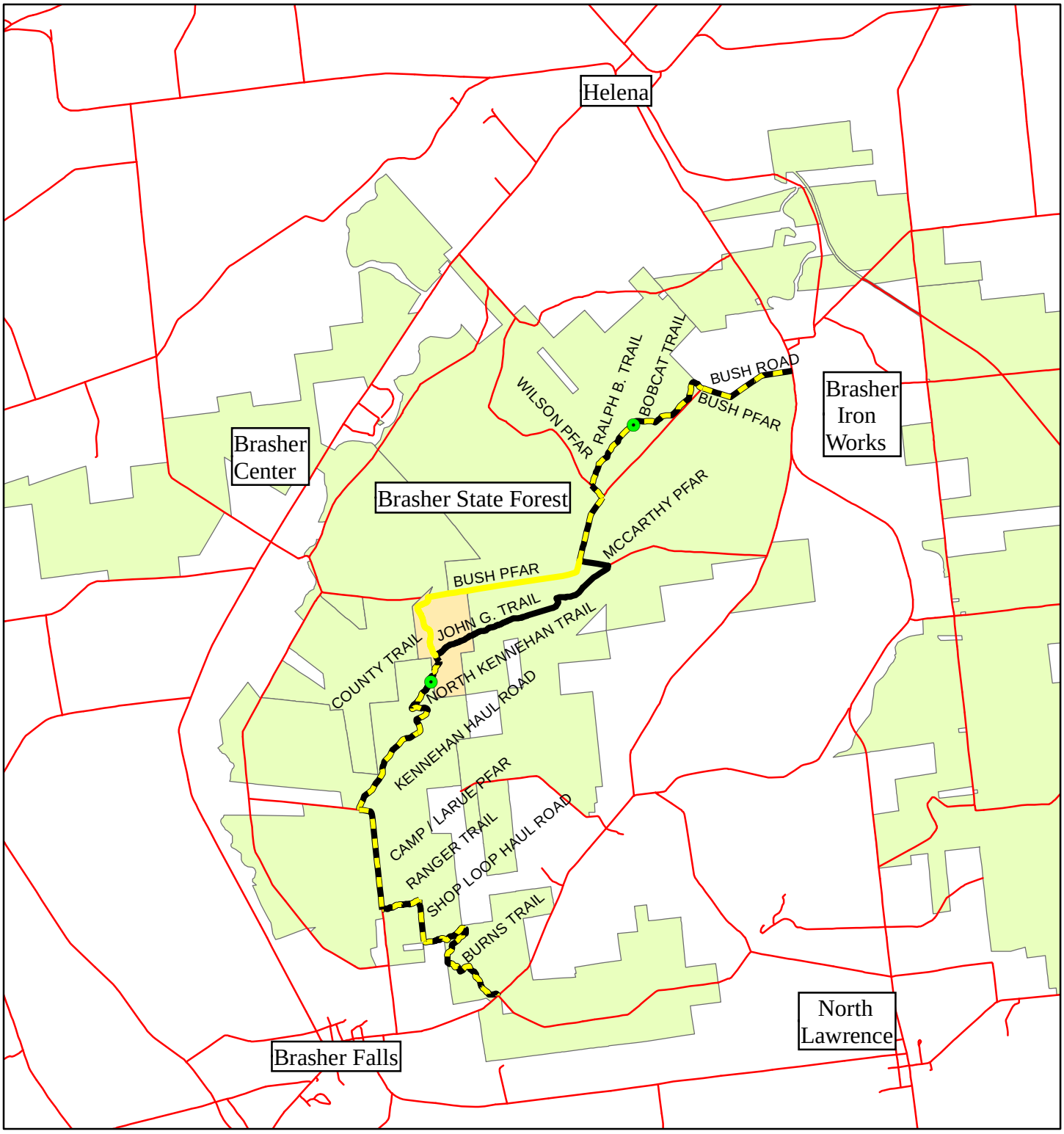
DESIGNATED SNOWMOBILE TRAILS
ST. LAWRENCE FLATLANDS UNIT
FIGURE 9

N

0 1.9 Miles

FIGURE 10. – MULTI-USE TRAIL ALTERNATIVES MAPS

(see appendices and figures)



Major Work Needed

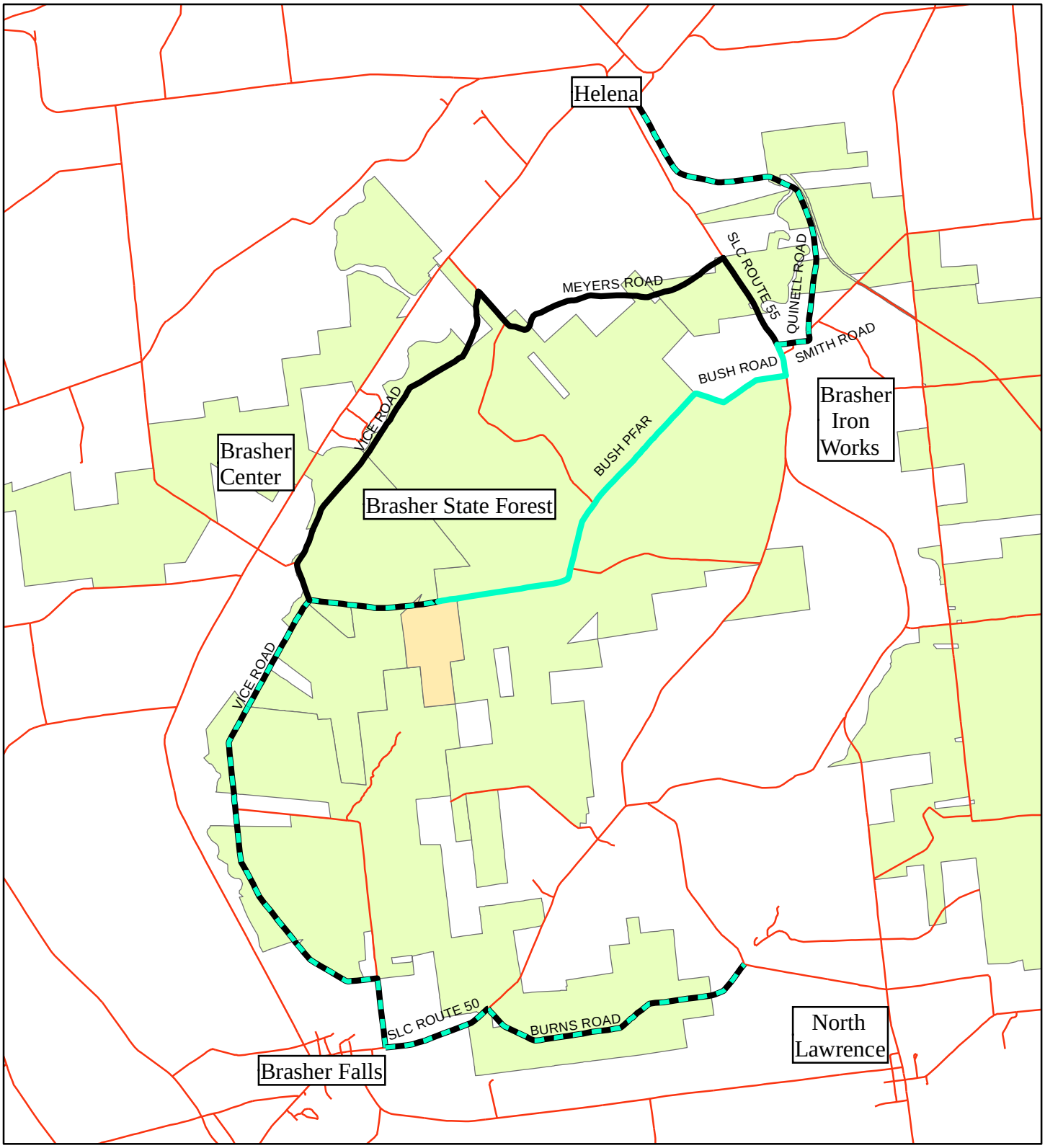
Alternatives

- 1a
- 1b
- Used by both 1a and 1b
- County Forests
- St Law Flatlands UMP

MULTI-USE TRAIL ALTERNATIVES
ST. LAWRENCE FLATLANDS UNIT
FIGURE 10

N

0 1.4 Miles



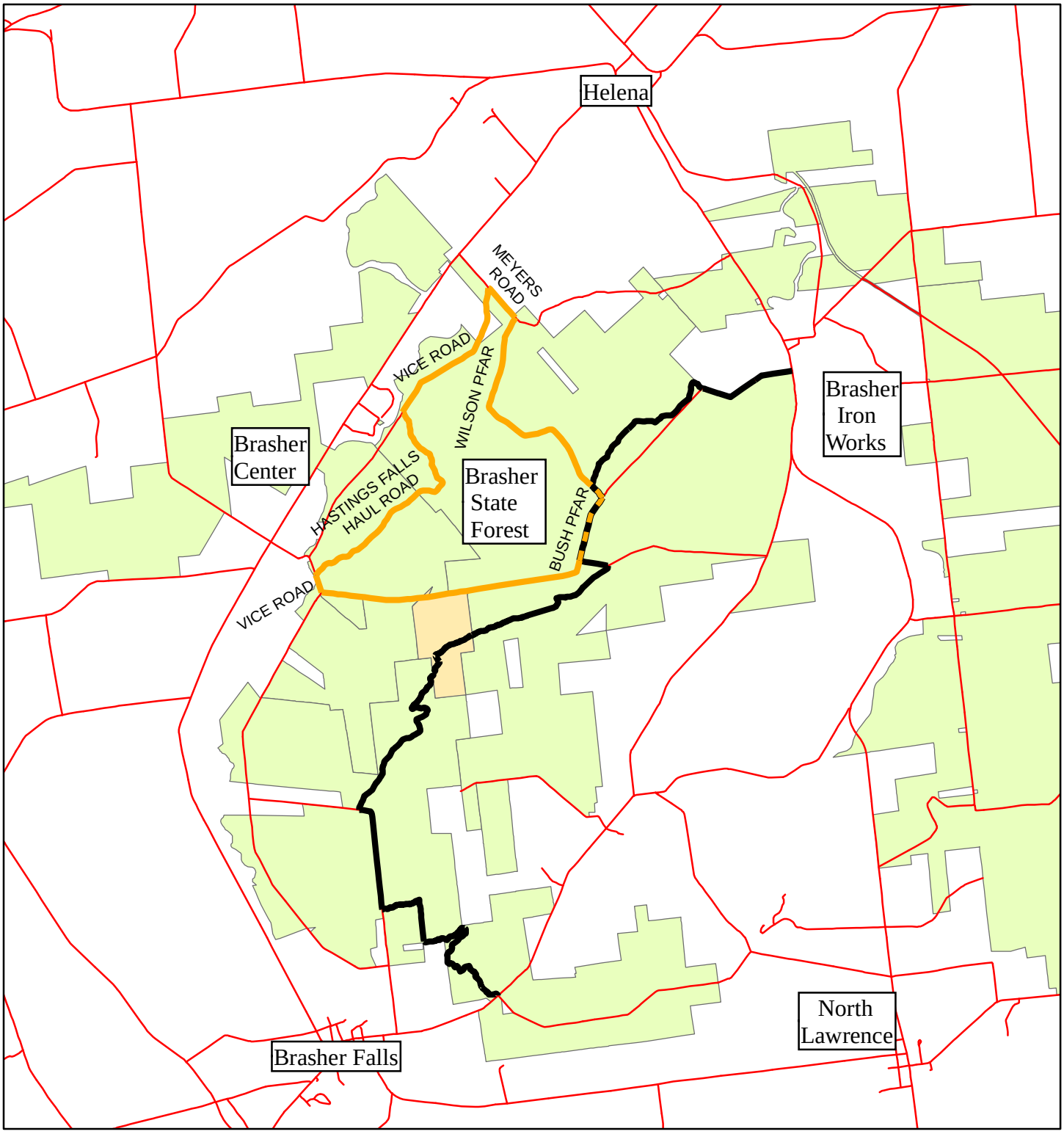
Alternatives

- 1c
- 1d
- Used by both 1c and 1d
- County Forests
- St Law Flatlands UMP

MULTI-USE TRAIL ALTERNATIVES
ST. LAWRENCE FLATLANDS UNIT
FIGURE 10

N

0 1.3 Miles



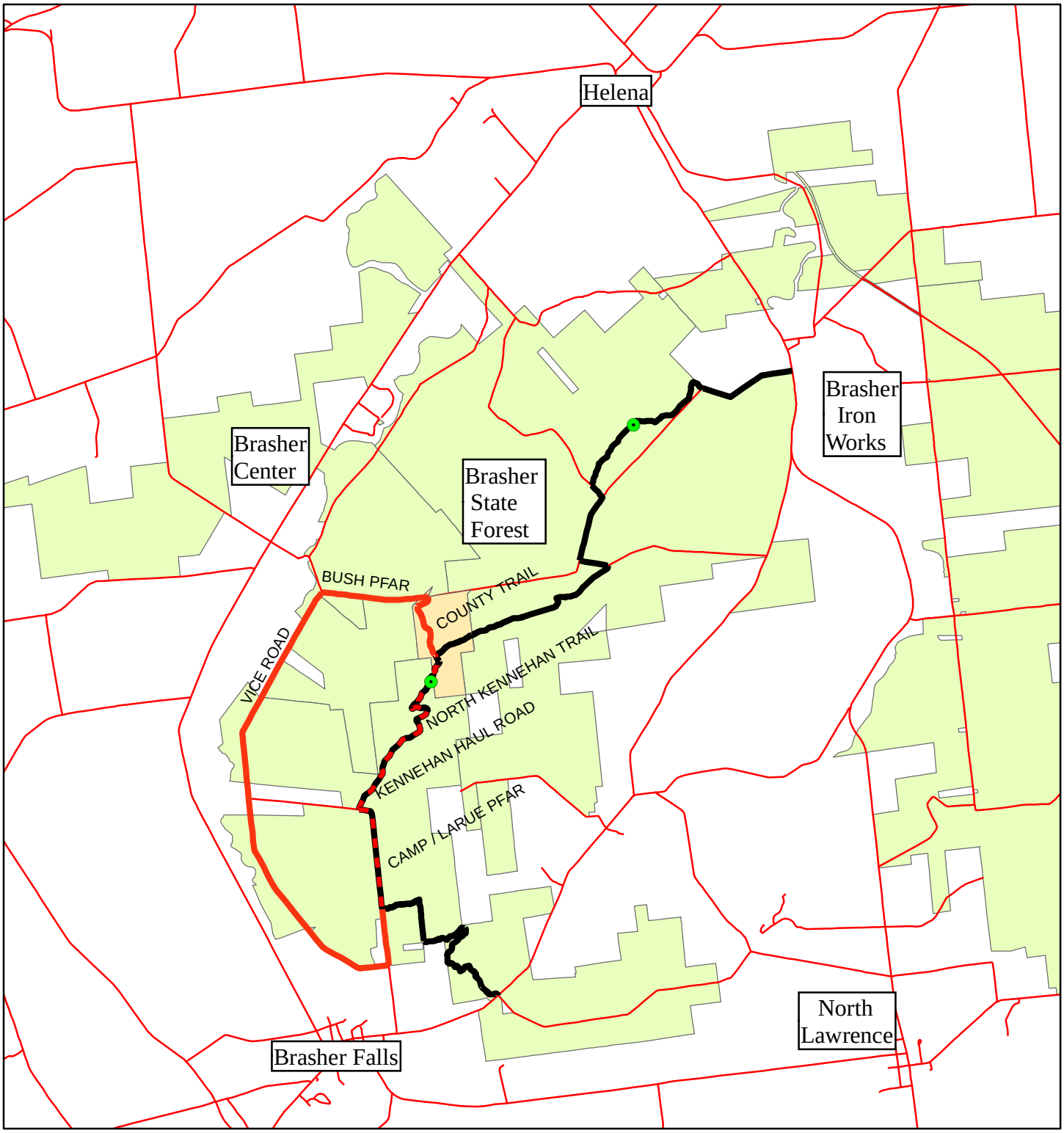
Alternatives

- 1a
- 2a
- Used by both 1a and 2a
- County Forests
- St Law Flatlands UMP

MULTI-USE TRAIL ALTERNATIVES
ST. LAWRENCE FLATLANDS UNIT
FIGURE 10

N

0 1.4 Miles



Major Work Needed

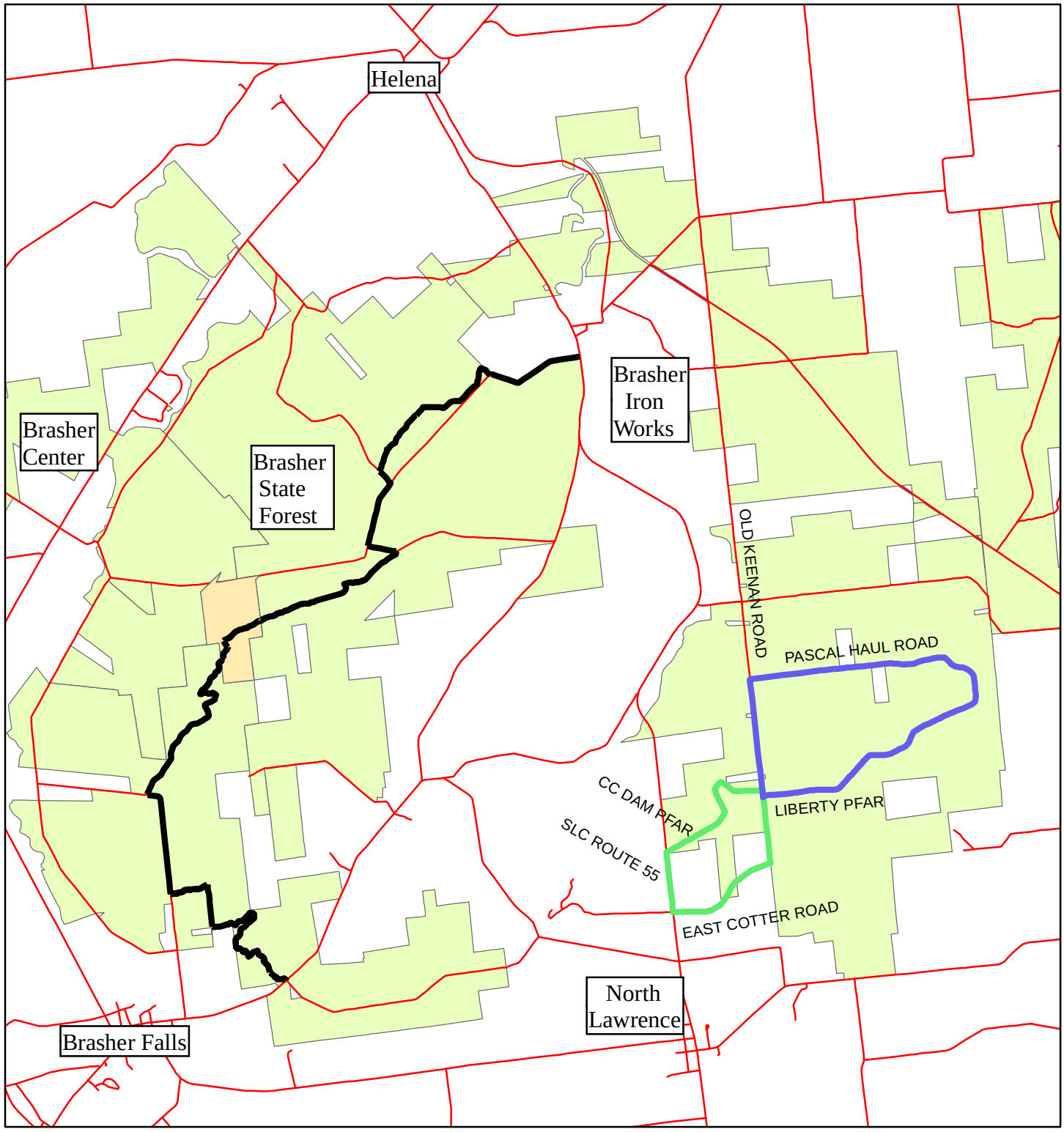
Alternatives

- 1a
- 2b
- Used by both 1a and 2b
- County Forests
- St Law Flatlands UMP

MULTI-USE TRAIL ALTERNATIVES
ST. LAWRENCE FLATLANDS UNIT
FIGURE 10

N

0 1.4 Miles



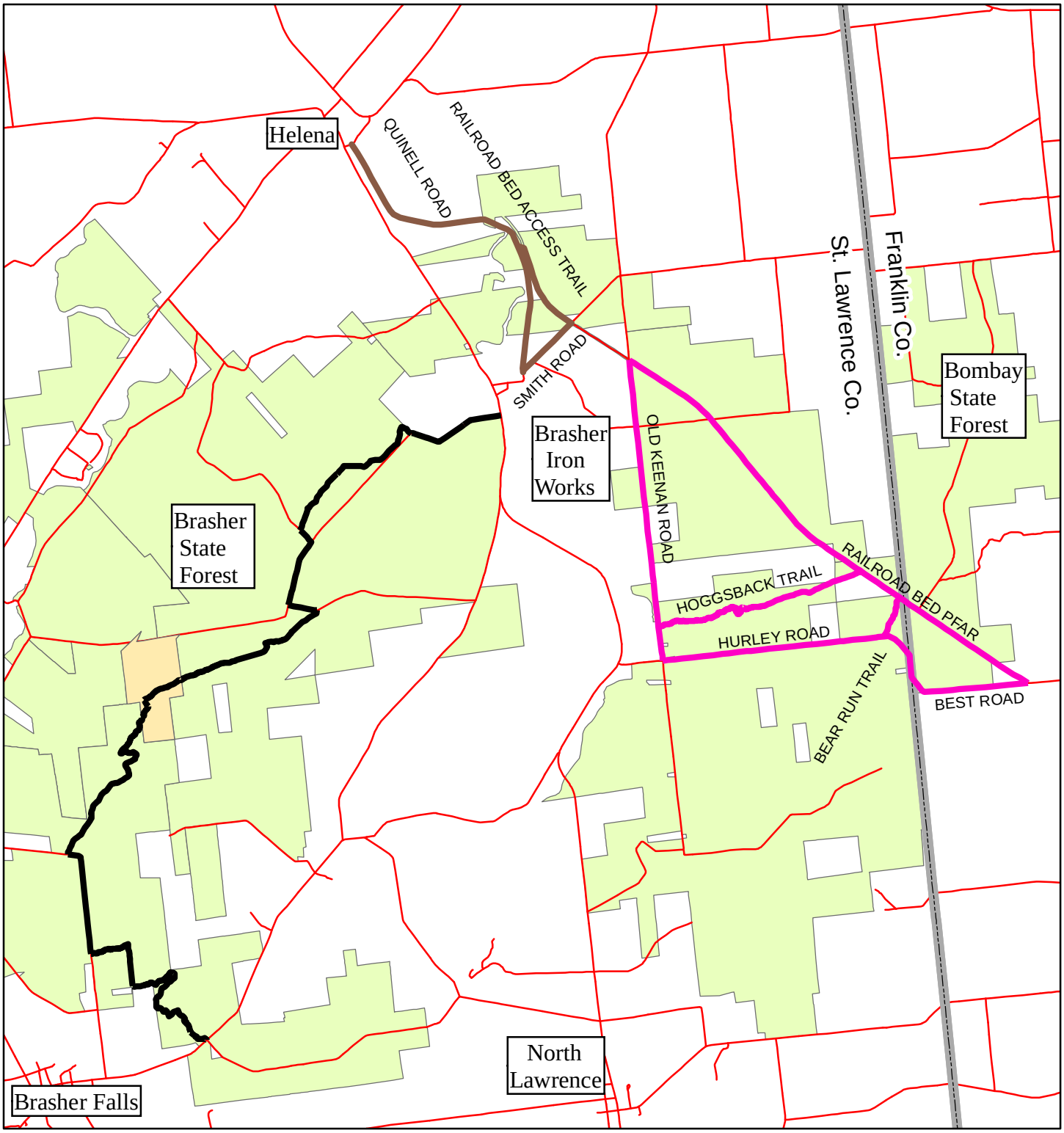
Alternatives

- 1a
- 2c
- 2d
- County Forests
- St Law Flatlands UMP

MULTI-USE TRAIL ALTERNATIVES
ST. LAWRENCE FLATLANDS UNIT
FIGURE 10

N

0 1.4 Miles



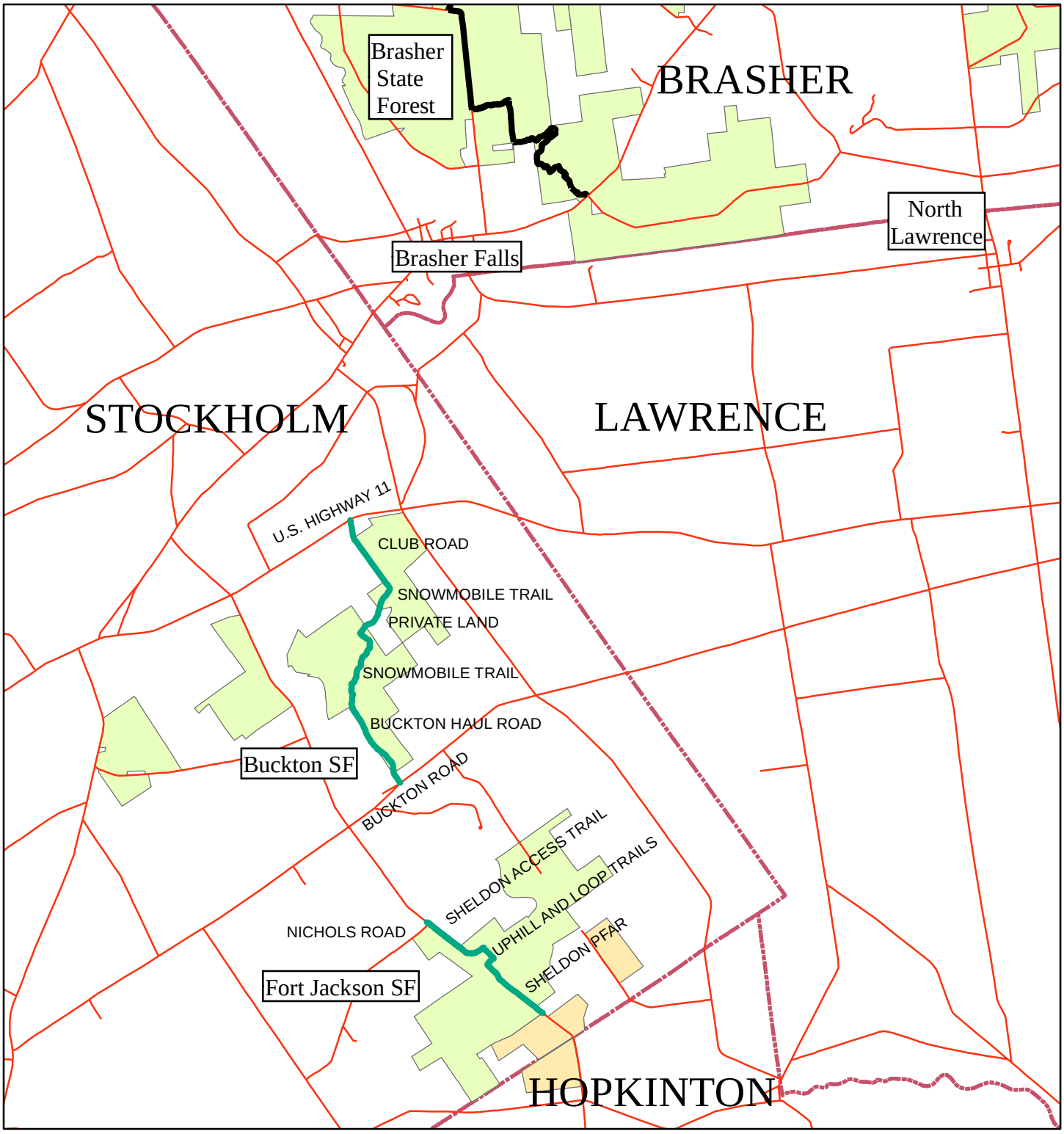
Alternatives

- 1a
- 2e
- 2f
- County Forests
- St Law Flatlands UMP
- County Boundary

MULTI-USE TRAIL ALTERNATIVES
ST. LAWRENCE FLATLANDS UNIT
FIGURE 10

N

0 1.4 Miles



Alternatives

- 1a
- 3a
- County Forests
- St Law Flatlands UMP

MULTI-USE TRAIL ALTERNATIVES
ST. LAWRENCE FLATLANDS UNIT
FIGURE 10

N

0 1.4 Miles