

- b. The proposer should send two (2) copies of its "Cost" proposal as described below.
- c. Proposer's should send or hand deliver the completed "Technical" and "Cost" proposals under separate cover to the following address:

Michael Tyler
Westport Town Supervisor
22 Champlain Ave. PO Box
465 Westport NY 12993
518-962-4419

During the evaluation process, the Town reserves the right, where it may serve the Town's best interest, to request additional information or clarifications from proposers, or to allow corrections of errors or omissions.

Town of Westport will not be liable for any costs incurred by firms associated with the development or delivery of proposals.

B. Term of Engagement

The term will cover three years. The contract will include an option exercisable by the Town for forestry management services for the two subsequent years. The Town reserves the right to terminate the agreement at any time through the initial term (or thereafter) with appropriate notice to the firm.

C. Scope of Work to be Performed

Vendors responding to the RFP should submit proposals that provide discussions addressing the following items.

1. The anticipated services required include:

- Provide efficient and effective forest management services in the best interests of the Municipality;
- Review the current Forestry Plan and submit for the approval of the Municipality any changes recommended;
- Conform to any instructions given by the Municipality for the carrying out of any agreed plan of development or any variation thereof directed by the Municipality;
- Provide the services of managers, consultants, advisors, surveyors, accountants, contractors and other workers necessary for the proper and efficient management and development of the Forest at the expense of the Municipality;
- The Consultant shall act as liaison with governmental agencies with respect to forest practices, property taxation and similar matters;
- Organize and supervise all timber harvesting and stand operations;
- Prepare any forest accounts and necessary tax information and the submission of such reports to the Municipality annually;
- Collect and verify all timber incomes and submit to the Municipality on its behalf; and,

- Provide and furnish such other management and administrative services, and at such rates of compensation, as may, from time to time, be agreed upon between the Consultant and the Municipality.

2. The proposal shall be clear, concise and shall include sufficient detail for effective evaluation and for substantiating the validity of stated claims. Proposal response shall include a paragraph-by-paragraph response indicating how or that they do comply with the specifications. The proposal shall prove convincing rationale to address how the Offeror intends to meet the requirements of the RFP.

3. The successful vendor shall adhere to the policies and procedures as established by both the Municipality and the selected vendor. The successful vendor shall be responsible for ensuring that its staff reports any problems and/or unusual incidents to the Municipality or their designee immediately or in an appropriate timeframe as designated by the Municipality.

4. The successful vendor and its employees will at all times act and perform as and are considered an Independent Contractor, and in no sense shall they be considered employees, agents, or volunteers of the Municipality.

5. If subcontractors are to be used, this should be clearly explained in the proposal. However, the prime vendor will be responsible for contract performance whether or not subcontractors are used.

6. No right or duty in whole or in part of the vendor under this contract may be assigned or delegated without prior written consent of the Municipality.

PROPOSAL REQUIREMENTS

A. General Requirements

1. Inquiries – Inquiries concerning the request for proposals and the subject of the request for proposals must be made to:

Michael Tyler
22 Champlain Ave, PO Box 465
Westport NY. 12993
518-962-4419

2. Submission of Proposals - The following material is required to be received by June 11, 2024 for a proposing firm to be considered:
 - a. Two (2) copies of the "Technical" proposal to include the following:
 - (i) Title Page – Title page showing the request for proposals subject; the firm's name; the name, address, and telephone number of the contract person; and the date of the proposal.
 - (ii) Table of Contents
 - (iii) Transmittal Letter – A signed letter of transmittal briefly stating the proposer's understanding of the work to be done, the commitment to perform the work within the time period, a statement why the firm believes itself to be best qualified to perform the services, and a statement that the proposal is a firm and irrevocable offer.
 - (iv) Detailed Proposal (see B below)
 - b. The proposer should send 2 (two) copies of its "Cost" proposal as described below.
 - c. Proposer's should send the completed "Technical" and "Cost" proposals under separate cover to the following address:

B. Proposal

General Requirements – The purpose of the proposal is to demonstrate the qualifications, competence and capacity of the firms seeking to contract for Forestry Management Services with the Municipality.

1. Statement of Qualifications - The vendor shall provide a history and profile of the firm. List relevant experience with providing Forestry management services.
2. Project Methodology - The vendor shall provide, in detail, the processes and methodology to be employed in the performance of this project.

3. Scope of Work - Provide a detailed scope of work, including project approach, tasks to be performed, personnel to be provided, resources to be provided, and requirements for Municipality assets or services.
4. Biographies - The proposal shall include resumes detailing the educational/employment history of the employee's most likely working on this project.
5. Experience on Similar Projects - The vendor must provide a minimum of three (3) project references of similar project work experience for contact by the Municipality.
6. Exceptions and Clarifications - It is understood that there might be exceptions and/or clarifications within the response. Exceptions and/or clarifications must be clearly identified and discussed within the proposal. The response shall be incorporated into the ultimate contract. Respondents are encouraged to utilize this area within the proposal to clarify their offering.

NO DOLLARS SHOULD BE INCLUDED IN THE TECHNICAL PROPOSAL

C. Sealed Dollar Cost Bid

The first page of the dollar cost bid should include the following information:

- a. Name of Firm.
- b. Certification that the person signing the proposal is entitled to represent the firm, empowered to submit the bid, and authorized to sign a contract with the Town.

Manner of Payment – The vendor shall provide a schedule of rates by cost per hour and job title. All invoices will be required to detail this information. The Consultant will be reimbursed for all out-of-pocket costs directly related to management of the Forest provided that prior to incurring the same the Consultant has first furnished to the Municipality a detailed estimate of such expenses and the same has been approved by the Municipality. Costs for Comprehensive Management Plans, Timber Appraisal, Timber Sale Administration and Timber Marking will be included in your proposal. Work outside of the scope of this project, as so listed, will not be paid without the prior knowledge and approval of the Municipality in writing. It is anticipated that the successful vendor will negotiate a contract within a reasonable amount of time, after RFP award, with Town of Westport.

Pricing page must clearly identify what fees or rates will be charged to the user and what implementation, software, hardware, maintenance, or other miscellaneous charges would be incurred by the Municipality whether recurring or non-recurring if any at all.

Vendor should provide a discussion on the reports and invoices they will provide the Municipality and include a sample of each.

The Town will not be responsible for expenses incurred in preparing and submitting the technical proposal or the dollar cost bid. Such costs should not be included in the proposal.

EVALUATION PROCEDURES

A. Review of Proposals

The Selection Committee will review qualifications of the proposals. Firms with unacceptably low technical qualifications will be eliminated from further consideration.

After the qualifications for each firm has been established, the dollar cost bid will be examined.

The Town reserves the rights to retain all proposals submitted and use any idea in a proposal regardless of whether that proposal is selected.

B. Evaluation Criteria

Proposals will be evaluated using three sets of criteria. Firms meeting the mandatory criteria will have their proposals evaluated and scored for both technical qualifications and price. The following represent the principal selection criteria that will be considered during the evaluation process.

1. Mandatory Elements

- a. The firm has no conflict of interest with regard to any other work performed by the firm for the Town.
- b. The firm adheres to the instructions in this request for proposal on preparing and submitting the proposal.

2. Technical Quality (Maximum Points – 70)

Expertise and Experience (maximum points – 70)

- (i) The consultant's past experience and performance on comparable local governmental and/or large tract engagements.
- (ii) The consultant's qualifications.
- (iii) Level of understanding exhibited by the proposal of unique Town of Westport needs.
- (iv) Supplemental Information provided within proposal.
- (v) At least five years of total experience with Forestry Management Services in New York State (can include Education)
- (vi) Review of References

3. Price (Maximum Points – 30)

Cost will not be the primary factor in the selection of a firm. The proposed price will be graded based upon the following formula:

Average Bid/Your Bid = X (whereby X can not exceed 100%)

$X * 30 \text{ points} = \text{Points awarded based on cost}$

C. Oral Presentations and presentations

During the evaluation process, the Selection Committee at their discretion may request any one or all firms to make oral presentations. Such presentations will provide firms with an opportunity to answer any questions that the Committee may have on a firm's proposal. Not all firms may be asked to make such oral presentations.

D. Right to Reject Proposals

Submission of a Proposal indicates acceptance by the firm of the conditions contained in this request for proposal unless clearly and specifically noted in the proposal submitted and confirmed in the contract between the Town and the firm selected.

The Town reserves the right without prejudice to reject any or all proposals.



P.O. Box 407, 3 Sisco Street
Westport, NY 12993
(518)962-8225

Forest Management Plan

Landowner: Town of Westport
22 Champlain Ave, P.O. Box 465
Westport, NY 12993

Property: Tax map numbers: 65.4-2-33.000 (50 acres)
66.3-1-33.000 (31.9 acres)
66.3-1-34.000 (397.6 acres)
66.3-1-35.000 (43.4 acres)
76.1-1-1.000 (340 acres)
76.1-1-2.000 (129.6 acres)
76.1-1-7.000 (43.3 acres)
76.1-1-8.000 (76.9 acres)
76.1-1-9.000 (32.8 acres)
76.1-1-10.000 (69.7 acres)
76.1-1-11.000 (6.8 acres)
76.1-1-12.000 (24.3 acres)
76.1-1-13.000 (123.3 acres)



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Landowner Goals and Objectives

The primary goal of the Town of Westport is to protect or improve water quality while sustainably harvesting forest products. Primary forest products will include veneer, sawtimber, pulpwood, and fuel wood. Utilizing proper silvicultural and best management practices will ensure the long-term survival and thriving of the natural resources within the property.

Due to the nature of a changing governmental body, it is important that the forest management plan reflects some flexibility to goals besides the primary two goals. Public opinion should also be factored in since the property is open to the public. The following goals and objectives may be of priority now, however, may not be in subsequent years.

Wildlife should be considered for both regeneration and diversity purposes. Currently, deer populations appear to be high, reducing both quantity and quality of desired regeneration. This also inhibits other wildlife from having a stable food source. Objectives to reducing deer browse damage include leaving hardwood tops, coordinating harvests during good seed years for desired species regeneration, and trying to focus deer pressure in a few areas with more harvesting in one area for continued low browse. Deer nuisance permits may also be an option. Eradication is not the goal, as deer do provide a necessary component to the forest; however, current populations are discouraging quality yields of regeneration due to a high intensity of browsing. Diversity in wildlife populations can be attained by providing a wide variety of habitats. Various types of harvesting methods will be used to achieve this.

Recreation is an important factor to consider as the land is open to the public for various usages. Main skid trails may be used by multiple users and should be kept in usable form. New trails could be created to allow for hiking use to access scenic views.

Local residents should also be considered. If a more intense cut is prescribed, it would be beneficial to demonstrate why this is. Workshops may also be held to help describe what is going on in the forest.

Real Property Identification and Description

Property Description

The property is known to locals as the Westport Watershed since water from these lands is utilized for several residents. The land owned by the Town of Westport consists of 1,369.6 contiguous acres, based on tax map acreages (see above). The only thing that divides the forest is McMahon Road and Mountain Spring Road, which dissects the property into three sections; a northwestern section, northeastern section, and southern section. See Appendix A for relative location from the hamlet of Westport.

The property boundary has not been maintained over the years unless by other landowners. Red paint has been documented on lands bordering Lyme Adk Timberlands, LLC, which holds several 480a forested lands in the area. As a requirement under 480a, boundary lines must be maintained every 5 years. In other areas the boundary line is less visible with posted signs and old wire fencing. Some areas have old survey blazes using axe marks on trees. Corner posts are also generally visible above ground.

Non-planned Areas

The following land areas have not been included in any planning for various reasons. The table below describes these areas and can be used in conjunction with the map in Appendix B.

Map Symbol	Acres	Type
A	40	(NW) Inoperable Hoisington Mountain
B	8	(NE) Inoperable Smith Hill
C	2	(NW below) Inoperable
D	9	(SW) Inoperable Harper Mountain
E	1	Fire reservoir
F	3	Greelee Pond
G	9	Wetland, Water Treatment Plant

Property History

Several parcels included in this plan have been documented to have been harvested since the 1960's. Since this time, the primary goal has been to maintain or increase high quality drinking water for town residents as well as provide a source of generous income for the Town. Since 1962, professional foresters have provided expertise and supervision of quality harvests. Winter harvests, while the ground is frozen, have been traditional, and within recent years, summer harvests have also occurred to promote regeneration. Since the preparation of the prior plan

(2006), an additional parcel has been added to the Town's woodlot. This 123-acre parcel is below the main water source and was harvested prior to being sold to the Town.

Evidence of barbed wire fence, woven fence, and rock walls in the forest suggests the woodlot was used for farming prior to being converted to forest lands. This is typical of forested land in the area, as farming was necessary to support various industries that occurred in this area after the Revolutionary War.

Property Access

The property is very accessible along two roads; MacMahon Road and Mountain Spring Road. From these roads, several landings or staging areas are commonly used to access the interior of the forest. Many main skid roads occur within the forest. One is known as Tram Road, which connects MacMahon Road to the southwestern portion of the forest. A second road, known as Pooler Spring Road, connects the water treatment plant to both Mountain Spring and MacMahon Roads. Two other major skid roads have several water bars that make it difficult to access at times. Several major skid roads are also used extensively for recreational purposes throughout the seasons. The majority of these are found in the northern portion of the forest, with many on the northeastern side of McMahan Road. Some major trails do have erosion issues and should be avoided when possible.

Property Description, Soils, and Classified Resources

General Topography

The topography of the property is extremely varied, from flat and gentle slopes, to moderate slopes, to severe slopes and large rock outcrop features. Two mountain peaks are located on the property; Hoisington Mountain in the northwest section and Harper Mountain in the southwest section. Smith Hill, summitting just outside the northeastern section of the property, contributes to rock outcrops in that section. Stream beds are moderately steep, creating step-pool systems over much of their length on the property. Streams in areas that aren't as steep commonly experience beaver activity. Appendix C shows the varying topography throughout the property. Appendix D shows a 2017 aerial photograph, which slopes can be defined and intermittent waters can be seen based on long, narrow patches of evergreen growth.

Soils

Map located in Appendix E

10 Pleasant Lake-Burnt Vly, 0.2 acre: Complex. A very wet soil that occurs mostly in bogs and swamps within Adirondack uplands. There is very little of this soil in the landscape and occurs in the southwestern most corner of the property in a small wetland.

651 Monadnock- Adams-Colton, 445 acres: Complex, rocky, very bouldery. A deep, loamy soil that is common to Adirondack upland backslopes. This soil unit is the largest on the landscape. It occurs over much of the western section of the property.

721 Becket-Tunbridge, 69 acres: Complex, rocky, very bouldery. A loamy soil that occurs on backslopes and shoulders of glaciated Adirondack uplands. This soil occurs mostly in the northwestern section of the property.

831 Tunbridge-Lyman, 299 acres: Complex, very rocky and bouldery. This loamy soil occurs on backslopes of glaciated Adirondack upland hillsides. It is found primarily on Hoisington Mountain on the property.

Bk Becket-Tunbridge, 15 acres: Complex, rocky, very bouldery. Well drained soils in the Adirondack Upland. Found on the southeastern boundary on the upslope of a ravine.

Cb Colton, 110 acres: Very gravelly loamy sand. A very deep and excessively drained soil. Found on summits and plains.

Cg Cayuga, 10 acres: Silty clay loam. A moderately drained soil found on backslopes of ridges. Mostly found on the eastern boundary along hemlock and hardwood ridges.

Ch Champlain, 79 acres: Loamy sand. This somewhat excessively drained soil is found on a variety of terrains including summits and plains, and stream terraces. This soil is located on a wide variety of terrains on the woodlot landscape.

Cn Charlton-Chatfield, 13 acres: Complex. Found on shoulders and backslopes of glaciated hills, this soil is well drained. These soils are found near a small stream ravine.

Co Chatfield-Hollis, 4 acres: Complex. A well-drained soil found on summits and shoulders of hills. Located in the eastern portion of the property on hillsides.

Cq Claverack, 2 acres: Loamy fine sand. Found on lake plains on summits and shoulders. Found in the eastern property along Mountain Spring Road.

Cw Croghan, 8 acres: Fine sand. This moderately well drained soil is found on footslopes, plains, and stream terraces. This soil is found in the northern part of the property on footslopes.

De Deerfield, 7 acres: Loamy sand. A moderately well drained soil on footslopes.

Dx Duxbury, 152 acres: Fine sandy loam. A well-drained soil found on summits and shoulders of terraces. This soil can be found in the flatter areas coming off Hoisington Mountain and Smith Hill. These areas also appear to be wetter, as several drainages end at this terrace.

Fn Fernlake, 25 acres: Loamy fine sand. This somewhat excessively drained soil is found on the summits and shoulders of glaciated mountains. On the woodlot, this soil can be found along the northeastern corner.

Ge Georgia, 2 acres: Loam. Located on till plains and summits and shoulders of hillsides. A moderately well drained soil. Found on the eastern boundary of the woodlot.

Ly Lyman-Knob Lock, 32 acres: Complex. A shallow, well-drained soil found on backslopes. This soil can be found in the northern portion of the woodlot in hilly areas.

Mn Monadnock-Tunbridge, 14 acres: Complex. Deep soils that are well drained on backslopes and shoulders of hillsides. This soil is scattered on the eastern side of the property.

Mo Mooers, 15 acres: Loamy fine sand. A moderately well drained soils on footslopes and plains. This soil can be found on the stream that outlets Greelee Pond.

Na Naumberg, 5 acres: Loamy fine sand. A somewhat poorly drained soil on footslopes and plains. This soil can be found on the south side of Greelee Pond.

Pf Pittsfield, 25 acres: Loam. Well drained soils found on summits, shoulders, and plains. This soil is found on small hill shoulders in the eastern portion of the forest.

Pk Pleasant Lake, 0.5 acre: Peat. A mucky, poorly drained soil in bogs and swamps. This is found in a small area in the northern portion of the forest.

P1 Pittsfield-Chatfield, 21 acres: Complex. A well-drained soil on shoulders and backslopes of hills. This soil can be found on the shoulder of a hill in the eastern portion of the property.

Tu Tunbridge-Lyman, 48 acres: Complex. A well-drained soil that can be found on summits, shoulders, and backslopes of hills and mountains. This soil can be found in a variety of locations in the eastern portion of the property, typically where there are rock outcrops present.

Ve Vergennes, 42 acres: Silty loam clay. A moderately well drained soil on backslopes of lake plains. Typically found north of Mountain Spring Road.

Wn Windsor, 10 acres: Loamy sand. An excessively drained soil found on summits. This soil can be found north of Mountain Spring Road.

Streams and Wetlands

The properties primary use is to provide a clean water supply for residents of the Town of Westport. There is one main spring located in the south eastern portion of the forest. There are two blue line streams according to the NYS DEC's Environmental Resource Mapper, one C(T) and one AA(T). These two streams converge as the headwaters of Hammond Brook. Several intermittent and runoff streams exist on the property, creating some wet areas throughout the forest. Most wet areas are small in area, and do not represent a considerable amount of space. There are eight small APA designated wetlands throughout the landscape for a total of 12 acres. The largest wetland being Greelee Pond, which is 3.20 acres, and the smallest being 0.3 acre. These wetlands include open water, deciduous forest and shrub, seasonally flooded sites, and beaver activity. Beaver activity is predominately found in Stands 5 and 27. Map can be found in Appendix F.

Type	Area (acres)	General location
POWHb	3.20	Greelee Pond
POWHb	0.90	Fire Pond
POWHb	0.30	Swamp, SW corner
PSS1E	0.40	East of MacMahon Road
PFO1E	1.26	Spring house
PFO1/SS1E	3.14	West of MacMahon Road

New York Natural Heritage Sites and Endangered Species

The summits of Hoisington Mountain and Smith Hill are designated as archaeological sensitive areas by the NYS Historic Preservation Office (SHPO). Prior to harvesting on these sites, SHPO should be notified. No harvesting should occur until SHPO has sent a letter allowing progression. A map can be found in Appendix G.

On April 21, 2017, correspondence from the NY Natural Heritage Program shows no records of rare or state-listed plants or animals on the property or in the near vicinity. Bat hibernaculum has been documented within three miles of the property. While most harvests occur in the winter, while bats are hibernating, care will need to be taken in the summer months of harvest when bats are active to prevent possible damage of roosting areas. Information can be found in Appendix H.

If any heritage sites or listed plants or animals are discovered while working these lands, all work will immediately stop in that area until all steps are taken to preserve and protect these valuable sites.

Threats and Hazards to the Natural Resources

Insects & Disease

Beech bark disease (BBD) is a common occurrence in similar forests. Many of the beech in this forest exhibited typical BBD signs and symptoms. This disease occurs when the bark is infested with beech scale insects. These insects alone are relatively harmless to the tree. An interaction with a *Nectria* fungi causes severe damage and mortality throughout the tree. American beech trees are currently the only hosts, and it appears to affect trees greater than 8 inches in diameter. Signs include white, wooly scales on bark, red fungi, and sunken calluses. Many American beech in the forest exhibited one or many of these signs. When possible, it is critical to save beech trees that do not exhibit signs of the disease as these trees may be resistant.

Red rot is a common rot associated with several species of conifers, notably eastern white pine in the northeast. This rot creates a red ring in the main stem of the tree. The rot weakens the wood, making it unsuitable for use in building. Signs are limited, and easily can be mistaken. Signs include conks, red-orange fungi, and false resin pouches. Some white pine in the forest exhibited these signs.

Invasive Species

Very few invasive species were noted in the forest. Honey suckle (*Lonicera*) was the most prevalent, in small patches, with some common buckthorn (*Rhamnus cathartica*), and a few Japanese barberry (*Berberis thunbergii*). Even with relatively low populations of these invasive plants, care should be taken to reduce the spread. Each stand that is harvested should be checked for invasive species and care should be taken to avoid or remove those invasives.

Managed Resource Summaries

Timber

Timber on the property has been managed extensively for many years, which has led to quality forest production. By continuing excellent forest management practices, timber quality will improve and provide an extra source of income for the Town for many more years. Heavy harvests, such as seed tree and shelterwood silvicultural practices, have been conducted in recent years to increase regeneration rates. Advanced regeneration, such as those in the pole stages, have responded well to release techniques. Quality growth and genetic stock is visible throughout the property. While not every tree is of superior quality or genetic makeup, these trees provide critical habitat for many species of wildlife. Timber is a major aspect of the management process. To ensure future regeneration success, it is encouraged to scarify some areas in the summer months, other than skid trails, to encourage pine regeneration as well as decrease the amount of beech root suckers that create dense shade.

Wildlife

Despite the vastness of this forest, a variety of wildlife was very sparse over much of the forest. Areas that had standing water, downed debris, and low vegetation appeared to host the most variety of wildlife observations. This may be due to several reasons; however, deer populations may be the largest detriment to healthy wildlife diversity. No studies on deer populations were conducted, but high numbers of tracks, trails, scat, bones, bedding areas, live deer and/or hair were found in every stand in the forest. High deer populations can reduce the amount of low vegetation available to other wildlife. The least amount of deer presence was noted in areas of heavy blow downs, logging activity with downed wood, and some rocky areas. Deer legs get caught in these and can reduce speed when escaping a predator, so these areas are generally avoided. Areas with lots of downed logs appeared to host a wide assortment of wildlife and lower vegetation. These areas of downed logs typically had some of the most promising regeneration.

Wildlife species observed includes deer, turkey, grouse, woodcock, raccoon, beaver, coyote, owl, woodpecker, songbirds, mice, voles, chipmunk, red and gray squirrel, turkey vulture, wood ducks, turtles, salamanders, and crow. Observations were based on visual characteristics, such as actual animal encounters, tracks, scat, bones, hair or feather, and on audio characteristics, such as calls, snorts, and other vocalizations. More varieties of wildlife may be present; however, no studies were conducted.

Some of the ponds on the property are stocked for fishing. The ponds also host a wide diversity of wildlife, aquatic species, and invertebrates. The ponds also provide prime migratory habitat for birds passing through in the spring and fall.

Bat hibernaculum has been found within 3 miles of the property. Bats can fly more than 5 miles for summer roosting. Due to white nose syndrome in bats, many species of bat populations have greatly decreased. Care will be taken when harvesting in the summer months to reduce stress on

populations of bats. Dead trees should be left when possible for use of habitat, not only for bats, but for other wildlife as well.

Recreation

The land is open to the public for various activities. Common uses noted include hiking, hunting, fishing, trapping, horseback riding, snowshoeing and cross-country skiing, snowmobiling, ATV riding, and wildlife viewing. While planning timber sales, it is important to consider the effects on these activities and minimize impacts on public usages.

Several trails are currently multiuse trails. While much of these trails are in good condition, some sections of the trail are severely eroding and are in desperate need of attention to protect water quality. Trails to the east of MacMahon Road appear to be in better shape as they are maintained by local snowmobiling club members. Trails to the west of MacMahon Road are in rough condition, limiting access into the interior of the forest. This is primarily due to steep slopes, small stream crossings, and failed best management practices. Many of the issues could be avoided with regular inspections and maintenance as well as adjusting best management practices if they appear to be failing. This limited access to the interior of the forest prevents full utilization of the land by local residents as well as future forestry activities.

While some areas may be inoperable to equipment, these areas generally provide favorable opportunities for foot trails to stunning rock crops that provide views of the Lake Champlain Valley and surrounding mountains. Unique woodland habitats generally also occur in these areas. Marked trails to these locations would prove beneficial, as several old skid roads could easily cause a hiker to become lost in the vast forest and skid trail network. Proper trails should be established to ensure erosion is also kept to a minimum. Inoperable areas that may stimulate local hikers include Area's A (Hoisington Mountain), B (Smith Hill), and D (Harper Mountain).



View from Hoisington Mountain

Soil and Water Conservation

Given the location and goals of the forested land, care should be taken to protect water resources. Protecting the water resources on this property will be best managed by addressing soil erosion and preventing sediments and other pollutants from entering the waterways. Skid trails should be laid out to prevent soil erosion and runoff, especially in Stand 8 which is located just above the town's water supply. Skidder bridges may be available for free use through the Greater

Adirondack Resource Conservation and Development Council (RC&D) for stream crossings. Equipment should be kept out of flowing water at all times unless there are no other options available. Skid roads in the north western portion of the forest have experienced severe erosion and will need to be rebuilt or rerouted for future use. Proper BMP placement on these trails will be critical to future usage.

Stream crossings will also be kept to a minimum. Many of the streams on the property are intermittent or ephemeral in nature and may not be an issue during most harvests. There is significant evidence that many crossings use to have culverts, which have not been maintained or were blown out during storms. Some of the crossings on major skid trails also have brush piles impeding flow, causing the stream channel to jump into the skid trails, creating a potential hazard for both water quality and future use of the trail. These old crossings show lots of erosion, disconnection from the stream channel, sedimentation, loss of habitat, and other negative effects. Water quality can be severely impacted if not addressed. On more permanent skid roads, properly designed fords are recommended. Fords are low maintenance, can be left in place with less worry of failure, and if done properly, improve water quality. Culvert stream crossings should be considered if the skid road will be used for more than six consecutive months and should be properly removed and stabilized when harvest is complete.

Buffers should also be placed along stream channels which have minimal or no cutting within them. This buffer should be at least 50' wide. To reduce soil compaction or rutting, harvests should be conducted during the winter when the ground is frozen or during the summer when the ground is dry. NYS BMP's should be followed. Permits will be obtained and a copy will be presented before any harvest can commence.

Some major skid trails are severely eroding. In many instances, this is directly due to runoff or intermittent stream crossings. While the trails were properly stabilized after the completion of harvests, it appears minimal maintenance of best management practices has occurred. This is a common problem for forest skid roads. It is very apparent that best management practices, such as water bars and stream crossings, were installed, and were likely done correctly. Years of trail usage has worn many water bars down. Runoff drainages have become clogged or flattened, forcing water down the trail. Stream crossings have been compromised, also forcing water down the trail, and were likely undersized based on the twisted fates of the culverts now laying outside the channel. The result has led to severe erosion of the skid trails, allowing tons of sediment to enter clean water sources and denying passage to the property. The resulting damage will lead to costly repairs and should be dealt with before becoming worse and more expensive. Several grants are available to protect water quality which may help to alleviate the cost. Skid trails should be designed to incorporate multiuse as well as climate change. A trend of heavier, more intense rain storms have been occurring, as well as multiple freeze-thaw events. New designs should be planned to tolerate these fluctuations and may be more versatile for access. Due to the use of the trails for recreational vehicles, water bars seem to be worn down quickly. Turn outs, rolling dips or broad-based dips, turn-ups, rubber belt deflectors, and diversion ditches would all help to reduce runoff issues. Stream crossing should be evaluated individually, however, many are intermittent and may benefit from a stable ford crossing. This would allow for multiuse, variable stream depths, and improve water quality if done properly. All of these practices can be

found in the NYS Forestry Best Management Practices For Water Quality (www.nysbmpguidelines.com).

Other

Some areas of hophornbeam growth, especially those found on Hoisington Mountain and Harper Mountain, are known to be Champlain Hill communities. These communities are unique and offer intriguing diversity to hikers. These areas are generally inoperable and should be conserved to maintain their unique characteristics. More information on Champlain Hill communities can be located with the Adirondack Nature Conservancy and the Wildlife Conservation Society. A paper was constructed by Jerry Jenkins titled "The West Champlain Hills", with a draft version completed in 2006 and a revision in 2008.

Recommendations and Prescriptions

Recommendations

To ensure sustainable harvests that draw an income each year, it is recommended to create stands of similar acreages and rotate harvests throughout the property on a yearly basis. This management plan draws a rotation of 27 years between entries into a stand. The table below shows the rotation that should be followed. Once the rotation is complete, it will start again from the beginning. Stands may be harvested consecutively to encourage competitive bidding or if long skids are involved. In this event, the rotation may be shortened.

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Stand	7	1	8	4	3	6	2	5	14	19	18	12	10	11	15	13	22	23	20	17	16	25	24	21	26	27	9

Stand information below was collected on a grid pattern with various radius plots. In most instances, plots captured accurate occurrences of trees and sizes found within the stand. Some stands reflect data that is heavily weighted toward an anomaly within the stand or failed to capture variations within the stand.

Stand Characteristics, Descriptions and Prescriptions

Stand 1

Cover Type:

Broadleaf forest

Stand Type:

Oak northern pine

Stand Size:

52.0 acres

Size Class: Large sawtimber

Site Class: II

Timber Quality: Fair to good. Quality varied greatly based on soil characteristics.

Operability: Rock outcrops and some steeper slopes will limit operability in the eastern sections of the stand. Some wet areas may also present issues unless dry or frozen.

Overstory Composition: 22% red oak, 19% sugar maple, 15% white pine, 15% hemlock 12% hickory, 17% other (hophornbeam, red maple)

Regeneration: Generally, regeneration reflects overstory composition. Most of this consists of white pine and sugar maple over much of the stand, as well as some northern red oak. Other noted species throughout the stand include hophornbeam, striped maple, American beech, and hickory. Parts of the stand include beech and hophornbeam regeneration that is heavy and shading out other stems in certain locations. Stems ranged greatly in size from seedlings to small poles, with most occurring in the sapling stage.

Description: The stand borders the northern and eastern boundaries of the forest and is bordered on the western side by McMahan Road and shares its southern boundary with Stands 2 and 7. The western half of the stand is generally rolling, with some areas of hillocks and semi-wet areas. These areas support pine and hemlock growth best, with patches of high quality white pine sawlogs. As one progresses east, the forest transitions both in slope and species composition. The eastern portion of the stand generally supports more hardwoods on a southern aspect hill side. In general, as elevation increased, tree quality appeared to reduce, mostly due to depth to bedrock. Trees with spreading roots appeared to grow better and had a more consistent quality.

Preferred Species: Northern hardwoods, white pine

Prescription: The stand will receive a group selection harvest on a minimum of a 20-year rotation. Patches of no more than one (1) acre in size will be established across the stand, with seventeen (17) acres being harvested during each rotation. This breaks down to a third of the stand being harvested each rotation. Patches can be any shape, with favor to irregular shapes when possible. Patches may border each other on short ends, creating larger openings for wildlife habitat. Irregular shapes mimic natural disturbances as well as generally creating more edge habitat, favored by several species of wildlife. Patches should be laid out by and marked clearly by a forester. Trees in the overstory and poor-quality trees outside the patch may be considered for removal, leaving behind quality advanced regeneration when possible. This stand may be harvested in the winter when grounds are frozen or during a dry summer.

Overstory Stocking Characteristics						
Species	Trees/ Acre	BA/ Acre	Percent BA/ Acre	QMD	Relative Density	Percent AGS
Northern red oak	24.60	23.33	25%	13.19	20.62	27%
Sugar maple	21.22	6.67	7%	7.59	5.82	20%
White pine	17.47	46.67	50%	22.13	14.73	83%
Hophornbeam	16.98	3.33	4%	6.00	2.92	0%
Eastern hemlock	16.98	3.33	4%	6.00	1.33	0%
Hickory	13.79	6.67	7%	9.42	5.89	31%
Red maple	2.39	3.33	3%	15.98	1.82	0%
Stand	113.43	93.33	100%	12.28	53.13	26%

Stand 2

Cover Type:

Mixed coniferous/ broadleaf forest

Stand Type:

Pine hardwoods

Stand Size:

53.0 acres

Size Class: Large sawtimber

Site Class: II

Timber Quality: Good. Sawtimber sized trees seemed to be of better quality.

Operability: Some larger wet areas are present, occasional steep slopes present

Overstory Composition: 43% white pine, 29% sugar maple, 16% hickory, 13% American beech

Regeneration: American beech and hophornbeam dominated the regeneration class over much of the stand. Areas that had been logged in the past are highly visible due to white pine regeneration occurring in skid trails in those areas. Witch hazel also appeared in the stand, indicating that soils may be slightly acidic in places. Stems were generally out of the seedling stage, with many in the sapling and small pole stage.

Description: The stand had lots of variety in the forest, which may not all be captured in the inventory. Stocking levels across the stand, however, were very low. There is a wet area located in the western portion of the stand. Stand 2 is bordered to the north by Stand 1 and property

owned by James Herman. The eastern boundary is bordered by property owned by James Herman. Stand 6 borders most of the southern boundary and Stand 7 borders to the west.

Preferred Species: White pine, sugar maple

Prescription: This stand will tentatively be planned for a partial overstory removal. Mature trees should be removed to allow growth of regenerating trees. This prescription may change if conditions in the stand differ during five (5) year updates to the forest management plan. During harvest, no more than 20% of the standing trees should be removed from the forest as an effort to attempt increasing basal area. Previously used skid trails which have white pine growth should be avoided when possible. Establishing quality regeneration will be a key in planning the future of this stand. This stand should only be harvested when the ground is frozen in the winter.

Overstory Stocking Characteristics						
Species	Trees/Acre	BA/Acre	Percent BA/Acre	QMD	Relative Density	Percent AGS
White pine	13.79	36.67	73%	22.08	11.56	91%
Sugar maple	9.23	6.67	13%	11.51	5.43	49%
Hickory	5.05	3.33	7%	11.00	2.84	100%
American beech	4.24	3.33	7%	12.00	2.70	0%
Totals	32.31	50	100%	16.84	32.18	40%

Stand 3

Cover Type:

Coniferous forest

Stand Type:

Bottomland Conifer

Stand Size:

53.0 acres

Size Class: Small sawtimber

Site Class: II

Timber Quality: Fair to Good. Quality varied greatly based on past harvesting activity.

Operability: Rock outcrops and some steeper slopes will limit operability in the northern most sections of the stand. Few small wet areas may also present issues unless dry or frozen.

Overstory Composition: 40% hemlock, 26% hophornbeam, 15% red oak, 7% sugar maple, 5% white pine, 7% other (hickory, ash, white oak)

Regeneration: Generally, regeneration is in the small pole stage and reflects the overstory. Parts of the stand include beech and hophornbeam regeneration that is heavy and shading out other stems in certain locations. Stems ranged greatly in size from seedlings to small poles, with most occurring in that sapling stage.

Description: The stand borders the northern and eastern boundaries of the forest. These boundaries are shared with Herrman and Sherman, respectively. It is bordered on the western side by Stand 6 and shares its southern boundary with Stands 4 and 5. Much of the stand was moderately cut before coming into possession of the Town of Westport. Several areas of the stand are regenerating in the small pole stage generally consisting of hardwood species and some softwood species. The regenerating trees appear to be of good quality and may require thinning to promote excellent quality.

Preferred Species: Northern hardwoods, white pine

Prescription: A combination of thinning and TSI are recommended for this stand. Trees to be taken out include those that are financially mature, poor quality, less vigorous, or compete with high quality trees. No more than 30% of the basal area should be removed. Hophornbeam and American beech regeneration should be discouraged. Some larger trees that are of minimal economic value should be left as wildlife habitat, such as hemlock groves or mast producers. This stand may be harvested in the winter when grounds are frozen or in during a dry summer.

Overstory Stocking Characteristics						
Species	Trees/ Acre	BA/ Acre	Percent BA/ Acre	QMD	Relative Density	Percent AGS
Eastern hemlock	58.14	40	42%	11.23	18.18	32%
Hophornbeam	38.20	3.33	3%	4.00	3.63	0%
Northern red oak	21.46	26.67	29%	15.09	23.32	82%
Sugar maple	9.55	3.33	3%	8.00	2.90	0%
White pine	7.59	13.33	14%	17.94	4.42	59%
Hickory	6.11	3.33	3%	10.00	2.91	100%
Ash	3.12	3.33	3%	14.00	1.29	0%
White oak	0.78	3.33	3%	28.00	2.43	0%
Stand	144.95	96.67	100%	11.1	59.09	33%

Stand 4

Cover Type:

Broadleaf forest

Stand Type:

Other hardwoods

Stand Size:

53.0 acres

Size Class: Small sawtimber

Site Class: II

Timber Quality: Fair to good. Quality varied greatly based on soil characteristics.

Operability: Good, generally gentle to gradual slopes

Overstory Composition: 38% sugar maple, 14% paper birch, 12% hemlock, 9% ash, 7% aspen, 7% white pine, 12% other (red oak, white oak, black cherry, black locust)

Regeneration: Generally, regeneration is in the small pole stage and reflects the overstory. Parts of the stand include beech and hophornbeam regeneration that has the potential of shading out other stems in certain locations. Stems ranged greatly in size from seedlings to small poles, with most occurring in the small pole stage.

Description: The stand borders the eastern boundary with the Sherman property. The southern portion is bordered by Mountain Spring Road and Hammond Brook. The western boundary is shared with Stand 5. Much of the stand was heavily cut before coming into possession of the Town of Westport. Several areas of the stand are regenerating in the small pole stage generally consisting of hardwood species and some softwood species. The regenerating trees appear to be of good quality and may require thinning to promote excellent quality. Large sawtimber white pine stands do occur in some areas alongside hemlock. Wildlife is diverse in this stand.

Preferred Species: Northern hardwoods, white pine

Prescription: A combination of thinning and TSI are recommended for this stand. Trees to be taken out include those that are financially mature, poor quality, less vigorous, or compete with high quality trees. No more than 20% of the basal area should be removed. Hophornbeam and American beech regeneration should be discouraged. Some larger trees that are of minimal economic value should be left as wildlife habitat, such as hemlock groves or mast producers. This stand may be harvested in the winter when grounds are frozen or in during a dry summer.

Overstory Stocking Characteristics						
Species	Trees/ Acre	BA/ Acre	Percent BA/ Acre	QMD	Relative Density	Percent AGS
Sugar maple	68.23	26.67	27%	8.47	22.80	38%
Paper birch	25.22	13.33	13%	9.85	12.40	75%
Eastern hemlock	20.63	10.00	10%	9.43	4.47	35%
Ash	16.47	10.00	10%	10.55	8.85	100%
Bigtooth aspen	13.38	10.00	10%	11.71	6.33	69%
Eastern white pine	13.31	13.33	13%	13.55	4.81	0%
Northern red oak	7.55	3.33	3%	9.00	3.10	100%
Black cherry	6.11	3.33	3%	10.00	1.65	0%
White oak	4.77	6.67	7%	16.00	5.26	0%
Black locust	3.12	3.33	3%	14.00	1.92	0%
Stand	178.78	100	100%	10.1	71.59	50%

Stand 5

Cover Type:

Coniferous forest

Size Class: Large sawtimber

Timber Quality: Fair to good. Quality varied greatly based on soil characteristics.

Operability: Good. Some wet areas occur, and streams do create deep ravines. Current trails in good condition.

Stand Type:

Bottomland Conifer

Site Class: II

Stand Size:

52.0 acres

Overstory Composition: 37% hemlock, 34% beech, 15% white pine, 14% other (sugar maple, red oak, aspen, red maple, ash)

Regeneration: Generally, regeneration reflects overstory composition. Most of this consists of white pine and sugar maple over much of the stand, as well as some northern red oak. Other noted species throughout the stand include hophornbeam, striped maple, American beech, and ash. Parts of the stand include beech and hophornbeam regeneration that is heavy and shading out other stems in certain locations. Stems ranged greatly in size from seedlings to small poles, with most occurring in the seedling and sapling stages.

Description: The stand is bordered by Stands 3, 4, 6, and 9, as well as Mountain Spring Road to the south. The Town of Westport's Water Treatment Facility is also located around this stand.

Streams do exist in the stand and create operability issues with deep ravines. Past timber harvests have established a network of well-built trails that can be used to avoid any contact with the streams. The stand has gentle to moderate slopes, with softwoods occurring mostly around the stream ravines and becoming more of a hardwood forest farther from the streams. Utmost care will need to be taken in this stand to protect water quality.

Preferred Species: Northern hardwoods, white pine

Prescription: The stand should be managed as a single tree selection harvest due to the need to protect water quality. The amount of trees harvested should not reduce the basal area less than 30%. This will encourage shade tolerant species to grow such as sugar maple. Some areas may receive a heavier cut, such as group selection, to promote shade intolerant tree species such as pine. Beech and hophornbeam growth should be discouraged, and trees that are damaged, diseased, or dying should be a priority to remove, as well as trees that are competing with higher quality trees. This stand is recommended to have a low impact logging method used, such as horse logging, due to the proximity of the stream. Crossing should be kept to a minimum and utilizing proper NYS BMP methods and permits. This stand will be harvested in 2025.

Overstory Stocking Characteristics						
Species	Trees/Acre	BA/Acre	Percent BA/Acre	QMD	Relative Density	Percent AGS
White pine	14.89	30.00	34%	19.22	9.68	39%
Eastern hemlock	38.53	22.50	26%	10.35	10.13	56%
Northern red oak	3.88	7.50	9%	18.82	6.46	66%
Aspen	3.21	7.50	9%	20.69	4.12	0%
American beech	34.82	7.50	9%	6.28	6.93	100%
Sugar maple	5.73	5.00	5%	12.65	4.00	100%
Red maple	2.29	5.00	5%	20.00	2.51	0%
Ash	1.41	2.50	3%	18.00	1.99	0%
Stand	104.77	87.50	100%	12.37	45.82	54%

Stand 6

Cover Type:

Mixed coniferous/ broadleaf forest

Stand Type:

Pine hardwoods

Stand Size:

58.0 acres

Size Class: Small sawtimber

Site Class: II

Timber Quality: Fair to good. Quality varied greatly based on age class.

Operability: Good. Some wet areas are present and the headwaters of a tributary begin in this stand. Steep slopes occur near the tributary.

Overstory Composition: 76% sugar maple, 4% white pine, 8% striped maple, 5% American beech, 4% paper birch, 4% other (red oak, aspen, hemlock)

Regeneration: This stand is in a regeneration phase with some larger stems. Regeneration does not reflect the overstory. Most stems are coming back as hardwood species with a wide range of shade tolerance visible. Stems appear to be of quality growing stock, however, will benefit from thinning and other timber stand improvement harvests.

Description: This mixed stand is bordered by Stand 2 in the north, Stand 3 in the east, Stands 5 and 9 to the south, and Stands 7 and 8 to the west. A main snowmobile trail passes through this stand. Much of the hardwood species exist as small pole regeneration and groups of large pine. Species diversity appears to be high along with stems of all size classes. Regeneration in the stand appears to mostly be hardwood species and generally of good quality. The stand contains the headwaters for a small tributary that feeds into Hammond Brook. Slopes are generally gradual with a few steeper slopes near the tributary.

Preferred Species: Northern hardwoods

Prescription: A combination of thinning and TSI are recommended for this stand. Trees to be taken out include those that are financially mature, poor quality, less vigorous, or compete with high quality trees. No more than 30% of the basal area should be removed. Hophornbeam and American beech regeneration should be discouraged. Some larger trees that are of minimal economic value should be left as wildlife habitat, such as hemlock groves or mast producers. This stand should only be harvested in the winter when the ground is frozen.

Overstory Stocking Characteristics						
Species	Trees/Acre	BA/Acre	Percent BA/Acre	QMD	Relative Density	Percent AGS
Sugar maple	364.02	33.33	30%	4.10	34.71	19%
White pine	17.33	46.67	42%	22.22	14.58	56%
Striped maple	38.20	3.33	3%	4.00	3.63	0%
American beech	22.11	7.78	7%	8.03	6.67	0%
Paper birch	16.98	3.33	3%	6.00	3.02	100%
Bigtooth aspen	10.35	4.44	4%	8.88	3.10	92%
Northern red oak	9.69	11.11	10%	14.50	9.77	56%
Eastern hemlock	1.41	1.11	1	12.00	0.51	0%
Stand	480.08	111.1	100%	6.5	76.08	23%

Stand 7

Cover Type:
Coniferous forest

Size Class: Small sawtimber

Timber Quality: Fair to good. Quality varied greatly based on soil characteristics.

Operability: Good. Some wet areas may present issues unless dry or frozen.

Stand Type:
Pine-hemlock
Site Class: II

Stand Size:
47.0 acres

Overstory Composition: 42% sugar maple, 15% white pine, 15% hickory, 14% hemlock 9% red oak, 3% other (American beech, red maple)

Regeneration: Regeneration mostly consists of American beech and hemlock. The canopy is dense in several locations, encouraging the growth of shade tolerant species. Sugar maple, red oak, and hickory saplings and small poles were observed in more open areas. White pine was observed growing on skid roads. In general, regeneration was sparse.

Description: Stand 7 is bordered on the west side by MacMahon Road, to the north by Stand 1, to the east by Stands 2 and 6 and to the south by Stand 8. The stand is relatively flat, with gentle rolling hillocks. A larger wet area occurs in the eastern most portion of the stand, with smaller damp areas occurring across the landscape. Some small areas of pine, especially in the western portion of the stand, appear to be in plantation formation, and have regularly been thinned. Rolling hillocks contain large pine with hemlock growth coming in. Areas with clearings or more light appear to be growing in as hardwoods.

Preferred Species: Northern hardwoods, white pine

Prescription: The stand will receive a group selection harvest on a 20-year rotation. Patches of no more than one (1) acre in size will be established across the stand, with fifteen and a half (15.5) acres being harvested during each rotation. This breaks down to a third of the stand being harvested each rotation. Patches can be any shape, with favor to irregular shapes when possible. Patches may border each other on short ends, creating larger openings for wildlife habitat. Irregular shapes mimic natural disturbances as well as generally creating more edge habitat, favored by several species of wildlife. Patches should be laid out by and marked clearly by a forester. Trees in the overstory and poor-quality trees within the patch may be considered for removal, leaving behind quality advanced regeneration when possible. This stand may be harvested in the winter when grounds are frozen or in during a dry summer.

Overstory Stocking Characteristics						
Species	Trees/Acre	BA/Acre	Percent BA/Acre	QMD	Relative Density	Percent AGS
Sugar maple	112.21	10.00	10%	4.04	10.53	95%
White pine	40.35	33.33	32%	12.31	12.21	18%
Hickory	40.08	6.67	6%	5.52	6.67	5%
Eastern hemlock	37.30	26.67	26%	11.45	12.15	19%
Northern red oak	24.09	20.00	19%	12.34	17.86	22%
American beech	6.11	3.33	3%	10.00	2.78	0%
Red maple	2.39	3.33	3%	15.98	1.82	0%
Stand	262.53	103.33	100%	8.50	64.02	49%

Stand 8

Cover Type:

Mixed Coniferous/ broadleaf forest

Stand Type:

Pine hardwoods

Stand Size:

54.0 acres

Size Class: Large sawtimber *Site Class:* II
Timber Quality: Fair to good. Quality varied greatly.
Operability: Good, able to support summer harvest.

Overstory Composition: 38% sugar maple, 10% red oak, 6% white pine, 17% American beech, 28% other (red pine, white oak, striped maple)

Regeneration: Generally, regeneration reflects overstory composition. Hophornbeam and beech seedlings and saplings are very common, with striped maple being common. Hickory, sugar maple and white pine are scattered throughout the stand. Regeneration in this stand is in poor condition, as quality target species numbers are very low.

Description: This stand is bordered to the west by MacMahon Road, to the north by Stand 7, to the east by Stands 5 and 6, and to the south by Stand 9. The stand is well mixed with hardwoods and softwoods, creating great habitat for several species of wildlife. This stand is somewhat drier than neighboring stands and appears to support a broader range of plant life. There is a lot of diversity in species, diameters, heights, and quality. Generally, growth and quality are better in the hardwood areas. Gentle slopes and well drained soils are characteristic across the stand. Overall quality of trees is decent, with about half acceptable growing stock for the major timber species. The stand is located upslope of a viable spring that is used as a water supply for the Town. Care need to be taken to protect this resource.

Preferred Species: Northern hardwoods, white pine

Prescription: The goal will be to maintain the current diversity seen in this stand. Due to lack of promising regeneration, more intense cuts will be needed to stimulate production, however, also need to be light enough to protect nearby water sources. A combination of group selection and single tree selection will be used to mimic natural disturbances in the landscape, creating openings in the canopy. Good seeding stock should be left in the overstory to pass on quality genetics. Deer may have a high impact in this area, so regeneration rates will need to be monitored after harvests to ensure that a good take is occurring.

Overstory Stocking Characteristics						
Species	Trees/ Acre	BA/ Acre	Percent BA/ Acre	QMD	Relative Density	Percent AGS
Sugar maple	55.04	20.00	21%	8.16	17.24	45%
Striped maple	38.20	3.33	3%	4.00	3.63	0%
American beech	25.14	10.00	10%	8.54	8.55	0%
Northern red oak	14.76	23.33	24%	17.02	20.21	43%
White pine	8.56	30.00	31%	25.35	9.20	62%
White oak	1.56	6.67	7%	28.00	4.86	0%
Red pine	1.26	3.33	3%	22.01	1.37	0%
Stand	144.52	96.67	100%	11.07	65.07	25%

Stand 9

Cover Type:

Broadleaf forest

Stand Type:

Oak northern pine

Stand Size:

54.0 acres

Size Class: Large sawtimber

Site Class: II

Timber Quality: Fair to good. Quality varied greatly based on topography.

Operability: Good. Some wet areas do exist, including a stream. The stream is spring based and can be simply passed with existing skid trails.

Overstory Composition: 51% red oak, 33% white pine, 11% sugar maple, 5% beech

Regeneration: Generally, regeneration reflects overstory composition. Most of this consists of white pine and sugar maple over much of the stand, as well as some northern red oak. Other noted species throughout the stand include hophornbeam, striped maple, American beech, and ash. Parts of the stand include beech, striped maple and hophornbeam regeneration that is heavy and shading out other stems in certain locations. Stems ranged greatly in size from seedlings to small poles, with most occurring in that sapling to pole stage.

Description: The stand is bordered by McMahon Road and Mountain Spring as well as Stands 5, 6, and 8. The ground generally is gently sloping, with some steeper slopes present. A small rock outcrop is present on the eastern boundary, however, is relatively flat. Due to the sloping, several trees are tall and straight as they grew competing for sunlight. A spring develops in this stand, with skid trails that by-pass the area. From the spring, a ravine and stream divide the stand. Crossing this area occurs upslope of the spring's appearance. A mix of hardwoods and softwoods occurs, with nearly pure softwood coverage near the ravine.

Preferred Species: Northern hardwoods, white pine

Prescription: This stand was harvested in 2017 with an improvement based various selection cuts. Both single tree and group selection was used to promote excellent growth of various tree species. Regeneration that was in the pole and small sawtimber stage was also released to allow for quality growth for the next harvest. The stand will be harvested again in 2044, at which time it will receive a similar treatment to protect water quality, unless need for different treatment exists.

Overstory Stocking Characteristics						
Species	Trees/ Acre	BA/ Acre	Percent BA/ Acre	QMD	Relative Density	Percent AGS
Red oak	21.97	18.75	31%	12.51	16.57	62%
White pine	14.37	38.75	63%	22.24	12.20	81%
Sugar maple	4.58	2.50	4%	10.00	2.09	100%
American beech	2.29	1.25	2%	10.00	1.04	0%
Stand	43.21	61.3	100%	16.1	31.90	72%

Stand 10

Cover Type:

Mixed coniferous/broadleaf forest

Size Class: Small sawtimber

Stand Type:

Other mixed woods

Site Class: II

Stand Size:

54.0 acres

Timber Quality: Fair to good. Quality varied greatly based on soil depth.

Operability: Rock outcrops and some steeper slopes will limit operability in the eastern sections of the stand.

Overstory Composition: 70% hophornbeam, 15% sugar maple, 7% white pine, 8% other (red oak, hemlock)

Regeneration: Generally, regeneration reflects overstory composition. Most of this consists of hophornbeam and sugar maple over much of the stand, as well as some hemlock. Other noted species throughout the stand include white pine, striped maple, American beech, and hickory. Stems ranged greatly in size from seedlings to large poles, with most occurring in that sapling to small pole stage.

Description: The stand borders the northern and western boundaries of the forest and is bordered on the north side by Hoisington Mountain (inaccessible) and shares its southern boundary with Stands 11 and eastern boundary with Stand 12. The western half of the stand is generally rolling hills. This area supports pine and hemlock growth best, with patches of high quality white pine sawlogs. As one progresses east, the forest transitions both in slope and species composition. The eastern portion of the stand generally supports more hardwoods, especially hophornbeam-oak forest cover, on a southern aspect hill side. In general, as slope grade increased, tree quality appeared to reduce, mostly due to depth to bedrock. Trees that tolerate hot, dry conditions best appeared to thrive in areas with the steepest grades. Steep skid roads have severely eroded in this stand and will need to be rerouted or reclaimed prior to future usage.

Preferred Species: Northern hardwoods, white pine

Prescription: TSI is encouraged for this stand. Also retaining the unique characteristics of the stands hophornbeam forest will be encouraged. Removal of mature, poor quality, diseased, or damaged trees will take priority for removal, as well as removing trees that are hindering the growth of high quality trees. No more than 35% of the basal area should be removed from one location where possible.

Overstory Stocking Characteristics						
Species	Trees/ Acre	BA/ Acre	Percent BA/ Acre	QMD	Relative Density	Percent AGS
Hophornbeam	152.46	25.00	25%	5.48	22.47	53%
Sugar maple	32.24	20.00	20%	10.66	16.44	56%
White pine	14.37	25.00	25%	17.86	8.31	100%
Northern red oak	12.41	20.00	20%	17.19	17.35	77%
Eastern hemlock	6.90	10.00	10%	16.30	4.67	41%
Stand	218.39	100.00	100%	9.2	69.25	57%

Stand 11

Cover Type:

Broadleaf forest

Size Class: Small sawtimber

Timber Quality: Fair to good. Quality varied greatly based on soil characteristics.

Operability: Good, some steep slopes exist, however, should not be limiting factors based on past trails.

Stand Type:

Oak northern pine

Site Class: II

Stand Size:

51.0 acres

Overstory Composition: 37% red oak, 29% white pine, 11% sugar maple, 11% beech 9% hemlock, 3% other (paper birch, ash)

Regeneration: Regeneration is mostly sugar maple and beech, with some hemlock. This is common as many of the shade intolerant species mature, shade tolerant species are able to compete. Stems ranged greatly in size from seedlings to small poles, with most occurring in the small pole stage.

Description: The stand is bordered by Stand 10 to the north, Stand 13 to the south, Stands 12 and 14 to the east as well as an inoperable area, and lands owned by Lyme Timber. The slopes in the eastern portion of the stand are generally steeper and have higher risks for erosion. The western portion of the stand generally has more gradual slopes and host an extensive network of skid paths. Small valleys and ridges are more conifer dominant whereas slopes and flatter areas were dominated by hardwoods.

Preferred Species: Northern hardwoods, pine

Prescription: Timber stand improvement is encouraged to help increase the percentage of acceptable growing stock. Removal of poor quality, diseased, or competing trees will prove valuable to future harvests.

Overstory Stocking Characteristics						
Species	Trees/ Acre	BA/ Acre	Percent BA/ Acre	QMD	Relative Density	Percent AGS
Northern red oak	39.43	37.50	45%	13.20	33.22	65%
White pine	31.10	22.50	27%	11.52	8.52	43%
Sugar maple	11.75	5.00	6%	8.83	4.26	100%
American beech	11.75	5.00	6%	8.83	4.26	0%
Eastern hemlock	9.35	7.50	10%	12.13	3.43	100%
Paper birch	2.04	2.50	3%	15.00	2.39	0%
Ash	0.95	2.50	3%	22.00	1.21	100%
Stand	106.36	82.50	100%	11.90	57.30	57%

Stand 12

Cover Type:

Broadleaf forest

Size Class: Small sawtimber

Timber Quality: Fair to good. Quality varied greatly based on soil characteristics.

Operability: Good. Rock outcrops and some steeper slopes may limit operability. A stream within the stand is easily crossed in lower elevations.

Stand Type:

Oak northern pine

Site Class: II

Stand Size:

57.0 acres

Overstory Composition: 42% red oak, 23% sugar maple, 15% hemlock, 10% white pine, 10% other (paper birch, hickory, cedar)

Regeneration: Generally, regeneration reflects overstory composition. Most of this consists of red oak and hickory in the northern portion of the stand, and white pine, maples, and beech to the south. Throughout the stand, clusters of hophornbeam regeneration are heavy and shading out other stems. Stems ranged greatly in size from seedlings to large poles, with most occurring in the pole stage.

Description: The stand borders the northern boundary of the forest and is bordered on the east side by McMahan Road, shares its western boundary with Stands 10 and 11, and is bordered by Stand 14 to the south. The eastern portion of the stand starts relatively flat, and progressively increases in elevation to the west. The steepest slopes occur in the western portion of the stand. To the northwest is an inoperable area that has steep rock cliffs that are difficult to navigate even on foot. Skid trails in the western portion of this stand are in bad condition and will need to be either rerouted or repaired for future use. The current trail condition makes it very dangerous to the environment, equipment, and workers. Generally, the stand is dry as soils are rocky and allow infiltration of water. The conditions within the stand allow for prime northern hardwood growth. A grove of large beech occurs near the southern boundary and appears to currently be free of Beech Bark Disease. White pine trees are generally mature and provide shady habitats for shade tolerant hardwoods such as sugar maple. Hickory, oak, and birch occur in areas that have little to no canopy above. Large red oak trees occur in areas that progress into inaccessible areas. A small stream traverses through the stand, which occasionally has steeper slopes.

Preferred Species: Northern hardwoods

Prescription: Timber stand improvement is recommended to release superior trees. Beech that exhibit signs of Beech Bark Disease resistance should be left to promote genetically superior stock for the future, as well as provide a source hard mast. These will include trees with smooth bark, no or very few scale insects, and no signs or symptoms of Beech Bark Disease. The stand should also be harvested in a way that encourages the continuation of current diversity.

Overstory Stocking Characteristics						
Species	Trees/Acre	BA/Acre	Percent BA/Acre	QMD	Relative Density	Percent AGS
Northern red oak	43.55	55.00	50%	15.22	48.16	51%
Sugar maple	23.87	17.50	16%	11.59	14.23	74%
Eastern hemlock	15.16	7.50	7%	9.52	3.34	15%

White pine	11.17	22.50	21%	19.22	7.34	82%
Paper birch	4.58	2.50	2%	10.00	2.30	0%
Hickory	2.71	2.50	2%	13.00	2.05	0%
White cedar	2.71	2.50	2%	13.00	1.48	0%
Stand	103.76	110.00	100%	13.90	78.90	50%

Stand 13

Cover Type:

Mixed Coniferous/ Broadleaf forest

Stand Type:

Hemlock hardwoods

Stand Size:

52.0 acres

Size Class: Small sawtimber

Site Class: II

Timber Quality: Fair. Many young stems exhibited poor qualities that they may grow out of in maturity.

Operability: Rock outcrops and some steeper slopes will limit operability in the eastern sections of the stand. An intermittent stream runs through part of the stand, and will need a proper, stable crossing.

Overstory Composition: 35% hemlock, 33% American beech, 12% sugar maple, 10% red oak, 7% yellow birch, 3% other (basswood)

Regeneration: Generally, regeneration reflects overstory composition. Hemlock, beech, and sugar maple regeneration dominate the shady areas and red oak and yellow birch regeneration dominate the open areas. Sizes ranged from seedlings to large poles, with most occurring in the small to large poles.

Description: The stand is located along the western boundary, with adjoining lands owned by Lyme Timber. Surrounding stands include Stand 11 to the north, Stands 14 and 16 to the east and Stand 15 to the south. Much of the stand is steep throughout, however, well established trails can be found to access much of the stand. The stand hosts a wide variety of growing conditions from rock outcrops, a stream, and several hills, creating a diverse tree community. This diverse community is very rich in species and growth diversification. Trails throughout the stand generally appear in good condition, however, a stream crossing will need to be reestablished.

Preferred Species: Maintain diversity

Prescription: Single tree and group selection in this stand will help to maintain the current diversity in the stand while also allowing for regeneration. Utilizing TSI will also help to increase the acceptable growth stock percentage as well as encouraging regeneration to grow.

Overstory Stocking Characteristics						
Species	Trees/ Acre	BA/ Acre	Percent BA/ Acre	QMD	Relative Density	Percent AGS
Eastern hemlock	33.17	26.67	35%	12.14	12.24	42%
American beech	31.26	13.33	17%	8.84	11.29	0%
Sugar maple	11.19	23.33	31%	19.55	17.89	58%

Northern red oak	9.55	3.33	4%	8.00	3.15	0%
Yellow birch	6.11	3.33	4%	10.00	2.78	0%
Basswood	2.59	6.67	9%	21.73	3.45	59%
Stand	93.87	76.67	100%	12.20	50.80	23%

Stand 14

Cover Type:

Mixed coniferous/ broadleaf

Size Class: Large sawtimber

Timber Quality: Good.

Operability: Good. Soils may be soft after rain which can lead to rutting.

Stand Type:

Pine hardwoods

Site Class: II

Stand Size:

52.0 acres

Overstory Composition: 62% sugar maple, 13% white pine, 9% beech, 7% red pine 9% other (red oak, hickory, hemlock)

Regeneration: Regeneration appears to vary based on harvest history. Areas that were recently harvested appeared to be coming back as mostly pine while those that were harvested several years ago tend to be stronger in hardwood regeneration. The western portion of the stand is mostly hardwood regeneration in the pole stage, while the eastern portion consists more of pine regeneration in the seedling to sapling stage.

Description: The stand is bordered to the east by Mountain Spring Road, north by Stand 12, west by Stands 11 and 13, and south by Stands 16 and 17. The stand appeared to have been harvested around 12 years prior to this management plan based on pine regeneration. The stand is relatively dry; however, some areas may be soft if wet. Slopes are gradual, but moderately steep in some places. As elevation increases, the forest transitions from softwoods to hardwoods. Many of the hardwood areas would benefit from improvement cuts as they grow.

Preferred Species: Northern hardwoods, white pine

Prescription: This stand will receive an improvement cut that will favor quality hardwoods and pine in 2027. Trees to be removed should include those that are dying, diseased, poor quality, or are competing with superior trees. No more than 30% of the total trees per acre should be harvest. This harvest should focus on improving the timber quality in this stand with as little residual stand damage as possible.

Overstory Stocking Characteristics						
Species	Trees/ Acre	BA/ Acre	Percent BA/ Acre	QMD	Relative Density	Percent AGS
Sugar maple	54.11	13.33	19%	6.72	11.80	100%
White pine	11.71	30.00	43%	21.67	9.49	89%
American beech	7.55	3.33	5%	9.00	2.84	0%
Red pine	6.13	6.67	9%	14.12	3.08	100%
Northern red oak	3.68	10.00	14%	22.33	8.51	67%

Hickory	3.12	3.33	5%	14.00	2.69	100%
Eastern hemlock	1.69	3.33	5%	19.00	1.57	0%
Stand	87.98	70.00	100%	12.10	39.98	79%

Stand 15

Cover Type: Mixed coniferous/ broadleaf forest
Stand Type: Hemlock hardwoods
Stand Size: 51.0 acres
Size Class: Small sawtimber
Site Class: II

Timber Quality: Fair to good. The percentage calculated below in the Overstory Stocking Characteristics table is very low due to the high number of beech trees in the stand exhibiting beech bark disease. Without the beech in this calculation, the percent AGS jumps up to approximately 67%.

Operability: Good. Some intermittent streams do occur, however, can be easily crossed if dry or frozen conditions exist. Some areas are steep but should be accessible by cable skidders easily.

Overstory Composition: 61% beech, 24% sugar maple, 10% hemlock, 5% other (basswood, ash)

Regeneration: Generally, regeneration reflects overstory composition. Most of this consists of beech and sugar maple over much of the stand, as well as some hemlock and hophornbeam. Red oak regeneration is present in the stand; however, none fell within inventory limits. Parts of the stand include beech sucker regeneration that is heavy and shading out other stems in certain locations. Regeneration under hemlock growth is generally at a low rate, while regeneration rates under hardwoods tend to be much higher. Stems ranged greatly in size from seedlings to large poles, with most occurring in the small pole stage.

Description: The stand borders the western boundary with lands owned by Lyme Timber. To the north is Stand 13, with Stand 16 to the east and Stand 18 to the south. The stand is steep; however, an extensive network of skid trails exist that can be reused. Much of the stand has the potential to be a highly productive hardwood stand with proper improvement harvests to maintain quality. Conifers that exist in the stand are generally hemlock with some white pine and mostly occur near intermittent streams. Wildlife in this stand is prevalent and is likely used as a wintering area due to high numbers of hemlock clusters.

Preferred Species: Northern hardwoods, hemlock

Prescription: Timber stand improvement is recommended to reduce competition as well as encourage regeneration of shade tolerant species. Low quality and poor health trees should be removed, as well as trees reaching over maturity.

Overstory Stocking Characteristics						
Species	Trees/ Acre	BA/ Acre	Percent BA/ Acre	QMD	Relative Density	Percent AGS
American beech	95.88	16.67	24%	5.65	15.55	2%

Sugar maple	38.37	33.33	48%	12.62	26.77	68%
Eastern hemlock	15.79	10.00	14%	10.78	4.53	80%
Basswood	6.11	6.67	10%	14.14	3.44	17%
Ash	2.11	3.33	4%	17.00	1.78	100%
Stand	158.26	70.00	100%	9.0	52.07	28%

Stand 16

Cover Type:

Mixed coniferous/ broadleaf forest

Size Class: Small sawtimber

Timber Quality: Fair to good. Quality varied greatly throughout the stand.

Operability: Good. Some intermittent streams have steep slopes, however, trails from prior harvest allow for good accessibility with minor crossing updates.

Stand Type:

Hemlock hardwoods

Site Class: II

Stand Size:

61.0 acres

Overstory Composition: 48% beech, 16% sugar maple, 16% hemlock, 7% hophornbeam, 13% other (birch, oak, ash, red maple)

Regeneration: Generally, regeneration reflects overstory composition. Most of this consists of beech, sugar maple, and hophornbeam over much of the stand, as well as some hemlock. Other noted species throughout the stand include striped maple and ash. Parts of the stand include beech and hophornbeam regeneration that is heavy and shading out other stems in certain locations. Dense overstories occur in the western portion of the stand, limiting the available light to start the regeneration process. Areas of recent harvest have much higher rates of regeneration. Stems ranged greatly in size from seedlings to large poles, with most occurring in the pole stage.

Description: The stand is bordered by Stand 14 to the north, Stand 17 to the east, Stand 20 to the south, and Stands 13 and 15 to the west. Much of the stand was scheduled for harvest from 2008 to 2014, which is evident throughout the stand. A shelterwood harvest can be observed throughout the stand. Advanced regeneration, now in the large pole stage, seems to have responded well, however, few stems feel within the inventory limits to represent this. Some steep ravines occur within the stand that concentrate streams to those areas. The streams are relatively small, and with proper crossings installed, can be traversed in suitable areas. Most of these streams have established riparian buffers with minimal, if any, cutting, which should be maintained. Much of the stand is gradually sloped, with several skid trails already in place.

Preferred Species: Northern hardwoods, especially sugar maple, and hemlock

Prescription: In areas that advanced regeneration has responded well, partial overstory removal is recommended. Removing approximately 30-50% of the overstory will provide protection to poles from windthrow and provide shade that may reduce the effects of frost cracks and epicormic branching. In areas that advanced regeneration did not respond well, a selection cut may be done to remove trees of poor quality, diseased, or damaged. In areas that were not harvested as heavily, group selection of no more than one acre in size are recommended to encourage regeneration. Regeneration of desirable species may be left.

Overstory Stocking Characteristics						
Species	Trees/ Acre	BA/ Acre	Percent BA/ Acre	QMD	Relative Density	Percent AGS
Beech	67.94	22.00	26%	7.71	19.16	52%
Sugar maple	23.20	20.00	24%	12.57	16.06	56%
Eastern hemlock	22.32	22.00	26%	13.44	10.17	79%
Hophornbeam	10.19	2.00	2%	6.00	1.75	0%
Paper birch	5.80	4.00	6%	11.25	3.76	100%
Northern red oak	4.65	8.00	10%	17.76	6.89	29%
Yellow birch	3.67	2.00	2%	10.00	1.67	0%
Ash	3.03	2.00	2%	11.00	1.75	0%
Red maple	0.76	2.00	2%	22.00	0.97	0%
Stand	141.54	84.00	100%	10.4	62.19	52%

Stand 17

Cover Type:

Broadleaf forest

Size Class: Small sawtimber

Timber Quality: Good.

Operability: Good. Slopes generally mild, wet soils do occur.

Stand Type:

Oak northern hardwoods

Site Class: II

Stand Size:

52.0 acres

Overstory Composition: 35% white oak, 22% sugar maple, 10% red oak, 10% American beech, 8% white pine, 7% yellow birch, 7% other (paper birch, ash, hemlock, red maple)

Regeneration: Generally, regeneration reflects overstory composition. Most of this consists of white pine and sugar maple over much of the stand, as well as some northern red oak. Other noted species throughout the stand include hophornbeam, striped maple, and American beech. Parts of the stand include beech and hophornbeam regeneration that is heavy and shading out other stems in certain locations. Stems ranged greatly in size from seedlings to small poles, with most occurring in the seedling to sapling stage.

Description: The stand is bordered to the north by Stand 14, to the west by Stand 16, to the south by Stands 22 and 23, and MacMahon Road to the east. Much of the stand was harvested within the last 10 years. Due to the ease of accessibility of trails to other areas of the forest and gentle slopes, this stand is frequented in use for harvests in other stands as well as recreational purposes. Trees near secondary trails appear to be healthy; however, damage to the butt is noticeable on several stems that are close to the trail. The stand has a wide diversity of tree species and should remain as diverse as possible to promote ecological benefits. In the Overstory Stocking Characteristics table below, it depicts white oak as having a significant appearance in the stand. This is due to a small cluster of young white oaks that are specific a wet area between the snowmobile trail and MacMahon Road.

Preferred Species: Maintain diversity

Prescription: Timber stand improvement for hardwoods, low thinning for pine. Stressed, dead and unhealthy trees should be removed for hardwoods. Thinning of the pines should remove less

superior trees such as those that are suppressed, diseased, or appear to have rot. Trees that are close to being over mature may also be removed during harvest to allow for new growth.

Overstory Stocking Characteristics						
Species	Trees/ Acre	BA/ Acre	Percent BA/ Acre	QMD	Relative Density	Percent AGS
White oak	62.64	6.67	8%	4.42	7.78	100%
Sugar maple	40.18	13.33	14%	7.80	11.64	24%
Northern red oak	17.93	16.67	19%	13.05	14.71	80%
American beech	16.98	3.33	4%	6.00	3.12	0%
White pine	14.73	26.67	31%	18.22	8.80	61%
Yellow birch	12.22	6.67	8%	10.00	5.56	100%
Paper birch	6.11	3.33	4%	10.00	3.07	100%
White ash	4.24	3.33	4%	12.00	1.44	0%
Eastern hemlock	1.53	3.33	4%	20.00	1.57	0%
Red maple	1.26	3.33	4%	22.00	1.62	0%
Stand	177.84	86.67	100%	5.7	59.32	62%

Stand 18

Cover Type:

Mixed coniferous/ broadleaf forest

Stand Type:

Hemlock hardwoods

Stand Size:

53.0 acres

Size Class: Small sawtimber

Site Class: II

Timber Quality: Fair to good.

Operability: Rock outcrops and some steeper slopes will limit some operability in the western sections of the stand. Most of these areas are easily outskirted, and with proper planning, trees can be felled and reachable without cables.

Overstory Composition: 49% sugar maple, 26% hemlock, 10% paper birch, 7% ash, 6% beech, 1% other (basswood)

Regeneration: Generally, regeneration reflects overstory composition. Most of this consists of sugar maple, paper birch and ash over much of the stand, as well as some white pine. Other noted species throughout the stand include hophornbeam, striped maple, and American beech. Several stems are noticed throughout the stand in the small pole stage, however, were rarely recorded because they were not within inventory plots. Stems ranged greatly in size from seedlings to small poles, with most occurring in the sapling to pole stage.

Description: The stand borders the western boundary of the forest land and is bordered to the north by Stand 15, east by Stand 20 and south by Stand 19. The stand has been entered within the past 15-20 years for harvest, and quality trees were left to grow. In some areas, trees did not respond well to release and show signs of minor stress, such as epicormic branching (sugar maple and white pine), root sprouts (beech, red and striped maple), and bending under the weight of snow (young birch). Hemlock is a major part of the southwestern portion of the stand. The

structure in this part of the forest should be continued due to its ecological significance. Many wildlife tracks can be found in the shelter of the hemlock growth, especially near the edge with harvested areas.

Preferred Species: Northern hardwoods, hemlock

Prescription: Timber stand improvement focusing on the removal of severely stressed trees and dead trees as well as reducing competition of new growth. In areas of hemlock growth, some large woody debris should be left to encourage nurse logs and habitat. It will also be critical to protect current regeneration.

Overstory Stocking Characteristics						
Species	Trees/ Acre	BA/ Acre	Percent BA/ Acre	QMD	Relative Density	Percent AGS
Sugar maple	32.40	36.67	55%	14.41	28.98	100%
Eastern hemlock	16.91	10.00	15%	10.41	4.51	100%
Paper birch	6.73	6.67	10%	13.48	6.31	54%
Ash	4.77	6.67	10%	16.01	5.41	50%
Beech	4.24	3.33	5%	12.00	2.70	0%
Basswood	0.90	3.33	5%	26.05	1.73	100%
Stand	65.97	66.67	100%	13.6	49.63	85%

Stand 19

Cover Type:

Mixed coniferous/ broadleaf forest

Size Class: Small sawtimber

Timber Quality: Fair to good. Quality varied greatly based on soil characteristics.

Operability: Rock outcrops and some steeper slopes will limit operability of the stand. Some wet areas may also present issues unless dry or frozen.

Stand Type:

Pine hardwoods

Site Class: II

Stand Size:

49.0 acres

Overstory Composition: 57% sugar maple, 17% paper birch, 11% red pine, 9% white pine, 6% other (red spruce, hemlock)

Regeneration: Generally, regeneration reflects overstory composition. Most of this consists of white pine and sugar maple over much of the stand. Other noted species throughout the stand include hophornbeam, striped maple, aspen, and American beech. Stems ranged greatly in size from seedlings to small poles, with most occurring in the sapling stage.

Description: The stand borders the south western property boundary line with Stand 18 to the north and Stands 20 and 21 to the east. The summit of Harper Mountain is within this stand, and contains many step rock outcrops, however, many areas are still accessible with careful navigation. Harvesting within the stand has not occurred in several years. Many areas have quality pines that show promise of future harvest. Although none were inventoried, red oak does have a significant occurrence in the stand.

Preferred Species: Maple, oak, pine

Prescription: The stand should be harvested consecutively with Stand 18. Harvest is planned for 2028. A single tree selection harvest will occur over much of the stand, with occasional openings being larger to encourage regeneration. The openings should be no larger than two tree lengths in any direction and should encourage oak and pine regeneration.

Overstory Stocking Characteristics						
Species	Trees/ Acre	BA/ Acre	Percent BA/ Acre	QMD	Relative Density	Percent AGS
Sugar maple	108.23	10.00	14%	4.12	10.28	100%
Paper birch	31.83	10.00	14%	7.59	9.21	0%
Red pine	22.10	20.00	29%	12.88	9.52	100%
White pine	17.50	20.00	29%	14.47	7.01	21%
Red spruce	9.17	5.00	7%	11.83	2.09	100%
Eastern hemlock	1.89	5.00	7%	26.06	2.37	100%
Stand	190.72	70.00	100%	8.2	40.48	76%

Stand 20

Cover Type:

Broadleaf forest

Size Class: Small sawtimber

Timber Quality: Fair to good. Stand was harvested recently and left superior trees.

Operability: Good. A few wet areas are present but don't appear to be an issue from past harvests. Some rock outcrops in the southern part of the stand may pose slight limitation to some equipment. Current skid trails appear in good condition.

Stand Type:

Oak northern hardwoods

Site Class: II

Stand Size:

53.0 acres

Overstory Composition: 52% sugar maple, 28% ash, 8% hemlock, 12% other (hophornbeam, red oak, beech)

Regeneration: Regeneration reflects overstory composition, as well as having white pine intermixed. Most of this consists of white pine, sugar maple and ash over much of the stand, as well as some northern red oak and beech. Other noted species throughout the stand include hophornbeam, striped maple, and hickory. Shrubby regeneration is common throughout the stand and may inhibit some growth. Heavy deer, rabbit and hare, and rodent pressure also seem to be contributing to undesired regeneration in this stand. Stems ranged greatly in size from seedlings to small poles, with most occurring in the sapling stage.

Description: The stand is bordered to the north by Stand 16, to the east by Stand 23, to the south Stand 21 and to the west Stands 18 and 19. The stand is gradually sloping, becoming steeper in the southwestern corner. Much of the stand was harvested within the last ten years with what appears to be a light to moderate shelterwood. Regeneration appears to be healthy; however, much of the stand has come back as low growing shrubs. This may be due to heavy deer pressure. Steeper areas exhibit more hemlock growth mixed with the hardwoods.

Preferred Species: Northern hardwoods
Prescription: Overstory removal

Overstory Stocking Characteristics						
Species	Trees/ Acre	BA/ Acre	Percent BA/ Acre	QMD	Relative Density	Percent AGS
Sugar maple	60.78	25.00	55%	8.68	20.95	69%
Ash	32.11	6.25	14%	5.97	6.58	88%
Eastern hemlock	9.55	3.75	8%	8.48	1.64	33%
Hophornbeam	5.87	2.50	5%	8.84	1.78	0%
Red oak	4.78	7.50	16%	16.96	6.50	43%
Beech	3.58	1.25	2%	8.00	1.09	100%
Stand	116.68	46.25	100%	8.5	38.55	68%

Stand 21

Cover Type:

Broadleaf forest

Size Class: Small sawtimber

Stand Type:

Oak northern pine

Site Class: II

Stand Size:

52.0 acres

Timber Quality: Fair to Decent. Ledge characteristics prevent excellent growth. A recent harvest also left large patches of diseased American beech and damaged trees.

Operability: Fair to good. Some steep areas present as well as wet areas. Wet areas may not be operable unless completely frozen or dry, as deep rutting occurs very easily.

Overstory Composition: 23% red oak, 9% white pine, 9% beech, 7% sugar maple, 51% other (hophornbeam, aspen, hemlock)

Regeneration: Types of regeneration varied across the stand. Areas with ledge present tended to have more acidic soils and supported thick patches of blueberry. Larger stems of oak were also present on these ledge soils as well as some small poles. Areas with deeper soils were noted to have more sugar maple and red oak regeneration in the sapling to small pole stages. Beech, hophornbeam, and striped maple were common understory species across the stand in varying densities.

Description: The stand is bordered to the south by lands owned by Lyme ADK Timberlands LLC and the McCutcheon's. The western boundary is shared with Stand 19, north by Stand's 20 and 23, and east by Stand 24. Much of the stand is hardwoods, with pines occurring on shallower soils. Approximately half of the stand was harvested recently, and damages are still highly visible. Currently, primary and some secondary skid roads are clearly evident due to rutting in wet areas. Care will be needed when re-entering the stand, and major skid roads will need to be relocated or repaired to reduce future damages to both soil and equipment. Part of the stand occurs on ledge, exposing trees to shallow soils and rock. Trees in these areas are generally scrubby and are valuable for wildlife habitat. Rock ledges also provide exceptional views of

Lake Champlain during winter. Slopes are generally moderate to steep. In general, slopes with a northern aspect tend to have deeper soils. Wet areas are present along the property boundary.

Preferred Species: Northern hardwoods, white pine

Prescription: Overstory removal and pre-commercial thinning are currently recommended, however, may change based on growth habits within the coming years.

Overstory Stocking Characteristics						
Species	Trees/ Acre	BA/ Acre	Percent BA/ Acre	QMD	Relative Density	Percent AGS
Hophornbeam	63.66	5.00	7%	3.79	5.33	0%
Northern red oak	30.24	30.00	43%	13.49	26.52	62%
White pine	11.79	12.50	18%	13.94	4.47	29%
American beech	11.75	5.00	7%	8.83	4.26	0%
Sugar maple	9.35	10.00	14%	14.00	7.94	59%
Aspen	1.27	2.50	4%	19.00	1.40	0%
Eastern hemlock	1.19	5.00	7%	27.79	2.38	100%
Stand	129.24	70.00	100%	10.00	52.31	22%

Stand 22

Cover Type:

Broadleaf forest

Stand Type:

Oak northern hardwoods

Stand Size:

53.0 acres

Size Class: Small sawtimber

Site Class: II

Timber Quality: Fair to good. Much of the stand is in a regenerative state.

Operability: Good. Rock outcrops and some steeper slopes will limit operability in the southeastern sections of the stand. Some seasonal streams may also present issues unless dry or frozen.

Overstory Composition: 86% sugar maple, 9% red oak, 6% yellow birch, 6% white ash, 8% other (white pine, hickory)

Regeneration: Regeneration reflects the overstory in some areas of the stand; however, white pine seems to be growing well in recently disturbed areas. American beech, striped maple, and hophornbeam are thick in some areas and are shading out preferred regeneration. Regeneration of preferred species is generally larger in size with several in the small pole stage.

Description: The stand is bordered to the east by McMahon Road, north by Stand 17, west by Stand 23, and south by Stands 24 and 25 as well as a rock cliff which is inoperable. Much of the stand has a moderate slope, with some seasonal streams that flow northeast. Seasonal streams have formed many ridges that provide shelter for several forms of wildlife. The ridges also encourage trees to grow taller and straighter to reach the light. Part of the stand is steeper, and access may be slightly limited in those areas. However, quality timber does exist in some of the deeper soils on the steep slopes.

Preferred Species: Northern hardwoods

Prescription: Overstory removal and timber stand improvement are recommended at this point. Removal should focus on poor quality trees.

Overstory Stocking Characteristics						
Species	Trees/ Acre	BA/ Acre	Percent BA/ Acre	QMD	Relative Density	Percent AGS
Sugar maple	97.03	32.50	42%	7.84	27.90	7%
Northern red oak	10.69	17.50	23%	17.33	15.16	36%
Yellow birch	8.37	5.00	6%	10.46	4.14	0%
White ash	7.45	5.00	6%	11.09	2.24	24%
White pine	5.07	15.00	19%	23.28	4.68	100%
Hickory	4.58	2.50	3%	10.00	2.18	100%
Stand	113.20	77.50	100%	10.30	56.30	17%

Stand 23

Cover Type:

Mixed coniferous/ Broadleaf forest

Size Class: Large sawtimber

Timber Quality: Fair to good.

Stand Type:

Pine hardwoods

Site Class: II

Stand Size:

49.0 acres

Operability: Wet areas are prominent in this stand, and ruts from past harvests were observed. These areas will best be harvested when frozen. Proper erosion and sediment control measures will need to be taken. Ruts will need to be fixed after the harvest is complete to reduce trail damage from erosion. Some rock outcrops exist, however, pose little concern for operability.

Overstory Composition: 42% hophornbeam, 36% sugar maple, 7% white pine, 7% red oak, 8% other (ash, hemlock)

Regeneration: Generally, regeneration reflects overstory composition. Regeneration was sparse or non-existent in some locations, which appeared to be near major game trails. Stems ranged greatly in size from seedlings to small poles, with most occurring in the sapling to pole stage. Several hophornbeam seedlings are present as well in all sizes. In some occurrences, the amount of hophornbeam regeneration appears to be hindering the growth of preferred commercial species such as oak and maple.

Description: The stand is bordered to the north by Stand 17, to the east by Stand 22, to the west by Stand 20 and to the south by Stands 21 and 24. A band of steeper, rocky slopes does exist in the southern portion of the stand and has more oak and pine occurrences than the gentler slopes that has more sugar maple. A majority of the stand was harvest recently with a light shelterwood harvest. Younger trees were released and appear to be growing well. The northern portion of the stand has a vernal stream that snakes through the landscape, as well as a wet area that retains water for long periods of time.

Preferred Species: Northern hardwoods, white pine

Prescription: Overstory removal

Overstory Stocking Characteristics						
Species	Trees/ Acre	BA/ Acre	Percent BA/ Acre	QMD	Relative Density	Percent AGS
Hophornbeam	24.45	3.33	7%	5.00	3.22	0%
Sugar maple	20.93	23.33	46%	14.30	18.43	71%
White pine	4.33	10.00	20%	20.58	3.20	0%
Northern red oak	4.00	6.67	13%	17.49	5.78	100%
Ash	3.12	3.33	7%	13.99	2.77	100%
Eastern hemlock	1.89	3.33	7%	17.97	1.57	0%
Stand	58.71	50.00	100%	12.5	34.97	73%

Stand 24

Cover Type:

Broadleaf forest

Stand Type:

Oak northern hardwoods

Stand Size:

53.0 acres

Size Class: Small sawtimber

Site Class: II

Timber Quality: Poor to fair. The stand is predominately in regeneration, thus timber quality is currently lacking, however, should produce quality timber in the future.

Operability: Some rock outcrops exist along the northern stand boundary. Steep slopes do exist as do some wet areas. Access is good; however, erosion and rutting may be a concern in wet conditions. Wet areas must be protected, as the soils are very soft near the wet areas and deep rutting is very common.

Overstory Composition: 32% red oak, 29% hophornbeam, 29% aspen, 9% other (beech, sugar maple).

Regeneration: Regeneration typically reflected first successional species such as aspen and birch or reflected somewhat shade tolerant species such as striped maple and red oak. Some areas of regeneration reflected the overstory. Aspen, striped maple, and oak make up most of the regeneration in the pole stage. Larger cut patches show high rates of successful regeneration with a variety of species growing in these patches.

Description: The stand is bordered to the north by Stands 22 and 23, to the west by Stand 21, to the east by Stand 25, and to the south by the southern boundary line. Several areas in the stand have recently been harvested, which appears to have been a shelterwood harvest over part of the stand and an overstory removal over other parts of the stand. Regeneration is still sparse in some areas, and other areas have an overabundance of young stems. Southeast aspects appear to host a majority of the regeneration and were likely harvested 5-10 years ago. The southwestern corner of the stand is wet, and recent harvesting activity in the past 5 years has left the ground heavily rutted. This area should be avoided in the future, unless completely frozen or completely dry.

Damages to sensitive wet areas can be drastic, and effect water quality, wildlife habitat, soil, and more. Damages to the soils may also restrict quality regeneration. In general, the stand is of medium slope grade with some rock outcrops in areas, especially in the northern section of the stand. Rocky areas seem to host red oak trees originating from root suckers. Hard mast production in these areas is relatively good.

Preferred Species: Northern hardwoods

Prescription: Pre-commercial thinning and overstory removal

Overstory Stocking Characteristics						
Species	Trees/ Acre	BA/ Acre	Percent BA/ Acre	QMD	Relative Density	Percent AGS
Northern red oak	51.61	45.00	72%	12.64	39.73	55%
Hophornbeam	46.98	5.00	8%	4.42	5.14	0%
Bigtooth aspen	46.98	5.00	68%	4.42	4.97	61%
American beech	12.82	5.00	8%	8.46	4.30	0%
Sugar maple	1.59	2.50	4%	17.00	1.94	100%
Stand	159.98	62.50	100%	8.5	56.09	37%

Stand 25

Cover Type:

Mixed Coniferous/ Broadleaf forest

Stand Type:

Pine hardwoods

Stand Size:

55.0 acres

Size Class: Large sawtimber

Site Class: II

Timber Quality: Fair to good. Quality varied mostly based on slope aspect.

Operability: Small rock outcrops do exist but should be easily worked around. Wet areas will present issues unless dry or frozen. During the winter, many of these wet areas are easily hidden under layers of snow and may not be noticed until equipment enters these areas. A dry summer may be the best option for future harvests.

Overstory Composition: 29% hophornbeam, 23% beech, 17% white pine, 13% ash, 7% red spruce, 6% sugar maple, 5% other (red oak, red maple)

Regeneration: Regeneration does not generally reflect the overstory. American beech and hophornbeam are common understory occurrences that do not appear in the overstory. Pine regeneration is common in used skid trails, however, is sparse elsewhere. Sugar maple and red oak do occasionally occur.

Description: The stand is bordered to the north by MacMahon Road and to the east by Mountain Spring Road, with Stands 22 and 24, as well as an inoperable area, to the west. The stand is generally gradually sloped in the west and coming into flatter lands along the road boundaries. There is a high-water table where the slope flattens out, which is occasionally perched after thawing events. A main skid trail traverses the eastern portion of the stand, leading into Stand 24. Trees in this stand exhibited diverse sizes in most species. Quality was generally very good,

however, rock outcrops near the inoperable area produced large red oak, but very low-quality trees. Trees on the eastern aspect on moderate slopes appeared to be growing well, as did pines and mixed woods located on the flat area.

Preferred Species: Northern hardwoods, white pine

Prescription: Due to the recent harvest within this stand, reentry will occur after the fifteen-year schedule and should be a pre-commercial or low thinning, depending on growth. Overstory removal may also be considered.

Overstory Stocking Characteristics						
Species	Trees/ Acre	BA/ Acre	Percent BA/ Acre	QMD	Relative Density	Percent AGS
Hophornbeam	38.20	3.33	4%	4.00	3.63	0%
American beech	29.45	6.67	8%	6.44	6.11	0%
White pine	21.37	50.00	58%	20.71	16.01	46%
White ash	16.98	3.33	4%	6.00	3.65	100%
Red spruce	9.55	3.33	4%	8.00	1.65	0%
Sugar maple	7.23	6.67	8%	13.00	5.35	50%
Northern red oak	4.98	10.00	11%	19.19	8.59	67%
Red maple	1.53	3.33	4%	20.00	1.67	0%
Stand	129.28	86.7	100%	11.1	46.68	42%

Stand 26

Cover Type:

Coniferous forest

Size Class: Large sawtimber

Timber Quality: Fair to good.

Stand Type:

Eastern hemlock

Site Class: II

Stand Size:

35.0 acres

Operability: Good. A stream with steep banks creates a natural buffer for the stream. Main trails exist on both sides of the stream, and a crossing exists in a flat section of the stream.

Overstory Composition: 83% hemlock, 6% sugar maple, 9% other (red oak, red maple, white pine)

Regeneration: Regeneration is sparse over much of the stand, most likely due to a dense overstory. Recent harvests have opened the canopy to allow more light to the ground. The best regeneration was found in the northern and southern most portions of the stand which had more deciduous trees. In these deciduous dominant areas, regeneration reflected the overstory and was mostly in the large sapling, small pole size classes. Where canopies were dense, stand tolerant species were sparsely present in the understory, including hemlock, sugar maple, beech, and hophornbeam. White pine seedlings and small saplings were present in old skid trails.

Description: The stand is bordered to the west and north by Mountain Spring Road, to the south by Stand 27, and to the east by property owned by the Monty's. A small stream flows through

the stand and has relatively steep banks except for an area near the intersection with Mountain Spring Road. The table below does not accurately depict the presence of white pine in the stand. A small pond also exists along the stream and provides prime habitat for waterfowl and amphibians. The stream has long, steep banks which help to create a natural riparian buffer. These slopes consist mainly of mature white pine and hemlock growth. A maturing hemlock grove occurs just north of the pond. White pine grows thick to the west and south of the pond. East and southeast of the pond as well as north of the hemlock grove grows a mix of mature pine and hardwoods. Regeneration in these areas is prominent. The diversity of the stand allows for many types of habitats for a wide variety of wildlife.

Preferred Species: Northern hardwoods, white pine, hemlock

Prescription: Harvest of this stand will occur after the 15-year schedule. At this point, an overstory removal would be recommended, but may change based on growth habits in the coming years.

Overstory Stocking Characteristics						
Species	Trees/ Acre	BA/ Acre	Percent BA/ Acre	QMD	Relative Density	Percent AGS
Eastern hemlock	76.97	115.0	83%	16.55	53.81	61%
Northern red oak	4.83	10.00	8%	19.48	8.59	100%
Sugar maple	5.42	5.00	3%	13.00	4.01	100%
Red maple	3.17	5.00	3%	17.00	2.67	0%
White pine	0.90	5.00	3%	32.00	1.48	100%
Stand	91.29	140.0	100%	16.8	70.56	67%

Stand 27

Cover Type:

Mixed coniferous/ broadleaf forest

Size Class: Large sawtimber

Timber Quality: Good.

Operability: Wet areas around Greelee Pond make operability difficult if not frozen or dry. The remainder of the stand is easily accessible.

Stand Type:

Pine hardwoods

Site Class: II

Stand Size:

33.0 acres

Overstory Composition: 27% sugar maple, 18% white pine, 54% hophornbeam

Regeneration: Generally, regeneration reflects overstory composition. Most of this consists of white pine and sugar maple over much of the stand, as well as some northern red oak. Other noted species throughout the stand include hophornbeam, American beech, and other hardwood species. Parts of the stand include beech and hophornbeam regeneration that is heavy and shading out other stems in certain locations. Stems ranged greatly in size from seedlings to small poles, with most occurring in the sapling stage. Some honeysuckle was found in the stand prior to harvest, however, has not been seen at this time after the harvest.

Description: The stand borders the southern and eastern boundaries of the forest and is bordered on the western side by Mountain Spring Road and shares its northern boundary with Stand 26. The southern boundary is shared with private lands owned by Affinity Group Mbr Svces Inc and the eastern boundary with Arthur Dodge and James Monty. The southern half of the stand contains Greelee Pond, with generally rolling hills that flatten out near the pond. These areas support pine, birch, and other first successional species best. As one progresses north, the forest transitions both in slope and species composition. The northern portion of the stand generally supports more sugar maple and red oak on moderately sloped land. White pine is seen in all portions of the stand.

Preferred Species: Northern hardwoods, white pine

Prescription: This stand was harvested in 2016, focusing on releasing high quality trees and regeneration. The stand should be monitored for growth at each update of the plan. The stand should not be entered for timber harvest until the next rotation, which should be in 2043. The next harvest will reflect changes in the growth.

Overstory Stocking Characteristics						
Species	Trees/ Acre	BA/ Acre	Percent BA/ Acre	QMD	Relative Density	Percent AGS
Hophornbeam	73.34	10.00	9%	5.00	9.67	0%
Sugar maple	37.04	30.00	27%	12.19	24.24	34%
White pine	24.88	70.00	64%	22.71	22.00	85%
Stand	135.26	110.0	100%	12.20	55.92	48%

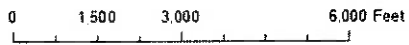
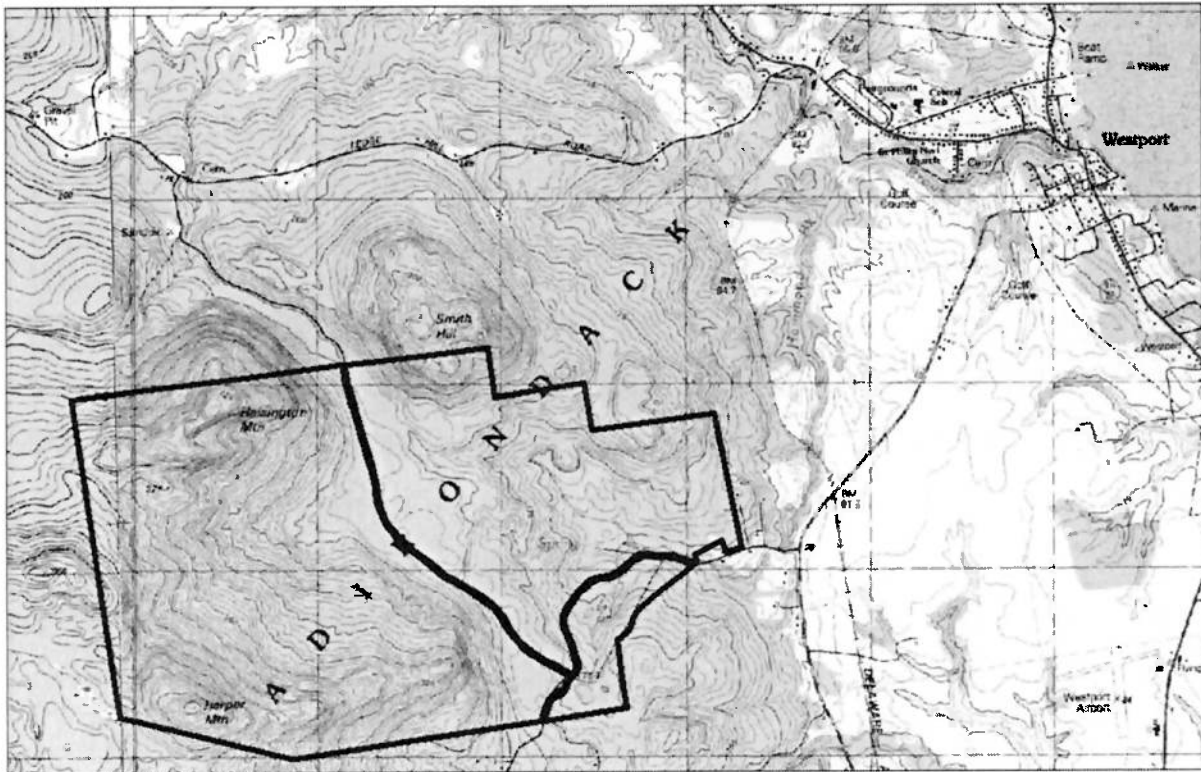
Fifteen Year Schedule

Year	Stand	Acres	Activity	Status
2017/2018	All	1,369.6	Update management plan	Complete 8/2018
2017/2018	9	54	Single tree/ group select	Waiting to harvest
2018	All	1,369.6	Boundary line maintenance	
2018/2019	7	47	Group selection	
2019/2020	1	52	Group selection	
2020/2021	8	54	Single tree/ group selection	
2021	All	1,369.6	5-year revision	
2021/2022	4	53	Thinning/ TSI	
2022/2023	3	54	Thinning/ TSI	
2023/2024	6	58	Thinning/ TSI	
2024/2025	2	53	Partial overstory removal	
2025	All	1,369.6	Boundary line maintenance	
2025	5	52	Single tree selection	
2026	All	1,369.6	5-year revision	
2027	14	52	TSI	
2028	19	49	Single tree	
2029	18	53	TSI	
2030	12	57	TSI	
2031	All	1,369.6	5-year revision	
2032	All	1,369.6	Boundary line maintenance	

Appendix

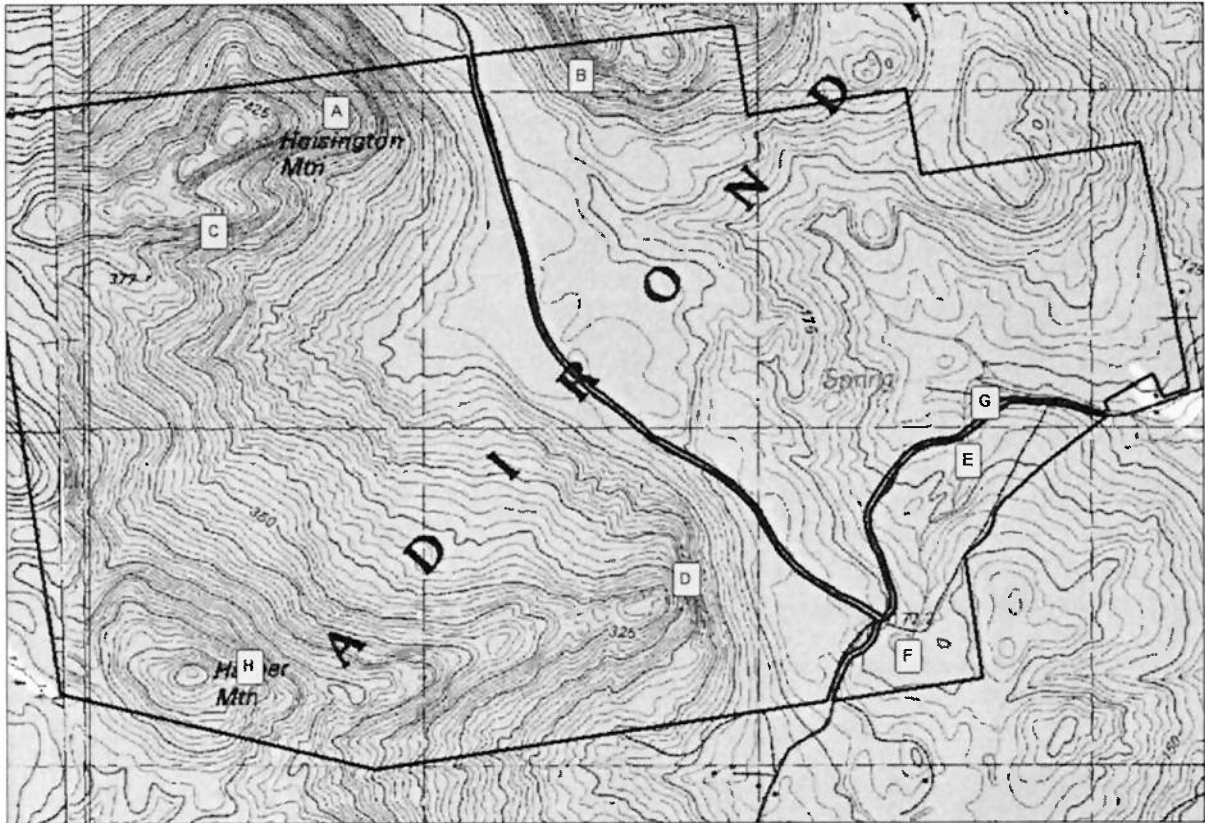
- 45...Location Map
- 46...Topographic Map
- 47...2017 Aerial Photograph
- 48...Non-planned Areas Map
- 49...Soils Map
- 50...Streams and Wetlands
- 51...NYS Cultural Resource Information Map
- 52...NY Natural Heritage Correspondence
- 54...List of Acronyms

Appendix A



Topographic
Location Map
Essex County Soil and Water
Conservation District
July 18, 2018

Appendix B

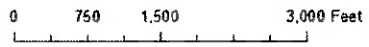
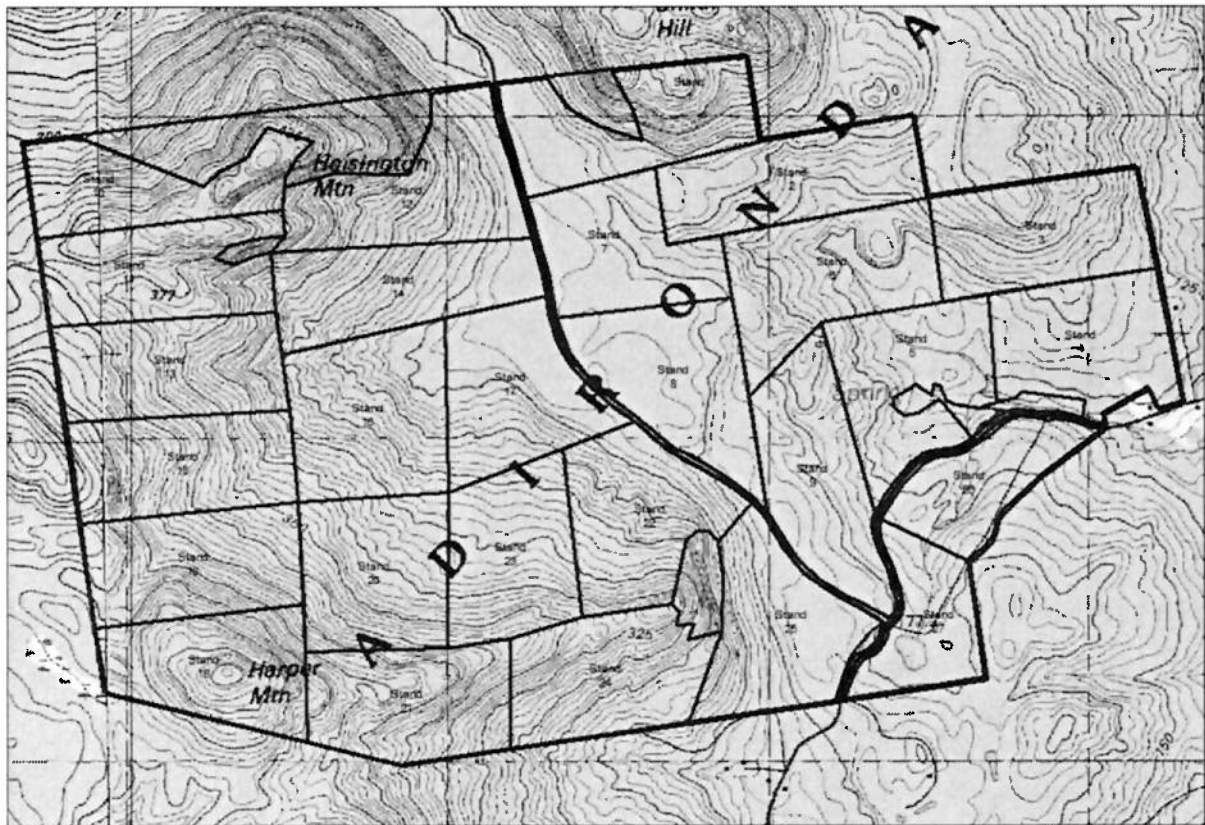


0 750 1,500 3,000 Feet



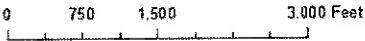
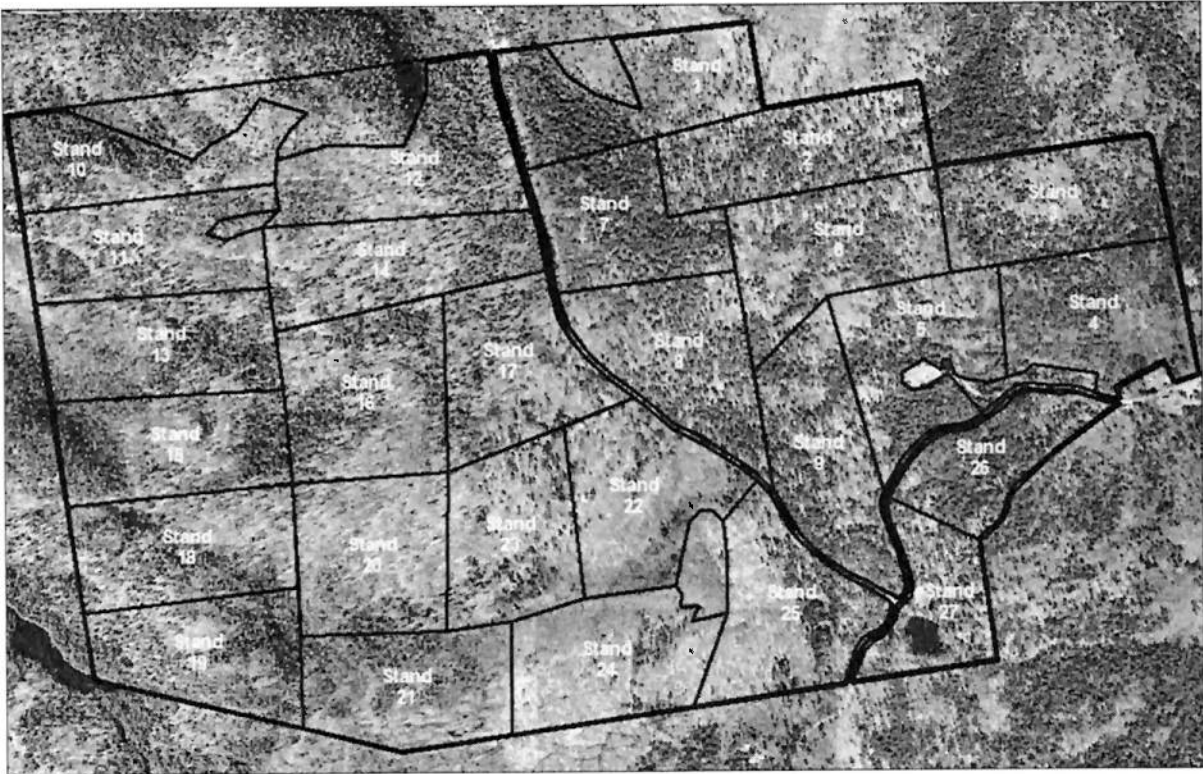
Topographic
Non-planned Areas Map
Essex County Soil and Water
Conservation District
July 18, 2018

Appendix C



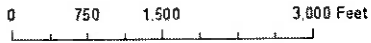
Topographic
Stand Map
Essex County Soil and Water
Conservation District
July 18, 2018

Appendix D



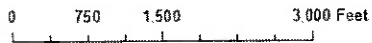
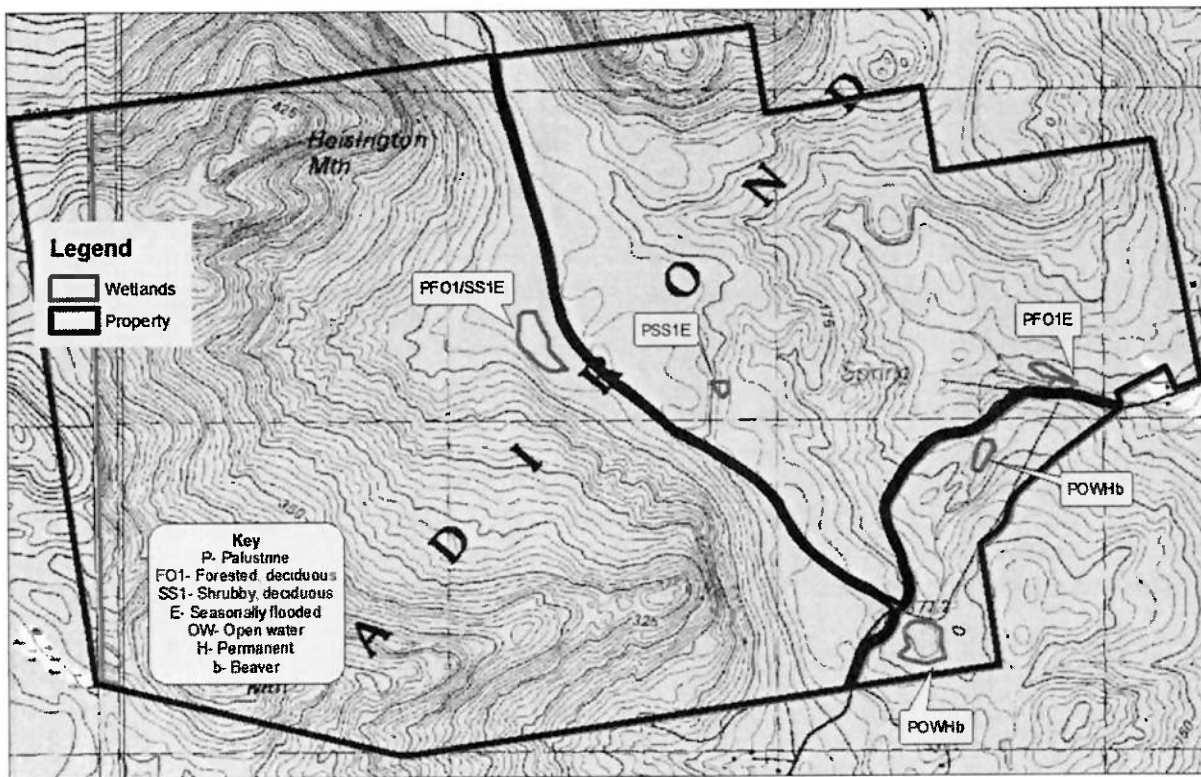
2017 Aerial Photograph
Stand Map
Essex County Soil and Water
Conservation District
July 18, 2018

Appendix E



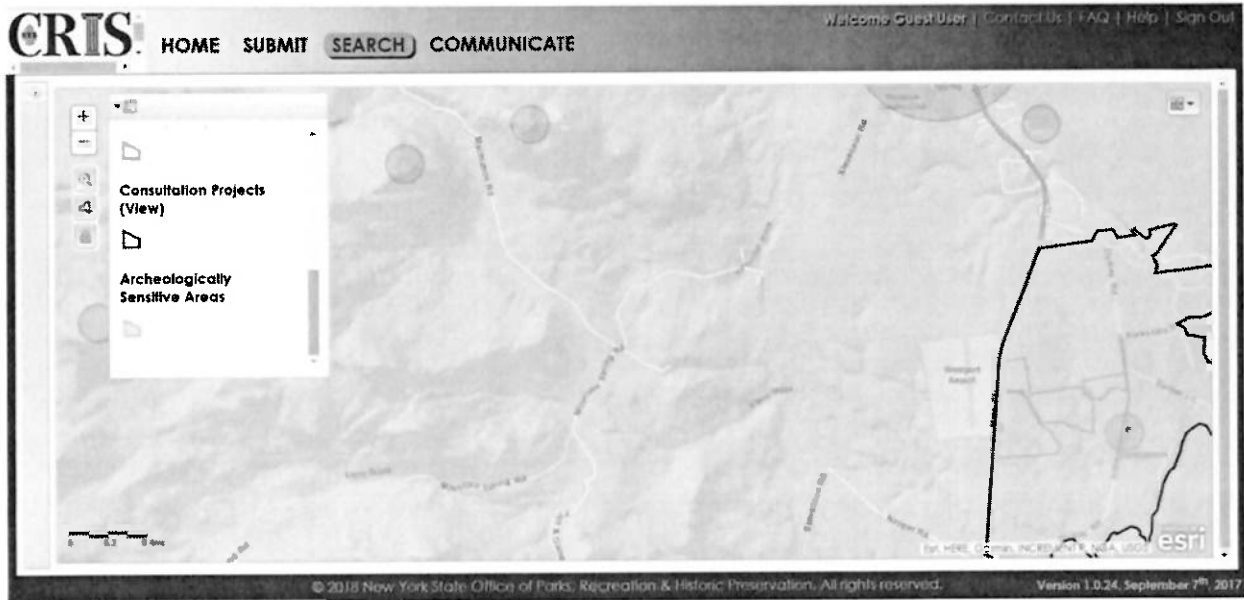
2017 Aerial Photograph
Soil Map
Essex County Soil and Water
Conservation District
July 18, 2018

Appendix F



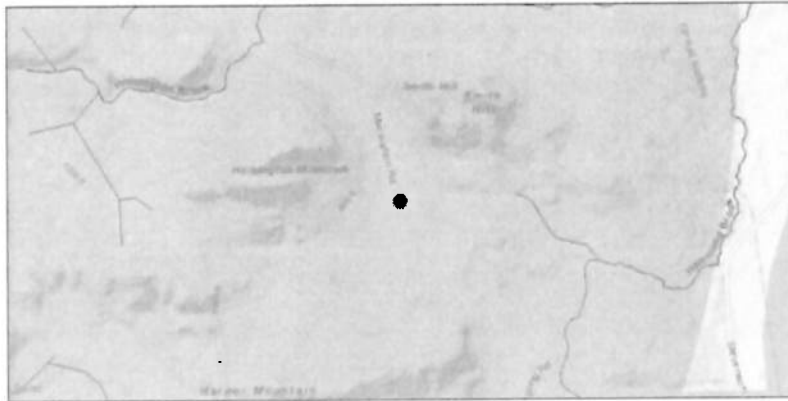
Topographic
Wetland Map
Essex County Soil and Water
Conservation District
July 18, 2018

Appendix G



Appendix H

Environmental Resource Mapper



The coordinates of the point you clicked on are:

UTM 18	Easting:	621350.889	Northing:	4891762.745
Longitude/Latitude	Longitude:	-73.482	Latitude:	44.169

The approximate address of the point you clicked on is:

2-498 Macmahon Rd, Westport, New York, 12993

County: Essex

Town: Westport

USGS Quad: WESTPORT

DEC Region:

Region 5:

(Eastern Adirondacks/Lake Champlain) Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren and Washington counties. For more information visit <http://www.dec.ny.gov/about/631.html>

Rare Plants and Rare Animals

This location is in the vicinity of State-listed Bats

If your project or action is within or near an area with a rare animal, a permit may be required if the species is listed as endangered or threatened and the department determines the action may be harmful to the species or its habitat.

If your project or action is within or near an area with rare plants and/or significant natural communities, the environmental impacts may need to be addressed.

The presence of a unique geological feature or landform near a project, unto itself, does not trigger a requirement for a NYS DEC permit. Readers are advised, however, that there is the chance that a unique feature may also show in another data layer (i.e. a wetland) and thus be subject to permit jurisdiction.

Please refer to the "Need a Permit?" tab for permit information or other authorizations regarding these natural resources.

Disclaimer: If you are considering a project or action in, or near, a wetland or a stream, a NYS DEC permit may be required. The Environmental Resources Mapper does not show all natural resources which are regulated by NYS DEC, and for which permits from NYS DEC are required. For example, Regulated Tidal Wetlands, and Wild, Scenic, and Recreational Rivers, are currently not included on the maps.

Appendix I

Acronyms and Terms in Order of Appearance

- 480a- A tax relief program for private landowners offered through NYS that encourages sound forest management.
- NYS DEC- New York State Department of Environmental Conservation
- C(T)- A stream classification that is suitable for fisheries and non-contact activities. This classification may also support trout populations.
- AA(T)- A stream classification that is suitable for drinking water. This classification may also support trout populations.
- SHPO- State Historic Preservation Office
- BBD- Beech Bark Disease
- RC&D- Resource Conservation and Development Council
- BMP- Best Management Practice
- Trees/ acre- A unit of measurement that estimates density based on the number of tree occurrences per acre.
- BA/ acre- A unit of measurement that estimates density based on the cross-sectional area of stems.
- QMD- Quadratic Mean Diameter, a unit of measurement that uses the basal area and trees per acre to determine a diameter that represents trees found in the stand.
- Relative Density- A measurement of stem crowding within a stocked area.
- AGS- Acceptable Growing Stock, trees that show quality characteristics for future growth.
- TSI- Timber Stand Improvement, a type of silvicultural practice that improves stand growing conditions to promote healthy timber.