

Forest Management Plan Update

For

Town of Appleton

Mid Coast Properties Lot

Tax Map 8; Lot 1-13

44 acres

Prepared by:

Mark R. Vannah

RLCO L.F. #1098

Aug. 23, 2017

Current Woodland Condition:

This parcel is well wooded, dominated by softwood in the early sawtimber stage, and stays somewhat consistent in size and composition throughout. White pine, spruce, hemlock, and hardwood of red maple and birch represent the majority of timber volume with some very good quality white pine crop trees (diameter class 10-16" dbh) noted. The last commercial harvest of this particular woodland occurred some 30-40 years ago.

The shape of the lot (irregular spaghetti lot - some 3600 feet deep) and amount of small wetland scattered throughout, creates some difficult access for removing timber especially from the far west section. Access conditions could be drastically enhanced by receiving permission to use the neighbors (Jenness Gushee) old road system to the north as it winds down through the Gushee lot and back to the east and onto the town forest. The neighbors may even entertain the thought of doing similar work on their land as well.

Harvest Timetable:

This lot should be harvested in a selective manner within the next 5 years and would be best served using a mechanical operation, preferably a cut to length system. This type of harvesting operation could utilize the small sawtimber and pole size trees most efficiently and do the least damage to the residual stand and site. They are able to spread brush where needed for wet spots, and most importantly, could feasibly access the timber by use of a forwarder to a woodyard near the West Appleton road.

Time Period	Presription	Species	Volume
2017-22	Selective harvest – no more than 40% of	Spruce/hem	20 mbf + 50 cd.
	total stand volume – preferably in winter	Pine	10 mbf + 40 cd.
	time due to shallow rooting of crop tree	Hdwd	5 mbf + 60 cd.
	pine/spruce		

Forest Management Plan Update

For

Town of Appleton – Collamore Lot

Johnson Pond Trail

Tax Map 9, Lot 21

42 acres

Prepared by:

Mark R. Vannah

RLCO L.F. #1098

September 12, 2017

Current Woodland Condition:

Woodland remains untouched from previous plan write up of 2001 as mature timber of popple, hardwood, and light pockets of softwood sustain. Most of the woodlot would benefit from a commercial timber harvest. The popple component, in particular, is overmature and should receive highest priority for removal dependent on a decent market for popple logs (tough to find at times), with some of the bigtooth aspen over 20" at the stump. Maple, Oak, Birch, and Beech along with some scattered Black Cherry and Basswood comprise most of the remaining hardwood mix. Certain red oak individuals also are reaching the mature stage as diameters of 25-30 inches on the stump were noted.

Natural regeneration consisting of sugar maple seedlings was prevalent especially in and around the old homestead area (fairly large stone foundations were found) and there is one particular area near the old road, heavier to mature sugar maple, that at one time could have served as a "sugarbush".

The woodlot still contains difficult access as the Johnson Pond Trail serves as the official right of way, due to steep terrain (once upon the lot) and an old Beaver dam abutting the old road that tends to flood over occasionally. Best access would be served from the south across the Staples property to avoid these difficult impacts on removing wood.

The woodlot was cruised by a licensed forester back in 2001 which resulted in volume estimates of 35 cord and 4250 board feet per acre, for a stumpage value of \$529/acre. Total acreage used was 41 acres which yields the estimate of \$21,700 total stumpage value.

I recently walked the woodlot some 16 years later and would honestly not value this woodlot any higher than what the original cruise came up with. That includes factoring in ¼ cord of growth per acre, annually, but also an increase in mortality and reduction in market prices and uses. The popple component is most contradicting, due to poor log market uses and scarcity in high grade pulp market. In their initial cruise they had a lot of sawlog volume (over 33%) in popple sawlogs. That is unrealistic in today's market place as most of that volume will be either sold as high grade pulp or regular pulp if cut today.

So even though growth has added to the volume of the original timber cruise of 2001, I would not add any more value to the total stumpage value. If changed at all, I would decrease the value to no more than \$20,000 for total stumpage on the lot.

Forest Management Plan Update

For

Grover McLaughlin Lot

Town of Appleton

Map 8; Lots 5 + 15

34 acres

Updated by Mark R. Vannah

RLCO L.F. #1098

Aug 23, 2017

Current Woodland Condition:

The woodland continues to recover from a selective harvest some 12 – 15 years ago when the town put the woodland up for a harvest bid. A licensed forester oversaw the harvest and marked timber for harvest in managing long term for the town of Appleton. I recently walked back over much of the woodland on each side of the West Appleton Road and will break down the woodlot accordingly.

The west parcel (swamp side) still maintains a light overstory of maturing timber mixed with white pine, red oak, other hardwood, and a scattering of hemlock/spruce in the poletimber to sawtimber size class. The white pine and oak, in particular, represent the highest value with some good looking individual trees spread throughout. The natural regeneration looks fantastic with white pine saplings dominating small openings along with hardwood like red oak. Keep in mind, red oak just came off a bumper crop of acorn production last fall.

The east parcel (cemetery side) contains a more densely populated stand especially to the south end, heavy to hardwood poles and early sawtimber of red oak, red maple, and birch mixed with an occasional white pine, that could use some light harvesting to favor crop tree release. Red pine plantation in the sawtimber stage dominates the northern section of the woodland looking somewhat stagnant in productivity. Mostly hardwood pulp/firewood would be the main product to remove with the exception of possibly a load or two of logs (some white pine to harvest, if necessary) in the southern portion of the lot. Again, where small openings occurred from the previous harvest, natural regeneration of white pine, oak, and other hardwood was abundant. The red pine stand will need a heavy harvest at some point in the near future as live crowns continue to shrink.

Harvest timetable:

The next harvest for the west parcel will be mainly an overstory removal though I'm not sure it's ready yet. More time is probably needed for the natural regeneration to grow and strengthen before the overstory is removed. Allow this stand to grow for another 5-10 years at which time the landowner's agent and a forester can evaluate the understory condition before committing to the overstory removal.

The next commercial harvest for the east parcel should probably coincide with the harvest to the west for quantity sake, making the job more attractive to a logging contractor.

Forest Management Plan Update

For

Collins & Pert Lot

Town of Appleton

Map 12; Lots 2 + 3

Approximately 125 Acres

Supervising Forester: Mark Vannah

License number: LF1098

Prepared by Nolan Steele

August 23, 2017

Current Woodlot Condition:

This woodlot has been harvested some 10-15 years ago by a local logger and timber marked by a licensed forester (MRV). The woodlot was accessed from the Lower Road as roughly 50-60% of the woodland was treated. Parts of Stand 3a and all of 3b and Stand 5 were not harvested due to length of skid and wetland issues.

The forest remains fairly well wooded as good form, sawtimber white pine and hardwood maintain the overstory and ample natural regeneration dominated by balsam fir, white pine, and hardwood constitute the understory.

The wetland areas are still well wooded, and have ample shade on the ground to protect the biologic individuals inhabiting these areas. **NO NOT CUT IN THESE AREAS.**

The back of the woodlot is still well wooded. There is noted mortality in the balsam fir component. This fir could eventually get harvested to capture the mortality but there is not a good market currently or this product. This part of the woodlot, part of Stand 3a, and all of 3b and Stand 5 should be accessed to the south east if possible across private property and out to the Back Road (See Map).

Management Recommendations:

It is recommended that this woodlot as a whole be uninterrupted within the next 10 years. During this 10 years the woodlot should be monitored for overall forest health, including any horrific weather events, insect and disease outbreaks, land use neglect (dumping, etc.).

Wildlife Habitat

The large wetland in the center of the lot is labeled as Inland Waterfowl/Wading bird Habitat (IWWH 205557) with a low rating. The Beginning with Habitat website (<http://www.beginningwithhabitat.org>) provides interactive maps that can be extremely useful and informative for landowners as well as various habitat descriptions/information. Any harvesting activities should be preceded by review of the current rules and regulations surrounding timber harvesting adjacent to significant wildlife habitat.

Legal Obligations

All harvesting operations must follow the rules and guidelines set forth by the Forest Practices Act. The large wetland in the center of the woodlot is required to be provided with a 250' buffer zone from the high water mark Refer to Maine's "Chapter 21: Statewide Standards for Timber Harvesting and Related Activities in Shoreland Areas" for more

information. Any harvesting activities should be preceded by review of the current rules and regulations surrounding timber harvesting adjacent to bodies of water.

To help achieve the desired outcomes and make sure that rules and regulations are followed, it may be useful for the landowner to employ a licensed forester to oversee operations during future harvests. This service can range from a quick review of current laws, to marking timber for removal and checking up on harvest operations and progress.

Forest Management Plan Update

For

Fred Lamont Lot

Town of Appleton

Map 3; Lots 14 + 15

Approximately 52 Acres

Supervising Forester: Mark Vannah

License number: LF1098

Prepared by Nolan Steele

August 23, 2017

Current Woodlot Conditions:

The portion of the woodlot that was previously labeled as stand 1 still runs heavily, if not almost entirely, to red and white pine. This stand condition takes up the entire operable portion of the woodlot on the west side of Collinstown Road and approximately 13 acres of the rest of the woodlot. There are very few scattered birch and red maple individuals that have found gaps in the pine overstory to inhabit. This stand contains timber mostly in the sawlog size classes. The red pine component seems to have thin crowns indicating possible stress or lack of vigor. Much of the red pine is straight stemmed with little branch retention. The white pine component seems to have healthy live crowns and are fairly vigorous. They are starting to touch other crowns and the base of the live crowns are likely receding, indicating that they are competing with neighbors for available light.

Much of the rest of the woodlot, outside of the wetlands, is mixed in composition. Overstory species tend to include mostly red maple, white pine, hemlock, and spruce with other scattered species like birch, balsam fir, and red oak. The overstory seems to be somewhat well stocked, ranging from dense in some areas to still having growing space for individuals to expand their crowns in others. Most of these trees are large poles or small sawlog sizes. There are some scattered large white pine that were left in previous harvests that are reaching oversize class but are providing good seed sources. The understory in this stand type is well regenerated with advance regen of white pine, spruce, and fir in openings and in old trails. This occurrence of regeneration is especially prolific in the more eastern portion of the woodlot.

The wetland areas on this woodlot are dominated by red maple, many originating from stump sprouts indicating heavy past harvesting. Scattered within the red maple are individuals indicative of forested wetlands including cedar, balsam fir, spruce, yellow birch. A few scattered hummocks in the topography house isolated white pine individuals. Size classes vary throughout the stand due to scattered individual cases of mortality and microsite quality.

Harvest Timetable:

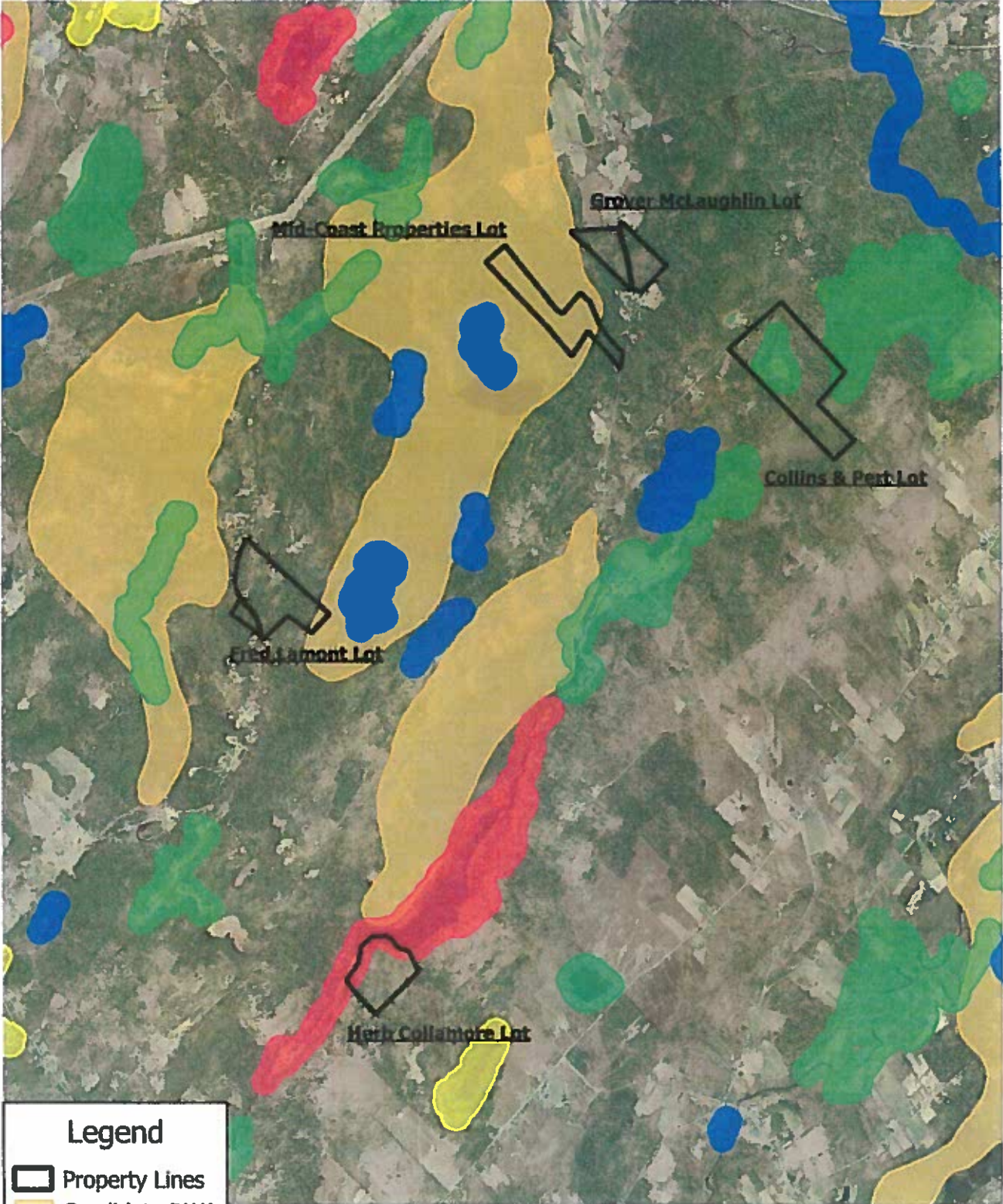
The next harvest for this woodlot will be very dependent on the current wood markets. In what was stand 1, the red pine should be thinned/removed to release the white pine in the overstory and to release the regeneration beneath it. Currently red pine markets are not great and are very seasonal, generally occurring in the fall and ending in the early spring. In the mixed stand components, it would be helpful to both release established regeneration and establish white pine in uninhabited areas. This can be done by intentionally thinning near overstory white pine to light the ground below and let seed establish the site. Target trees for removal should be balsam fir, poorly formed hardwood stems, and high-risk spruce stems. If markets are conducive, this harvest should happen within the next 10-15 years.

Timber Harvest Priority List 10/5/2017

For Town of Appleton Woodlots

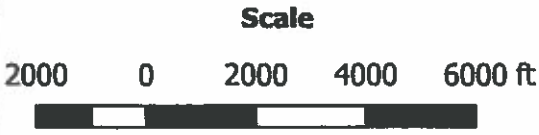
Time Frame	Lot	Harvest Type	Stumpage
2017-27	McLaughlin	Allow to grow Possibility on east parcel, Red pine, hdwd	less than \$1000
2017-27	Collins n Pert	Allow to grow other than back side of lot, wtc operation may best serve this area	less than \$1500
2017-27	Fred Lamont	Some improvement work possible, target Red pine stands for heavy harvest Can wait this time period Allow most white pine to grow	less than \$2000
2017-27	Mid Coast Prop.	Thinning/improvement cut needed, Cut to Length best application	\$6000 - \$9000
2017-27	Collamore lot	Needs improvement cut	\$6,000 +

Town of Appleton: Wildlife Considerations



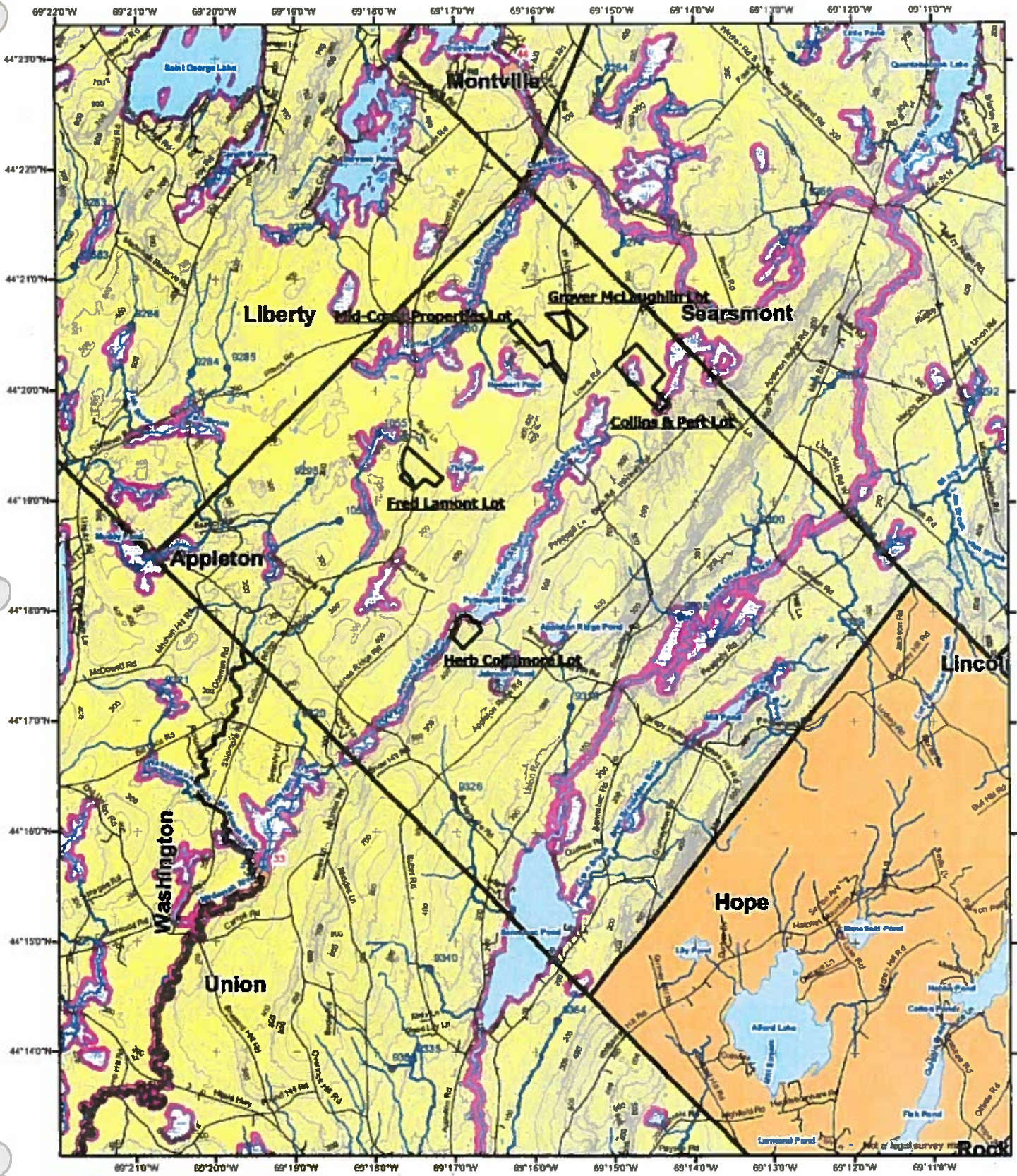
Legend

- Property Lines
- Candidate DWA
- IWWH
- High Rating
- Low Rating
- Medium Rating
- Not Yet Rated



Map created by Robbins Lumber, Inc.
Created on 08-24-2017.
NAD 83, Zone 19N.
Oriented to True North.
Habitat data from Beginning With Habitat.
2013 orthophotos from MEOGIS.
Intended for planning purposes only.
Not a legal survey.

Statewide Standards for Timber Harvesting in the Shoreland Area* Map



This map is ADVISORY, for planning purposes only. Actual ground conditions and water body locations determine where and how MFS timber harvesting rules apply. Contact the MFS for additional information/assistance from a MFS Forester.

Forest Operation Notification & Shoreland Area* Map

Appleton

LD Last Name _____
 LD First Name _____
 Prepared By _____
 FOHS # _____
 Date _____

Wetlands

- Non-forested Wetlands Greater Than 10 acres (Lacustrine Forested)
- Emergent or Marine Wetland

Department of Agriculture, Conservation and Forestry
 Maine Forest Service

Maine Forest Service

For additional information, please contact the MFS at 1-207-287-2791 or 1-800-367-0223 (in-State)

Email us at: foreinfo@maine.gov

or on the web at: www.maine-forestservice.gov

*See MFS Rule - Chapter 21 for additional information.

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Drainage Points

- 300 Acre Drainage Point (start of the 75 ft Buffer) 1234 - ID Number (Location 1-5)
- 25 Square Mile Drainage Point (start of the 250 ft buffer) 5678 - ID Number (Location 1-5)

Habitat

- Essential Wildlife Habitat (Least Tern, Rowley Tern, Ring-billed Gull)

- FON Town (Statewide Standards Rules do not apply (Rowley Tern Standards apply))

Buffers

- 250 Foot Buffer Zones (Drainage Points Non-forested Wetlands greater than 10 acres Rivers below the 25 square mile drainage point Coastal Wetlands Total River Estuary or Water Habitat (Less than 1000 feet, 100 ft Buffer))
- 75 Foot Buffer Zones (Streams within the 300 acre drainage point and the 25 square mile drainage point)
- Streamline Buffer Zones (Streams at or above 100 feet and Non-forested Wetlands greater than 10 acres and wetland 100 ft Buffer)

Shaded in light grey, with symbols to UNMAPPED streams & wetlands

September 2016

