



Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 47

Entry Year 2015

Acreage: 2,101

County Schoolcraft

Management Area: Seney Manistique Swamp

Revision Date: 08/05/2013

Stand Examiner: Tom Burnis

Legal Description:

T43N R14W Sections 1,12,13,23,24

Identified Planning Goals:

Timber production and wildlife management.

Soil and topography:

Topography is mainly flat, with a mix of marsh and low ridges. The soil type in the majority of the compartment is sauguetuck.

Ownership Patterns, Development, and Land Use in and Around the Compartment:

County road 433 runs through the compartment providing access to multiple blocks of private land and hunting camps.

Unique Natural Features:

No Unique Natural Features known.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

None

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions

Sections 1,12-14, 23 & 24, T43N-R14W, Schoolcraft County

Surface sediments consist of lacustrine (lake) sand and gravel, peat and muck and coarse-textured till. There is insufficient data to determine the glacial drift thickness. The Silurian Manitoulin Dolomite and Ordovician Queenston Shale subcrop below the glacial drift. The Manitoulin is used for stone. The nearest gravel pit is 2 miles to the northeast and there may be some gravel potential on the north end. There is no commercial oil and gas production in the UP.

Vehicle Access:

A county road runs through and alongside of the compartment however, there is no access to most of the compartment due to marsh areas.

Survey Needs:

None

Recreational Facilities and Opportunities:

Snowmobile Trail #2 barely touches the southeast corner of the compartment. Avoid use of the trail for logging activities if possible. If the trail must be used for access, do not plow to bare ground and keep the trail/road maintained as wide as possible.

Fire Protection:

Limited access to marsh and pine ridges.

Additional Compartment Information:

The following reports from the Inventory are attached:

- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

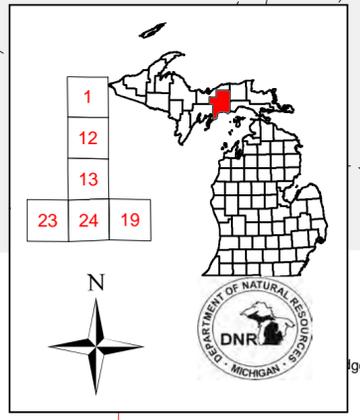
The following information is displayed, where pertinent, on the attached compartment maps:

- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

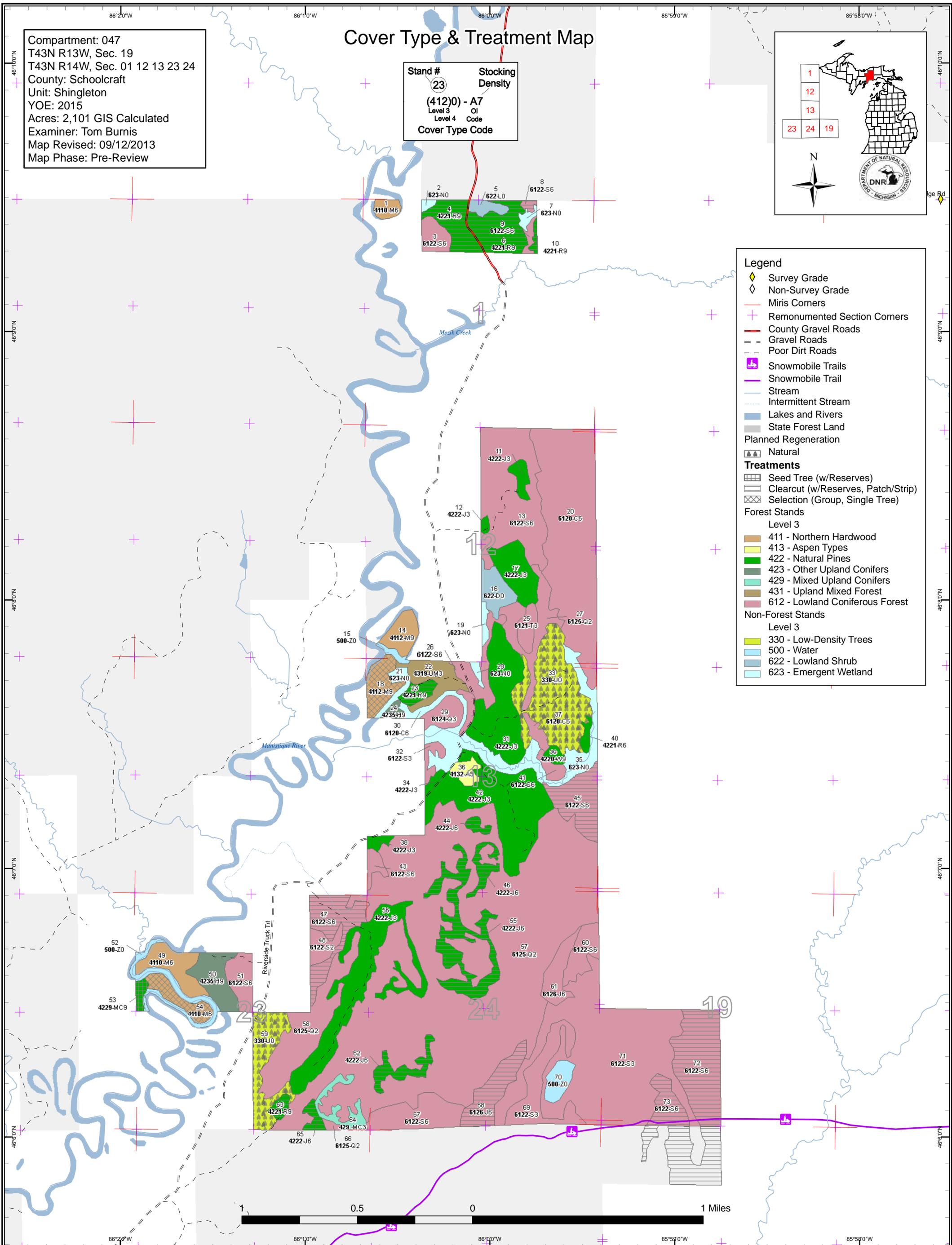
Cover Type & Treatment Map

Compartment: 047
 T43N R13W, Sec. 19
 T43N R14W, Sec. 01 12 13 23 24
 County: Schoolcraft
 Unit: Shingleton
 YOY: 2015
 Acres: 2,101 GIS Calculated
 Examiner: Tom Burnis
 Map Revised: 09/12/2013
 Map Phase: Pre-Review

Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



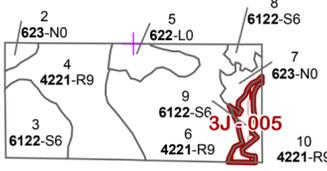
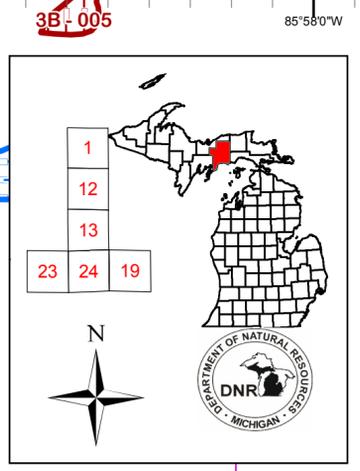
- Legend**
- ◆ Survey Grade
 - ◇ Non-Survey Grade
 - Miris Corners
 - + Remonumented Section Corners
 - County Gravel Roads
 - - - Gravel Roads
 - - - Poor Dirt Roads
 - ⚡ Snowmobile Trails
 - Snowmobile Trail
 - Stream
 - Intermittent Stream
 - Lakes and Rivers
 - State Forest Land
 - Planned Regeneration
 - ▲ Natural
 - Treatments**
 - ▨ Seed Tree (w/Reserves)
 - ▨ Clearcut (w/Reserves, Patch/Strip)
 - ▨ Selection (Group, Single Tree)
 - Forest Stands**
 - Level 3
 - 411 - Northern Hardwood
 - 413 - Aspen Types
 - 422 - Natural Pines
 - 423 - Other Upland Conifers
 - 429 - Mixed Upland Conifers
 - 431 - Upland Mixed Forest
 - 612 - Lowland Coniferous Forest
 - Non-Forest Stands**
 - Level 3
 - 330 - Low-Density Trees
 - 500 - Water
 - 622 - Lowland Shrub
 - 623 - Emergent Wetland



Special Conservation Areas & Site Conditions Map

Compartment: 047
 T43N R13W, Sec. 19
 T43N R14W, Sec. 01 12 13 23 24
 County: Schoolcraft
 Unit: Shingleton
 YOE: 2015
 Acres: 2,101 GIS Calculated
 Examiner: Tom Burnis
 Map Revised: 09/12/2013
 Map Phase: Pre-Review

Stand #
 23
 (412)0 - A7
 Level 3 OI
 Level 4 Code
 Cover Type Code



Legend

- Remonumented Section Corners
- Miris Corners
- Stand Boundaries

Site Condition Available

- Available w/ Constraints (Factor - Number)
- Unavailable (Factor - Number)

Available Factors W/ Constraints

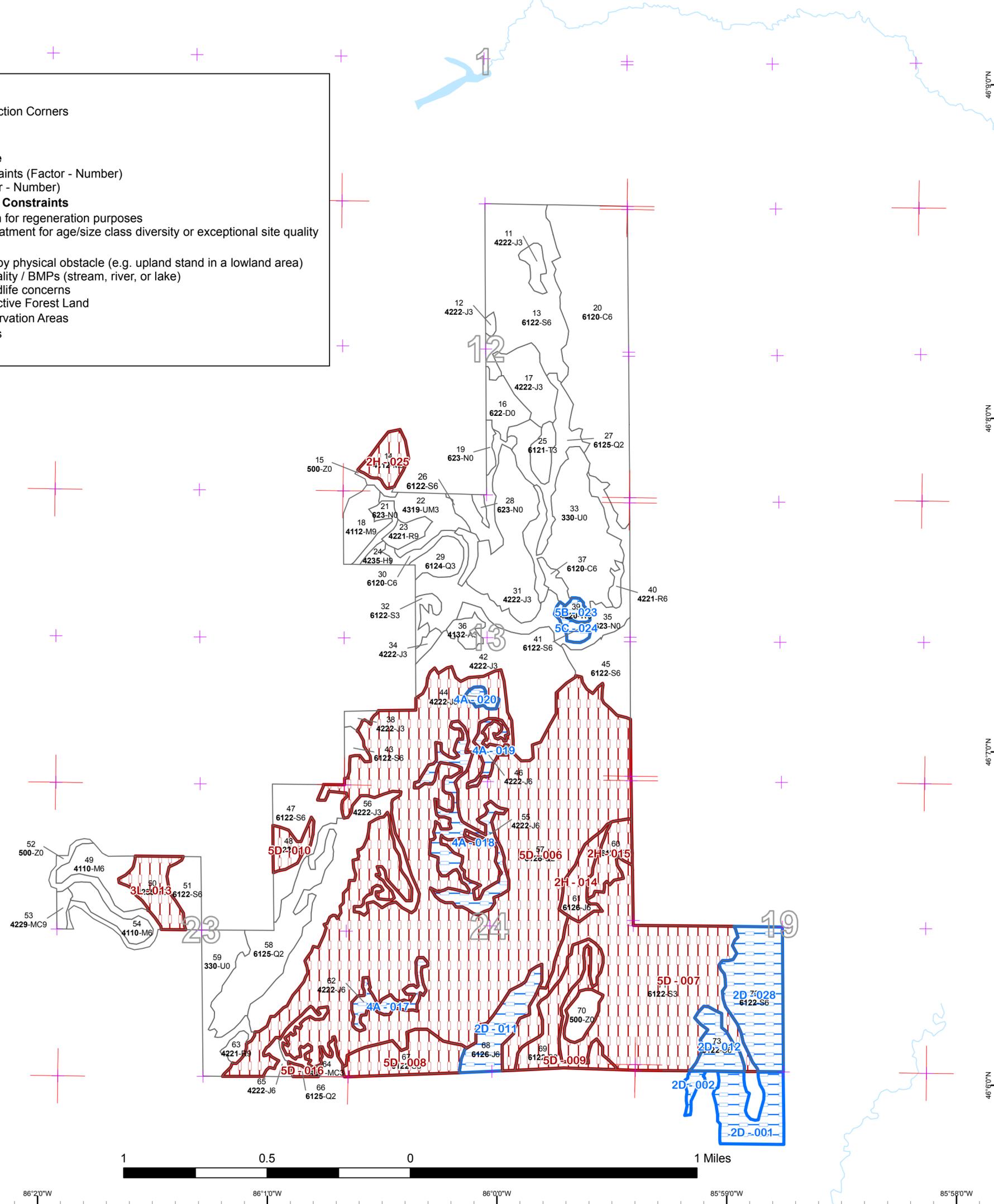
- 5B: Retention for regeneration purposes
- 5C: Delay treatment for age/size class diversity or exceptional site quality

Unavailable Factors

- 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
- 3J: Water quality / BMPs (stream, river, or lake)
- 3L: Other wildlife concerns
- 5D: Unproductive Forest Land

Dedicated Special Conservation Areas

- Cold Water Streams
- Cold Water Lakes



Report 1 – Total Acres by Cover Type and Age Class



	Age Class													Total	
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +		Uneven Age
Aspen	0	0	6	0	0	0	0	0	0	0	0	0	0	0	6
Cedar	0	0	0	0	0	0	0	0	0	0	0	9	139	0	148
Hemlock	0	0	0	0	0	0	0	0	0	0	0	0	24	0	24
Jack Pine	3	119	108	0	0	0	55	49	0	0	0	0	0	0	334
Low-Density Trees	97	0	0	0	0	0	0	0	0	0	0	0	0	0	97
Lowland Conifers	0	0	11	0	0	654	0	0	0	0	0	0	0	0	665
Lowland Shrub	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Lowland Spruce/Fir	0	0	0	5	0	187	189	15	68	0	0	69	0	0	534
Marsh	73	0	0	0	0	0	0	0	0	0	0	0	0	0	73
Natural Mixed Pines	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
Northern Hardwood	0	0	0	0	0	0	0	5	33	0	0	0	29	0	67
Red Pine	0	0	0	0	0	3	0	7	48	0	4	0	0	0	62
Tamarack	0	0	8	0	0	0	0	0	0	0	0	0	0	0	8
Treed Bog	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Upland Conifers	0	11	0	0	0	0	0	0	0	0	0	0	0	0	11
Upland Mixed Forest	0	0	0	19	0	0	0	0	0	0	0	0	0	0	19
Water	28	0	0	0	0	0	0	0	0	0	0	0	0	0	28
White Pine	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
Total	219	130	134	24	0	844	244	80	149	0	4	78	195	0	2101



Report 2 – Proposed Treatment Summaries

Shingleton Mgt. Unit
Year of Entry 2015

Compartment 047
Total Compartment Acres: 2,101

Acres by Treatment Type

Commercial Harvest - 308 Tree Planting - 20 Other - 0
 Habitat Cut - 0 Opening Maintenance - 0

Cover Type by Harvest Method

	<i>Clearcut</i>	<i>Selection</i>	<i>Seed Tree</i>	<i>Shelterwood</i>	<i>Thinning</i>	<i>Other - Specify</i>	<i>Total Acres</i>
Lowland Coniferous Forest	152	0	0	0	0	0	152
Natural Pines	123	0	3	0	0	0	127
Northern Hardwood	0	29	0	0	0	0	29
Total	276	29	3	0	0	0	308



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
4	41047004-Cut	19.8	42210 - Natural Red Pine	High Density Log	86	111-140	Harvest	Clearcut with Reserves	42110 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Clearcut stand, leaving some large white pine and red pine as a seed source. Buffer each side of drainage ditch 10 feet to protect ditch and										
<u>Specs:</u> serve as retention.										
<u>Other</u> Wait two years to see where aspen clones form and to see if any natural red pine seed in.										
<u>Comments:</u>										
<u>Next</u> After two years, plant red pine seedlings through stand but avoid planting through aspen clones. Also plant oak saplings.										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2014										
6	41047006-Cut	26.0	42210 - Natural Red Pine	High Density Log	86	51-80	Harvest	Clearcut with Reserves	42210 - Natural Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Clearcut. Leave section of stand north of drainage as retention.										
<u>Specs:</u>										
<u>Other</u> Previously cut to 50 sqft. residual red pine. Some open areas contain densely stocked jack pine regeneration.										
<u>Comments:</u>										
<u>Next</u> Write FTP for site prep and planting of red pine seedlings. Avoid areas with existing jack pine regen.										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2014										
8	41047008-Cut	1.7	6122 - Black Spruce	High Density Pole	86		Harvest	Clearcut	6122 - Black Spruce	Cmpt. Review Proposal
<u>Prescription</u> Harvest all trees. Do not cut submerchantable trees. No retention due to small acreage and amount of submerchantable trees.										
<u>Specs:</u>										
<u>Other</u> Could be cut with dry summer conditions, otherwise, will have to be cut in freezing winter conditions.										
<u>Comments:</u>										
<u>Next</u> Monitor for the success of regeneration. Acceptable regen includes mix of existing overstory.										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2014										
10	41047010-Cut	1.7	42210 - Natural Red Pine	High Density Log	86	51-80	Harvest	Clearcut	42210 - Natural Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Clearcut all species. No retention due to small acreage.										
<u>Specs:</u>										
<u>Other</u> Previously cut to 50 sqft of red pine. Some open areas have high density jack pine regeneration.										
<u>Comments:</u>										
<u>Next</u> Prepare site and plant red pine seedlings. Avoid areas with good jack pine regen existing.										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2014										
18	41047018-Cut	16.3	4112 - Maple, Beech, Cherry Association	High Density Log	169	111-140	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<u>Prescription</u> Mark to cut down to 80 sqft/acre. No cut on hemlock. Avoid plugging any drainages to the river and stay out of oxbows. Maintain a 50 foot buffer										
<u>Specs:</u> along Manistique river.										
<u>Other</u> Previously classified as old growth. Received a select cut in 1987. Stand next to river and has seasonal drains and oxbows present. Stand must										
<u>Comments:</u> be accessed during frozen winter conditions. An old sleugh must be crossed for access.										
<u>Next</u> Monitor for success of regeneration. Mix of current species is acceptable.										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2014										

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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
23 41047023-Cut	6.8	42210 - Natural Red Pine	High Density Log	77	81-110	Harvest	Clearcut with Reserves	429 - Mixed Upland Conifers	Cmpt. Review Proposal
<u>Prescription</u> Remove pine overstory leaving a few large white pine as a seed source. Also leave any red pine pole size trees. Take care to protect existing regeneration.									
<u>Specs:</u>									
<u>Other</u> Thick advanced regen in understory. Converting stand from red pine to existing regen of mostly balsam fir.									
<u>Comments:</u>									
<u>Next</u> Acceptable regen mix of existing overstory species as well as existing advanced regeneration consisting mostly of balsam fir.									
<u>Steps:</u>									
<u>Proposed</u>									
<u>Start Date:</u> 10/01/2014									

45 41047045-Cut	27.5	6122 - Black Spruce	High Density Pole	82		Harvest	Clearcut with Reserves	6122 - Black Spruce	Cmpt. Review Proposal
<u>Prescription</u> Clearcut but leave white pine. Retention area in a north-south strip through center of stand.									
<u>Specs:</u>									
<u>Other</u> Old fence evidence on section line east side of stand. Mature spruce with areas of young spruce mixed in.									
<u>Comments:</u>									
<u>Next</u> Monitor the success of regeneration. Acceptable regen, mix of current spp.									
<u>Steps:</u>									
<u>Proposed</u>									
<u>Start Date:</u> 10/01/2014									

47 41047047-Cut	29.8	6122 - Black Spruce	High Density Pole	64		Harvest	Clearcut with Reserves	6122 - Black Spruce	Cmpt. Review Proposal
<u>Prescription</u> Clearcut but leave large red and white pine if on firm ground. No cut on cedar and take care not to block drainages. Put retention patch where appropriate to include cedar areas.									
<u>Specs:</u>									
<u>Other</u> Stand is mostly black spruce with some lower areas of cedar in drainage areas. Stand also contains some higher ground with large red and white pine.									
<u>Comments:</u>									
<u>Next</u> Monitor for success of regeneration. Acceptable regen includes mix of current species.									
<u>Steps:</u>									
<u>Proposed</u>									
<u>Start Date:</u> 10/01/2014									

53 41047053-Cut	3.5	42290 - Natural Mixed Pine	High Density Log	77	141-170	Harvest	Seed Tree with Reserves	42290 - Natural Mixed Pine	Cmpt. Review Proposal
<u>Prescription</u> Cut red and white pine leaving 30 sqft as seed source. Do not cut hemlock, exclude southern portion of stand where most hemlock exists. This will be the retention area. Maintain a 50 foot river buffer.									
<u>Specs:</u>									
<u>Other</u> Red and white pine logs with a thick understory of fir 30' tall. South portion of the stand is heavier to large hemlock. This is a small stand which is the access to stand 55. A few hemlock may have to be cut to get down the ridge into stand 55.									
<u>Comments:</u>									
<u>Next</u> Monitor for regeneration. Stand will likely convert to fir but hoping for some mixed pine regen in areas torn up from logging. Acceptable regen mix of current species as well as existing advanced regen consisting of mostly balsam fir.									
<u>Steps:</u>									
<u>Proposed</u>									
<u>Start Date:</u> 10/01/2014									



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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
54 41047054-Cut	12.6	4110 - Sugar Maple Association	High Density Pole	82	111-140	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal

Prescription Thin to 50-70 sq.ft. Need to open crown enough to get good regen in order to try and overwhelm deer. Do not plug any drainage areas and stay out of oxbows. Maintain a 50 foot buffer to the Manistique river.

Other Comments: Gullies and low drainage areas throughout stand. They are dry now but could hold water on wetter years.

Next Steps: Monitor for success of regeneration. Mix of current species is acceptable regen.

Proposed Start Date: 10/01/2014

63 41047063-Cut	4.0	42210 - Natural Red Pine	High Density Log	106	51-80	Harvest	Clearcut	42210 - Natural Red Pine	Cmpt. Review Proposal
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Prescription Remove all red and white pine overstory. No retention due to small acreage.

Other Comments: Stand was too thick to scarify and was not accessible due to drainage and private land. 2012 Walk through shows poor regen.

Next Steps: Hand plant red pine.

Proposed Start Date: 10/01/2014

65 41047065-Cut	4.4	42220 - Natural Jack Pine	High Density Pole	65		Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal
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Prescription Cut all trees except red pine.

Other Comments:

Next Steps: Monitor for success of regen. Hand plant if natural regen fails. Mix of current species acceptable regen.

Proposed Start Date: 10/01/2014

Total Treatment Acreage Proposed: 154.1



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
44	41047044-Cut	3.2	42220 - Natural Jack Pine	High Density Pole	76		Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> Clearcut leaving some red pine seed trees. Exclude areas, where appropriate, as retention.										
<u>Specs:</u>										
<u>Other</u> Island of timber in marsh will have to freeze access road.										
<u>Comment:</u>										
<u>Next</u> Monitor for success of regeneration. Hand plant if natural regen fails. Mix of current species is acceptable regen.										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2014										
<u>Limiting Factor</u> 4A: No merchantable products (see product standards)										
46	41047046-Cut	7.5	42220 - Natural Jack Pine	High Density Pole	76		Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> Clearcut leaving some red pine seed trees. Exclude areas, where appropriate, as retention.										
<u>Specs:</u>										
<u>Other</u> Island of timber in marsh. Will have to freeze access road.										
<u>Comment:</u>										
<u>Next</u> Monitor for success of regeneration. Hand plant if natural regen fails. Mix of current species acceptable regen.										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2014										
<u>Limiting Factor</u> 4A: No merchantable products (see product standards)										
55	41047055-Cut	38.3	42220 - Natural Jack Pine	High Density Pole	76		Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> Clearcut leaving some red pine seed trees. Exclude areas, where appropriate, as retention.										
<u>Specs:</u>										
<u>Other</u> Island of timber in marsh. Will have to freeze access road.										
<u>Comment:</u>										
<u>Next</u> Monitor for success of regeneration. Hand plant if natural regen fails. Mix of current species acceptable regen.										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2014										
<u>Limiting Factor</u> 4A: No merchantable products (see product standards)										
62	41047062-Cut	11.5	42220 - Natural Jack Pine	High Density Pole	65		Harvest	Clearcut	42220 - Natural Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> Cut all trees. No retention due to small acreage.										
<u>Specs:</u>										
<u>Other</u> Will have to freeze a road to access stand.										
<u>Comment:</u>										
<u>Next</u> Monitor for success of regeneration. Hand plant if natural regen fails.										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2014										
<u>Limiting Factor</u> 4A: No merchantable products (see product standards)										

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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
68 41047068-Cut	24.5	6126 - Lowland Jack Pine	High Density Pole	67		Harvest	Clearcut with Reserves	6125 - Lowland Black Spruce, Jack Pine	Cmpt. Review Proposal

Prescription Cut all trees but leave red and white pine if they exist.

Specs:

Other Comment: Center of stand is pure jack pine that is on it's way out. Edges of stand is black spruce much of which is submerchantable. Stand may be inaccessible.

Next Steps: Monitor for success of regeneration. Hand plant if natural regen fails. Mix of current species acceptable regen.

Proposed Start Date: 10/01/2014

Limiting Factor 2D: Portable Bridge Needed (Dept. bridge will be adequate)

72 41047072-Cut	53.6	6122 - Black Spruce	High Density Pole	115		Harvest	Clearcut with Reserves	6122 - Black Spruce	Cmpt. Review Proposal
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Prescription Cut all trees. Leave retention patches where appropriate.

Specs:

Other Comment: New stand this entry, newly acquired land. Pure black spruce stand. Nice height and DBH as far as black spruce goes. Stand may not be accesable. Include adjacent stand in compartment 63.

Next Steps: Monitor for success of regeneration. Mix of current spp acceptable regen.

Proposed Start Date: 10/01/2014

Limiting Factor 2D: Portable Bridge Needed (Dept. bridge will be adequate)

73 41047073-Cut	15.3	6122 - Black Spruce	High Density Pole	110		Harvest	Clearcut with Reserves	6122 - Black Spruce	Cmpt. Review Proposal
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Prescription Cut all trees except red and white pine. Make retention patch where appropriate.

Specs:

Other Comment: New stand this entry, newly acquired land. Old stand with slow growing trees. Mix of poles and submerchantable black spruce. Stand may not be accesable. Include adjacent stand in compartment 63.

Next Steps: Monitor for success of regeneration. Current species mix is acceptable regen.

Proposed Start Date: 10/01/2014

Limiting Factor 2D: Portable Bridge Needed (Dept. bridge will be adequate)

41063_OutOfY OE_1-Cut	31.3					Harvest	Clearcut with Reserves	6122 - Black Spruce	Cmpt. Review Proposal
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Prescription Cut all trees. Leave retention patches where appropriate.

Specs:

Other Comment: New stand this entry, newly acquired land. Pure black spruce stand. Nice height and DBH as far as black spruce goes. Stand may not be accesable. Harvest with stand 72, comp.47.

Next Steps: Monitor for success of regeneration. Mix of current spp acceptable regen.

Proposed Start Date: 10/01/2014

Limiting Factor 2D: Portable Bridge Needed (Dept. bridge will be adequate)



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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
41063_OutOfY OE-Cut	3.5					Harvest	Clearcut with Reserves	6122 - Black Spruce	Cmpt. Review Proposal

Prescription Cut all trees except red and white pine. Make retention patch where appropriate.

Specs:

Other Comment: New stand this entry, newly acquired land. Old stand with slow growing trees. Mix of poles and submerchantable black spruce. Stand may not be accesable. Harvest with stand 73, comp 47.

Next Steps: Monitor for success of regeneration. Current species mix is acceptable regen.

Proposed Start Date: 10/01/2014

Limiting Factor 2D: Portable Bridge Needed (Dept. bridge will be adequate)

**Total Treatment
Acreage Proposed: 188.7**

Report 5 – Site Conditions

Shingleton Mgt. Unit

Tom Burnis : Examiner

Compartment 047

Year of Entry 2015

Availability for Management

Total Acres	Acres		Dominant Site Conditions	Dominant Site Conditions						
	Available	Not Available		No	5D	5C	5B	3L	3J	2H
6	6		Aspen	6						
148	148		Cedar	148						
24	3	20	Hemlock	3				20		
334	319	15	Jack Pine	319						15
665	88	577	Lowland Conifers	88	577					
534	263	270	Lowland Spruce/Fir	258	252	5			3	15
3	3		Natural Mixed Pines	3						
67	54	13	Northern Hardwood	54						13
62	62		Red Pine	62						
8	8		Tamarack	8						
11	11		Upland Conifers	11						
19	19		Upland Mixed Forest	19						
4	4		White Pine				4			
1,884	988	896	Total Forested Acres	979	830	5	4	20	3	43
	52%	48%	Relative Percent							

**Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.*

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
005	Not Available	3J: Water quality / BMPs (stream, river, or lake)	3				
Comments:							
006	Not Available	5D: Unproductive Forest Land	575				
Comments:							
High water table. Sparsley covered with short stunted low quality trees.							

Report 5 – Site Conditions

Shingleton Mgt. Unit
Tom Burnis : Examiner

Compartment 047
Year of Entry 2015

007	Not Available	5D: Unproductive Forest Land	182		
Comments: High water table. Densely covered with short stunted low quality trees.					
008	Not Available	5D: Unproductive Forest Land	30		
Comments: High water table. Taller trees and more densely covered than adjacent stand but very slow growing. Over 60 years old and mostly sapling size, 3-4 inch DBH.					
009	Not Available	5D: Unproductive Forest Land	32		
Comments: High water table. High density but very slow growing trees.					
010	Not Available	5D: Unproductive Forest Land	9		
Comments: High water table. High density slow growing trees.					
011	Available	2D: Portable Bridge Needed (Dept. bridge will be adequate)	25	2E: Road needed	2G: Too wet (sensitive soils, does not include access issues)
Comments: Area to access through has poor history for freezing characteristics. About 2 1/2 miles needed.					
012	Available	2D: Portable Bridge Needed (Dept. bridge will be adequate)	15	2E: Road needed	2G: Too wet (sensitive soils, does not include access issues)
Comments: Area to access through has poor history of freezing characteristics. About 3 miles.					

Report 5 – Site Conditions

Shingleton Mgt. Unit

Tom Burnis : Examiner

Compartment 047

Year of Entry 2015

013	Not Available	3L: Other wildlife concerns	21	
Comments:				
014	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	15	No Limiting Factor
Comments:				
Poor quality short trees. Access across sensitive soils with high water table.				
015	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	15	2G: Too wet (sensitive soils, does not include access issues)
Comments:				
Access through sensitive soils with high water table.				
016	Not Available	5D: Unproductive Forest Land	2	
Comments:				
High water table. trees are old but of sapling size.				
017	Available	4A: No merchantable products (see product standards)	12	
Comments:				
Short crossing on lowland site. Factor limits due to similar unsold sales.				
018	Available	4A: No merchantable products (see product standards)	38	
Comments:				
Short crossing on lowland site. Factor limits due to similar unsold sales.				

Report 5 – Site Conditions

Shingleton Mgt. Unit

Tom Burnis : Examiner

Compartment 047

Year of Entry 2015

019	Available	4A: No merchantable products (see product standards)	8		
Comments: Short crossing on lowland site. Factor limit due to similar unsold sales.					
020	Available	4A: No merchantable products (see product standards)	3		
Comments: Short crossing on lowland site. Factor limit due to similar unsold sales.					
023	Available	5B: Retention for regeneration purposes	4		
Comments: Previously shelterwood cut. Want to allow more time for advanced regeneration.					
024	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5		
Comments: Small stand. Want to save and harvest with stands 39 and 40.					
025	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	13		
Comments: Island of timber surrounded by river slough.					
028	Available	2D: Portable Bridge Needed (Dept. bridge will be adequate)	54	2E: Road needed	2G: Too wet (sensitive soils, does not include access issues)
Comments: Area to access through has poor history of freezing characteristics. About 3 miles.					



Report 6 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
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Comments



Report 7 – DEDICATED CONSERVATION AREA DETAILS

* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

ERA = Ecological Reference Area
 HCVA = High Conservation Value Area
 SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4110 - Sugar Maple Association	High Density Pole	5.5	75	81-110	Select cut in 1978 but must have been cut heavy. M6 stand with an M3 understory, almost all hard maple.
3	6122 - Black Spruce	High Density Pole	10.0	64		
4	42210 - Natural Red Pine	High Density Log	19.8	86	111-140	Mixed poles and logs in red pine. White pine all large. Some aspen and jack pine mixed through stand. Seasonal drainages in stand.
6	42210 - Natural Red Pine	High Density Log	26.0	86	51-80	<p>Cut all species except red and white pine. Can mark a few to cut if necessary in areas of high densities. Also, cut all trees within the aspen clones within this stand.</p> <p>[3-10-05 BB] Just Off The Road Sale 11-05 Residual Volumes= Red Pine=50sq ft, White Pine = 3 sq. ft. TO: Jeff Stampfly</p> <p>FROM: Bob Burnham</p> <p>SUBJECT: Compartment 47 OI Change</p> <p>The intent of this memo is to request approval to make a change in OI. When prepping Sale 11-05, Just Off the Road Sale we determined that Stand 2 in Compartment 47 needed a little tweaking. The stand is typed as an R6 and is scheduled for a thinning. However, the residual stocking of red and white pine is quite variable since it's a natural stand. There are several areas where the residual basal area is 0-30 square feet per acre, these areas were stocked mainly with jack pine. We would like to do some cultural work to these areas in the form of scarification, the adjacent stands that are part of the sale call for scarification so t</p>
8	6122 - Black Spruce	High Density Pole	1.7	86		mature spruce with submerchatable mixed. Small acreage, low volume.
9	6122 - Black Spruce	High Density Pole	2.8	86		Part of old inventory stand 2. Maintained as buffer to drainage as well as retention to original stand.
10	42210 - Natural Red Pine	High Density Log	1.7	86	51-80	<p>Cut all species except red and white pine. Can mark a few to cut if necessary in areas of high densities. Also, cut all trees within the aspen clones within this stand.</p> <p>[3-10-05 BB] Just Off The Road Sale 11-05 Residual Volumes= Red Pine=50sq ft, White Pine = 3 sq. ft. TO: Jeff Stampfly</p> <p>FROM: Bob Burnham</p> <p>SUBJECT: Compartment 47 OI Change</p> <p>The intent of this memo is to request approval to make a change in OI. When prepping Sale 11-05, Just Off the Road Sale we determined that Stand 2 in Compartment 47 needed a little tweaking. The stand is typed as an R6 and is scheduled for a thinning. However, the residual stocking of red and white pine is quite variable since it's a natural stand. There are several areas where the residual basal area is 0-30 square feet per acre, these areas were stocked mainly with jack pine. We would like to do some cultural work to these areas in the form of scarification, the adjacent stands that are part of the sale call for scarification so t</p>



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
11	42220 - Natural Jack Pine	High Density Sapling	5.9	20		[1/7/04 BB] Stand was covered under FTP-542 & 600, stand was never scarified or at least no record of it, it was re-inventoried in 2004 and it was determined to be fully stocked, the old stand number was 11, the FTP was cancelled with a blanket letter.
12	42220 - Natural Jack Pine	High Density Sapling	1.5	20		
13	6122 - Black Spruce	High Density Pole	80.5	64		Stand in good condition. Lot of small diameter spruce throughout stand. Let stand grow and evaluate next entry.
14	4112 - Maple, Beech, Cherry Association	High Density Log	12.9	169	111-140	Stand was missed in previous inventory. Island of timber surrounded by river slough makes it inaccessible.
17	42220 - Natural Jack Pine	High Density Sapling	22.1	20		[1/7/04 BB] Stand was covered under FTP-542 & 600, stand was never scarified or at least no record of it, it was re-inventoried in 2004 and it was determined to be fully stocked, the old stand number was 11, the FTP was cancelled with a blanket letter.
18	4112 - Maple, Beech, Cherry Association	High Density Log	16.3	169	111-140	Received a select cut in 1987. Hemlock and hardwoods marked, all other species cut. Resulted in good hard maple regen.
20	6120 - Lowland Cedar	High Density Pole	138.9	125		Poor quality cedar. Not heavily stocked with alder understory.
22	4319 - Mixed Upland Forest	High Density Sapling	18.7	30		
23	42210 - Natural Red Pine	High Density Log	6.8	77	81-110	Stand has advanced fir regen 20 - 30 feet tall. Some white pine, aspen and a few red pine also present but understory has converted to fir.
24	42350 - Upland Hemlock	High Density Log	3.1	169	81-110	Received a select cut in 1987. Hemlock and hardwoods marked, all other species cut. Heavy understory of fir regen resulted.
25	6121 - Tamarack	High Density Sapling	8.1	20		Mostly tamarack regeneration with some black spruce
26	6122 - Black Spruce	High Density Pole	15.3	69		
27	6125 - Lowland Black Spruce, Jack Pine	Medium Density	26.3	50		Stunted, slow growing trees on wet soil
29	6124 - Lowland Spruce-Fir	High Density Sapling	11.3	25		
30	6120 - Lowland Cedar	High Density Pole	4.2	119		



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
31	42221 - Natural Jack Pine, Mixed Deciduous	High Density Sapling	53.1	15		[1/7/04 BB] Stand was covered under FTP-712, stand was at least partially scarified. Old OI had stand 17 as part of new stand 22 as well. Stand was counted in 2002 and 1269 tpa were found, stand is fully regenerated and the FTP was closed with a blanket letter.
32	6122 - Black Spruce	High Density Sapling	5.1	30		Stand cut approx. 30 years ago. About 1 acre area didn't get cut and is black spruce poles.
34	42220 - Natural Jack Pine	High Density Sapling	2.9	6		[3-10-05 BB] White Pine Bit Sale 8-05 (10/2/07 AP) Inmates planted site with jack pine fall 2007. Contract is still open. Will need regen check in 2009. (6/6/08 AP) Inmates planted site with jack pine in spring 2008. Regen check needed in 2009. [6/9/2008 BB] Sale is now closed. Unit was cut spring 2006. TCR Date is 5/6/2008. Stand was originally scheduled for natural regeneration via scarification. However, due to the small size of the stand it was converted to artificial regeneration via inmate planting. Regeneration check to occur in 2009. (4/24/09 AP) 2009 regen count numbers for stand 14: 1,480 jack pine. Areas without slash were highly stocked. Areas with slash had lower stocking. Roadbed looks good. 3 year check in 2011. (6/7/2011 AP) 2011 regen counts showed excellent regeneration. FTP is closed.
36	4132 - Aspen, Jack Pine	High Density Sapling	6.4	25		
37	6120 - Lowland Cedar	High Density Pole	4.7	115		
38	42220 - Natural Jack Pine	High Density Sapling	3.2	25		Mostly upland jack pine with edges being lowland spruce.
39	42200 - Natural White Pine	High Density Log	3.6	122	81-110	Do not cut hemlock. [3-10-05 BB] White Pine Bit Sale 8-05 Residual Volumes; Red Pine = 48 sq ft, White pine = 7 sq ft [6/9/2008 BB] Sale is now closed. Stand was cut in January 2008. TCR Date is 5-6-2008. Regen survey walk through will be scheduled for 2012 WP, RP, SP, and RM saps filling in. Passed walk through survey. Look at next entry for overstory removal leaving 10 sqft WP seed trees. Cut with nearby stand numbers 40 and 41.
40	42210 - Natural Red Pine	High Density Pole	3.3	59	111-140	Harvest next entry with stands 39 and 41.
41	6122 - Black Spruce	High Density Pole	5.0	82		Harvest next entry with stands 39 and 40.
42	42220 - Natural Jack Pine	High Density Sapling	75.0	25		West 1/2 planted, East 1/2 scarified.
43	6122 - Black Spruce	High Density Pole	5.2	52		



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
44	42220 - Natural Jack Pine	High Density Pole	3.2	76		
45	6122 - Black Spruce	High Density Pole	27.5	82		Old fence evidence on section line east side of stand. Mature spruce with areas of young spruce mixed in.
46	42220 - Natural Jack Pine	High Density Pole	7.5	76		
47	6122 - Black Spruce	High Density Pole	29.8	64		Stand is mostly black spruce with some lower areas of cedar in drainage areas. Stand also contains some higher ground with large red and white pine.
48	6122 - Black Spruce	Medium Density	9.4	64		
49	4110 - Sugar Maple Association	High Density Pole	20.1	82	81-110	Received a selection cut in 1961 and 1987.
50	42350 - Upland Hemlock	High Density Log	20.5	169		Select cut in 1961 and 1987.
51	6122 - Black Spruce	High Density Pole	14.5	65		Mostly black spruce with variable densities and diameters. Cedar mixed through center portion of stand. Few scattered large white pine and hemlock.
53	42290 - Natural Mixed Pine	High Density Log	3.5	77	141-170	Red and white pine logs with a thick understory of fir 30' tall. South portion of the stand is heavier to large hemlock. This is a small stand which is the access to stand 55. A few hemlock may have to be cut to get down the ridge into stand 55.
54	4110 - Sugar Maple Association	High Density Pole	12.6	82	111-140	Gullies and low drainage areas throughout stand. They are dry now but could hold water on wetter years.
55	42220 - Natural Jack Pine	High Density Pole	38.3	76		
56	42220 - Natural Jack Pine	High Density Sapling	65.8	15		1/7/04 BB] Stand was covered under FTP-712, stand was at least partially scarified. Old OI had stand 41 as part of new stand 40 as well. Stand was counted in 2002 and 1495 tpa were found, stand is fully regenerated and the FTP was closed with a blanket letter.
57	6125 - Lowland Black Spruce, Jack Pine	Medium Density	575.4	50		Stunted trees growing poorly and slowly on wet soil.
58	6125 - Lowland Black Spruce, Jack Pine	Medium Density	50.0	50		poor quality, slow growing trees on wet soil.
60	6122 - Black Spruce	High Density Pole	15.1	72		poor quality slow growing, not worth the effort of trying to freeze a 1/4 mile of marsh to reach.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
61	6126 - Lowland Jack Pine	High Density Pole	15.0	67		Low quality, dead and dying, 3 stick tall. Not worth the effort of trying to freeze 1/4 mile of marsh to reach.
62	42220 - Natural Jack Pine	High Density Pole	11.5	65		Mature jack pine but may not be accesable.
63	42210 - Natural Red Pine	High Density Log	4.0	106	51-80	<p>Scarify if possible, if unable hand plant site. [3-10-05 BB] River Road Spruce 7-05 Residual Volumes; Red Pine = 45 sq ft, White pine = 5 sq ft</p> <p>[11-24-08 BB) Sale now closed, TCR Date is 11/11/2008. Stand will be on natural regen clock for 2012, stand was cut in the summer of 2008. Unit 3</p> <p>(9/15/2010 AP) Stand was too thick to scarify and was not accessible due to drainage and private land. Check regeneration as part of next inventory cycle. (3/22/11 AP) FTP W41-1229 has been cancelled.</p> <p>2012 Walk through shows poor regen. Maybe cut all but 30 sqft and scarify</p>
64	429 - Mixed Upland Conifers	High Density Sapling	10.8	15		[1/7/04 BB] Stand was covered under FTP-712, stand was at least partially scarified. Stand was counted in 2002 and 1495 tpa were found, stand is fully regenerated and the FTP was closed with a blanket letter.
65	42220 - Natural Jack Pine	High Density Pole	4.4	65		
66	6125 - Lowland Black Spruce, Jack Pine	Medium Density	2.0	50		Poor quality, slow growing trees on wet soil.
67	6122 - Black Spruce	High Density Pole	29.5	63		poor quality spruce. Not enough merchantable trees within stand to be worth cutting.
68	6126 - Lowland Jack Pine	High Density Pole	24.5	67		Center of stand is pure jack pine that is on it's way out. Edges of stand is black spruce much of which is submerchantable. Stand may be inaccessible.
69	6122 - Black Spruce	High Density Sapling	31.5	83		Very poor site with slow growing trees. Most trees are only 3-4 inches DBH and over 80 years old. Not enough merchantable timber in stand to be worth harvesting.
71	6122 - Black Spruce	High Density Sapling	182.0	54		Very poor site with slow growing trees.
72	6122 - Black Spruce	High Density Pole	53.6	115		New stand this entry, newly acquired land. Pure black spruce stand. Nice height and DBH as far as black spruce goes. Stand may not be accesable.
73	6122 - Black Spruce	High Density Pole	15.3	110		New stand this entry, newly acquired land. Old stand with slow growing trees. Mix of poles and submerchantable black spruce. Stand may not be accesable.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
2	6239 - Mixed Emergent Wetland	1.5	Unspecified	Unspecified	
5	6229 - Mixed lowland shrub	5.4	Unspecified	Unspecified	
7	6239 - Mixed Emergent Wetland	2.7	Unspecified	Unspecified	
15	50 - Water	2.5	Unspecified	Unspecified	
16	6224 - Treed Bog	13.5	Unspecified	Unspecified	
19	6239 - Mixed Emergent Wetland	3.0	Unspecified	Unspecified	
21	6239 - Mixed Emergent Wetland	5.9	Unspecified	Unspecified	
28	6239 - Mixed Emergent Wetland	2.0	Unspecified	Unspecified	
33	3302 - Low Density Conifer Trees	66.7	Natural Regen	Lowland Conifers	A walk through regeneration count showed 2750 TPA of BS, RP, WP, and fir. White pine Bit sale 8-05. West of creek cut winter of 2006. East of creek cut winter of 2008.
35	6239 - Mixed Emergent Wetland	57.7	Unspecified	Unspecified	
52	50 - Water	15.5	Unspecified	Unspecified	
59	3302 - Low Density Conifer Trees	30.2	Natural Regen	Lowland Conifers	A walk through regen survey showed 1254 TPA of BS, Fir, WP, JP
70	50 - Water	10.0	Unspecified	Unspecified	