Compartment Review Presentation

Sault Ste. Marie Forest Management Unit

Compartment 148
Entry Year 2016
Acreage: 1,858
County Mackinac
Management Area: Mackinac Mix

Revision Date: 06/30/2014

Stand Examiner: Matt Edison

Legal Description:

T43N-R7W, Section 6; T43N-R8W, Section 1; T44N-R8W, Section 36 & T44N-R7W, Section 31.

Identified Planning Goals:

This compartment surrounds the town of Rexton. The timber types within this compartment are quite diverse. The cover types include cedar, swamp conifer, aspen–birch, northern hardwoods, red pine, bog types, other lowlands, grassy openings, and several lakes. The mature to over-mature areas are recommended for harvest to assure adequate regeneration and continued age class diversity. Aspen budding trees will be left along the edge of the cuts as well as some birch trees within the cuts. The hardwood and pine stands need regular treatment to promote health and growth.

Soil and topography:

The uplands are generally Amadon-Rock outcrop complex, Menominee loamy sand, Wallace sands, and Paquin sand. Lowlands and swamps consist primarily of Markey and Carbondale mucks, with Spot-Finch and Markey-Spot-Finch Complexes. Level lowlands to rolling uplands.

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

The state land is within the compartment is solidly blocked together; however there are numerous private holdings in the town of Rexton and the surrounding area. The compartment is bordered by state land.

Unique Natural Features:

Rexton Lake, Crawfin Lake, Tucker Lake, and Crossville Lake all lay within this compartment. There is a potential for rare threatened or endangered plant and animal species within the compartment. Stands to be managed will be checked for species of concern. Management will be modified if species are found within those stands per management guidelines for that species.

Archeological, Historical, and Cultural Features:

There are known concerns within the compartment. All proposed management activities have taken these concerns into consideration.

Special Management Designations or Considerations:

None noted.

Watershed and Fisheries Considerations:

The vast majority of this compartment lies in the Lake Michigan watershed. The extreme northern portion of the compartment includes the Lake Superior watershed. There are no lakes or streams that drain to Lake Superior in this compartment. Fisheries Division (ELSMU) has no concerns for treatments in this compartment at this time.

Wildlife Habitat Considerations:

This compartment lies within the Mackinac Mix Management are. The original surveyor's notes show that this area generally contained a diversity of tree species in the pre-settlement forest. The assemblage of tree species includes hemlock, white birch, yellow birch, sugar maple, black ash, aspen, elm, red maple, and cedar. Lowlands also contained spruce and tamarack.

Aspen appears to be more prevalent in today's forest than during pre-settlement times. Mixed hardwood/conifer stands appear to be less prevalent in this compartment. Red pine has been planted mostly in the western portion of this compartment. This is a highly diverse compartment with wildlife habitat objectives including maintenance of the mature hardwood and red pine component. Aspen management has occurred in the recent past, resulting in relatively young stands. Where hemlock and white pine exist, management will be done to encourage an increase in that component. Wildlife species with the potential to benefit from the prescriptions white-tailed deer, black bear, American woodcock, snowshoe hare, bobcat, and a number of migratory birds.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of peat & muck and lacustrine (lake) sand and gravel. The glacial drift thickness varies between 10 and 50 feet. The Silurian Engadine and Manistique Groups subcrop below the glacial drift. The Engadine is quarried for stone/limestone three mile to the east. A gravel pit is located in Section 36 and there appears to be potential. There is no current economic oil and gas production in the UP.

Vehicle Access:

Vehicle access to this compartment is pretty good. H-40 is a paved county road; Hog Island Road, Streeter Road, Dinky Line, Strouble Lake Road, and Davis Road are county gravel roads. Crawfin Lake Road is a DNR dirt road. There are also numerous two tracks that are used to access other areas of the compartment.

Survey Needs:

Blue property lines will need to be painted, but adequate corners exist.

Recreational Facilities and Opportunities:

A groomed snowmobile trail runs through the compartment. The Newberry-Rexton Motorcycle trail enters the compartment at stands 12 & 13 and ends at Hurd rd. The area is also used for hunting deer, bear and small game, trapping, snowmobiling, and ORVing.

Fire Protection:

This is a low fire danger area.

Additional Compartment Information:

The following reports from the Inventory are attached:

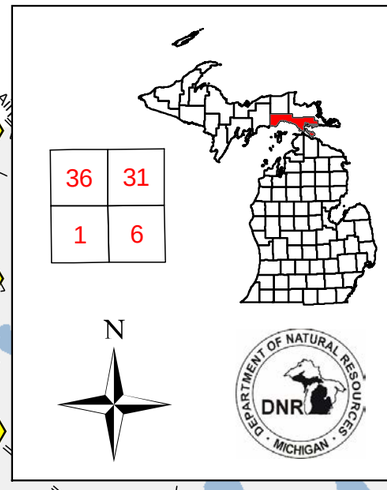
- **Total Acres by Cover Type and Age Class**
- **Cover Type by Harvest Method**
- **Proposed Treatments – No Limiting Factors**
- **Proposed Treatments – With Limiting Factors**
- **Stand Details (Forested and Nonforested)**
- **Dedicated and Proposed Special Conservation Areas**
- **Site Condition 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: 148
T43N R07W Section 6
T43N R08W Section 1
T44N R07W Section 31
T44N R08W Section 36
County: Mackinac
Unit: Sault Ste. Marie
Management Area: Mackinac Mix
YOE: 2016
Acres: 1,858 GIS Calculated
Examiner: Matt Edison
Map Revised: 08/07/2014
Map Phase: Pre-Review



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

Legend

- Miris Corners
- Remonumented Section Corners
- DNR Survey Grade Corner
- PLSS Corner
- Unclassified Corners
- Gate
- Berms
- Recreation
- Motorcycle Trails (DNR License)
- Snowmobile Trails
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Railroads
- Powerline
- Motorcycle (DNR Sticker)
- Snowmobile Trail
- Stream
- Intermittent Stream
- Lakes and Rivers
- State Forest Land

Treatments

- Clearcut (w/Reserves, Patch/Strip)
- Thinning (Crown, Low, Systematic)
- Selection (Group, Single Tree)
- Monitoring - See Comments

Forest Stands

Level 3

- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands

Level 3

- 122 - Road/Parking Lot
- 123 - Other High Intensity Urban
- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 629 - Mixed non-forested wetland

1 0.5 0 1 Miles

85°16'0"W 85°15'0"W 85°14'0"W 85°13'0"W 85°12'0"W
46°0'0"N

Stand Boundary Map

Compartment: 148
T43N R07W Section 6
T43N R08W Section 1
T44N R07W Section 31
T44N R08W Section 36
County: Mackinac
Unit: Sault Ste. Marie
Management Area: Mackinac Mix
YOE: 2016
Acres: 1,858 GIS Calculated
Examiner: Matt Edison
Map Revised: 08/07/2014
Map Phase: Pre-Review

36	31
1	6

Stand # 23 — Stocking Density

(412)0) - A7
Level 3 — Level 4 — OI Code

Cover Type Code

Legend

- Miris Corners
- Remonumented Section Corners
- DNR Survey Grade Corner
- PLSS Corner
- Unclassified Corners
- Gate
- Berms
- Recreation
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- Snowmobile Trails
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- Railroads
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- Stream
- Intermittent Stream
- Stand Boundaries

Forest Stands

Level 3

- 411 - Northern Hardwood
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1 0.5 0 1 Miles

85°16'0"W 85°15'0"W 85°14'0"W 85°13'0"W 85°12'0"W

Special Conservation Areas & Site Conditions Map

Legend

- Miris Corners
- Remonumented Section Corners
- Stand Boundaries

Site Condition Available

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

Site Condition Type

Unavailable Factors

- 2G: Too wet (sensitive soils, does not include access issues)
- 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)

Compartment: 148
T43N R07W Section 6
T43N R08W Section 1
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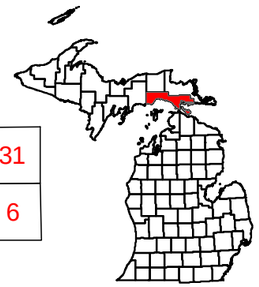
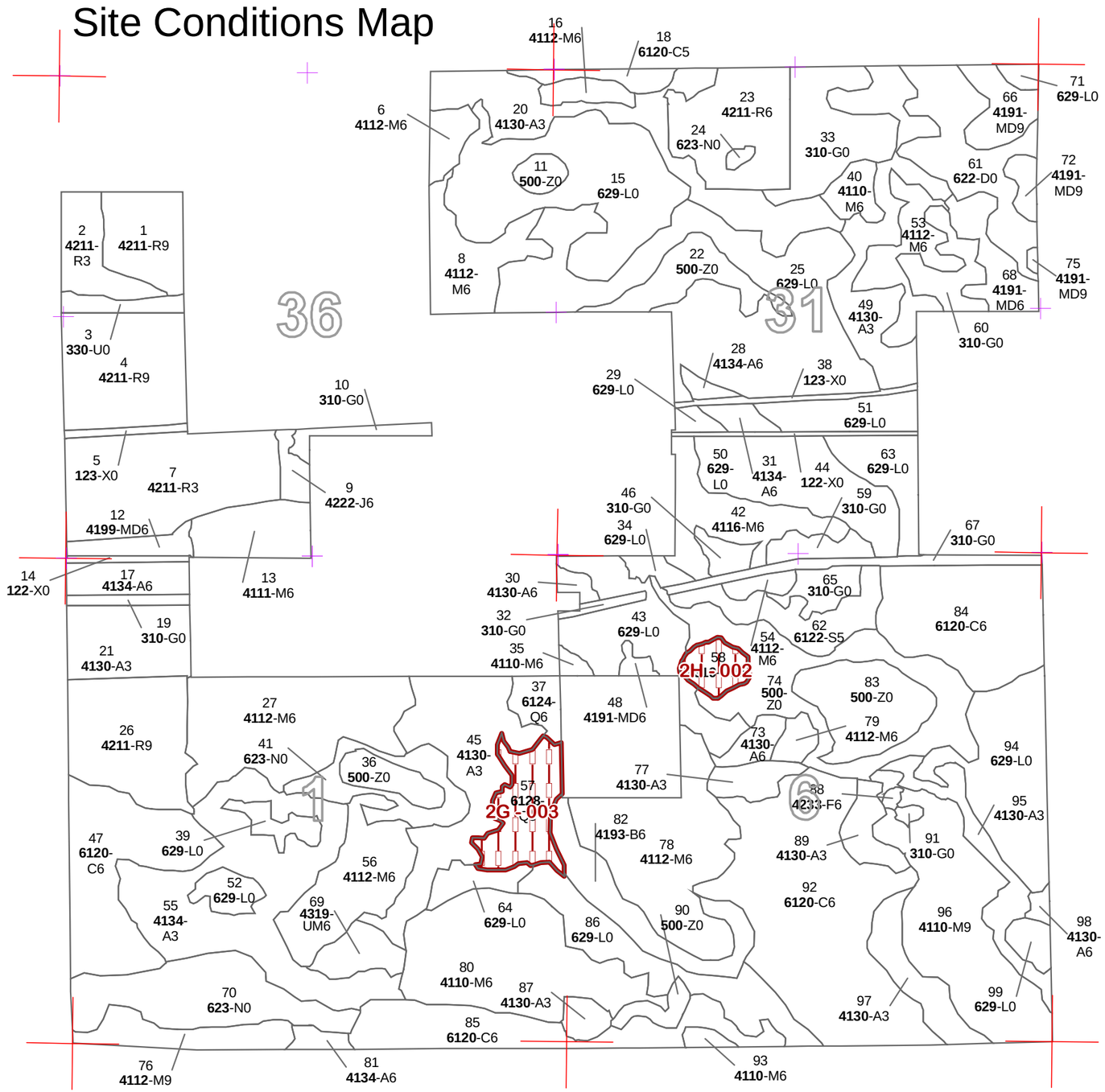


Stand # 23 — Stocking Density: (412)0) - A7
Level 3 Level 4 OI Code
Cover Type Code



Report 1 – Total Acres by Cover Type and Age Class

Sault Ste. Marie Mgt. Unit **Compartment 148 Year of Entry 2016**

Matt Edison : Examiner

Age Class

	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	Total
Aspen	0	117	161	0	3	0	12	4	0	0	0	0	0	0	**297**
Cedar	0	0	0	0	0	0	0	6	0	94	0	45	81	0	**226**
Herbaceous Openland	77	0	0	0	0	0	0	0	0	0	0	0	0	0	**77**
Jack Pine	0	0	0	0	5	0	0	0	0	0	0	0	0	0	**5**
Low-Density Trees	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
Lowland Conifers	0	0	0	0	0	7	0	0	21	0	0	0	0	0	**28**
Lowland Shrub	349	0	0	0	0	0	0	0	0	0	0	0	0	0	**349**
Lowland Spruce/Fir	0	0	19	0	0	0	0	0	0	0	0	0	0	0	**19**
Marsh	55	0	0	0	0	0	0	0	0	0	0	0	0	0	**55**
Mixed Upland Deciduous	0	0	0	0	7	0	15	11	5	0	0	0	0	0	**38**
Northern Hardwood	0	0	0	0	0	29	136	139	57	15	0	0	0	0	**376**
Paper Birch	0	0	0	22	0	0	0	0	0	0	0	0	0	0	**22**
Red Pine	0	15	52	0	0	33	38	58	0	0	0	0	0	0	**195**
Treed Bog	32	0	0	0	0	0	0	0	0	0	0	0	0	0	**32**
Upland Mixed Forest	0	0	0	0	0	0	9	0	8	0	0	0	0	0	**17**
Upland Spruce/Fir	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
Urban	11	0	0	0	0	0	0	0	0	0	0	0	0	0	**11**
Water	106	0	0	0	0	0	0	0	0	0	0	0	0	0	**106**
Total	**636**	**131**	**233**	**22**	**14**	**69**	**211**	**218**	**90**	**109**	**0**	**45**	**81**	**0**	**1858**

Report 2 – Proposed Treatment Summaries

Sault Ste. Marie Mgt. Unit
Year of Entry 2016

Compartment 148
Total Compartment Acres: 1,858

Acres by Treatment Type

Commercial Harvest - 361	Tree Planting - 20	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen Types	16	0	0	0	0	0	**16**
Mixed Upland Deciduous	38	0	0	0	0	0	**38**
Natural Pines	5	0	0	0	0	0	**5**
Northern Hardwood	0	155	0	0	10	0	**165**
Planted Pines	20	0	0	0	109	0	**129**
Upland Mixed Forest	9	0	0	0	0	0	**9**
Total	**87**	**155**	**0**	**0**	**119**	**0**	**361**

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Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
1	45148001-Cut	19.5	42110 - Planted Red Pine	High Density Log	74	111-140	Harvest	Clearcut with Reserves	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Clearcut stand with retention of live trees on the edges of the treatment. Standing trees within the stand after harvest create a hazard for aerial spraying of the stand for release and pest management so all retention must be along the edges.

Other Comments:

Next Steps: After harvest treatment is completed, the stand may be prescribed burned if necessary for site prep depending on amount of slash left on site. Trenching and hand planting of red pine seedling to acceptable regeneration levels will need to be completed within 2 years of the Timber Cutting Report date. After establishment of red pine regeneration, regeneration surveys need to be scheduled for 1 year and 3 years for monitoring of regeneration. Release as necessary determined by TMS.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
4	45148004-Cut	37.9	42110 - Planted Red Pine	High Density Log	66	141-170	Harvest	Crown Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Thin to around 120 Basal Area. Leave species diversity within the stand were present.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
9	45148009-Cut	4.6	42220 - Natural Jack Pine	High Density Pole	49	81-110	Harvest	Clearcut with Reserves	42221 - Natural Jack Pine, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: Clearcut all jack pine down to 2" in diameter. Leave any red and white pine. Leave some paper birch and maple scattered as retention. Harvest in snow free conditions if possible for scarification.

Other Comments:

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is maple, paper and yellow birch, white pine, spruce, fir, aspen, jack pine, and red pine.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
12	45148012-Cut	6.6	4199 - Other Mixed Upland Deciduous	High Density Pole	49	81-110	Harvest	Clearcut with Reserves	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal

Prescription Specs: Clearcut with reserves following the retention guidelines. Retain conifer 4" and smaller on the site. Leave some scattered trees representative of the stand. Newberry-Rexton motorcycle trail passes throught the stand. Provide standard trail protections during treatments.

Other Comments:

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, beech, yellow and paper birch, ironwood, balsam fir, white spruce , jack pine and white pine.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
13	45148013-Cut	16.6	4111 - S.Maple, Hard Mast Association	High Density Pole	65	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Cmpt. Review Proposal

Prescription Specs: Good diversity of species in this stand. Mark stand to 80 to 90 Basal Area. Retain any healthy beech with the smooth bark. Leave Black Cherry and Yellow Birch and mixed conifer. Newberry-Rexton motorcycle trail passes throught the stand. Provide standard trail protections during treatments.

Other Comments:

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, yellow and paper birch, balsam fir, white spruce, hemlock, and white pine

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
16	45148016-Cut	5.6	4112 - Maple, Beech, Cherry Association	High Density Pole	55	111-140	Harvest	Crown Thinning	411 - Northern Hardwood	Cmpt. Review Proposal

Prescription Specs: Thin small pole stand down to basal area of 80-90 average. Leave a representative of existing species for retention. Salvage any remaining beech, but leave any healthy, potentially BBD resitant trees. Leave all conifer trees.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
23	45148023-Cut	32.9	42110 - Planted Red Pine	High Density Pole	51	141-170	Harvest	Crown Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Second thinning of red pine plantation. Thin to average of 120 basal area.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
26	45148026-Cut	38.3	42110 - Planted Red Pine	High Density Log	77	171-200	Harvest	Crown Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Thin mature red pine to lower basal area to average of 120.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
28	45148028-Cut	2.4	4134 - Aspen, Spruce/Fir	High Density Pole	60		Harvest	Clearcut with Reserves	4137 - Aspen, Birch	Cmpt. Review Proposal

Prescription Specs: Clearcut with reserves following the retention guideline. Retain representative species of the stand. Some paper birch should be retained for seed trees and future snags.

Other Comments:

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, paper and yellow birch, white pine, spruce, fir, jack pine, and red pine.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
30	45148030-Cut	2.5	4130 - Aspen	High Density Pole	69	81-110	Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal

Prescription Specs: Clearcut with reserves following the retention guideline. Retain some scattered trees representative of the stand.

Other Comments:

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, cedar, yellow and paper birch, balsam fir, white spruce, black spruce and white pine.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
31	45148031-Cut	4.0	4134 - Aspen, Spruce/Fir	High Density Pole	70		Harvest	Clearcut with Reserves	4137 - Aspen, Birch	Cmpt. Review Proposal

Prescription Specs: Clearcut with reserves following the retention guideline. Retain representative species of the stand. Some paper birch should be retained for seed trees and future snags.

Other Comments:

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, paper and yellow birch, white pine, spruce, fir, jack pine, and red pine.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
42	45148042-Cut	23.8	4116 - Mixed N. Hardwood - Aspen	High Density Pole	61	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Cmpt. Review Proposal

Prescription Specs: Thin the stand to average of 80 basal area. Remove the overmature aspen and some birch. Retain representative aspen and birch as well as conifer. Select the poorest quality maple and promote crop trees.

Other Comments:

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, yellow and paper birch, balsam fir, white spruce, black spruce, hemlock, and white pine.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
48	45148048-Cut	2.1	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	66	111-140	Harvest	Clearcut with Reserves	4137 - Aspen, Birch	Cmpt. Review Proposal

Prescription Specs: Cut all deciduous 2" or more and conifer 4" or more. Leave a representative, healthy, mature trees scattered.

Other Comments:

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, cedar, yellow and paper birch, balsam fir, white spruce, black spruce and white pine.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
54	45148054-Cut	3.6	4112 - Maple, Beech, Cherry Association	High Density Pole	60	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Cmpt. Review Proposal

Prescription Specs: Mark stand to 80 to 90 Basal Area. Retain some beech with the smooth bark and wildlife trees. Retain all conifer.

Other Comments:

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is maple, cherry, beech, paper and yellow birch, balsam fir, spruce, aspen and hemlock.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
66	45148066-Cut	11.1	4191 - Mixed Upland Deciduous with Conifer	High Density Log	77	81-110	Harvest	Clearcut with Reserves	4137 - Aspen, Birch	Cmpt. Review Proposal

Prescription Specs: Clearcut with reserves following the retention guideline. Leave some paper birch for seed trees and future snags. Leave some scattered trees representative of the stand. Winter cut only and access must be frozen.

Other Comments: Access will be winter only and dependent upon adequate freezing conditions.

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cedar, yellow and paper birch, balsam fir, white spruce, black spruce and white pine.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
68	45148068-Cut	13.2	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	67	111-140	Harvest	Clearcut with Reserves	4137 - Aspen, Birch	Cmpt. Review Proposal

Prescription Specs: Clearcut with reserves following the retention guideline. Leave some paper birch for seed trees and future snags. Leave some scattered trees representative of the stand. Winter cut only and access must be frozen.

Other Comments:

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cedar, yellow and paper birch, balsam fir, white spruce, black spruce and white pine.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
69	45148069-Cut	9.3	4319 - Mixed Upland Forest	High Density Pole	69	111-140	Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal

Prescription Specs: Cut all deciduous 2" or more and conifer 4" or more. Leave representative trees of all existing species. Follow retention guidelines. Provide normal protection of snowmobile trail during treatments.

Other Comments: Snowmoile trail goes through stand.

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, paper and yellow birch, white pine, spruce, fir, jack pine, red pine, and white pine.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
72	45148072-Cut	4.1	4191 - Mixed Upland Deciduous with Conifer	High Density Log	87	111-140	Harvest	Clearcut with Reserves	4137 - Aspen, Birch	Cmpt. Review Proposal

Prescription Specs: Clearcut with reserves following the retention guideline. Leave some paper birch for seed trees and future snags. Leave some scattered trees representative of the stand. Winter cut only and access must be frozen.

Other Comments:

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cedar, yellow and paper birch, balsam fir, white spruce, black spruce and white pine.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
73	45148073-Cut	5.5	4130 - Aspen	High Density Pole	66	81-110	Harvest	Clearcut with Reserves	4136 - Aspen, Mixed Conifer	Cmpt. Review Proposal

Prescription Specs: Cut all deciduous 2" or more and conifer 4" or more. Leave representative, healthy, mature trees of all species.

Other Comments:

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is maple, cherry, beech, paper and yellow birch, balsam fir, spruce, aspen, white pine, and hemlock.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
75	45148075-Cut	0.7	4191 - Mixed Upland Deciduous with Conifer	High Density Log	87	111-140	Harvest	Clearcut with Reserves	4137 - Aspen, Birch	Cmpt. Review Proposal

Prescription Specs: Clearcut with reserves following the retention guideline. Leave some paper birch for seed trees and future snags. Leave some scattered trees representative of the stand. Winter cut only and access must be frozen.

Other Comments:

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cedar, yellow and paper birch, balsam fir, white spruce, black spruce and white pine.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
78	45148078-Cut	51.3	4112 - Maple, Beech, Cherry Association	High Density Pole	73	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Cmpt. Review Proposal

Prescription Specs: Mark stand to 80 to 90 Basal Area. Retain any beech with the smooth bark and wildlife trees. Create canopy gaps to regenerate and enhance the advanced regeneration present. Promote yellow birch where present.

Other Comments:

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is maple, cherry, beech, paper and yellow birch, basswood, aspen and ironwood.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
79	45148079-Cut	4.2	4112 - Maple, Beech, Cherry Association	High Density Pole	56	81-110	Harvest	Crown Thinning	411 - Northern Hardwood	Cmpt. Review Proposal

Prescription Specs: Thin pole sized stand to average of 80-90 baal are. Leave all conifer and some birch.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
80	45148080-Cut	57.7	4110 - Sugar Maple Association	High Density Pole	76	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Cmpt. Review Proposal

Prescription Specs: Thin stand to average basal area of 80-90. Leave any conifer, yellow birch, and hemlock. Provide normal protection of snowmobile trail during treatments.

Other Comments:

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is maple, cherry, beech, paper and yellow birch, basswood, aspen, spruce, fir, hemlock, white pine, and ironwood.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
93	45148093-Cut	2.2	4110 - Sugar Maple Association	High Density Pole	63	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Cmpt. Review Proposal

Prescription Specs: Mark stand to 80 to 90 Basal Area. Retain some beech with the smooth bark and wildlife trees. Some ironwood, basswood and all juneberry and conifer should be left. Some larger canopy gaps may be desirable around the cherry and yellow birch if possible to regenerate those species and enhance the advanced regeneration present.

Other Comments:

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is maple, cherry, beech, paper and yellow birch, basswood, aspen and ironwood.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
98	45148098-Cut	1.8	4130 - Aspen	High Density Pole	65	81-110	Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal

Prescription Specs: Cut all trees except white pine, yellow birch and cherry where present. Leave some larger aspen along edges.

Other Comments: Cut with adjacent compartment in 2014 after approval at compartment review.

Next Steps: Regeneration survey per Work Instructions. Acceptable regeneration includes apsen, birch, maple, white pine, balsam, spruce, cherry and yellow birch.

Proposed Start Date: 10/03/2014

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
2	45148002-Monitor	14.7	42110 - Planted Red Pine	High Density Sapling	14		Monitoring	See Comments	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Monitor effects of release and treat as necessary. Monitor for RHPS and any other pests. If monitoring shows that treatment is recommended, then spray when/if necessary with appropriate insecticide recommended by Forest Health Specialist/TMS.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
7	45148007-Monitor	52.2	42110 - Planted Red Pine	High Density Sapling	22		Monitoring	See Comments	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Monitor effects of release and treat as necessary. Monitor for RHPS and other pests. If monitoring shows that treatment is recommended, then spray when/if necessary with appropriate insecticide recommended by Forest Health Specialist/TMS.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2015

Total Treatment Acreage Proposed: 428.2

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
		#Type!	#Type!							

Prescription Specs:

Other Comment:

Next Steps:

Proposed Start Date: #Type!

Limiting Factor

Total Treatment Acreage Proposed: 0.0

Report 5 – Site Conditions

Sault Ste. Marie Mgt. Unit

Matt Edison : Examiner

Compartment 148

Year of Entry 2016

Availability for Management

Total Acres	Acres Available	Acres Not Available		Dominant Site Conditions No	2H	2G
297	297		**Aspen**	297		
226	226		**Cedar**	226		
5	5		**Jack Pine**	5		
28	7	21	**Lowland Conifers**	7		21
19	19		**Lowland Spruce/Fir**	19		
38	38		**Mixed Upland Deciduous**	38		
376	376		**Northern Hardwood**	376		
22	22		**Paper Birch**	22		
195	195		**Red Pine**	195		
17	9	8	**Upland Mixed Forest**	9	8	
1	1		**Upland Spruce/Fir**	1		
1,222	1,194	28	Total Forested Acres	1,194	8	21
	98%	2%	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
002	**Not Available**	**2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)**	8				
	Comments:						
003	**Not Available**	**2G: Too wet (sensitive soils, does not include access issues)**	21	4A: No merchantable products (see product standards)			
	Comments:						

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

Comments

Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS

* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

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

Conservation Area	Type	Description

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42110 - Planted Red Pine	High Density Log	19.5	74	111-140	Stand is mature red pine. Final harvest this entry.
2	42110 - Planted Red Pine	High Density Sapling	14.7	14		Stand was planted in 2000.
4	42110 - Planted Red Pine	High Density Log	37.9	66	141-170	Stand of mature red pine, thinned in 2004. Brushy understory of aspen and maple.
6	4112 - Maple, Beech, Cherry Association	High Density Pole	6.8	68	81-110	Stand of mixed hardwood thinned last entry. Good amount of yellow birch and paper birch.
7	42110 - Planted Red Pine	High Density Sapling	52.2	22		Red pine planted in 1992.
8	4112 - Maple, Beech, Cherry Association	High Density Pole	21.8	68	81-110	Mixed hardwood stand that was thinned last entry. Good amount of yellow and paper birch.
9	42220 - Natural Jack Pine	High Density Pole	4.6	49	81-110	Mixed stand of Jack pine with maple and paper birch scattered.
12	4199 - Other Mixed Upland Deciduous	High Density Pole	6.6	49	81-110	Stand is poor quality maple with good sized aspen , birch and spruce scattered.
13	4111 - S.Maple, Hard Mast Association	High Density Pole	16.6	65	111-140	Mixed stand of poor quality maple & beech mixed with some scattered yellow birch and cherry.
16	4112 - Maple, Beech, Cherry Association	High Density Pole	5.6	55	111-140	Small stand of pole sized mixed maple with some yellow birch, paper birch, beech, and balsam.
17	4134 - Aspen, Spruce/Fir	High Density Pole	10.8	25		Total mixed stand of aspen regeneration, maple poles, jack pine pockets and spruce scattered.
18	6120 - Lowland Cedar	Medium Density Pole	6.1	73	1-50	Very low, wet. Not merchantable, poor quality.
20	4130 - Aspen	High Density Sapling	42.0	26		Stand of aspen regeneration with mix of maple and cherry. Variable diameters and clumps of conifer in places.
21	4130 - Aspen	High Density Sapling	24.0	25		Aspen, maple, cherry, balsam mixed regeneration. Cut in 1989.
23	42110 - Planted Red Pine	High Density Pole	32.9	51	141-170	Red pine planted in 1963. Stand was third row thinned in past and is ready for second thinning.
26	42110 - Planted Red Pine	High Density Log	38.3	77	171-200	Mature red pine that is very nice. Adjacent stand was clear cut and planted last entry. This stand ha high basl area and could be thinned once again and allow for age class diversity.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
27	4112 - Maple, Beech, Cherry Association	High Density Pole	54.6	60	81-110	Stand was thinned in 1999. Mixed maple with lower basal area due to loss of beech. Check in ten years.
28	4134 - Aspen, Spruce/Fir	High Density Pole	2.4	60		Mixed stand with overmature aspen, birch, and spruce.
30	4130 - Aspen	High Density Pole	2.5	69	81-110	Mix of aspen, birch, ans some maple. Aspen poles are mature and ready to harvest and regenerate.
31	4134 - Aspen, Spruce/Fir	High Density Pole	4.0	70		Mackinac mix with some large overmature aspen. Mostly paper birch and some spruce scattered.
35	4110 - Sugar Maple Association	High Density Pole	1.8	55	81-110	Small diameter, quite poor quality maple. Almost 100% pure sugar maple. Check this in ten years for a thinning and small firewood job.
37	6124 - Lowland Spruce-Fir	High Density Pole	7.0	55	81-110	Lowland mixed conifer with some paper birch and aspen mixed in. Stand lies in dropoff from upland stands. Standing water at time of visit. Cedar near edge and wetter in interior. Tag alder wherever open. Not much merchantability this entry, check in future for birch and aspen to mature.
40	4110 - Sugar Maple Association	High Density Pole	6.7	65	81-110	island stand within large opening complex. Poor quality mu.ti stem maple. Relatively low basal area and diameter. Check in 10 years.
42	4116 - Mixed N. Hardwood - Aspen	High Density Pole	23.8	61	81-110	Mixed maple stand with some large aspen and birch within it.
45	4130 - Aspen	High Density Sapling	45.5	14		Aspen regeneration cut in 2000.
47	6120 - Lowland Cedar	High Density Pole	44.5	115		Small diameter cedar, very wet at time of inventory.
48	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	2.1	66	111-140	Mackinac mix stand.
49	4130 - Aspen	High Density Sapling	36.5	15		Aspen regeneration.
53	4112 - Maple, Beech, Cherry Association	High Density Pole	17.8	55	81-110	Stand of pole sized, mixed quality maple. Clump stand within large opening complex. Check in 10 years for added volume and potential firewood sale.
54	4112 - Maple, Beech, Cherry Association	High Density Pole	3.6	60	81-110	Maple stand of poles and multi stem trees. Thinto average basal area of 80.
55	4134 - Aspen, Spruce/Fir	High Density Sapling	68.2	27		Aspen, mackinac mix stand, regeneration from 1987 cut.
56	4112 - Maple, Beech, Cherry Association	High Density Pole	29.9	70	81-110	Thinned last entry. Mixed quality maple.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
57	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	20.8	88	51-80	Stand of mixed lowland conifer of poor quality and size, except right along road where the gorund slopes up from wtland to meet the road. Tag alder wherever open.
58	4319 - Mixed Upland Forest	High Density Log	7.6	87		No Access. Remote Call, surrounded by water on all sides makes it an island.
62	6122 - Black Spruce	Medium Density Pole	18.5	28		Poor quality stand of wet mix of lowland conifers and some aspen. Edge of wetland complex.
66	4191 - Mixed Upland Deciduous with Conifer	High Density Log	11.1	77	81-110	Stand of mature aspen and birch. Harvest via winter access from west.
68	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	13.2	67	111-140	Stand of mixed aspen, birch, and balsam. There is some clumps of maple within the center of stand.
69	4319 - Mixed Upland Forest	High Density Pole	9.3	69	111-140	Stand of mixed softwood, aspen, and poor quality hardwood.
72	4191 - Mixed Upland Deciduous with Conifer	High Density Log	4.1	87	111-140	A mature stand with paper birch and aspen as majority of species. Stand is surrounded by treed bog and cntinues into adjacent compqartment 135.
73	4130 - Aspen	High Density Pole	5.5	66	81-110	Mature aspen some birch, balsam and maple clumps.
75	4191 - Mixed Upland Deciduous with Conifer	High Density Log	0.7	87	111-140	Mature stand of aspen, birch, balsam mix.
76	4112 - Maple, Beech, Cherry Association	High Density Log	14.8	92	81-110	Stand was thinned a few years ago. Heavy browse on regeneration.
77	4130 - Aspen	High Density Sapling	7.3	15		Aspen regeration, cut in 1999.
78	4112 - Maple, Beech, Cherry Association	High Density Pole	51.3	73	111-140	Stand was thinned in 1999. the beech is lost from bbd, but not a lot of it in tne first place.
79	4112 - Maple, Beech, Cherry Association	High Density Pole	4.2	56	81-110	Stand of small pole sized mixed maple. Thin to average basal area of 80.
80	4110 - Sugar Maple Association	High Density Pole	57.7	76	111-140	Stand of pole sized mixed maple, mostly sugar. Open understory for most part. Not much conifer at all. Only saw 1 yellow birch during inventory.
81	4134 - Aspen, Spruce/Fir	High Density Pole	3.2	40	51-80	Stand has just matured into poles. Nice healthy aspen and conifer.
82	4193 - Birch, Aspen	High Density Pole	21.5	35	81-110	Part of stand was cut in 1999, mix of aspen, birch and poor quality clump maple. Strip along road is same composition, but on steep ridge and was not harvested.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
84	6120 - Lowland Cedar	High Density Pole	45.7	125		Could not get to stand in 2014. Datat from previous inventory.
85	6120 - Lowland Cedar	High Density Pole	35.3	126	141-170	Stand is part of very large cedar complex across several compartments.
87	4130 - Aspen	High Density Sapling	4.5	14		Aspen regeneration cut in 2000.
88	42330 - Upland Fir	High Density Pole	0.9	25	81-110	Small patch of mixed balsam, maple and aspen.
89	4130 - Aspen	High Density Sapling	8.4	14		Aspen regeneration cut in 1999.
92	6120 - Lowland Cedar	High Density Pole	94.0	99	51-80	Very wet, very small, very poor quality cedar. Nothing else to say.
93	4110 - Sugar Maple Association	High Density Pole	2.2	63	111-140	Nice, little maple stand, It will make a good firewood job.
95	4130 - Aspen	High Density Sapling	16.3	25		Aspen regeneration, with some mix of conifer and redf maple.
96	4110 - Sugar Maple Association	High Density Log	57.3	83	81-110	Was thinned last entry. Part of a large stand touching in 3 compartments. Check in ten years for another cut.
97	4130 - Aspen	High Density Sapling	14.4	14		Aspen regeneration cut in 2000.
98	4130 - Aspen	High Density Pole	1.8	65	81-110	Stand of large mature aspen. Starting to die out. Harvest with stand in adjacent compartment.

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
3	330 - Low-Density Trees	5.4	Unspecified	Unspecified	
5	123 - Other High Intensity Urban	2.5	Unspecified	Unspecified	
10	310 - Herbaceous Openland	4.7	Unspecified	Unspecified	
11	50 - Water	4.3	Unspecified	Unspecified	
14	122 - Road/Parking Lot	2.1	Unspecified	Unspecified	
15	629 - Mixed non-forested wetland	60.0	Unspecified	Unspecified	
19	310 - Herbaceous Openland	3.5	Unspecified	Unspecified	
22	50 - Water	15.9	Unspecified	Unspecified	
24	623 - Emergent Wetland	1.2	Unspecified	Unspecified	
25	629 - Mixed non-forested wetland	93.4	Unspecified	Unspecified	
29	629 - Mixed non-forested wetland	2.7	Unspecified	Unspecified	
32	310 - Herbaceous Openland	2.2	Unspecified	Unspecified	
33	310 - Herbaceous Openland	26.6	Unspecified	Unspecified	
34	629 - Mixed non-forested wetland	3.7	Unspecified	Unspecified	
36	50 - Water	8.6	Unspecified	Unspecified	
38	123 - Other High Intensity Urban	3.7	Unspecified	Unspecified	
39	629 - Mixed non-forested wetland	5.8	Unspecified	Unspecified	
41	623 - Emergent Wetland	16.4	Unspecified	Unspecified	

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
43	629 - Mixed non-forested wetland	31.7	Unspecified	Unspecified	
44	122 - Road/Parking Lot	2.8	Unspecified	Unspecified	
46	310 - Herbaceous Openland	4.5	Unspecified	Unspecified	
50	629 - Mixed non-forested wetland	34.9	Unspecified	Unspecified	
51	629 - Mixed non-forested wetland	13.7	Unspecified	Unspecified	
52	629 - Mixed non-forested wetland	6.3	Unspecified	Unspecified	
59	310 - Herbaceous Openland	6.6	Unspecified	Unspecified	
60	310 - Herbaceous Openland	11.5	Unspecified	Unspecified	
61	6224 - Treed Bog	31.7	Unspecified	Unspecified	
63	629 - Mixed non-forested wetland	14.2	Unspecified	Unspecified	
64	629 - Mixed non-forested wetland	6.9	Unspecified	Unspecified	
65	310 - Herbaceous Openland	7.3	Unspecified	Unspecified	
67	310 - Herbaceous Openland	9.5	Unspecified	Unspecified	
70	623 - Emergent Wetland	37.3	Unspecified	Unspecified	
71	629 - Mixed non-forested wetland	2.3	Unspecified	Unspecified	
74	50 - Water	46.4	Unspecified	Unspecified	
83	50 - Water	26.1	Unspecified	Unspecified	
86	629 - Mixed non-forested wetland	29.5	Unspecified	Unspecified	

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
90	50 - Water	4.6	Unspecified	Unspecified	
91	310 - Herbaceous Openland	1.1	Unspecified	Unspecified	
94	629 - Mixed non-forested wetland	39.7	Unspecified	Unspecified	
99	629 - Mixed non-forested wetland	4.8	Unspecified	Unspecified	