



Compartment Review Presentation

Sault Ste. Marie Forest Management Unit

Compartment 45042

Entry Year 2017

Acreage: 1,906

County Chippewa

Management Area: Kinross Bog

Revision Date: 2015-08-04

Stand Examiner: Jeff Wise

Legal Description:

T45N R1W Sections 2, 3, 10, 11, 12

Identified Planning Goals:

To develop an optimal age class distribution of aspen stands for sustainable forestry and wildlife values. To rotate hardwood treatments for optimum regeneration and stocking of all age classes as well as providing habitat for various species. Maintain current openings as needed for diversity and enhancement of wildlife benefits. To provide reasonable public access for multiple use benefits such as hunting, trail riding, camping, and hiking, while protecting the natural resources.

Soil and topography:

Markey Kinross-Croswell, and Markey Dawson: deep, level to undulating, poorly and moderately well drained, mucky and sandy soils on outwash plains. Topography is generally flat to rolling with lowland tag alder swamps and aspen hills.

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

This compartment is surrounded by private land on all sides except the west and part of the southeast. The area is used primarily for hunting, and timber and wildlife management. Private land bordering the compartment contains several hunting camps, and is primarily used for hunting and timber management as well. This is beneficial for landscape level management on State land.

Unique Natural Features:

None known at this time.

Archeological, Historical, and Cultural Features:

See compartment folder, no concerns this YOE.

Special Management Designations or Considerations:

None in this YOE

Watershed and Fisheries Considerations:

This compartment contains portions of the South Branch of the Charlotte River, within the St. Marys River watershed. The Charlotte River supports warm water fish species, particularly walleye and northern pike. Prescribed management actions are appropriate for the protection of the South Branch of the Charlotte River.

Wildlife Habitat Considerations:

Compartment 42 is located in the Kinross Bog Management Area (MA), and lies east of the snowmobile trail. Featured species in the MA include American bittern, black bear, beaver, and snowshoe hare. The western part of the compartment is dominated by lowland types ranging from open bog to lowland conifer stands, and is a continuation of cover types typical in the Kinross bog, including in compartments 43 to the west and 41 to the south that, together, support habitat for beaver, bitterns, and other wetland wildlife. Aspen and mixed deciduous stands dominate most upland areas, although several pockets of northern hardwoods and one hemlock stand exist. Most aspen stands were treated and are now young regenerating stands. The young growth provides habitat for snowshoe hare, ruffed grouse, American woodcock, white-tailed deer, and other wildlife. Future management will focus on maintaining age class diversity between stands while maintaining aspen where present, maintaining diversity in other stands by leaving and promoting hemlock and cedar as well as oak and other mast-producing species that will favor bear and other species, and protecting wetland habitats.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments are mapped as peat and muck but this may not be accurate. The glacial drift thickness varies between 50 and 100 feet. The Ordovician Trenton and Black River formations sub crop below the glacial drift. These formations are quarried for stone/dolomite. Gravel pits are located in sections 12 and 13/24, and potential appears to be good in the compartment. There is no current economic oil and gas potential in the UP. Surface sediments consist of peat and muck.

The glacial drift thickness varies between 50 and 100 feet. The Ordovician Trenton and Black River Groups sub crop below the glacial drift. These formations are quarried for stone/dolomite. A pit is located in Section 12 and there may be some potential on the uplands. There is no current economic oil and gas production in the UP.

Vehicle Access:

The east portion is accessed from 14 Mile Rd. The west part is accessed from the Old Mac Trail which is gated in summer. No roads exist within the compartment except old logging trails.

Survey Needs:

None this YOY, T45N R1W Sec 2 in the future.

Recreational Facilities and Opportunities:

Hunting is the primary recreation in this compartment and the Sault to Kinross snowmobile trail runs along the west side.

Fire Protection:

Vehicle access is poor, mostly walk in areas, and water sources are sufficient. Structure protection would be a concern on the east side.

Additional Compartment Information:

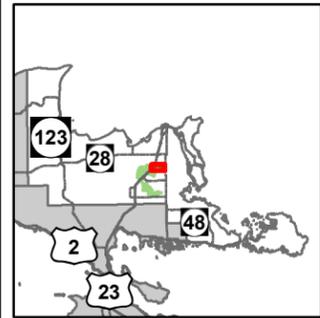
The following reports from the Inventory are attached:

- 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:

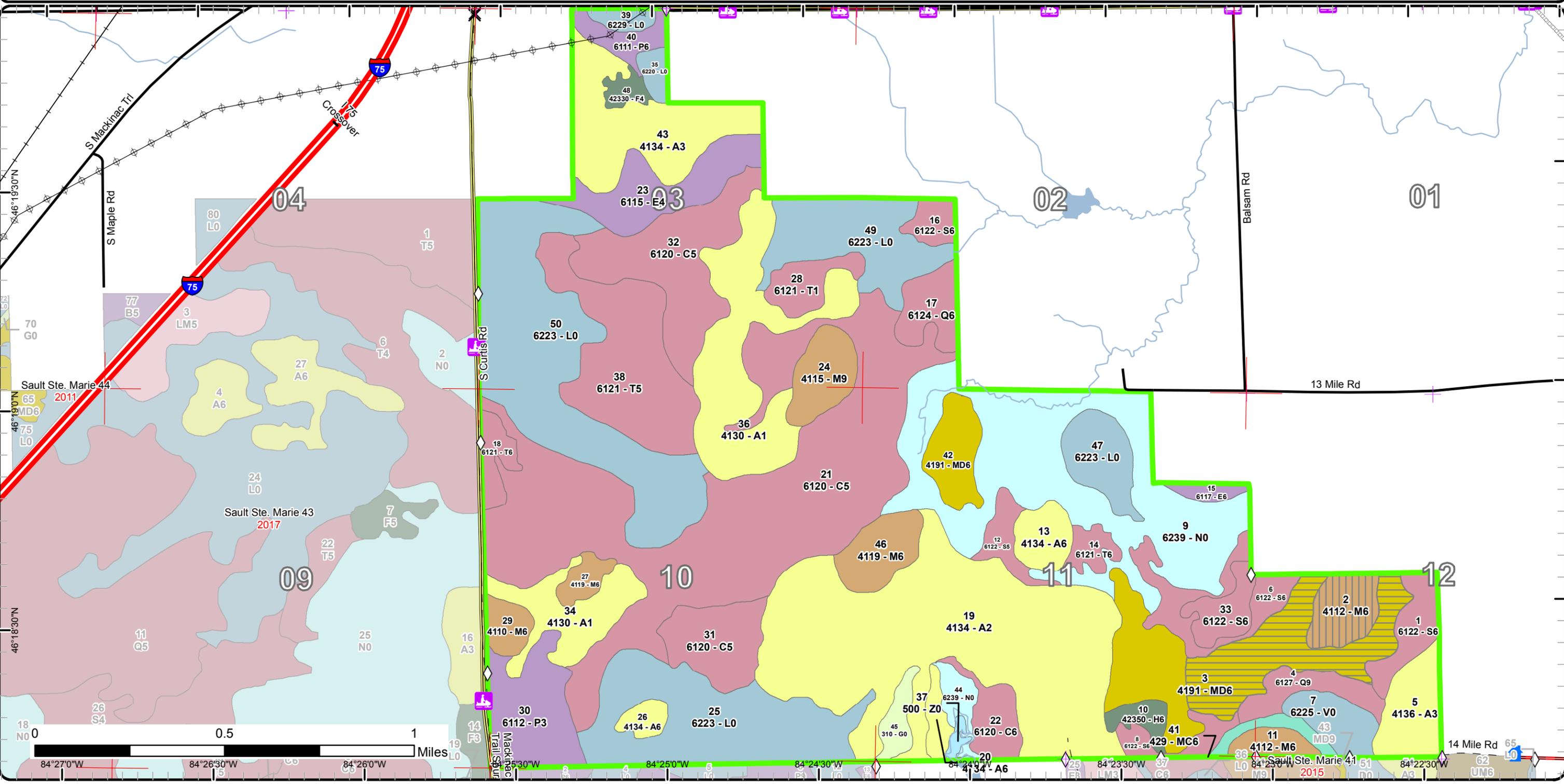
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments



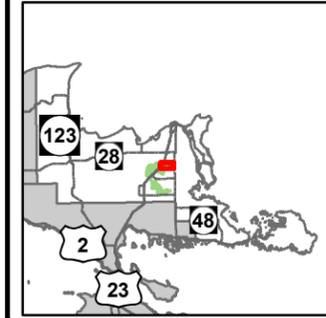
Compartment: 42
 T45N, R01W, Sec: 2, 3, 10 - 12
 County: Chippewa
 Unit: Sault Ste. Marie
 Mgmt Area: Kinross Bog
 YOE: 2017
 Acres: 1906 GIS Calculated
 Examiner: Jeff Wise
 Map Revised: 8/10/2015
 Map Phase: Review

- ✚ Remonumented Section Corners
- ◇ Field Grade GPS Corners
- Miris Corners
- Highway
- Paved Roads
- County Gravel Roads
- Poor Dirt Roads
- Trail (Non-Recreation)
- ✕ Gate
- 🚙 Snowmobile Trails
- Railroads
- Rivers
- 🌊 Lakes
- Pipeline
- ⚡ Powerline
- ▭ Clearcut (w/Reserves)
- ▨ Shelter Wood (w/Reserves)
- Forest Coverture
 - 411 - Northern Hardwood
 - 413 - Aspen
 - 419 - Mixed Upland Deciduous
 - 423 - Other Upland Conifers
 - 429 - Mixed Upland Conifers
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- Non-Forest Coverture
 - 310 - Herbaceous Openland
 - 500 - Water
 - 622 - Lowland Shrub
 - 623 - Emergent Wetland

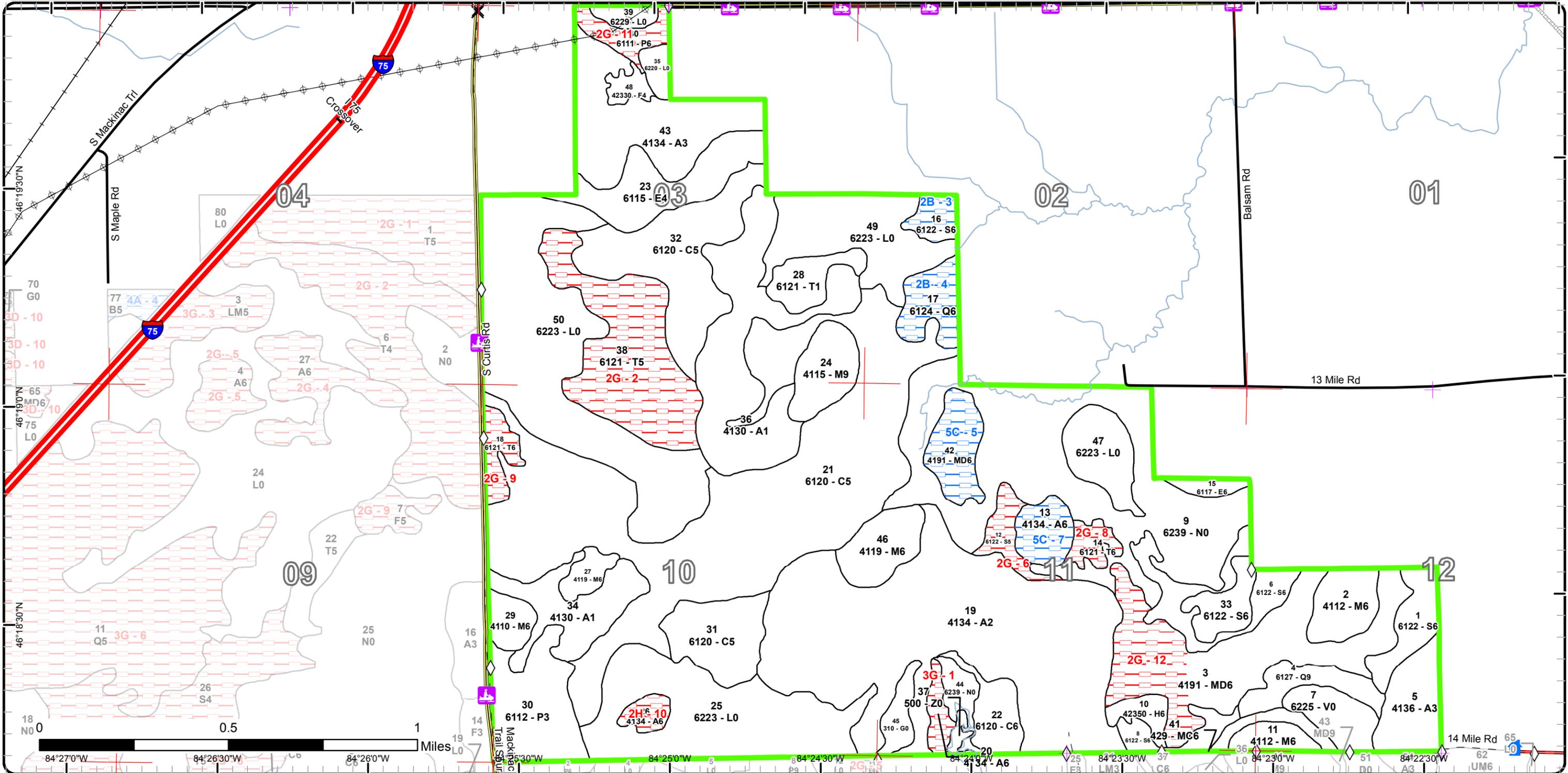


Special Conservation Areas & Site Conditions Map

Compartment: 42
 T45N, R01W, Sec: 2, 3, 10 - 12
 County: Chippewa
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- Railroads
- Rivers
- Pipeline
- ⚡ Powerline
- ▭ Stand Boundaries
- Site Condition
- Available w/ Constraints
- Unavailable
- Available Factors W/ Constraints
- 2B: Unknown if access through adjacent landowner(s) is possible
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 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)
- 3G: Other Influence zones - See comments
- Special Conservation Areas



Report 1 – Total Acres by Cover Type and Age Class



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	344	0	63	26	0	0	0	0	6	22	0	0	0	0	0	0	0	461
Bog	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Cedar	0	0	0	0	0	0	0	0	0	0	112	0	0	0	0	271	0	0	383
Hemlock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8
Herbaceous Openland	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Lowland Aspen/Balsam Poplar	0	0	0	42	0	0	0	0	0	11	0	0	0	0	0	0	0	0	53
Lowland Conifers	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	17	35
Lowland Deciduous	0	0	0	0	0	0	0	43	0	0	0	0	0	0	0	0	0	0	43
Lowland Shrub	315	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	315
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	0	38	0	0	0	0	0	0	52	90
Marsh	163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	163
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	92	113
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	82	90
Tamarack	0	15	0	0	0	0	0	0	0	76	19	0	0	0	0	0	0	0	110
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7
Upland Spruce/Fir	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Water	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	508	359	0	105	31	0	0	43	0	111	199	21	0	0	0	271	0	258	1906



Report 2 – Treatment Summary

Sault Ste. Marie Mgt. Unit
Year of Entry: 2017

Acres of Harvest

Compartment 42
Total Compartment Acres: 1,906

Commercial Harvest - 75
Harvests with Site Condition - 0
Next Step Harvest - 0
Habitat Cut - 0

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Mixed Upland Deciduous	56	0	0	0	0	0	0	0	0	56
Northern Hardwood	0	0	0	0	19	0	0	0	0	19
Total	56	0	0	0	19	0	0	0	0	75

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	75	0	0	0	0	0	0	0	0	75
Next Step	0	0	0	0	0	0	75	0	0	75
Total	75	0	0	0	0	0	75	0	0	150



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
2 45042002-Cut	19.3	4112 - Maple, Beech, Cherry Association	Poletimber Well	92	81-110	Harvest	Shelterwood with Retention	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No

Site Condition:

Prescription Cut all species except oak, hemlock, cedar, and sugar maple, some sugar maple may v be harvested as needed to operate.

Specs:

Next Step
Treatments:

Acceptable Present species acceptable, but sugar maple is priority.
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

3 45042003-Cut	55.7	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	92	111-140	Harvest	Clearcut with Retention	4199 - Other Mixed Upland Deciduous	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Harvest all species except hemlock, pine, and yellow birch, and any cedar and oak. Leave some uncut patches, preferably in locations to break up the treatment. Stay out of any wetlands.

Specs:

Next Step
Treatments:

Acceptable Present species acceptable.
Regen:

Other Red maple is not of quality to manage for hardwoods, especially with the balsam fir and aspen component. Stand would be impossible to mark.
Comment: Old next step comments:

Proposed Start Date: 10/1 /2016

Total Treatment Acreage Proposed: 75.0

Report 5 – Site Conditions

Sault Ste. Marie Mgt. Unit
 Jeff Wise : Examiner

Compartment: 42
 Year of Entry: 2017

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions				
		With Condition	Not Available		2B	5C	2G	2H	3G
461	432	15	14	Aspen		15		6	7
18	18	0	0	Bog					
382	382	0	0	Cedar					
8	8	0	0	Hemlock					
9	9	0	0	Herbaceous Openland					
54	42	0	11	Lowland Aspen/Balsam Poplar			11		
35	17	18	0	Lowland Conifers	18				
43	43	0	0	Lowland Deciduous					
315	315	0	0	Lowland Shrub					
90	70	9	11	Lowland Spruce/Fir	9		11		
163	163	0	0	Marsh					
113	56	21	37	Mixed Upland Deciduous		21	37		
89	89	0	0	Northern Hardwood					
111	15	0	96	Tamarack			96		
7	7	0	0	Upland Conifers					
5	5	0	0	Upland Spruce/Fir					
3	3	0	0	Water					
1,906	1,675	63	169	Total Forested Acres	27	36	155	6	7
	88%	3%	9%	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
1	Unavailable	3G: Other Influence zones - See comments	7	3I: Historical / archeological (add locked comments)	Unspecified	Unspecified	Unspecified
Comments:							
This stand was a retention and wetland buffer when stand 19 was cut							

Report 5 – Site Conditions

Sault Ste. Marie Mgt. Unit

Jeff Wise : Examiner

Compartment: 42

Year of Entry: 2017

2	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	77	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
3	Available	2B: Unknown if access through adjacent landowner(s) is possible	9	2I: Survey needed	Unspecified	Unspecified	Unspecified
Comments:							
4	Available	2B: Unknown if access through adjacent landowner(s) is possible	18	2I: Survey needed	Unspecified	Unspecified	Unspecified
Comments:							
5	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	21	2E: Road needed	Unspecified	Unspecified	Unspecified
Comments:							
6	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	11	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
7	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	15	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 5 – Site Conditions

Sault Ste. Marie Mgt. Unit

Jeff Wise : Examiner

Compartment: 42

Year of Entry: 2017

8	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
9	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	11	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
10	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	7	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
Comments:							
11	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
12	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	37	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
Comments: 5E -west part of stand contains more cedar and hemlock groves and is more boggy.							

Mgt. Unit

Compartment: #Type!

Year of Entry:



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 – 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
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	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6122 - Black Spruce	Poletimber Well	17.8	92	81-110	OPIIC - FMD: Boggy and wet, winter sale, survey line on north side is good.
2	4112 - Maple, Beech, Cherry Association	Poletimber Well	19.3	92	81-110	No Beech in stand, north line good no survey needed. Owner on north boundary has a gate and road extending down into State, treat with stand 3.
3	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	92.3	92	111-140	Scattered White Pine and Hemlock, old road through stand from pvt which is the access.
4	6127 - Lowland Pine	Sawtimber Well	16.9	151	81-110	An unusual boggy White Pine/Hemlock stand, standing water.
5	4136 - Aspen, Mixed Conifer	Sapling Well	25.6	30	Immature	
6	6122 - Black Spruce	Poletimber Well	26.3	92	111-140	Drops down off edge of stand 3 into wet ground, winter cut, treat with 33 if cut.
8	6122 - Black Spruce	Poletimber Well	11.0	92	111-140	
10	42350 - Upland Hemlock	Poletimber Well	7.9	100	111-140	
11	4112 - Maple, Beech, Cherry Association	Poletimber Well	9.6	101	81-110	Manage with stand 41 in C41, (not C42 St 41 to the north).
12	6122 - Black Spruce	Poletimber Medium	11.1	90	51-80	Was part of 13, more conifer, no treatment recommended this YOE.
13	4134 - Aspen, Spruce/Fir	Poletimber Well	14.7	90	51-80	Island stand, no cut recommended this YOE.
14	6121 - Tamarack	Poletimber Well	8.1	90	51-80	
15	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	5.0	61	81-110	Small stand along pvt, no access, no cut, may be smaller than five acres.
16	6122 - Black Spruce	Poletimber Well	8.8	92	51-80	Inaccessible at this point but may be possible from the north, spruce should still be alive and well.
17	6124 - Lowland Spruce- Fir	Poletimber Well	18.1	85	51-80	Borders pvt, inaccessible, no cut recommended.
18	6121 - Tamarack	Poletimber Well	11.2	90	51-80	Contains an island of pine and spruce, semi open area. Wet at this time.



Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
4134 - Aspen, Spruce/Fir	Sapling Medium	227.9	5	Immature	Sale 11-07, cut over several years from 2009-2013, sugar maple inclusions reserved as well as scattered pine, oak, and cedar.
4134 - Aspen, Spruce/Fir	Poletimber Well	7.2	90	111-140	Was part of stand 19, retained as wetland buffer, also pits from settlement in stand 45.
6120 - Lowland Cedar	Poletimber Medium	270.6	140	1-50	Huge stand which comprises a variety of low land shrubs like tag alder, and cedar, wet and marshy, very slow growing, did not walk into this stand.
6120 - Lowland Cedar	Poletimber Well	16.0	90	51-80	No cut recommended, wet and provides a good buffer for the marsh.
6115 - Lowland Ash	Poletimber Poor	38.4	65	51-80	Black ash swamp, wet, no treatment.
4115 - Y.Birch, Hemlock NH	Sawtimber Well	21.4	101	51-80	Sale 45-003-07-01, cut in 2011.
4134 - Aspen, Spruce/Fir	Poletimber Well	6.5	85	81-110	Island in stand 25, no treatment recommended.
4119 - Mixed Northern Hardwoods	Poletimber Well	7.8	90	81-110	Small hardwood stand, marked but not cut last YOE, small cedar pocket at south end, paint is fading.
6121 - Tamarack	Sapling Poor	14.9	3	Immature	Sale 003-07, cut in 2013, cedar reserved.
4110 - Sugar Maple Association	Poletimber Well	10.0	101	81-110	Small hardwood stand, marked but not cut last YOE, paint is fading.
6112 - Lowland Aspen	Sapling Well	42.3	23	Immature	OPIC - FMD: Tag Alder lowland comprising most of the connecting swampland in the compartment.
6120 - Lowland Cedar	Poletimber Medium	31.2	90	51-80	
6120 - Lowland Cedar	Poletimber Medium	64.4	90	81-110	
6122 - Black Spruce	Poletimber Well	14.7	92	111-140	Illegal ORV trail.
4130 - Aspen	Sapling Poor	33.6	3	Immature	Sale 009-07, hardwood units not cut.
4130 - Aspen	Sapling Poor	82.4	2	Immature	Sale 45-003-07-01, cedar and pine, and yellow birch reserved.
6121 - Tamarack	Poletimber Medium	76.5	85	1-50	

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Sault Ste. Marie Mgt. Unit

Report 8 – Forested Stands

Compartment: 42
Year of Entry: 2017

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
40	6111 - Lowland Balsam Poplar	Poletimber Well	11.5	80	51-80	OI says most timber on narrow ridge, but it looks pretty low and wet.
41	429 - Mixed Upland Conifers	Poletimber Well	7.5	100	81-110	Narrow stand surrounding stand 11, hemlock -cedar-yellow birch, no cut.
42	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	21.2	101	51-80	Island in stand 9, no treatment recommended this YOE.
43	4134 - Aspen, Spruce/Fir	Sapling Well	62.7	23	Immature	OPIC - FMD: Regenerating nicely, East part gets low and wet where winter road ends, north part has more fir but was cut at the same time.
46	4119 - Mixed Northern Hardwoods	Poletimber Well	21.3	75	81-110	Was marked last YOE, not cut, no treatment recommended this YOE.
48	42330 - Upland Fir	Poletimber Poor	5.4	30	1-50	This stand shows evidence of a homestead, rock piles, cellar, buckets, and an opening filling in with trees, was cut with surrounding area but looks a little older and mature so maybe not.



Stand	Cover Type	Acres	Managed Site	General Comments:
7	6225 - Bog	17.5	No	
9	6239 - Mixed Emergent Wetland	153.8	No	
25	6223 - Inundated Shrub Swamp	91.1	No	Marsh/ lowland shrub with a few small islands of timber, including stand 26.
35	6220 - Alder/willow	5.8	No	Scattered black spruce
37	500 - Water	2.8	No	Un-named beaver pond.
39	6229 - Mixed lowland shrub	5.7	No	Tag alder with scattered conifers.
44	6239 - Mixed Emergent Wetland	9.0	No	
45	310 - Herbaceous Openland	9.1	Yes	OPIC - FMD: OLD HOMESTEAD SITE(1996), I found no evidence of a homestead but I would not dispute it, Open fields are slowly filling in with White Spruce, White Birch, and pockets of brush, also has a few old wolfy Sugar Maple clumps. Stand is still quite open and has several meadows. I suggest keeping the fringe intact for a wildlife corridor, and reserving the large open grown maples, and a few scattered apple trees. Ground cover is grasses, raspberries and bracken fern,
47	6223 - Inundated Shrub Swamp	23.6	No	Tag alder with scattered tamarack.
49	6223 - Inundated Shrub Swamp	52.9	No	Wet tag alder swamp with four acre island of mixed timber.
50	6223 - Inundated Shrub Swamp	136.1	No	Wet tag alder swamp with tamarack.