



Compartment Review Presentation

Sault Ste. Marie Forest Management Unit

Compartment 50

Entry Year 2016

Acreage: 1,151

County Chippewa

Management Area: Waishkey Bay

Revision Date: 07/02/2014

Stand Examiner: Josh Brinks

Legal Description:

T46N R02W Sections 2, 3, 4, 10, T 47N R02W Sections 26, 30, 31

Identified Planning Goals:

Begin managing stands which meet silvicultural criteria and can be accessed. There is currently an open sale contract in this compartment to manage some of the black spruce stands and ridges of aspen. No further treatments are being proposed at this time. Work with Brimley State Park to enhance recreational opportunities in area. Continue to maintain and sign recreation trails located in the compartment.

Soil and topography:

The soil association in this compartment is a Fibre-Allendale-Pickford. The Fibre and Pickford soils are found on the broad flats and in the drainage ways, they are frequently ponded. The Allendale soils are in the slightly higher landscape positions or on the low knobs (USDA Soil Conservation Service). The majority of topography is low and relatively flat there are a few areas with steep hilly terrain.

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

Brimley State Park is found to the north west of the compartment. It is a modern campground with mini-cabins and many features including a picnic area, year-round interpretive program, and a playground. This campground offers the warmest swimming in Lake Superior's Whitefish Bay. This compartment is an isolated block of land managed by the DNR. The rest of the surrounding area consists of private ownership with a mix of both permanent and seasonal residences.

Unique Natural Features:

The compartment contains many natural bogs.

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:

Steep ridges and high water table make access and management difficult in this compartment. As resources available and lowland logging practices improve more of this compartment will be able to be accessed. It should also be noted that a portion of this compartment is located adjacent/within the Bay Mills Wetland Preserve. Special consideration should be given when making management decisions in this area.

Watershed and Fisheries Considerations:

This compartment is in the Eastern Lake Superior Management Unit. The state threatened lake sturgeon (*Acipenser fulvescens*) is known to use shallow, clear, rocky portions of the Waishkey River for spawning. Several drainages and intermittent streams run from the compartment into the river. Just maintain a minimum no clearcut buffer of 100 feet where appropriate. Selective cut can be within 75 feet of the stream bank. Waiska River is primarily warmwater so much beaver activity is not going to be detrimental to the fisheries that is offered.

Wildlife Habitat Considerations:

The majority of this compartment is located along the Waiska River near Brimley State Park, and is composed of lowland stands—hardwoods and mixed conifers. The remainder is cedar and lowland hardwoods in a coastal area on the west side of Brimley Bay. Some lowland spruce will be regenerated, and will benefit snowshoe hare.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine (lake) clay and silt. The glacial drift thickness varies between 100 and 200 feet. The Cambrian Munising Sandstone and the Precambrian Jacobsville Sandstone subcrop below the glacial drift. The Jacobsville was previously used as a building stone. A pit is located in Section 4 and gravel potential appears to be limited. A 1305 foot exploratory test into the Precambrian rocks was drilled and abandoned in 1973. There is no current economic oil and gas production in the UP.

Vehicle Access:

Access into the interior of the compartment is poor. There are limited trails many of these are impassible during different parts of the year. The only vehicle access into the compartment is by the Brimley Grade and this is gated off during the non-snow covered months.

Survey Needs:

None at this time.

Recreational Facilities and Opportunities:

The snowmobile trail is heavily used during the season. Opportunities for deer and small game also present themselves. The Wiaskey River provides fishing, canoeing, and other water related adventures. Bird watching and berry picking are also potential activities

Fire Protection:

Poor access and steep terrain are a concern. However; the current cover types are not known for frequent or explosive fire events.

Additional Compartment Information:

Round island in Lake Superior is also associated with this compartment. The portion of the compartment located on Back Bay is not being managed in order to promote and enhance the objectives associated with the Bay Mills Wetland Preserve which surrounds the property.

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:

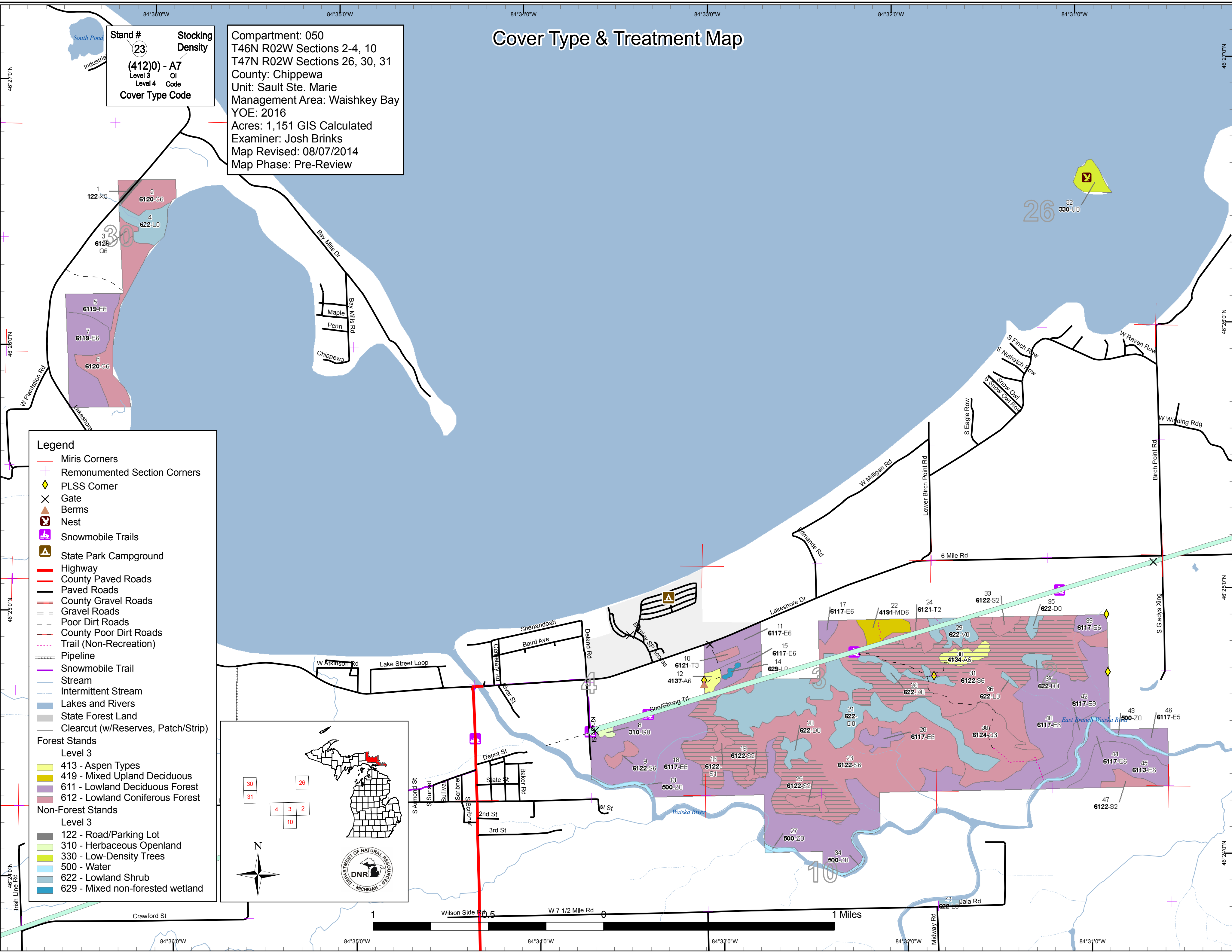
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatment Map

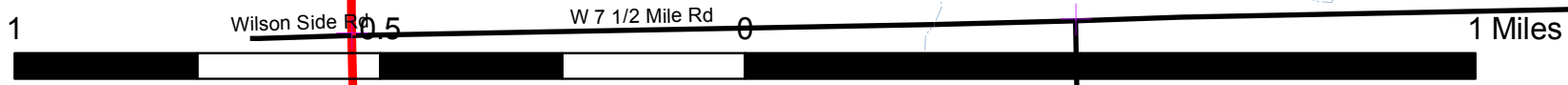
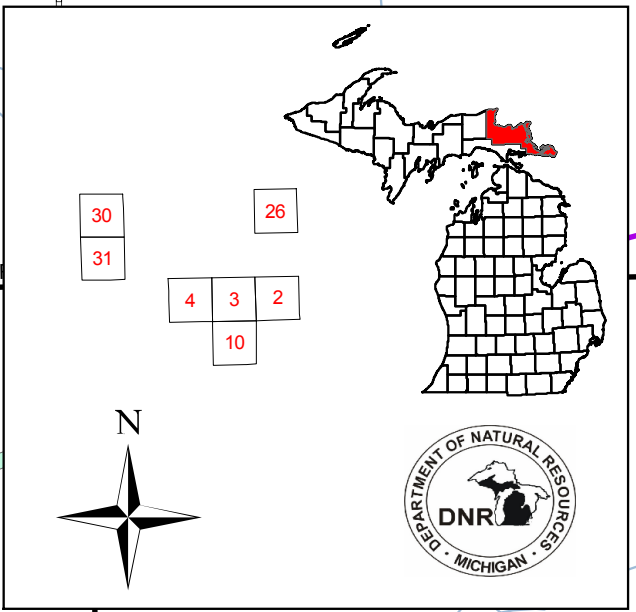
Stand #
23
(4120) - A7
 Level 3
 Level 4
 Cover Type Code

Stocking
 Density
 OI
 Code

Compartment: 050
 T46N R02W Sections 2-4, 10
 T47N R02W Sections 26, 30, 31
 County: Chippewa
 Unit: Sault Ste. Marie
 Management Area: Waishkey Bay
 YOE: 2016
 Acres: 1,151 GIS Calculated
 Examiner: Josh Brinks
 Map Revised: 08/07/2014
 Map Phase: Pre-Review



- Legend**
- Miris Corners
 - Remonumented Section Corners
 - ◆ PLSS Corner
 - × Gate
 - ▲ Berms
 - 👤 Nest
 - 🚙 Snowmobile Trails
 - ⚠ State Park Campground
 - Highway
 - County Paved Roads
 - Paved Roads
 - County Gravel Roads
 - Gravel Roads
 - Poor Dirt Roads
 - County Poor Dirt Roads
 - Trail (Non-Recreation)
 - Pipeline
 - Snowmobile Trail
 - Stream
 - Intermittent Stream
 - Lakes and Rivers
 - State Forest Land
 - Clearcut (w/Reserves, Patch/Strip)
- Forest Stands**
- Level 3
- 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest
- Non-Forest Stands**
- Level 3
- 122 - Road/Parking Lot
 - 310 - Herbaceous Openland
 - 330 - Low-Density Trees
 - 500 - Water
 - 622 - Lowland Shrub
 - 629 - Mixed non-forested wetland



Stand Boundary Map

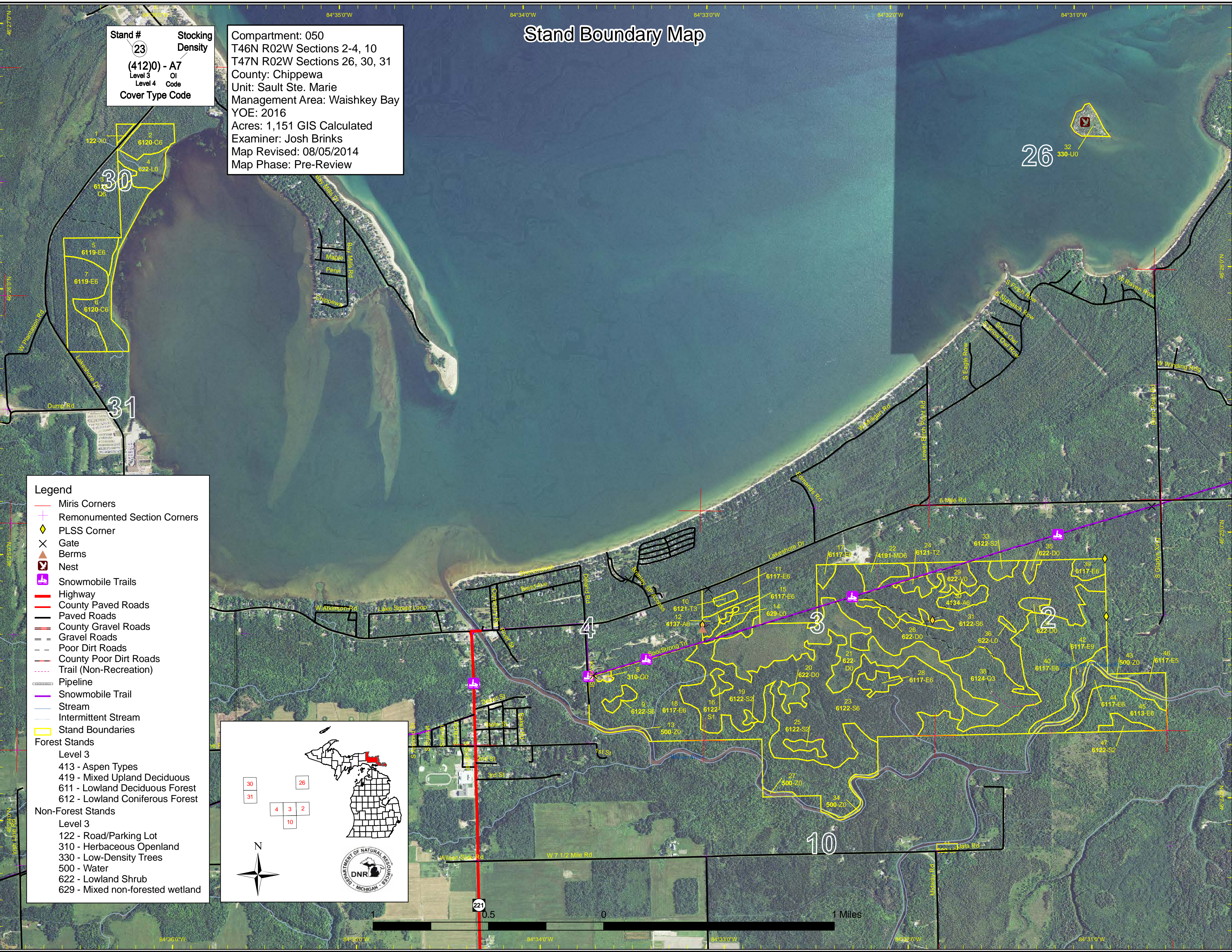
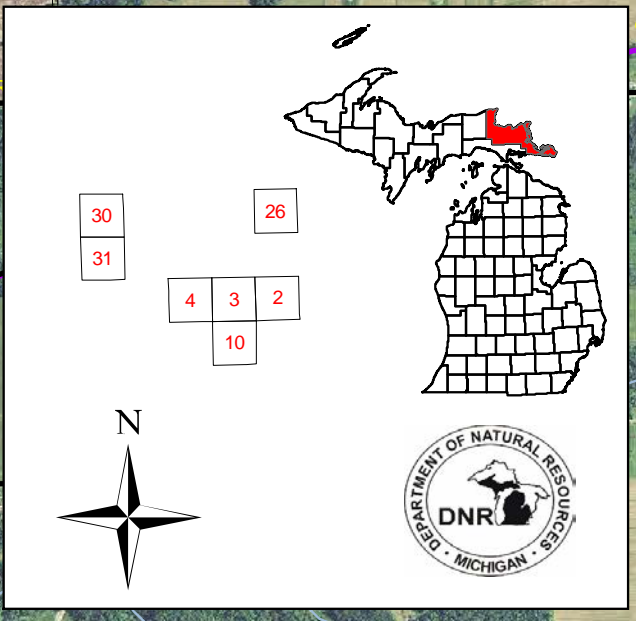
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(4120) - A7
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Legend

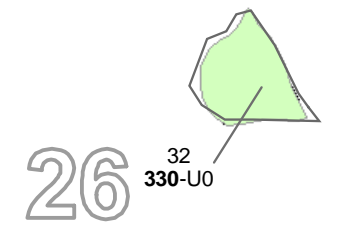
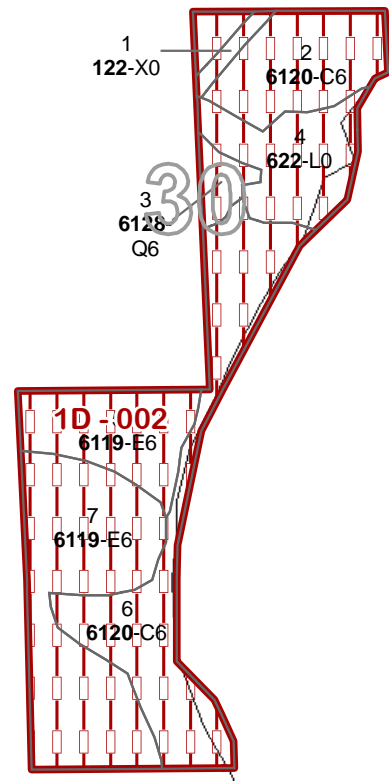
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Special Conservation Areas & Site Conditions Map

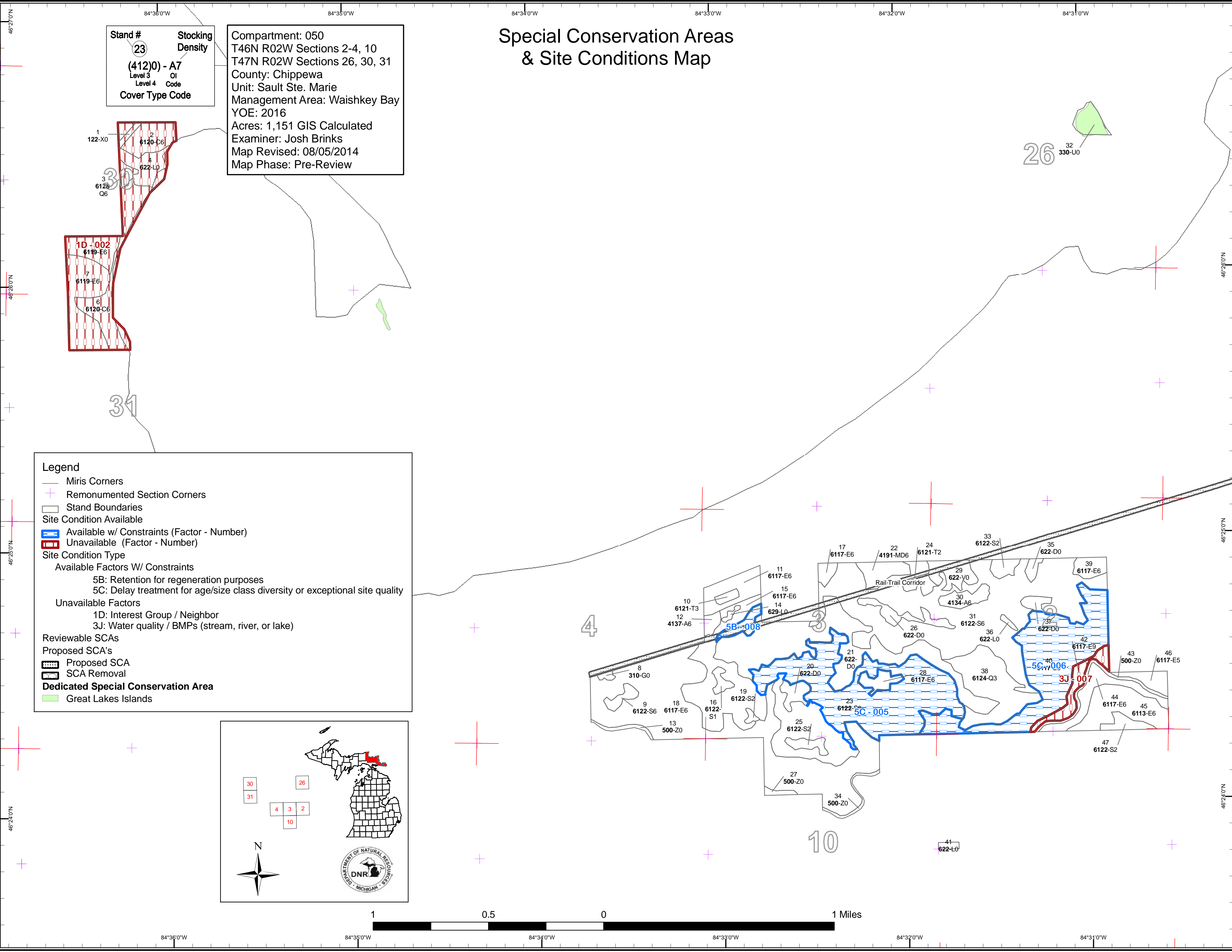
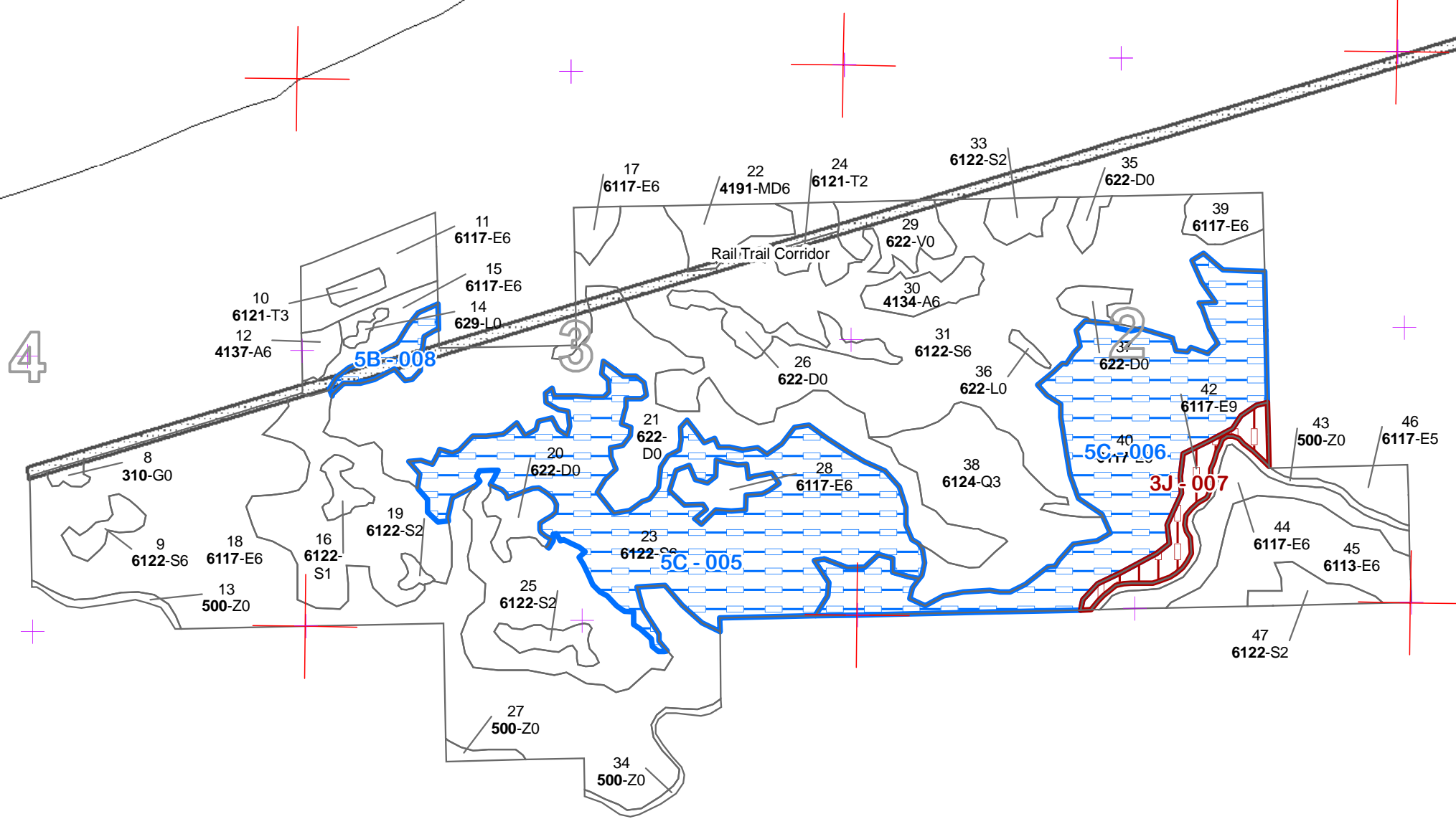
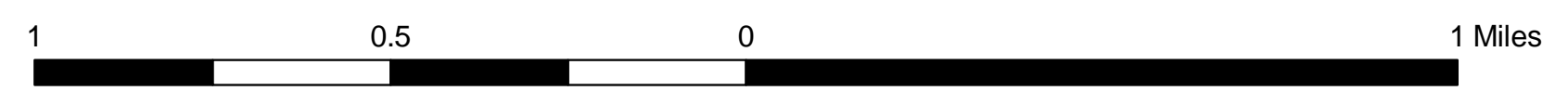
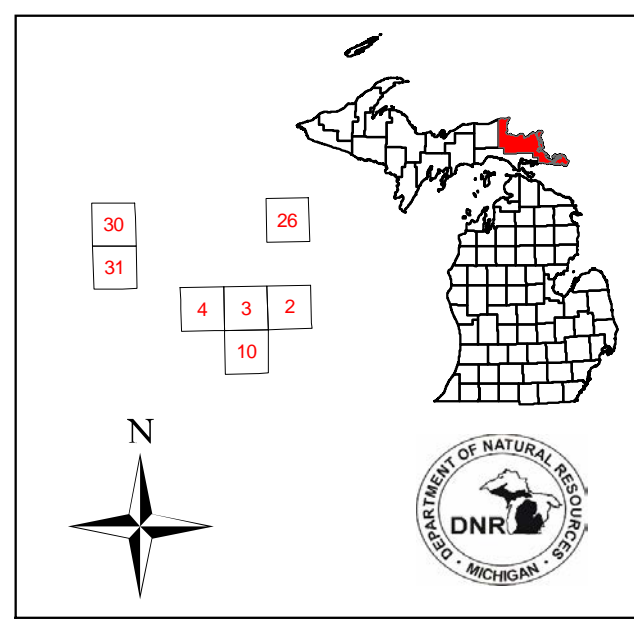
Stand #
23
(412)0 - A7
 Level 3 OI
 Level 4 Code
 Cover Type Code

Compartment: 050
 T46N R02W Sections 2-4, 10
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 Unit: Sault Ste. Marie
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 Map Revised: 08/05/2014
 Map Phase: Pre-Review



Legend

- Miris Corners
- Remonumented Section Corners
- Stand Boundaries
- Site Condition Available
- Available w/ Constraints (Factor - Number)
- Unavailable (Factor - Number)
- Site Condition Type
- Available Factors W/ Constraints
 - 5B: Retention for regeneration purposes
 - 5C: Delay treatment for age/size class diversity or exceptional site quality
- Unavailable Factors
 - 1D: Interest Group / Neighbor
 - 3J: Water quality / BMPs (stream, river, or lake)
- Reviewable SCAs
- Proposed SCAs
 - Proposed SCA
 - SCA Removal
- Dedicated Special Conservation Area
- Great Lakes Islands



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	0	0	4	0	0	0	8	0	0	0	0	0	12
Bog	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Cedar	0	0	0	0	0	0	18	0	0	32	0	0	0	0	50
Herbaceous Openland	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Low-Density Trees	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Lowland Conifers	0	0	44	0	0	0	3	0	0	0	0	0	0	0	47
Lowland Deciduous	0	0	0	15	0	17	67	213	111	0	0	0	0	0	423
Lowland Shrub	19	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Lowland Spruce/Fir	0	0	0	0	21	5	185	0	214	0	0	0	0	0	425
Mixed Upland Deciduous	0	0	0	0	0	11	0	0	0	0	0	0	0	0	11
Tamarack	0	0	3	0	5	0	0	0	0	0	0	0	0	0	8
Treed Bog	118	0	0	0	0	0	0	0	0	0	0	0	0	0	118
Urban	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Water	15	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Total	176	0	46	15	30	33	270	217	333	32	0	0	0	0	1151



Report 2 – Proposed Treatment Summaries

Sault Ste. Marie Mgt. Unit
Year of Entry 2016

Compartment 050
Total Compartment Acres: 1,151

Acres by Treatment Type

Commercial Harvest - 198 Tree Planting - 0 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	8	0	0	0	0	0	8
Lowland Coniferous Forest	189	0	0	0	0	0	189
Total	198	0	0	0	0	0	198

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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
23 45050023-Cut	85.8	6122 - Black Spruce	High Density Pole	83	141-170	Harvest	Clearcut with Reserves	6122 - Black Spruce	Fld. Tr. Bdy.

Prescription Cut all trees 4 inches or more in DBH. Leave all pine, hemlock, cedar, oak and yellow birch if it exists within the sale.

Specs:

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, jack pine, red pine, aspen and tamarack.

Proposed

Start Date: 10/01/2011

30 45050030-Cut	8.3	4134 - Aspen, Spruce/Fir	High Density Pole	83	81-110	Harvest	Clearcut with Reserves	413 - Aspen	Fld. Tr. Bdy.
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Prescription Cut all trees that are at least 4 inches in DBH. Leave all pine, oak, cedar, hemlock and yellow birch if they exist within the sale.

Specs:

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, red pine, and tamarack.

Proposed

Start Date: 10/01/2011

31 45050031-Cut	103.5	6122 - Black Spruce	High Density Pole	68	111-140	Harvest	Clearcut with Reserves	6122 - Black Spruce	Fld. Tr. Bdy.
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Prescription Cut all trees at least 4 inches in DBH. Leave all pine, cedar, hemlock, oak and yellow birch.

Specs:

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, jack pine, red pine, aspen, cedar and tamarack.

Proposed

Start Date: 10/01/2011

**Total Treatment
Acreage Proposed: 197.6**



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

Josh Brinks : Examiner

Compartment 050

Year of Entry 2016

Availability for Management

Availability for Management			Dominant Site Conditions					
Total Acres	Acres Available	Acres Not Available		No	5C	5B	3J	1D
12	12		Aspen	12				
50		50	Cedar					50
47	44	3	Lowland Conifers	44				3
423	360	63	Lowland Deciduous	263	97		13	50
424	424		Lowland Spruce/Fir	296	122	6		
11	11		Mixed Upland Deciduous	11				
8	8		Tamarack	8				
974	858	116	Total Forested Acres	633	219	6	13	103
	88%	12%	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	1D: Interest Group / Neighbor	119	2E: Road needed			
Comments: Surrounded by Bay Mills Wetland Preserve							
005	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	122				
Comments:							
006	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	97				
Comments:							

007	Not Available	3J: Water quality / BMPs (stream, river, or lake)	13	2F: Too steep
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Comments:

008	Available	5B: Maintain for regeneration purposes	6	
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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
Rail Trail Corridor	Concentrated Recreation Area	Rail-Trail Corridor	SCA	126.3
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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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	6120 - Lowland Cedar	High Density Pole	18.0	60	81-110	Short small diameter cedar with some black spruce poking out above it. Very poor quality and very wet.
3	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	3.3	73	81-110	Stand of mixed conifers that is very wet.
5	6119 - Mixed Lowland Deciduous Forest	High Density Pole	15.1	30	51-80	Stand appears to have been picked over in the past giving it a two aged look with lots of younger trees under some scattered larger trees. Stand is mostly unmerchantable at this time.
6	6120 - Lowland Cedar	High Density Pole	31.8	91	141-170	Cedar stand bordering the bay. Very thick with some deciduous trees scattered throughout.
7	6119 - Mixed Lowland Deciduous Forest	High Density Pole	34.5	72	81-110	Very nice pole size stand of paper birch, aspen with ash closer to the shoreline and red maple further away.
9	6122 - Black Spruce	High Density Pole	4.5	51	51-80	Low wet ground in the middle of the deciduous stand. Some cedar along the edges.
10	6121 - Tamarack	High Density Sapling	2.5	20		This stand was an old settling pond which has been abandoned. Most of the stand is tamarack with some paper birch and oak on the west end.
11	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	17.0	59	81-110	Old lake bottom ridge and swale topography that can be seen on the air photo. The low areas have more tag alder and conifers while the ridges have maple, paper birch, and aspen. Areas of sapling size trees exist on both ends of this stand. This stand is everything below the old shoreline.
12	4137 - Aspen, Birch	High Density Pole	3.5	43	51-80	Stand looks like it was cut in the past. Aspen and paper birch with a few areas of tag alder. There are some pines growing along the property line.
15	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	8.8	67	81-110	Nice stand of red maple and paper birch. Cedar present in stand as you transition into spruce.
16	6122 - Black Spruce	Low Density Sapling	3.5	40		Treed bog converted to S1
17	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	4.0	60	111-140	Smaller pole size hardwood. Stand is located right on the edge of the old shoreline.
18	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	161.4	73	111-140	A great lowland deciduous stand. There is a large gully that divides the stand. Some of the aspen is starting to decline but most of it should hold. Understory is thick in places and has a lot of balsam fir. Hilly topography in this stand that runs downhill to the river. Scattered cedar through the stand especially on the east edge.
19	6122 - Black Spruce	Medium Density	1.4	40		Treed bog converted to a spruce stand.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
22	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	10.9	56	81-110	Younger/smaller stand of birch, maple and aspen with conifer. Thick understory dominated by balsam fir. Lots of sappling and small pole size deciduous trees in areas. Some large wolfy aspen.
23	6122 - Black Spruce	High Density Pole	213.9	83	141-170	Nice black spruce stand. Some of the wetter areas are not as great and have more tag alder. Some steep ridges in this stand. Ridges are dry and have pines growing on them.
24	6121 - Tamarack	Medium Density	5.4	46		Treed bog which has converted to a tamarack stand.
25	6122 - Black Spruce	Medium Density	4.9	40		Treed bog converted to a spruce stand.
28	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	7.2	69	81-110	Area where aspen is growing over the spruce. Ground is a little higher than the surrounding area.
30	4134 - Aspen, Spruce/Fir	High Density Pole	8.3	83	81-110	This stand is a ridge of aspen growing over top of spruce and fir. Thick understory with lots of paper birch, maple and aspen sapplings.
31	6122 - Black Spruce	High Density Pole	185.0	68	111-140	Large stand of black spruce. There are some areas within the stand of smaller diameter trees. Trees get smaller and less dense as you transition into the bog. Drier ground is supporting deciduous trees. Scattered log size white pine.
33	6122 - Black Spruce	Medium Density	5.1	46		Stand has converted from treed bog to a sapling spruce stand.
38	6124 - Lowland Spruce-Fir	High Density Sapling	43.6	26		Stand regenerated nicely after being cut in 1987. Drier areas have spruce, birch, aspen, and maple. Wetter areas have tamarack and spruce. Part of the bog was cut and has not filled in as well. Stand is bordering a pole size stand.
39	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	7.3	66	81-110	Mixed stand that is similar to the stand to the south.
40	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	97.6	81	81-110	Mixed stand of red maple and aspen. Some patches of cedar. Aspen is old and poor quality and a lot of it is starting to die. There are areas where the stand is more log size but most of it is pole. There are steep drainages that run down to the river. A lot of balsam fir in the understory.
42	6117 - Lowland Deciduous, Mixed Coniferous	High Density Log	13.0	86	81-110	Steep hill down to the river. Some areas of tag alder adjacent to the river.
44	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	17.5	74	81-110	Aspen and ash with mixed conifers. Seems to be more cedar on the east end of the stand. Some areas of tag alder bottom lands located directly adjacent to the river.
45	6113 - Lowland Maple	High Density Pole	31.7	66	81-110	Stand is mostly red maple. Could be harvested if we got access into the area. Some hemlock and cedar scattered in the stand.

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Sault Ste. Marie Mgt. Unit

Report 8 – Forested Stands

Compartment: 050
Year of Entry: 2016



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
46	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	7.9	63	81-110	Portions of this stand along the rivers edge are a tag alder bottom land. As you go up the hill its quickly transintinos into bam and conifers. Some canopy gaps with really good regeneration. Lots of deer trails.
47	6122 - Black Spruce	Medium Density	6.3	40	1-50	Treed bog with enough trees to be a forested stand. Mostly sapling size with some bigger trees along the edge.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
1	122 - Road/Parking Lot	1.8	Unspecified	Unspecified	
4	622 - Lowland Shrub	14.7	Unspecified	Unspecified	Lowland shrub stand with some scattered cedar, spruce and tamarack
8	310 - Herbaceous Openland	1.6	Unspecified	Unspecified	Old pits that are often filled with water in wet times of the year.
13	50 - Water	2.7	Unspecified	Unspecified	
14	629 - Mixed non-forested wetland	1.2	Unspecified	Unspecified	This stand contain to small ponds seperated by a treed bog. The ponds were dug by the park back in the day.
20	6224 - Treed Bog	6.6	Unspecified	Unspecified	
21	6224 - Treed Bog	95.3	Unspecified	Unspecified	
26	6224 - Treed Bog	9.4	Unspecified	Unspecified	
27	50 - Water	2.0	Unspecified	Unspecified	
29	6225 - Bog	12.7	Unspecified	Unspecified	
32	330 - Low-Density Trees	9.1	Unspecified	Unspecified	Round Island. There is an old fondation on the island. The island is a blue heron rookery. Most of the trees have wind and ice damage.
34	50 - Water	2.9	Unspecified	Unspecified	
35	6224 - Treed Bog	2.9	Unspecified	Unspecified	
36	622 - Lowland Shrub	1.1	Unspecified	Unspecified	
37	6224 - Treed Bog	3.8	Unspecified	Unspecified	
41	622 - Lowland Shrub	1.6	Unspecified	Unspecified	This parcel was given to us by the MUCC as access to the river.
43	50 - Water	6.9	Unspecified	Unspecified	