

# **Compartment Review Presentation**

Sault Ste. Marie Forest Management Unit

Compartment 123 Entry Year 2016 Acreage: 1,721

**County Mackinac** 

Management Area: Mackinac Mix

Revision Date: 06/30/2014

Stand Examiner: Matt Edison

**Legal Description:** 

T43N-R07W, Sections 13, 14 &15

#### **Identified Planning Goals:**

This compartment is located 4.5 miles north of Epoufette, and 3 miles south of Caffey Corners. While the majority of the compartment is considered lowland, needing little or no management at this point; the upland areas consist of northern hardwoods, with smaller areas of pine and aspen. Management for the area is to select cut the northern hardwood stands to maintain health, growth, and productivity of these stands. Hemlock and yellow birch are to be enhanced where present. Beech Bark Disease has passed throught this area and is still present in the hardwood stands. However, most of the beech has already been lost. Any healthy or potentially BBD resistant Beech will be retained. The red pine stands will be mointored for pests and thinned in those that require it. Most aspen stands have received treatment within the past 20 years.

#### Soil and topography:

The area varies from low wet swamp types to level/rolling uplands. The swamp types are on Markey and Carbondale mucks, with inclusions of Leafriver mucky peat, and higher islands of Spot-Finch complex. Uplands, characterized by level and undulating areas on outwash plains, lake plains and/or ground moraines, consist of Wallace sand, Paquin sand, Kalkaska sand and Paquin-Finch sands.

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

The compartment has five 40's of private land. Two of these contain small parcels comprising Sand Lake Hamlet. The other three are privately owned, primarily for hunting. The adjacent lands are state owned, with another small burg located to the northwest (DeRushaville).

#### **Unique Natural Features:**

Peggley Lake lies in the southwest corner of the compartment. Various species of hawks have been known to inhabit the area. There is potential for various threatened and endangered plant and animal species within the compartment.

#### Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

#### **Special Management Designations or Considerations:**

Preserve appropriate buffers around Peggley Lake. Leave appropriate buffers around active hawk nest where found.

#### **Watershed and Fisheries Considerations:**

Due to the shallow depth of Peggley Lake it most likely winterkills frequently. It is not actively managed, and file information only notes the presence of minnow species and bullheads. Paquin Creek is designated a Type II trout stream. Previous surveys have captured brook trout, sculpin spp. lowa darters, pearl dace, blacknose dace, creek chubs, and rainbow trout. Paquin Creek is also used as a spawning and juvenile nursery area for Great Lakes fishes such as salmon and steelhead. Standard BMP guidelines should apply.

#### Wildlife Habitat Considerations:

This compartment lies within the Mackinac Mix Management Area, and contains a mixture of white cedar and northern hardwood. Red pine has been planted in the northwest portion of this compartment. Wildlife habitat objectives in this compartment include maintenance of mature hardwoods through selective harvest to enhance age class diveristy and promote mast producing species which will benefit deer, bear, and hawks. Harvests in deer wintering complex will take place during the winter to provide a source of browse for wintering deer. In its present condition, the cedar component is critical to deer, bobcat, bear, gray wolf and neo-tropical migrant birds. Therefore, it will be left with no active management during this period.

#### Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of peat and muck and lacustrine (lake) sand and gravel. There is insufficient data to determine the glacial drift thickness. The Silurian Engadine Group subcrops below the glacial drift. The Engadine is quarried for stone/limestone three miles to the north. Gravel pits are not located in the area and potential appears to be limited. There is no current economic oil and gas production in the UP.

#### **Vehicle Access:**

Access is good to the majority of the upland areas. Hiawatha Trail, a paved county road, lies on the west side of the compartment. Sand Lake Road, a gravel county road through the private parcels, becomes a DNR road as it hits state lands. Upgrading of this road has been done through road and bridge funds within the past 5 years. Bennett Road, a DNR gravel/dirt road, has also been upgraded somewhat within the past several years. Bridge redecking is still planned for the 2nd bridge. The two-track woods road through section 13 will be upgraded as part of the timber sale in the area. Culverts and fords will be put in according to DEQ permit guidelines.

#### **Survey Needs:**

Blue property line work will be required this entry, but all necessary corners are already in place.

#### **Recreational Facilities and Opportunities:**

No formal recreational facilities exist within this compartment. However, the area is used for hunting deer, bear and small game, trapping, snowmobiling, and ORVing. Peggley Lake has no formal access site.

#### **Fire Protection:**

There is little worry of a wildfire in the area due to the vast swamps. However, the proximity of homes and cabins along Hiawatha Trail may increase this risk.

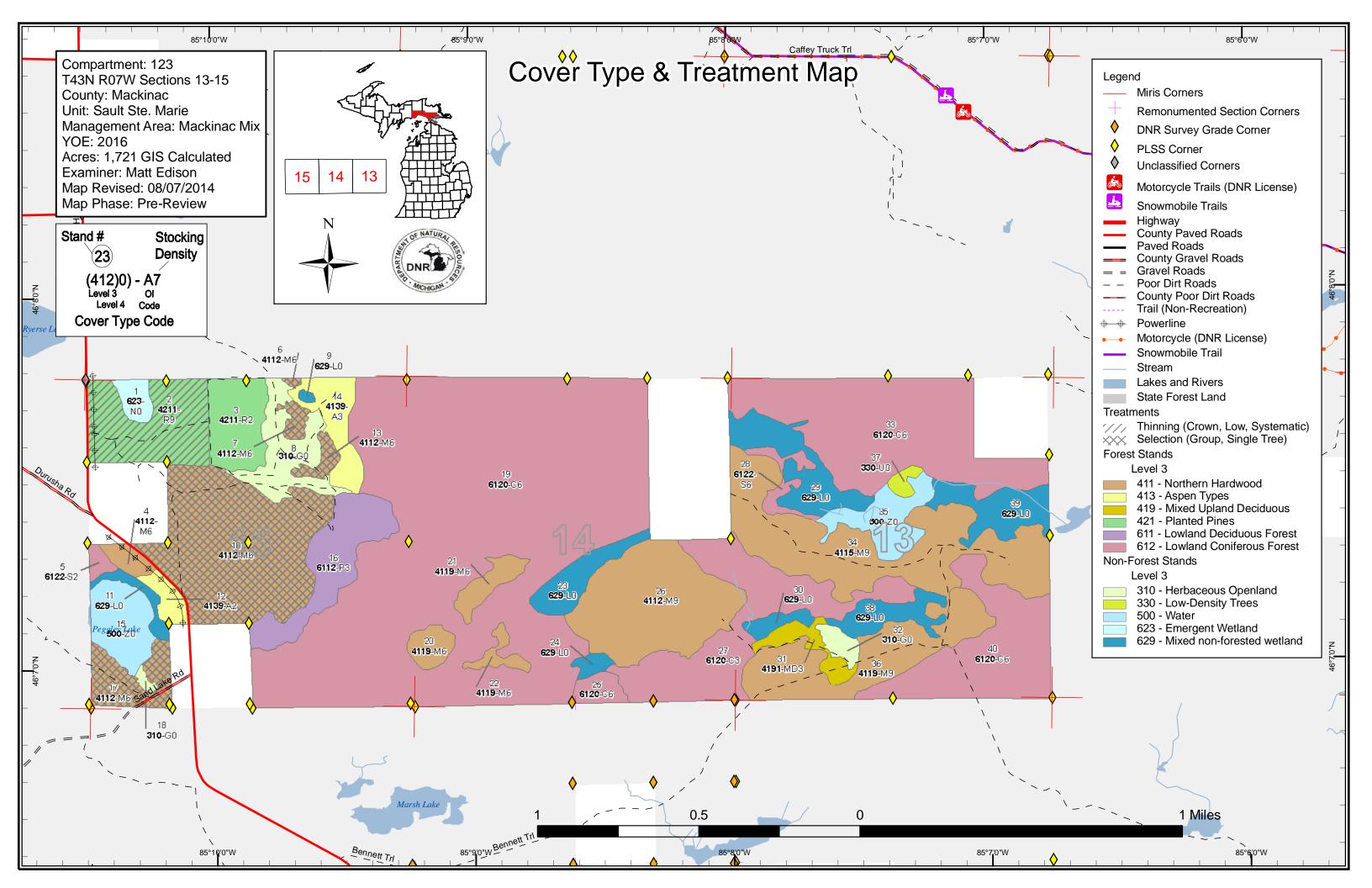
## **Additional Compartment Information:**

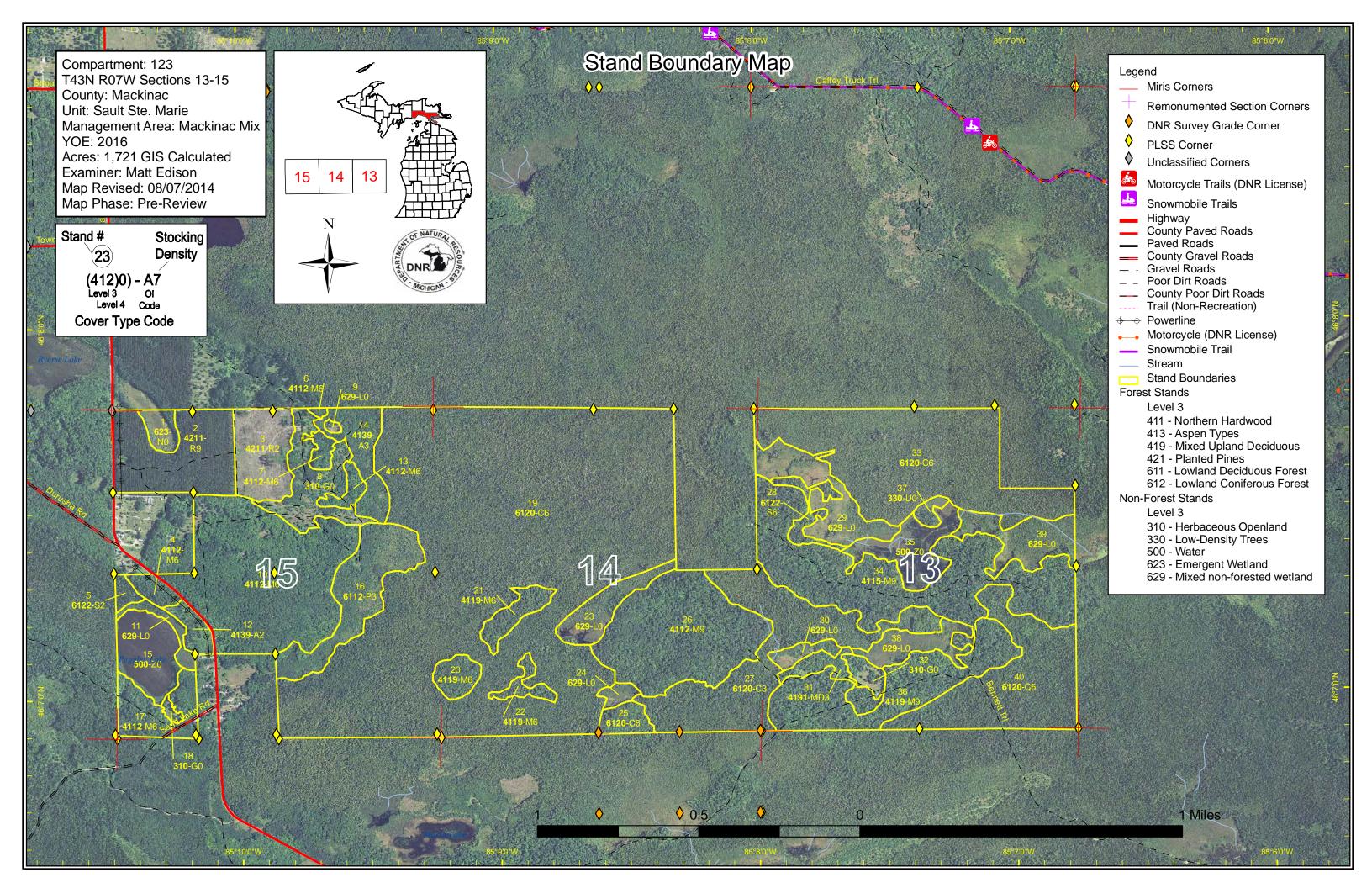
The following reports from the Inventory are attached:

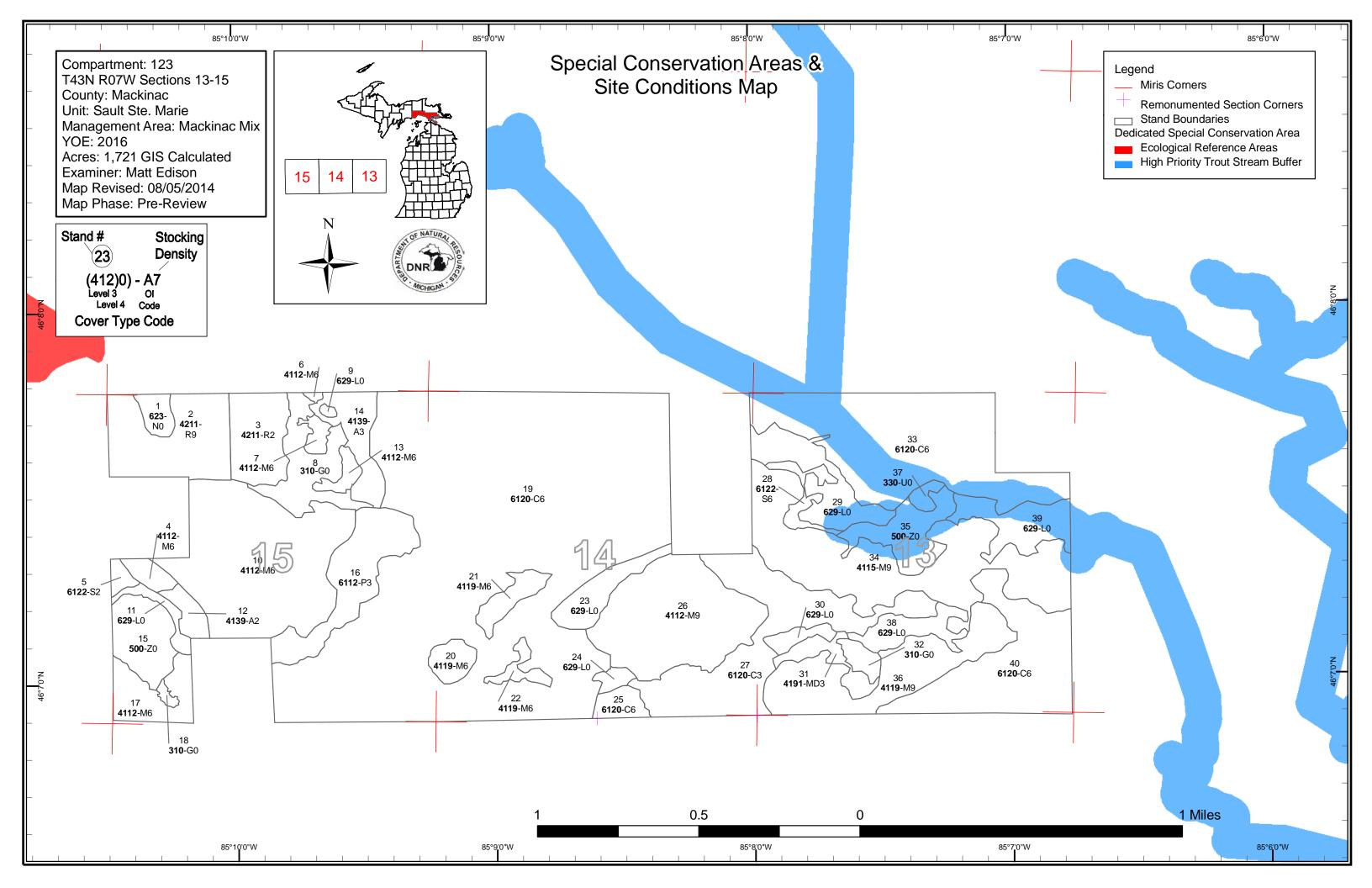
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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







Compartment 123 Year of Entry 2016

Sault Ste. Marie Mgt. Unit

Matt Edison: Examiner



Age Class																
		80	70.79	,	Ser. Ser. Ser. Ser. Ser. Ser. Ser. Ser.	AD DE	\$5.05 \$5.05	80.00	18 /s	80,00	85.00	00.00	70,70	No Su	A A	, so la
Aspen	8	0	23	0	0	0	0	0	0	0	0	0	0	0	31	
Cedar	0	0	0	0	0	0	0	0	9	90	216	525	0	0	839	
Herbaceous Openland	41	0	0	0	0	0	0	0	0	0	0	0	0	0	41	
Low-Density Trees	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Lowland Aspen/Balsam Poplar	0	0	46	0	0	0	0	0	0	0	0	0	0	0	46	
Lowland Shrub	113	0	0	0	0	0	0	0	0	0	0	0	0	0	113	
Lowland Spruce/Fir	0	0	0	4	0	9	0	0	0	0	0	0	0	0	13	
Marsh	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
Mixed Upland Deciduous	0	0	12	0	0	0	0	0	0	0	0	0	0	0	12	
Northern Hardwood	0	0	0	0	0	0	31	232	212	0	0	0	0	0	475	
Red Pine	31	0	0	0	0	0	0	0	55	0	0	0	0	0	86	
Water	54	0	0	0	0	0	0	0	0	0	0	0	0	0	54	
Total	258	0	81	4	0	9	31	232	276	90	216	525	0	0	1721	



# **Report 2 – Proposed Treatment Summaries**

Sault Ste. Marie Mgt. Unit Year of Entry 2016

Compartment 123 Total Compartment Acres: 1,721

## **Acres by Treatment Type**

Commercial Harvest - 218 Tree Planting - 0

Other - 0

Habitat Cut - 0

Opening Maintenance - 0

# Cover Type by Harvest Method | Cover Type by Harvest Method |

**Northern Hardwood** 0 55 **Planted Pines** 0 0 0 0 55 Total 0 163 55 218 0 0 0

Sault Ste. Marie Mgt. Unit

# Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 123 Year of Entry 2016 DNR MICHIGAN

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
2	45123002-Cut	54.9	42110 - Planted Red Pine	High Density Log	88	171-200	Harvest	Crown Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Thin mature red Pine to average of 120 basal area.

Specs:

S

Other Comments:

Next Steps:

Proposed

Start Date: 10/01/2015

0.9 High 66 111-140 Single Tree 411 - Northern Cmpt. Review 6 45123006-Cut 4112 - Maple, Harvest Beech, Cherry Density Selection Hardwood Proposal Association Pole

<u>Prescription</u> Select cut mixed hardwood stand to average of 80-90 basal area. Promote Black Cherry that is in the stand.

Specs:

Other Comments:

...

Next --Matthew Edison : 07/24/2014 comments: 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. Plant oak per wildlife availability.

<u>Proposed</u>

Start Date: 10/01/2015

45123007-Cut 4.7 4112 - Maple, High 79 81-110 Harvest Single Tree 411 - Northern Cmpt. Review Beech, Cherry Density Selection Hardwood Proposal Association Pole

Prescription Thin mixed hardwood stand to average basal area of 80-90 basal area. Promote the Black Cherry that is present in the stand.

Specs:

Other Comments:

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

Steps: birch, balsam fir, spruce, aspen and hemlock. Plant oak per wildlife availability.

**Proposed** 

Start Date: 10/01/2015

1045123010-Cut128.54112 - Maple,<br/>Beech, CherryHigh73111-140HarvestSingle Tree411 - NorthernCmpt. Review<br/>BelectionAcceptationDensitySelectionHardwoodProposal

Association Pole

<u>Prescription</u> Thin mixed hardwood stand to average basal area of 80-90 basal area. Promote Black Cherry and Yellow Birch that is in the stand.

Specs:

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. Plant oak per wildlife availability.

Proposed

Start Date: 10/01/2015

Sault Ste. Marie Mgt. Unit

#### Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 123 Year of Entry 2016

DEPARTMEN	DNR
\	MICHIGAN .

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
13	45123013-Cut	5.8	4112 - Maple, Beech, Cherry Association	High Density Pole	72	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Cmpt. Review Proposal

Prescription Thin mixed hardwood to average of 80-90 basal area. Promote the Black Cherry that is in the stand.

Specs:

<u>Next</u>

s

Other Comments:

Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is maple, cherry, beech, paper and yellow

Steps: birch, balsam fir, spruce, aspen and hemlock. Plant oak per wildlife availability.

<u>Proposed</u>

Start Date: 10/01/2015

45123017-Cut 23.6 4112 - Maple, High 111-140 Harvest Single Tree 411 - Northern Cmpt. Review Beech, Cherry Selection Hardwood Proposal Density Association Pole

Prescription Thin mixed hardwood to average of 80-90 basal area. Promote Yellow Birch that is in the stand.

Specs:

Other Comments:

Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is maple, cherry, beech, paper and yellow <u>Next</u> Steps:

birch, balsam fir, spruce, aspen and hemlock.

Proposed

Start Date: 10/01/2015

**Total Treatment** 

218.4 Acreage Proposed:

Sault Ste. Marie Mgt. Unit Report 4 -- Treatments Prescribed with Compartment: 123 a Site Condition s Year of Entry 2016 t **Treatment** Acres CoverType Size Stand ВА **Treatment Treatment Cover Type Approval** n Objective Method Status Name Range Density Age Type #Type! #Type! **Prescription** Specs: Other Comment: <u>Next</u> Steps: <u>Proposed</u> #Type! Start Date:

**Total Treatment** 

**Limiting Factor** 

Acreage Proposed: 0.0

# **Report 5 – Site Conditions**

Sault Ste. Marie Mgt. Unit

Matt Edison: Examiner

Compartment 123
Year of Entry 2016

# Availability for Management Total Acres Acres Dominant Site Conditions

Acres	Available	Not Available		No
31	31		Aspen	31
839	839		Cedar	839
46	46		Lowland Aspen/Balsam Poplar	46
13	13		Lowland Spruce/Fir	13
12	12		Mixed Upland Deciduous	12
475	475		Northern Hardwood	475
86	86		Red Pine	86
1,502	1,502		Total Forested Acres	1,502
	100%		Relative Percent	

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

Sault Ste. Marie Mgt. Unit

Compartment: 123 Year of Entry: 2016



#### 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				

Sault Ste. Marie Mgt. Unit Compartment: 123





# 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.

Conservation Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Habitat Area	An area that provide some specific need for the life cycle of wildle and Waterfowl Production Areas, deer wintering complexes in loo openings and savannas. Habitat areas are distinct from critical hendangered or threatened species (such as Kirtland's warbler or general in nature, are not primarily associated with threatened or covered by species recovery plans that are developed in cooperations.	wland conifer communities, grassland abitat designated for recovery of piping plover areas) in that they are more endangered species, and are not
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high dicommunities are ecologically and socially significant in their effect as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, iversity of plants and wildlife. Riparian cts on water quality and quantity, as well
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of identified as Element Occurrences (EOs) by the Michigan Natura context of their natural community classification system. Element (Excellent) or B (Good) and a Global (G) or State (S) element (ra threatened (2), or rare (3) serve as an initial base of ERAs. They the State. The system is comprised of individual or associations managed for restoration and maintenance of natural ecological p submit recommendations for lands as ERAs using the DNR Constitution.	Il Features Inventory (MNFI) within the Cocurrences with viability ranks of A rity) ranking of endangered (1), may be located upon any ownership in of natural community types that are rocesses and values. The public may

s t	Sault Ste. Mari	e Mgt. Unit		Report 8	– Forested	Stands Compartment: 123 Year of Entry: 2016
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	42110 - Planted Red Pine	High Density Log	54.9	88	171-200	Very nice Red Pine plantation. Still high basal area. Thin basal area to approx 120 and revisit in 10 years.
3	42110 - Planted Red Pine	Medium Density	31.4	4		Red pine regeneration looking good. Will need further release in future, pockets of aspen and cherry.
4	4112 - Maple, Beech, Cherry Association	High Density Pole	6.7	60	81-110	Pole stand thinned in 2008.
5	6122 - Black Spruce	Medium Density	3.8	35	51-80	Small black spruce, balsam fir, and a few scattered small tamarack. Very wet fringe stand on edge of Peggley Lake.
6	4112 - Maple, Beech, Cherry Association	High Density Pole	0.9	66	111-140	Small stand of mixed maple with some cherry. Thin to regulation and prromote cherry.
7	4112 - Maple, Beech, Cherry Association	High Density Pole	4.7	79	81-110	Small stand of mixed maple. Basal area suggests a selection cut. Not much regen present. Thin with pther nearby maple stands.
10	4112 - Maple, Beech, Cherry Association	High Density Pole	128.5	73	111-140	Decent quality stand of mixed maple. There is yellow birch and cherry scattered throughout. Some beech remains.
12	4139 - Aspen, Mixed Deciduous	Medium Density	8.2	6		Stand was cut in 2008. Regeneration is mix of aspen, mixed maple. Scattered residual white pine and red maple.
13	4112 - Maple, Beech, Cherry Association	High Density Pole	5.8	72	111-140	Stand of mixed maples with some cherry mixed in.

1-50

111-140

111-140

Stand of mixed brush with aspen, cherry, birch, and rm regen.

A3 about 15-20' tall.

Stand of mixed maples with some beech and yellow birch.

Steep ridge on east and wet edges of stand.

Very large stand of cedar with some areas of scattered

tamarack. Not the best quality.

Scattered balsam.

4139 - Aspen, Mixed

Deciduous

6112 - Lowland Aspen

4112 - Maple, Beech,

**Cherry Association** 

6120 - Lowland Cedar

14

16

17

19

High Density

Sapling

High Density

Sapling

High Density

Pole

High Density

Pole

23.0

45.6

23.6

524.7

29

24

60

110

# Report 8 - Forested Stands

Compartment: 123 Year of Entry: 2016



s t	Sault Ste. Mario	e Mgt. Unit		Report 8	– Forestea	Stands	Year of Entry: 2016		
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range		General Comments:	MICHIGAN	
25	6120 - Lowland Cedar	High Density Pole	8.6	80	81-110	Stand of small, poor qualit birch. A couple large v	y cedar with mix of spruc vhite pine on higher grou		
26	4112 - Maple, Beech, Cherry Association	High Density Log	89.4	80	81-110	Stand was thinned last e cherry and yellow bire	entry. Mixed maple and c ch. Hemlock groves thro		
27	6120 - Lowland Cedar	High Density Sapling	90.2	90		Very low ground that is of merc	ten flooded. Poor quality	cedar. No	
28	6122 - Black Spruce	High Density Pole	8.9	50	51-80	Transitional stand between poor quality, floode	harcwood and lowland o		
31	4191 - Mixed Upland Deciduous with Conifer	High Density Sapling	12.1	28	81-110		rush with some aspen an nall diameter.	d conifer.	
33	6120 - Lowland Cedar	High Density Pole	137.3	105	81-110	Very low ground, poo	or quality, small diameter	cedar.	
34	4115 - Y.Birch, Hemlock NH	High Density Log	122.8	80	51-80	Red Maple with some he Widely so	emlock groves and scatte eatttered yellow birch.	red beech.	
36	4119 - Mixed Northern Hardwoods	High Density Log	65.6	73	81-110	Thinned in 2008. Mix of poper birch and b	ole and log sized mixed no palsam. Scattered Hemlo		
40	6120 - Lowland Cedar	High Density Pole	78.3	100	81-110	Stand of short, densely s scattered b	stocked cedar with some palsam and tamarack.	areas with	

Compartment: 123 Year of Entry: 2016



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
1	623 - Emergent Wetland	7.7	Unspecified	Unspecified	
8	310 - Herbaceous Openland	32.4	Unspecified	Unspecified	
9	629 - Mixed non-forested wetland	1.0	Unspecified	Unspecified	
11	629 - Mixed non-forested wetland	6.6	Unspecified	Unspecified	
15	50 - Water	27.7	Unspecified	Unspecified	Stand swapped from Forested to Non-Forested.
18	310 - Herbaceous Openland	1.8	Unspecified	Unspecified	
23	629 - Mixed non-forested wetland	18.5	Unspecified	Unspecified	
24	629 - Mixed non-forested wetland	4.2	Unspecified	Unspecified	
29	629 - Mixed non-forested wetland	33.1	Unspecified	Unspecified	
30	629 - Mixed non-forested wetland	6.3	Unspecified	Unspecified	
32	310 - Herbaceous Openland	6.4	Unspecified	Unspecified	
35	50 - Water	26.3	Unspecified	Unspecified	
37	330 - Low-Density Trees	3.8	Unspecified	Unspecified	
38	629 - Mixed non-forested wetland	17.0	Unspecified	Unspecified	
39	629 - Mixed non-forested wetland	26.2	Unspecified	Unspecified	