

## **Compartment Review Presentation**

Sault Ste. Marie Forest Management Unit

Compartment 45125 Entry Year 2017 Acreage: 1,843

County Mackinac

Management Area: Mackinac Mix

Revision Date: 2015-08-07

Stand Examiner: Matt Edison

**Legal Description:** 

T43N-R7W Section 1 - 3, Hendricks Township

### **Identified Planning Goals:**

The compartment is located 1 mile south east of Caffey Corner and 3 miles east of Rexton. The compartment is mixture of lowland and upland types with a majority in the lowland and transition types. The aspen and lowland poplar stands have been actively managed within the past 2 decades. Management this entry will only involve select cuts of a couple northern hardwood stand. Most of the northern hardwood stands have been selectively harvested within the past 2 decades. The red pine stands within the compartment are being managed according to the red pine management guidelines and other available resources. The young red pine stands will be monitored for regeneration, release needs, and insect and disease infestations. The Red Pine stands in the Northwest corner of the compartment are included in the Graymont LTA.

### Soil and topography:

The majority of the outwash plain and lake plains are undulating to level with some rolling ridges. The majority of the compartment is depressions in the lake plains and outwash plains are nearly level with Dawson and Loxley peats and Markey and Carbondale mucks soils. The variation is the ridges within the depression which are Paquin-Finch sand, Pullup fine sand, Paquin sand and Finch sand soils. The majority of the uplands are in Section 3. The uplands are level to rolling which are composed of Wallace sand, and Menominee loamy sand.

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

The compartment is entirely state owned except the southwestern portion in Section 3. The private parcels are mostly absentee owners with cabins and a few permanent residences along with the ownership in Section 4 to the west. Sand Products owns ¾ of a mile along the northern boundary of Section 3. The property includes an inactive rock quarry. Their lands have recently been harvested for aspen management. The rest of the compartment is surrounded by State ownership. The NW part of the compartment includes areas that are part of the Graymont LTA.

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

Potential for raptors to nest in the compartment exists and care will be taken to check stands for nests and take appropriate management action to protect the species. There is a potential for some rare, threatened, and special concern plant and animal species to inhabit 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. Moose and wolves have been sighted on several occasions with the compartment. Four Moose did winter in this compartment when timber sale harvesting was active in 1998 and 1999.

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

There are known Archeological sites within this compartment. See compartment file.

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

The Caffey Road is used for snowmobile trail and a portion of the ORV trail runs on the road and to the north. 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 per management guidelines for that species if species are found within those stands or would be affected by treatment of the stands.

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

None.

#### Wildlife Habitat Considerations:

Compartment 125 is part of the Mackinac Mix Management Area (MA). Featured species in the MA include black bear, pileated woodpecker, ruffed grouse, snowshoe hare, and white-tailed deer. This is a compartment composed of red pine plantation, spruce, cedar and other lowland conifer, with some hardwood and aspen scattered throughout. A portion of a larger muskeg extends into the central part of the compartment. While the species composition within the lowlands appears

to be similar to that found in pre-settlement times, upland forest cover has changed substantially. Although a significant hemlock component exists, red pine plantations and aspen stands cover a portion of what probably was mixed hardwood/conifer forest at one time. Most aspen stands are relatively young, and provide habitat for ruffed grouse, American woodcock, and deer. Lowland conifers will be left to provide cover for hare and other wildlife. No activities will occur in the muskeg to maintain that habitat for wetland wildlife.

## Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of peat and muck and lacustrine sand and gravel. Surface sediments are thin to discontinuous in places. There is insufficient data to determine the glacial drift thickness. The Silurian Engadine and Manistique groups subcrop below the glacial drift. Silurian-age limestone and dolomite are quarried for stone/limestone in the area. The north half of Section 3 was part of the Graymont land transaction that was approved in March 2015. This is the proposed processing plant site for Graymont's planned underground limestone mine just to the west. Gravel pits are located just to the northwest, and there may be additional potential within the compartment. There is no current economic oil and gas production in the UP.

#### **Vehicle Access:**

Hiawatha Trail (a County maintained road) is the western boundary of the compartment and provides all season paved road access to this compartment. The Caffey Road (a DNR maintained road) provides good access to the rest of the compartment with the series of trail roads running north and south off of it. The trail roads are seasonal access with some wet areas on the roads. New roads were bermed and closed in the last decade and any new timber sale roads will be bermed closed after harvesting is completed

#### **Survey Needs:**

None

## **Recreational Facilities and Opportunities:**

This compartment and the surrounding area are heavily used by all types of recreationalists. The snowmobile trail is a connector loop for the Rexton-Trout Lake trail and the Cut River-Trout Lake trail with heavy use at times. The ORV trail is used by dirt bikes and the Caffey Road is used by ATV's of all types and sizes. The area is used additionally by hunters, trappers, berry and mushroom pickers, and nature viewers.

#### **Fire Protection:**

The western portion of the compartment has a potential for a moderate to higher intensity fire in the red pine area. A wildfire burned through stand 475 in 1994 from a burn barrel escape. Quick response from locals averted structures from becoming involved. The eastern portion has lower fire intensity potential with the hardwood, and aspen stands and lowlands. The problem of ground fire does exist in this portion of the compartment. There would be some areas of the compartment were access would be difficult.

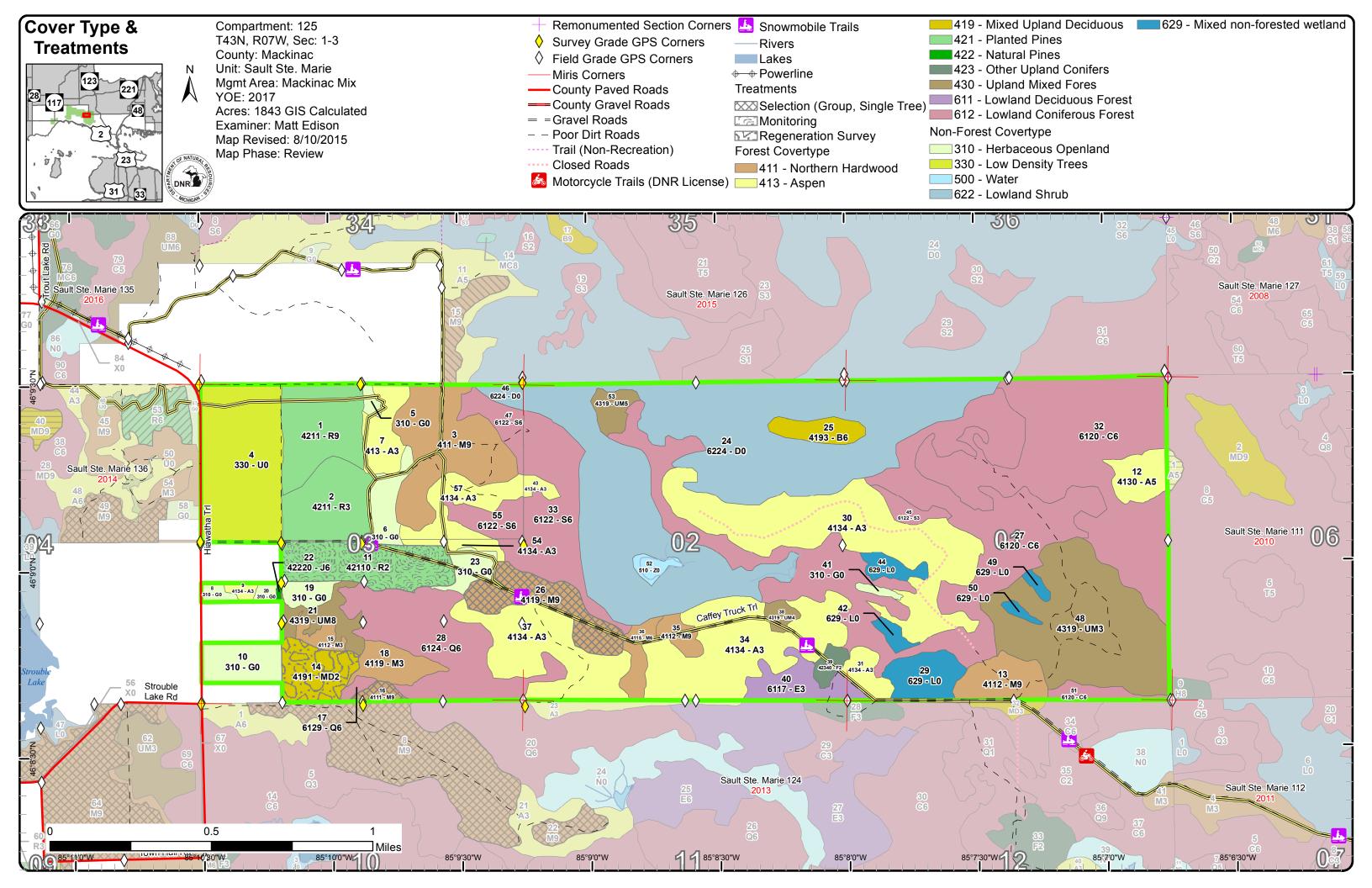
#### **Additional Compartment Information:**

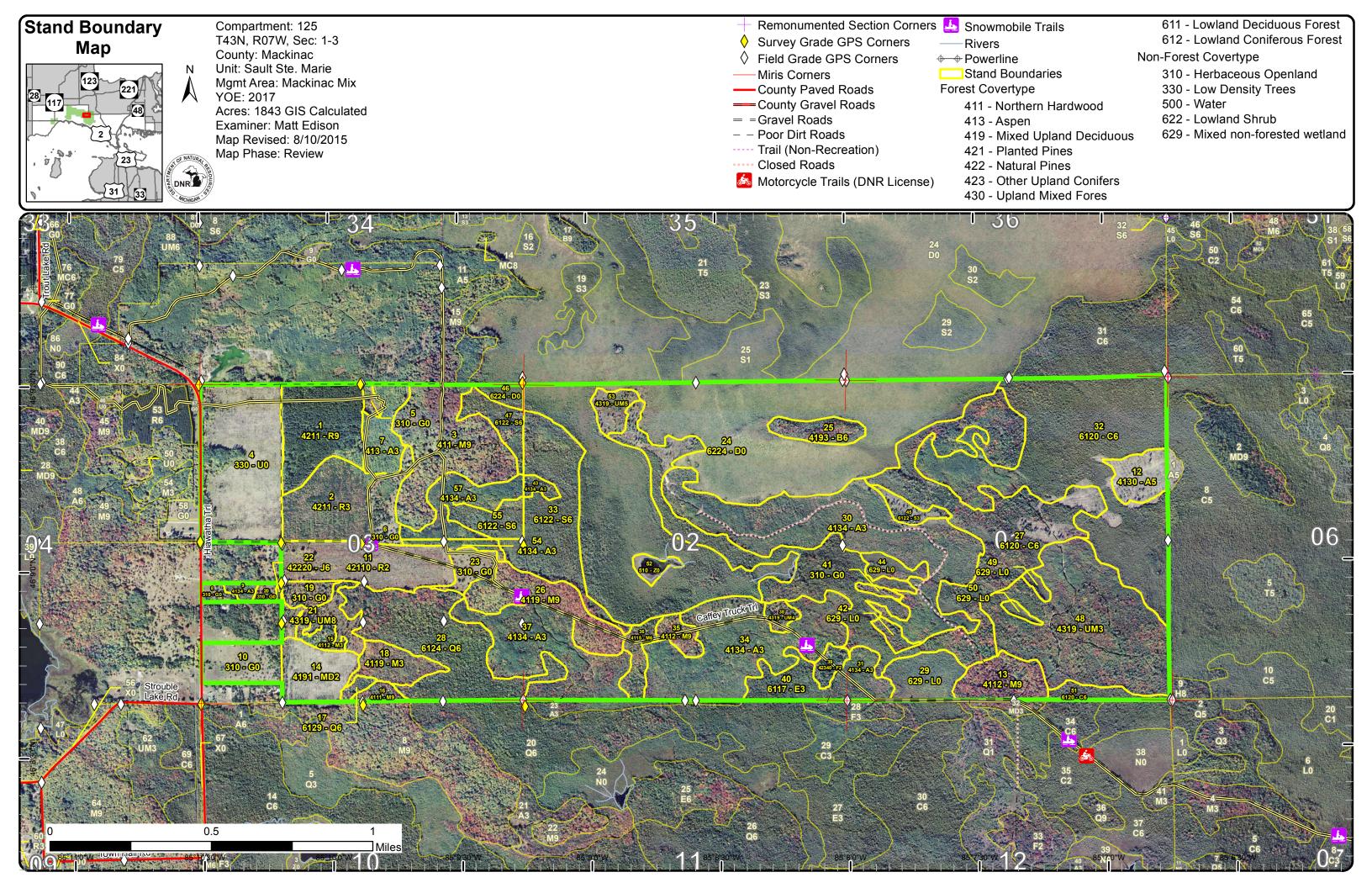
The following reports from the Inventory are attached:

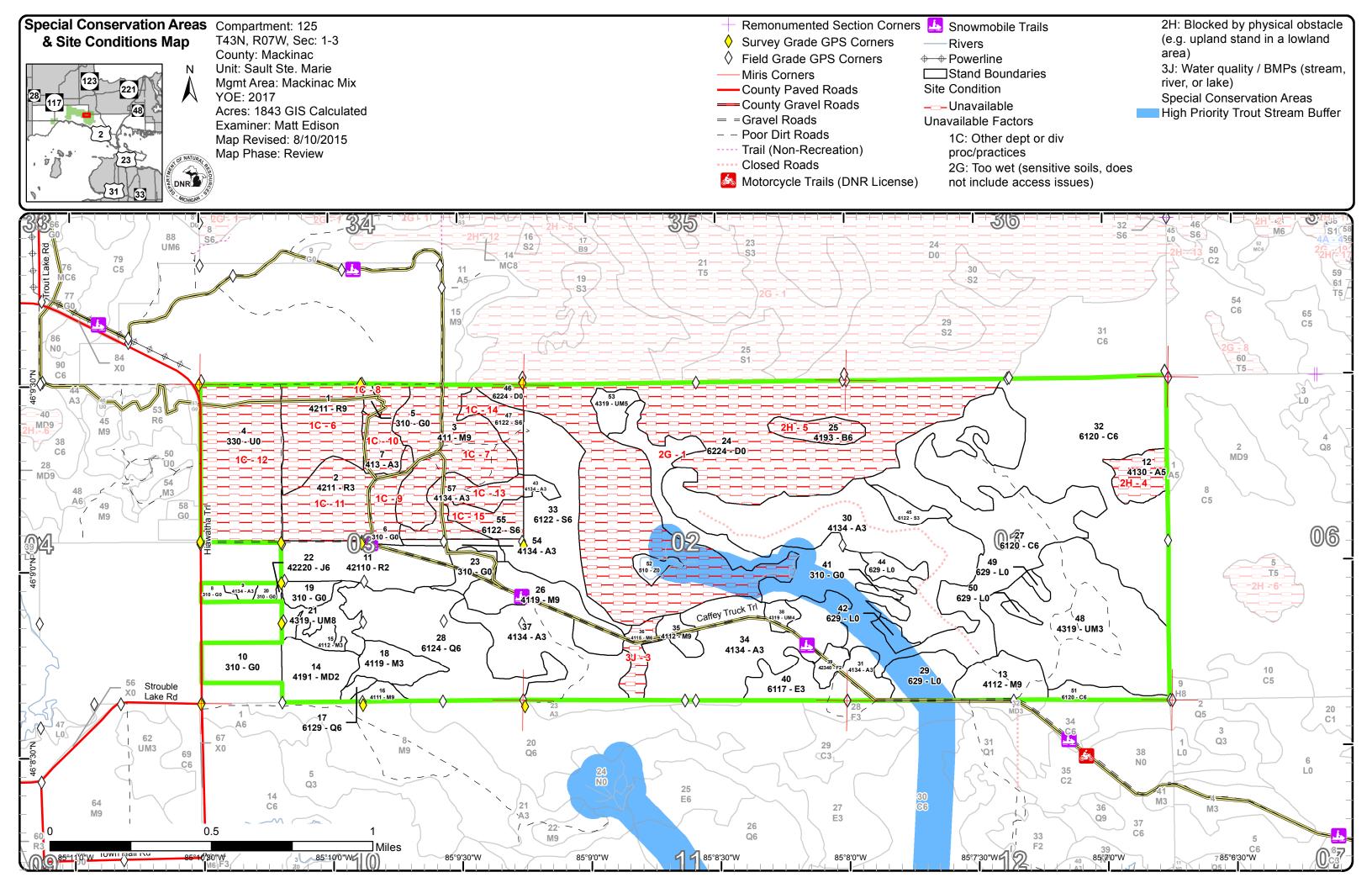
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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 125 Year of Entry 2017

Sault Ste. Marie Mgt. Unit

Matt Edison: Examiner



## Age Class

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Aspen	0	21	264	32	0	0	0	0	0	0	15	0	0	0	0	0	0	0	332
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	0	170	0	196	0	0	366
Herbaceous Openland	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63
Jack Pine	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Low-Density Trees	79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79
Lowland Conifers	0	0	0	0	0	0	74	0	0	0	0	0	0	0	0	0	0	3	77
Lowland Deciduous	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Lowland Shrub	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
Lowland Spruce/Fir	0	7	0	0	0	0	0	0	85	0	0	0	0	0	0	0	0	0	92
Mixed Upland Deciduous	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
Northern Hardwood	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	138	159
Paper Birch	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	12
Red Pine	0	44	37	0	0	0	0	0	0	44	0	0	0	0	0	0	0	0	125
Treed Bog	306	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	306
Upland Mixed Forest	0	0	0	0	14	0	15	0	0	0	0	0	0	0	0	0	0	113	142
Upland Spruce/Fir	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Water	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Total	489	96	301	59	35	0	90	0	85	56	15	0	0	170	0	196	0	254	1846



## **Report 2 – Treatment Summary**

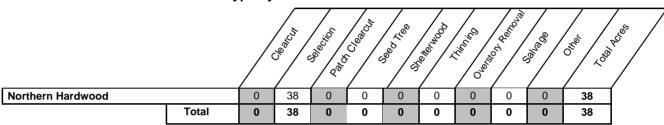
Sault Ste. Marie Mgt. Unit Year of Entry: 2017

**Acres of Harvest** 

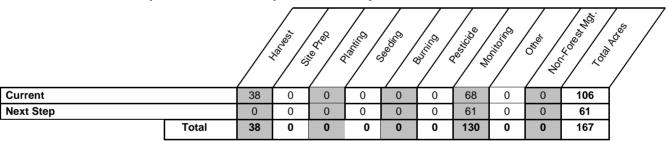
Compartment 125
Total Compartment Acres: 1,843

Commercial Harvest - 38 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

## **Cover Type by Harvest Method**



# **Proposed and Next Step Treatments by Method**



Sault Ste. Marie Mgt. Unit Report 4 -- Treatments Compartment: 125 s Year of Entry: 2017 t а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age **Approval** n Name CoverType Density Age Range Type Method Objective Structure **Status** d Sapling 11 45125011-42110 - Planted Herbicide Use 4211 - Planted 44.2 6 Immatu Monitoring Even-Aged Proposal Red Pine Medium Red Pine Monitor **Habitat Cut: Yes Site Condition:** Prescription Monitor for release and pest concerns. Specs: Next Step **Treatments:** Acceptable Red Pine Regen: Other Old next step comments: Comment: Proposed Start Date: 10/1 /2016 14 45125014-23.9 4191 - Mixed Artificial 4211 - Planted Even-Aged Proposal Sapling **Immatu** Monitoring **Upland Deciduous** Medium Red Pine Monitor re Regen(3yr) with Conifer **Habitat Cut: Yes** Site Condition: Prescription R3 Specs: Next Step Treatments: Acceptable Red Pine Regen: Other Old next step comments: Comment: **Proposed Start Date:** 10/1 /2015 84 45125016-Cut 4111 - S.Maple. Sawtimber 111-Harvest Single Tree 411 - Northern Uneven-Draft Field Hard Mast 140 Selection Well Hardwood Aged Boundary Association **Habitat Cut: No Site Condition:** Prescription Mark stand to 80 to 90 Basal Area. Retain some beech with the smooth bark and wildlife trees. Some larger canopy gaps may be desirable to enhance the advanced regeneration present. Specs: WLD: Also, leave some larger wolfy trees, snags, and coarse woody debris. Retain current species diversity Next Step

**Treatments:** 

Acceptable Acceptable regeneration will be any mix of maple, aspen, yellow birch, paper birch, balsam fir, spruce, hemlock, cherry, or pine.

Regen:

<u>Other</u> Stand is on approved prep contract. Old next step comments:

Comment:

**Proposed Start Date:** 10/1 /2014

4119 - Mixed Single Tree 33.0 77 411 - Northern Uneven-45125026-Cut Sawtimber 111-Harvest Proposal Northern Hardwoods 140 Selection Hardwood Aged

**Site Condition:** 

Prescription Select cut stand to reduce basal area to approximately 80-90 basal area.

Specs:

Next Step Treatments:

**Habitat Cut: No** 

Acceptable Acceptable regeneration will be any mix of maple, aspen, cherry, yellow birch, paper birch, balsam, spruce, hemlock, or pine.

Regen:

Other Old next step comments:

Comment:

**Proposed Start Date:** 10/1 /2016

**Total Treatment Acreage Proposed:** 

105.7

Sault Ste. Marie Mgt. Unit
Matt Edison : Examiner

Compartment: 125
Year of Entry: 2017

## **Dominant Site Conditions**

1C 2G 2H 3J

	10	20	211	50
Aspen	41		15	
Cedar				
Herbaceous Openland	17			
Jack Pine				
Low-Density Trees	79			
Lowland Conifers				
Lowland Deciduous				
Lowland Shrub				
Lowland Spruce/Fir	27			
Mixed Upland Deciduous				
Northern Hardwood	61			11
Paper Birch			12	
Red Pine	81			
Treed Bog		306		
Upland Mixed Forest				
Upland Spruce/Fir				
Water				
Total Forested Acres	305	306	27	11
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.

	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	306	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
3	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	11	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						

# Report 5 – Site Conditions

Sault Ste. Marie Mgt. Unit

Matt Edison : Examiner

Compartment: 125 Year of Entry: 2017

4	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	15	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	12	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	1C: Other dept or div proc/practices	44	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Graymont LTA						
7	Unavailable	1C: Other dept or div proc/practices	61	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Graymont LTA						
8	Unavailable	1C: Other dept or div proc/practices	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Graymont LTA						
9	Unavailable	1C: Other dept or div proc/practices	14	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Graymont LTA						

# Report 5 – Site Conditions

Sault Ste. Marie Mgt. Unit

Matt Edison : Examiner

Compartment: 125 Year of Entry: 2017

10	Unavailable	1C: Other dept or div proc/practices	18	Unspecified	Unspecified	Unspecified	Unspecified
C	comments:						
11	Unavailable	1C: Other dept or div proc/practices	37	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Graymont LTA						
12	Unavailable	1C: Other dept or div proc/practices	79	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Graymont LTA						
13	Unavailable	1C: Other dept or div proc/practices	23	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
14	Unavailable	1C: Other dept or div proc/practices	13	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Graymont LTA						
15	Unavailable	1C: Other dept or div proc/practices	14	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Graymont LTA						

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
Comments				

Sault Ste. Marie Mgt. Unit Compartment: 125
Year of Entry 2017





\* 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	Туре	Description	HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA I	Riparian Area	streams and open water wetlands, riparian areas communities are ecologically and socially signific	al ecosystems in which the terrestrial ecosystem a. Because of the unique conditions adjacent to lakes, s harbor a high diversity of plants and wildlife. Riparian cant in their effects on water quality and quantity, as well luction, and their contribution to overall biodiversity.

s t	Sault Ste. Marie	Sault Ste. Marie Mgt. Unit			- Forested S	Stands Compartment: 125 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4211 - Planted Red Pine	Sawtimber Well	43.5	85	171-200	Graymont LTA
2	4211 - Planted Red Pine	Sapling Well	37.4	15	Immature	Graymont LTA
3	411 - Northern Hardwood	Sawtimber Well	60.9	75	111-140	Graymont LTA
7	413 - Aspen	Sapling Well	17.9	7	Immature	Graymont LTA
9	4134 - Aspen, Spruce/Fir	Sapling Well	2.8	7	Immature	Stand was cut in 2008.
11	42110 - Planted Red Pine	Sapling Medium	44.2	6	Immature	R3 planted in 2009.
12	4130 - Aspen	Poletimber Medium	15.4	91	Unspecified	
13	4112 - Maple, Beech, Cherry Association	Sawtimber Well	21.3	70	81-110	Stand was select cut in 2012.
14	4191 - Mixed Upland Deciduous with Conifer	Sapling Medium	23.9	3	Immature	Stand was cut in 2009 & re-planted to red pine in 2012.
15	4112 - Maple, Beech, Cherry Association	Sapling Well	6.0	27	Immature	Hardwood regeneration after clear cut in 1988.
16	4111 - S.Maple, Hard Mast Association	Sawtimber Well	4.6	84	111-140	
17	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	2.8	125	Unspecified	Hemlock and cedar with some sparse areas that have some more aspen and a few maple.
18	4119 - Mixed Northern Hardwoods	Sapling Well	15.5	27	Immature	Mixed regeneration after cut in 1988.
21	4319 - Mixed Upland Forest	Sawtimber Medium	14.9	50	51-80	Stand was thinned in 2007.
22	42220 - Natural Jack Pine	Poletimber Well	0.6	55	Unspecified	
25	4193 - Birch, Aspen	Poletimber Well	12.0	80	Unspecified	Stand is inaccessible island within very large wetland.
26	4119 - Mixed Northern Hardwoods	Sawtimber Well	33.0	77	111-140	Stand was thinned in 1999. Decent hardwood.
27	6120 - Lowland Cedar	Poletimber Well	195.6	140	Unspecified	Cedar stand that is flooded in some spots.

S t	Sault Ste. Marie Mgt. Unit			Report 8	B – Forested	Stands Compartment: 125 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
28	6124 - Lowland Spruce- Fir	Poletimber Well	73.6	51	Unspecified	Variable swamp conifer stand.
30	4134 - Aspen, Spruce/Fir	Sapling Well	114.7	14	Immature	Mixed regeneration. Stand was cut in 2001.
31	4134 - Aspen, Spruce/Fir	Sapling Well	9.7	14	Immature	Mixed regeneration. Stand was cut in 2001.
32	6120 - Lowland Cedar	Poletimber Well	161.8	128	Unspecified	Large stand of variable cedar. There are areas of very wet. Black spruce in clumps scattered widely. Tamarack in a few areas.
33	6122 - Black Spruce	Poletimber Well	58.5	70	81-110	
34	4134 - Aspen, Spruce/Fir	Sapling Well	81.9	14	Immature	Mixed regeneration. Stand was cut in 2001.
35	4112 - Maple, Beech, Cherry Association	Sawtimber Well	7.5	75	81-110	Hardwood stand was select cut in 2012.
36	4115 - Y.Birch, Hemlock NH	Poletimber Well	10.7	75	Unspecified	Stand was left as a buffer along drainage in past.
37	4134 - Aspen, Spruce/Fir	Sapling Well	57.9	14	Immature	
38	4319 - Mixed Upland Forest	Poletimber Poor	4.8	35	Unspecified	Upland opening that is growing in.
39	42340 - Upland Spruce/Fir	Sapling Medium	5.7	27	Immature	Upland opening filling in with brush.
40	6117 - Lowland Deciduous, Mixed Coniferous	Sapling Well	20.8	39	Unspecified	
43	4134 - Aspen, Spruce/Fir	Sapling Well	3.6	27	Immature	Stand was cut in1988. Good regeneration of mixed aspen and other.
45	6122 - Black Spruce	Sapling Well	6.9	2	Immature	Spruce stand was cut in 2013.
47	6122 - Black Spruce	Poletimber Well	13.1	70	81-110	Some spruce dying out, need to decide on treatment.
48	4319 - Mixed Upland Forest	Sapling Well	112.5	22	Immature	Stand was shelterwood in 1993. There was a lot of blowdown in 1994. The regeneration coming in is complete mix of aspen, hardwoods, and mixed conifers. All the yellow birch, cedar, white pine, and hemlock where left from the original harvest. This stand will grow a lot in the next 10 years, check it then for further look at the supercanopy trees.

S t	Sault Ste. Marie	e Mgt. Unit		Report 8	- Forested	Compartment: Year of Entry:	S (0)
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	A MICHIGAN
51	6120 - Lowland Cedar	Poletimber Well	8.2	126	Unspecified		
53	4319 - Mixed Upland Forest	Poletimber Medium	9.0	30	Immature	Opening filling in.	
54	4134 - Aspen, Spruce/Fir	Sapling Well	5.6	27	Immature	Stand was cut in1988. Good regeneration of other.	of mixed aspen and
55	6122 - Black Spruce	Poletimber Well	13.5	70	81-110		
57	4134 - Aspen, Spruce/Fir	Sapling Well	22.7	27	Immature	Stand was cut in1988. Good regeneration of other.	of mixed aspen and

Compartment: 125 Year of Entry: 2017



Stand	Cover Type	Acres	Managed Site	General Comments:
4	330 - Low-Density Trees	79.1	No	Graymont LTA
5	310 - Herbaceous Openland	2.9	No	
6	310 - Herbaceous Openland	14.6	No	
8	310 - Herbaceous Openland	3.4	No	
10	310 - Herbaceous Openland	19.9	No	
19	310 - Herbaceous Openland	7.5	No	
20	310 - Herbaceous Openland	2.4	No	
23	310 - Herbaceous Openland	9.9	No	
24	6224 - Treed Bog	300.9	No	
29	629 - Mixed non-forested wetland	19.6	No	
41	310 - Herbaceous Openland	2.2	No	
42	629 - Mixed non-forested wetland	4.2	No	
44	629 - Mixed non-forested wetland	7.2	No	
46	6224 - Treed Bog	5.0	No	
49	629 - Mixed non-forested wetland	2.4	No	
50	629 - Mixed non-forested wetland	2.3	No	
52	510- Water (OI)	4.9	No	