

# **Compartment Review Presentation**

Sault Ste. Marie Forest Management Unit

Compartment 45181
Entry Year 2018
Acreage: 1,540
County Mackinac

Management Area: County Line Hardwoods

**Revision Date:** 2016-07-13

Stand Examiner: Steve Touvila

**Legal Description:** 

T44N R11W Section 1, 2 & 12, Portage Township

## **Identified Planning Goals:**

The compartment is located 3 miles to the east of Big Manistique Lake along the Luce – Mackinac County border. Most of the compartment is upland northern hardwood and aspen timber types. The other upland stands are upland mixed forest and upland conifer, which are a mixture of hemlock, white pine, plus other conifer and deciduous trees; a grassy opening; and a white spruce plantation. The lowland stands are lowland coniferous with cedar, hemlock, and other coniferous and deciduous trees; and lowland mixed with hemlock, spruce, red maple, birch and other coniferous and deciduous trees. There are small wetland potholes scattered in sections 1 and 2. The northern hardwood stands through out the compartment are in unevenaged management regulation. The species diversity will be maintained within the selection stands. In addition, larger canopy gaps will be created in attempt to increase regeneration, for species diversity, of the less shade tolerant trees within the stands. Beech bark disease is prevalent through the hardwood stands with some nectria cankers present. Hardwood selection harvests are planned for six stands in the compartment this year of entry. A group selection research harvest is planned in section 12. It will be managed by MSU and be 30 acres of northern hardwoods. The aspen stands within the compartment are all under 40 years of age with no older age class aspen within the compartment. The white spruce plantation is proposed for clearcut followed by natural regeneration to prevent the loss from spruce budworm. The 40 acre grassy opening is proposed for herbicide spray followed by planting to native grasses.

## Soil and topography:

The compartment is mostly composed of outwash plains and ground moraines with the upland northern hardwood stands having soils composed of Springlake loamy coarse sand, Adams sandy loam, Kalkaska sand and grading into Paquin sand, Paquin-Finch complex, and Spot-Finch complex in the aspen stands. The compartment is most level to rolling terrain in the upland with some high ridges. These ridge soils are composed of Wallace sand, Pullup fine sand and Wallace-Spot complex. The lowland soils are mostly Dawson and Loxley peats, Markey and Carbondale muck, Leafriver mucky peat and histosol.

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

There are 4 scattered private 40's within the compartment in Sections 1 and 12 with only 2 cabins on the 4 parcels. Section 2 has a private family in-holding of 160 acres on the west side of the section with a cabin. The surrounding area has some private lands mixed in with the State ownership on the east, north and west side of the compartment. There is an 80 of Christmas tree plantation on the east side of Section 1. The south side of Section 12 is all private land with a dairy farm within the private land. There are some permanent residences on these private lands and some seasonal cabins.

### **Unique Natural Features:**

There is potential for raptor nests within the northern hardwood stands. Some red tailed and red shouldered hawk nests have been found in this and the surrounding area. When doing selection harvests, stands will be checked for stick nests and necessary set backs around the nests and timing of harvest will be adjusted to minimize disturbance.

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

None found during inventory. There is an old farm field within the compartment which probably had a homestead in the surrounding area.

# **Special Management Designations or Considerations:**

Stand 31 is an open field which has in the past been farmed by land use permits. The Luce/West Mackinac Soil Conservation District had a land use permit to plant native plants for propagation of native plant seeds. The land use permit has not been renewed at this time. This stand is on proposal for herbicide to eliminate spotted knapweed, followed by planting of native grasses. Seasonal restrictions may be placed in some areas due to the snowmobile trail.

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

No fisheries interests.

#### Wildlife Habitat Considerations:

This compartment is part of the County Line Hardwoods Management Area where featured wildlife species include black bear, northern goshawk, red-shouldered hawk, ruffed grouse, snowshoe hare, and white-tailed deer. The compartment is dominated by northern hardwoods. Some stands were treated in recent years to encourage age class and structural diversity. Additional stands are planned for treatment during this cycle. In treated stands, snags and coarse woody debris will be retained, and some large trees will be left for potential future nest trees to benefit northern goshawks and red-shouldered hawks. Vernal ponds will be avoided, and tree species diversity will be maintained. Some aspen stands occur in the southern part of the compartment; some of these were former openings that have transitioned to aspen and benefits deer and ruffed grouse.

# Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine (lake) sand and gravel. There is insufficient data to determine the glacial drift thickness. The Silurian Burnt Bluff Group subcrops below the glacial drift. The Burnt Bluff is quarried for stone/limestone twelve miles to the southwest. There is a gravel pit one-half mile to the southeast and potential is good. There is no current economic oil and gas production in the UP.

#### **Vehicle Access:**

This compartment has good access to most areas within the compartment. The compartment has three maintained county gravel roads within it including Sandtown Road (southern boundary), Hayes Road (eastern boundary), and Forest Trail (middle road). The road running north through the west part of Section 2 is shown to be a county road on the Mackinac County Road Commission map. This road is gated on the north and south end of the private land in Section 2. The other roads within the compartment are state forest roads. Some of the roads within the compartment are closed with berms, are grown in and/or have trees down on them. These roads will be closed if any harvesting activity takes place on the road after harvesting is completed. Most of the state forest roads are poor dirt roads with little maintenance. The roads open to vehicular traffic will remain open.

## **Survey Needs:**

None needed.

## **Recreational Facilities and Opportunities:**

Sandtown ORV trail head is located just to the east of the compartment off the Hayes Road. The Sandtown ORV trail runs through all the sections of this compartment. Snowmobile trail 492 runs on Forest Trail on the south side of Section 2 and then north on a state forest road on the east side of Section 2 into Luce County. The area is used for hunting, trapping, bird watching, sight seeing, and mushroom and berry picking.

#### **Fire Protection:**

The compartment has a low potential for larger fires. The vehicle access is good within the compartment. The major timber types are hardwood and aspen which has a lower potential to carry a fire. There are some stands of mostly wetland open ground species. These stand will have some standing water in the spring and into the summer. Some evidence was found of old fire and lightning strikes within the compartment which did not look like the fire spread very far.

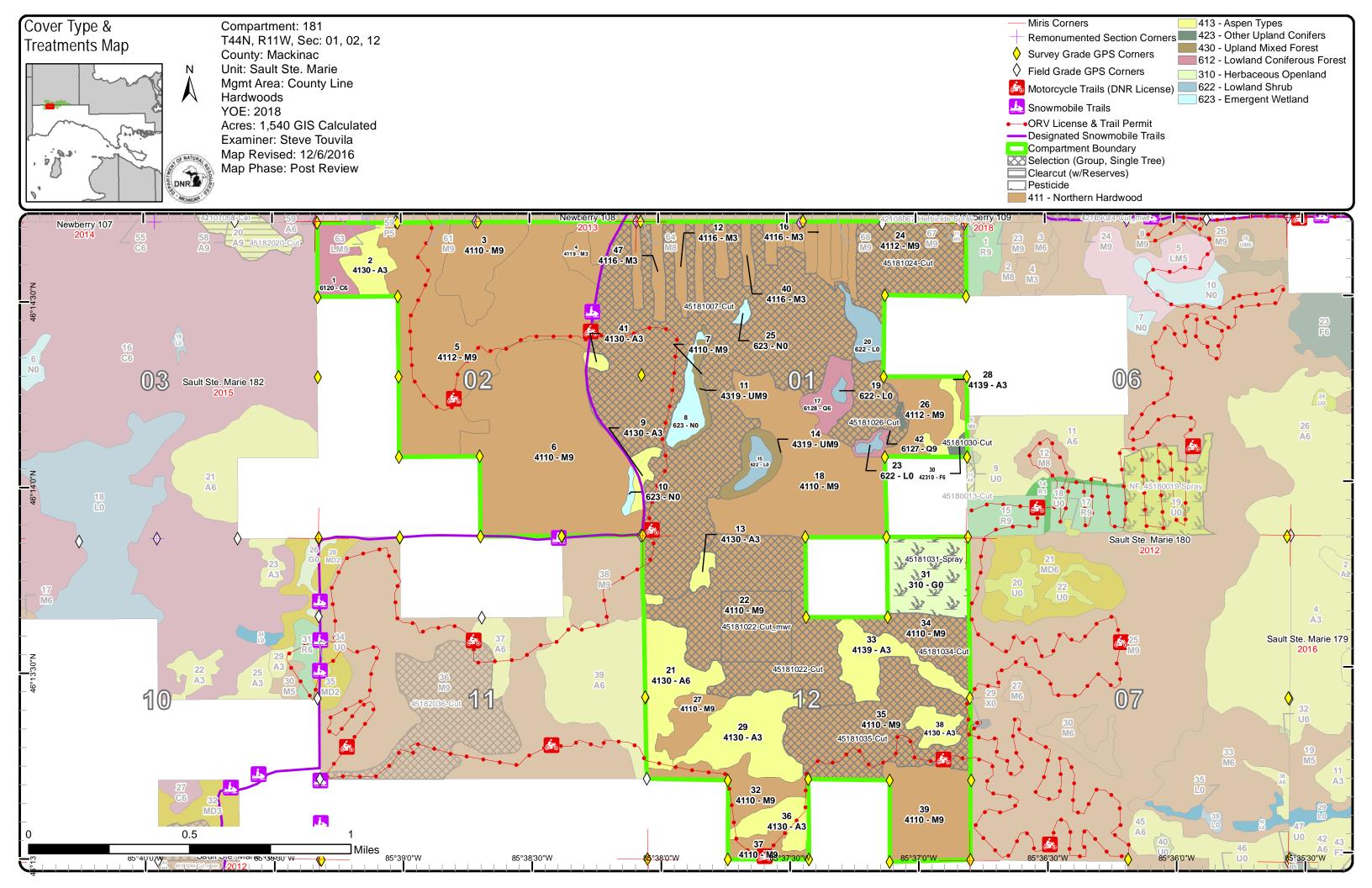
## **Additional Compartment Information:**

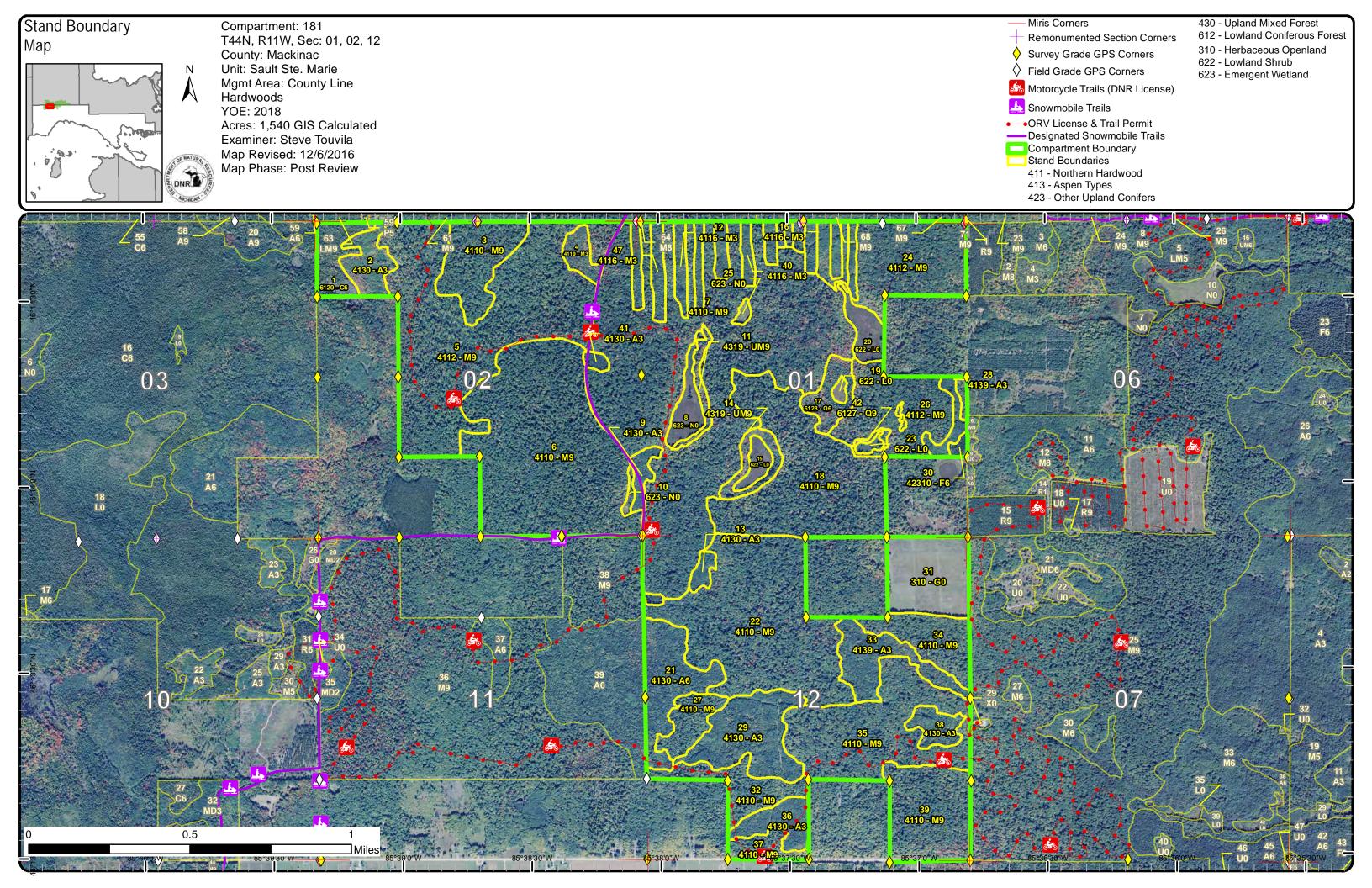
The following reports from the Inventory are attached:

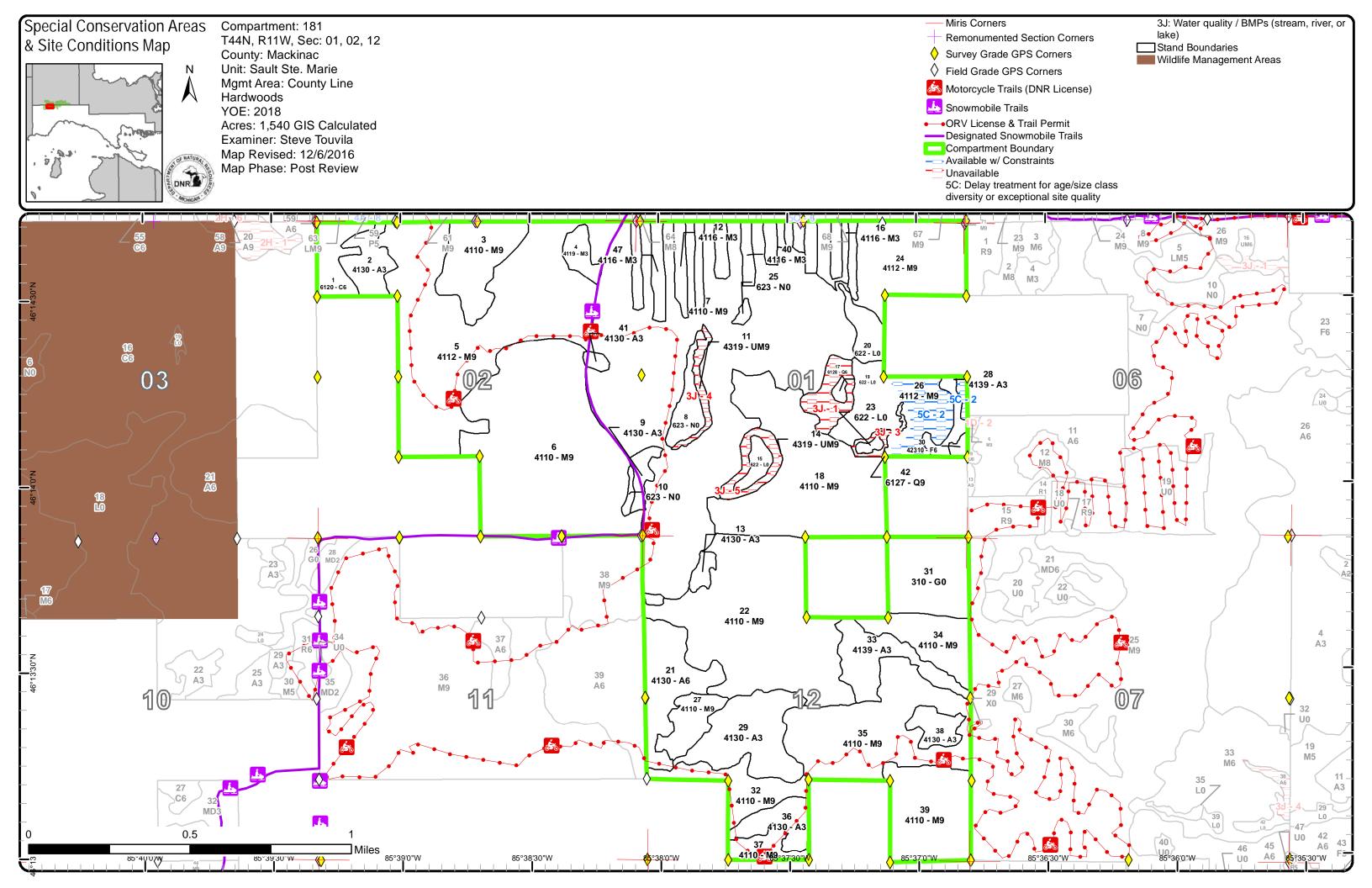
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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 181 Year of Entry 2018

Sault Ste. Marie Mgt. Unit

Steve Touvila : Examiner



## Age Class

	No.	40 0	3 / 2	87.05		3/40	\$ 10°	\$ /s	8/1	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	8 8	8 /0/	20,700	,	S. S. S.	\$ 150 PE	LE S	St Just	N. S.
Aspen	0	0	21	73	71	0	0	0	0	0	0	0	0	0	0	0	0	0	165
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	16
Herbaceous Openland	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	16
Lowland Shrub	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Marsh	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Northern Hardwood	0	0	11	58	0	0	0	0	0	456	146	423	157	0	0	0	0	0	1251
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	15
Upland Spruce/Fir	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
Total	74	0	32	131	71	0	0	0	3	456	146	423	204	0	0	0	0	0	1540



# **Report 2 – Treatment Summary**

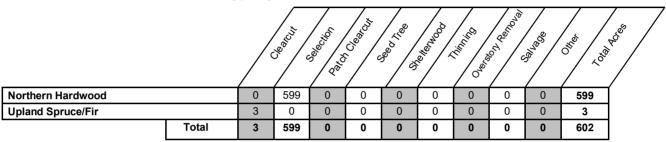
Sault Ste. Marie Mgt. Unit Year of Entry: 2018

#### **Acres of Harvest**

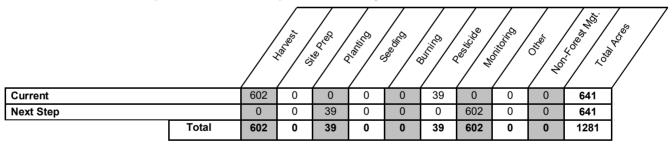
Compartment 181
Total Compartment Acres: 1,540

Commercial Harvest - 602 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

# **Cover Type by Harvest Method**



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



Compartment: 181 Year of Entry: 2018

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**Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type Approval** Age Method Objective Name Range Structure Status d CoverType Density Age Type 45181007-Cut 286.1 4110 - Sugar Maple Sawtimber 86 111-Harvest Single Tree 411 - Northern Uneven-Draft Field Association Well 140 Selection Hardwood Aged Boundary

**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 ironwood, basswood and all juneberry and Specs: 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. Try to open up around the drip edges of any hemlock.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, maple, cherry, beech, yellow and paper birch, ironwood, basswood, balsam fir, white spruce, hemlock, and white pine.

Regen:

Other Work with Paul Gaberdiel on timber sale activity near the recreational trails.

Comment:

Proposed Start Date: 10/01/2017

45181022-Cut 97.6 4110 - Sugar Maple Sawtimber 103 81-110 Harvest Single Tree 411 - Northern Uneven-Draft Field Association Well Selection Hardwood Aged Boundary

**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 ironwood, basswood and all 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 Specs:

advanced regeneration present.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, maple, cherry, beech, yellow and paper birch, ironwood, balsam fir, white spruce, hemlock, and white pine.

Regen:

Other Center 30 acres of this stand is a separate MSU Walter's research treatment.

Comment:

Proposed Start Date: 10/01/2017

22 45181022-30.5 4110 - Sugar Maple Sawtimber 103 81-110 Harvest Group Selection 411 - Northern Uneven-Draft Field Association Well Hardwood Aged Boundary Cut mwr

**Habitat Cut: No Site Condition:** 

Prescription Group selection harvest conducted by Mike Walter's research team. This stand will be harvested leaving all tops greater than 8",

Specs:

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable northern hardwoods

Regen:

Other Comment:

Proposed Start Date: 10/01/2016

45181024-Cut 52.9 4112 - Maple, Sawtimber 111-Harvest Single Tree 411 - Northern Uneven-Draft Field Beech, Cherry Well 140 Selection Hardwood Aged Boundary

Association

**Habitat Cut: No Site Condition:** 

<u>Prescription</u> Mark stand to 80 to 90 Basal Area. Retain all beech and conifer. 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. Don't cut any conifer. Specs:

Next Step Monitoring, Natural Regen (Intermediate)

**Treatments:** 

Aspen, maple, cherry, beech, yellow and paper birch, ironwood, balsam fir, white spruce, hemlock and white pine. <u>Acceptable</u>

Regen:

Other Comment:

Proposed Start Date: 10/01/2017 Association

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Compartment: 181

s Year of Entry: 2018 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type Approval** n Age Method Objective Status Name Density Structure d CoverType Age Range Type 26 45181026-Cut 23.3 4112 - Maple, Sawtimber 103 111-Harvest Single Tree 411 - Northern Uneven-Draft Field Beech, Cherry Well 140 Selection Hardwood Aged Boundary

**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 ironwood if present 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 Specs:

enhance the advanced regeneration present. Open up the drip line of the hemlock, there may be a few on the south and west edge.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, maple, cherry, beech, yellow and paper birch, ironwood, balsam fir, white spruce, hemlock, and white pine.

Regen:

Other Comment:

Proposed Start Date: 10/01/2017

45181030-Cut 28 42310 - Planted Poletimber 76 111-Even-Aged Draft Field Harvest Clearcut 413 - Aspen Spruce 140 Boundary

**Habitat Cut: No Site Condition:** 

Prescription Clear cut with no reserves given the small size of the stand and spruce bud worm concerns.

Specs:

Next Step Monitoring, Natural Regen (Intermediate)

**Treatments:** 

Acceptable Aspen, maple, cherry, beech, yellow and paper birch, ironwood, balsam fir, white spruce, hemlock, and white pine.

Regen:

**Other** Comment:

**Proposed Start Date:** 10/01/2017

31 45181031-39.0 310 - Herbaceous Unspec Pesticide 310 -Draft Field Nonstocked Aerial Openland ified Herbaceous Boundary Spray Openland

**Habitat Cut: No Site Condition:** 

Prescription Herbicide opening to treat spotted knapweed and prepare site for planting to native grasses.

Specs:

Next Step Planting, Initial Plant

**Treatments:** 

Acceptable Native grasses.

Regen:

Other

Comment:

**Proposed Start Date:** 10/01/2017

45181034-Cut 26.1 4110 - Sugar Maple Sawtimber 99 411 - Northern Draft Field 111-Harvest Single Tree Uneven-Association Well 140 Selection Hardwood Aged Boundary

**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 around the cherry and yellow birch if possible to regenerate those species and enhance the advanced regeneration present. Don't cut any conifer. Specs:

Monitoring, Natural Regen (Re-Inventory) Next Step

Treatments:

Acceptable Maple, cherry, beech, yellow and paper birch, ironwood, aspen, balsam fir, white spruce, hemlock, and white pine.

Regen:

Other

Comment:

**Proposed Start Date:** 10/01/2017 Sault Ste. Marie Mgt. Unit

Report 3 -- Treatments

Compartment: 181 Year of Entry: 2018

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a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
35	45181035-Cut	82.2 4	1110 - Sugar Maple Association	Sawtimber Well	105	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Draft Field Boundary

Habitat Cut: No Site Condition:

Prescription Specs: Mark stand to 80 to 90 Basal Area. Retain some beech with the smooth bark and wildlife trees. Some ironwood if found should be left Don't cut any conifer. 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.

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable Aspen, maple, cherry, beech, yellow and paper birch, ironwood, balsam fir, white spruce, hemlock, and white pine.

Regen:

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Other Work with Paul Gaberdiel for timber sale activity near the recreational trail.

Comment:

Proposed Start Date: 10/01/2017

Total Treatment Acreage Proposed:

640.5

Sault Ste. Marie Mgt. Unit

Steve Touvila : Examiner

Availa	ability for	Managemer	nt				
Total	Acres	Acres Avail	Acres		Domina	nt Site	Conditions
Acres	Available	With Condition	Not Available		5C	3J	
164	164	0	0	Aspen			
16	16	0	0	Cedar			u.
39	39	0	0	Herbaceous Openland			"
16	0	0	16	Lowland Conifers		16	
20	20	0	0	Lowland Shrub			
15	15	0	0	Marsh			*
1254	1230	24	0	Northern Hardwood	24		"
15	0	0	15	Upland Mixed Forest		15	*
3	3	0	0	Upland Spruce/Fir			"
1,542	1,487	24	31	Total Forested Acres	24	31	
	96%	2%	2%	Relative Percent			<del>-</del>

<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.

	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	13	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	24	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
3	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	3	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
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# **Report 4 – Site Conditions**

Sault Ste. Marie Mgt. Unit

Steve Touvila : Examiner

Unavailable	3J: Water quality / BMPs (stream, river, or lake)	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
Unavailable	3J: Water quality / BMPs (stream, river, or lake)	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
	Comments:	(stream, river, or lake)  Comments:  Unavailable 3J: Water quality / BMPs (stream, river, or lake)	(stream, river, or lake)  Comments:  Unavailable 3J: Water quality / BMPs 9 (stream, river, or lake)	(stream, river, or lake)  Comments:  Unavailable 3J: Water quality / BMPs 9 Unspecified (stream, river, or lake)	(stream, river, or lake)  Comments:  Unavailable 3J: Water quality / BMPs 9 Unspecified Unspecified (stream, river, or lake)	(stream, river, or lake)  Comments:  Unavailable 3J: Water quality / BMPs 9 Unspecified Unspecified Unspecified (stream, river, or lake)

Mgt. Unit

Compartment: #Type! Year of Entry:



# Report 5 - 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: 181
Year of Entry 2018



# Report 6 – 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	туре	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen con stocked trout populations and those of other coldwater fish speryear to year. Coldwater streams in Michigan typically provide th contributions of groundwater to their stream flows. Such stream designated as trout resources by Fisheries Order 210.	cies (e.g., slimy sculpin) to persist from ese conditions due to substantial
SCA	Habitat Area	An area that provide some specific need for the life cycle of wild and Waterfowl Production Areas, deer wintering complexes in lopenings and savannas. Habitat areas are distinct from critical endangered or threatened species (such as Kirtland's warbler of general in nature, are not primarily associated with threatened covered by species recovery plans that are developed in coope	owland conifer communities, grassland habitat designated for recovery of pripring plover areas) in that they are more or endangered species, and are not

Sault Ste. Marie Mgt. Unit S				Report 7	– Forested	Stands Compartment: 181 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6120 - Lowland Cedar	Poletimber Well	16.3	112	171-200	Small area was cut previously with smaller diameter cedar. Some good regeneration within the cut area. Some heavy deer use at times. Dense cedar stand.
2	4130 - Aspen	Sapling Well	15.2	14	Immature	Stand was harvested in 2002. Some mixed mature trees where left along a small stream. Aspen is regenerating well and is 15-20' tall. There are a few wet areas within the stand.
3	4110 - Sugar Maple Association	Sawtimber Well	32.8	93	51-80	Nice hardwood stand. Moderate raspberry growth and heavy deer browse on maple seedlings under 3'.
4	4119 - Mixed Northern Hardwoods	Sapling Well	7.8	25	1-50	Harvested in 1991.
5	4112 - Maple, Beech, Cherry Association	Sawtimber Well	170.0	86	51-80	Overall large diameter class stand. Beech is dying off, a few large trees left. Deer browse on 5' and under maple regeneration.
6	4110 - Sugar Maple Association	Sawtimber Well	156.9	113	51-80	Good quality maple stand. Snowmobile trail runs on east and south borders. ORV trail runs along north edge of stand.
7	4110 - Sugar Maple Association	Sawtimber Well	286.1	86	111-140	Most of stand last harvested in '01 and '02. Overall large diameter class stand. Beech has mostly died off except for a few large trees left. Deer browse on 5' and under maple regeneration. A trace amount of mature white pine and hemlock.
9	4130 - Aspen	Sapling Well	6.4	25	Immature	1991 aspen harvest with good regeneration.
11	4319 - Mixed Upland Forest	Sawtimber Well	6.0	112	141-170	Hemlock with mixed conifer and deciduous trees along a bog. The stand was harvested over 50 years ago.
12	4116 - Mixed N. Hardwood - Aspen	Sapling Well	16.0	24	Immature	Harvested on 1992. Coming back to a mixture of species.
13	4130 - Aspen	Sapling Well	5.4	16	Immature	
14	4319 - Mixed Upland Forest	Sawtimber Well	9.3	112	141-170	Mixed stand of conifer and deciduous trees along a bog edge.  Some dense hemlock areas.
16	4116 - Mixed N. Hardwood - Aspen	Sapling Well	11.2	16	Immature	Harvested in 2000 on the Blue Teepee sale.
17	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	13.4	112	141-170	
18	4110 - Sugar Maple Association	Sawtimber Well	101.8	103	51-80	Select harvested in 2010. Larger diameter stand of good quality trees.

21

4130 - Aspen

Poletimber Well

34.5

36

81-110

Harvested in 1980. Some older trees were left from the previous stand.



s t	Sault Ste. Marie	Mgt. Unit		Report 7	– Forested	Stands Compartment: 181 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
22	4110 - Sugar Maple Association	Sawtimber Well	128.2	103	81-110	Select harvested in 99-00. Part of Chip and Dale Hardwood. Turning into nice stand with good quality sugar maple. Good looking, tall black cherry with not much black knot.
24	4112 - Maple, Beech, Cherry Association	Sawtimber Well	53.2	93	111-140	Select harvested in 2000 on Painted Blind sale. Good quality sugar maple, red maple, black cherry, and yellow birch following previous treatments. Cherry is tall with very little black knot.
26	4112 - Maple, Beech, Cherry Association	Sawtimber Well	48.3	103	111-140	Overall large diameter stand.
27	4110 - Sugar Maple Association	Sawtimber Well	15.0	102	51-80	Stand was thinned in 2010 Weine's Heiny Hardwood sale #451220801. Heavy deer browse on maple seedlings and moderate raspberry growth throughout the stand.
28	4139 - Aspen, Mixed Deciduous	Sapling Well	7.1	26	1-50	Aspen and mixed species regenerated stand harvested in 1990.
29	4130 - Aspen	Sapling Well	42.3	26	1-50	Harvested in 1990. Good regeneration within the stand. Aspen thinning out and some are entering pole size. Still thick stand with plenty of sapling sized aspen.
30	42310 - Planted Spruce	Poletimber Well	2.8	76	111-140	Small white spruce plantation near private land.
32	4110 - Sugar Maple Association	Sawtimber Well	23.7	93	81-110	Stand was thinned in 2010 Weine's Heiny Hardwood sale #451220801. Most of the remaining beech are dying off. Some relatively tall and clean looking black cherry in this stand. ORV Trail runs through the stand. Heavy deer browse on maple seedlings and moderate raspberry growth throughout stand.
33	4139 - Aspen, Mixed Deciduous	Sapling Well	26.2	37	1-50	Few areas are more hardwood regeneration with less aspen. Small drainage area near the Hayes road with some larger diameter hardwood and aspen were left. The west half has the greatest concentration of aspen.
34	4110 - Sugar Maple Association	Sawtimber Well	26.1	99	111-140	Select harvested in 2000 on Chip and Dale Hardwood. Beech is dying off and mainly found in southeast corner of stand.
35	4110 - Sugar Maple Association	Sawtimber Well	82.2	105	111-140	Beech component is dying back in this stand. Overall log sized stand. Deer browse on maple seedlings.
36	4130 - Aspen	Sapling Well	15.0	26	1-50	Harvested in 1990. Aspen is beginning to thin out and enter pole size. A few are 6-8" dbh but there are still a lot of saplings yet.  ORV trail runs through the stand.
37	4110 - Sugar Maple Association	Sawtimber Well	10.4	90	51-80	ORV Trail runs through the stand. The stand runs along Sandtown Road. Some browse is ocurring to the hard maple and more beech regeneration is present within the stand. Maple seedlings are browsed heavily. There's moderate raspberry growth under the stand. Most of the remaining beech have died off.

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t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
38	4130 - Aspen	Sapling Well	10.0	37	1-50	Mostly an aspen stand regenerated stand with some hard maple and balsam fir.
39	4110 - Sugar Maple Association	Sawtimber Well	47.7	100	51-80	Stand was harvested in 2010 Hayfork Hardwoods sale #451090801. Yellow birch is present in the stand. There's very little 3' or smaller maple regeneration from deer browse. Light raspberry growth throughout the stand.
40	4116 - Mixed N. Hardwood - Aspen	Sapling Well	20.9	24	Immature	Harvetsed on 1992. Coming back to a mixture of species. some aspen and a few balsam fir are now pole sized.
41	4130 - Aspen	Sapling Well	2.4	25	1-50	Harvested in 1991 with good regeneration.
42	6127 - Lowland Pine	Sawtimber Well	2.5	112	111-140	
47	4116 - Mixed N. Hardwood - Aspen	Sapling Well	13.0	24	Immature	Harvested in 1992. Coming back to a mixture of species. Trees are entering pole sized.

# Report 8 - Nonforested Stands



Stand	Cover Type	Acres	Managed Site	General Comments:
8	623 - Emergent Wetland	11.4	No	
10	623 - Emergent Wetland	1.9	No	
15	622 - Lowland Shrub	5.9	No	
19	622 - Lowland Shrub	1.7	No	
20	622 - Lowland Shrub	10.8	No	
23	622 - Lowland Shrub	1.9	No	
25	623 - Emergent Wetland	1.7	No	
31	310 - Herbaceous Openland	39.1	Yes	