

# **Compartment Review Presentation**

Sault Ste. Marie Forest Management Unit

Compartment 45196
Entry Year 2018
Acreage: 1,969
County Mackinac

Management Area: Battydoe Deer Yard

Revision Date: 2016-07-29

Stand Examiner: Matt Edison

**Legal Description:** 

T42N R12W Sections 23, 24, and 25, Newton Township

## **Identified Planning Goals:**

Management for this entry will consist of monitoring stand conditions and regeneration to maintain and enhance the age class diversity and species composition. The accessible areas within the compartment have been treated in the past few entries, so there are no treatments scheduled for this entry period. WLD has shown potential interest in a possible cutting rotation of cedar areas to initiate and maintain some cedar regeneration within the large lowland cedar type that covers a large part of the compartment.

#### Soil and topography:

Majority of the compartment is wet lowland consisting of Markey and Carbondale mucks. On ridges and areas of higher ground, Spot-Finch complex (drained sands and loams) is a predominant soil type.

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

There are no private holdings within the compartment boundary. There is private property immediately adjacent to the compartment on the entire East (Forest Land Group) and North (E.J. Watson, et al.) sides.

# **Unique Natural Features:**

Per MNFI records, there are occurrences of osprey, eagles, and red-shouldered hawk in the area. Lake Huron locust occurrences to the southwest. There is wooded dune and swale complex to the southwest. Within the compartment, there exists potential for osprey, eagle, spruce grouse, gray wolf, moose, merlin, and great blue heron rookeries. There is potential for rare land snails in cedar swamps and in ecotones between cedar swamps and northern hardwoods. There is also, potential for ram's head orchid, dwarf lake iris, Alaska orchid, beauty sedge, round-leaved orchis and calypso orchid in cedar swamps.

## Archeological, Historical, and Cultural Features:

None

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

The entire compartment is within Deer Yard.

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

JMB: This compartment contains a portion of the northern Sand Lake shore. No fisheries information exists for this waterbody.

#### Wildlife Habitat Considerations:

This compartment is located in the Battydoe Deer Yard Management Area. Featured wildlife species include white-tailed deer, red-shouldered hawk, ruffed grouse, and snowshoe hare. The entire compartment is part of the deer wintering complex. Cedar and aspen mixed stands are common. Cedar stands have been and will continue to be maintained to provide cover for wintering deer as well as habitat for other species. Aspen stands have been managed to maintain early successional habitat benefits deer, grouse, and hare. Many stands were treated over the last 10 years, and now provide young early-successional habitat for these species.

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

Mackinac Co. Surface sediments consist of peat & muck and minor lacustrine (lake) sand & gravel. There is insufficient data to determine the glacial drift thickness. The Silurian Engadine and Manistique Groups subcrop below the glacial drift. The Engadine is quarried for stone/limestone elsewhere in the UP. 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.

There is an open gravel pit along Buckeye Road that has been used in the past for road repairs and timber sale roadwork projects.

#### **Vehicle Access:**

Road access into this compartment is via the Buckeye Road, which runs north-south from the Batty Doe Lake Road and up through the west part of Section 23. Overall, access to the interior areas of the compartment is poor. These areas of the compartment are only accessible via two-track roads off of the Buckeye Road. Swede Camp Road runs east from the Buckeye Road and winds to the middle of Section 25. Finn Grade enters the compartment from the west into section 25. There are several other timber sale roads and two-tracks, which reach into the interior in various places. At times, some or all roads in the compartment may be passable by 4-wheel drive or ORV vehicle only, depending on seasonal conditions. Timber sale access from the east has been granted through Forest Land Group in the past.

## **Survey Needs:**

There are no survey needs this entry for the proposed treatments.

## **Recreational Facilities and Opportunities:**

This compartment is used heavily by sportsmen year round. The area provides excellent opportunities for small game, bird hunting, deer, and bear hunting. There are many camps that return annually during deer season.

#### **Fire Protection:**

There is history of project fires in this compartment (Big Sand Lake Fire). This fire occurred in the southeastern portion of the compartment. The wet soil types in this area required heavy mop-up. These same mop-up problems can be expected throughout the compartment. The majority of cover types are lowland associated (lowland conifer, poplars, and cedar), which limits overall fire spread potential, but history shows fire starts are possible. Water sources within the compartment are Big Sand Lake to the south and Batty Doe Lake to the south and west.

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

The following reports from the Inventory are attached:

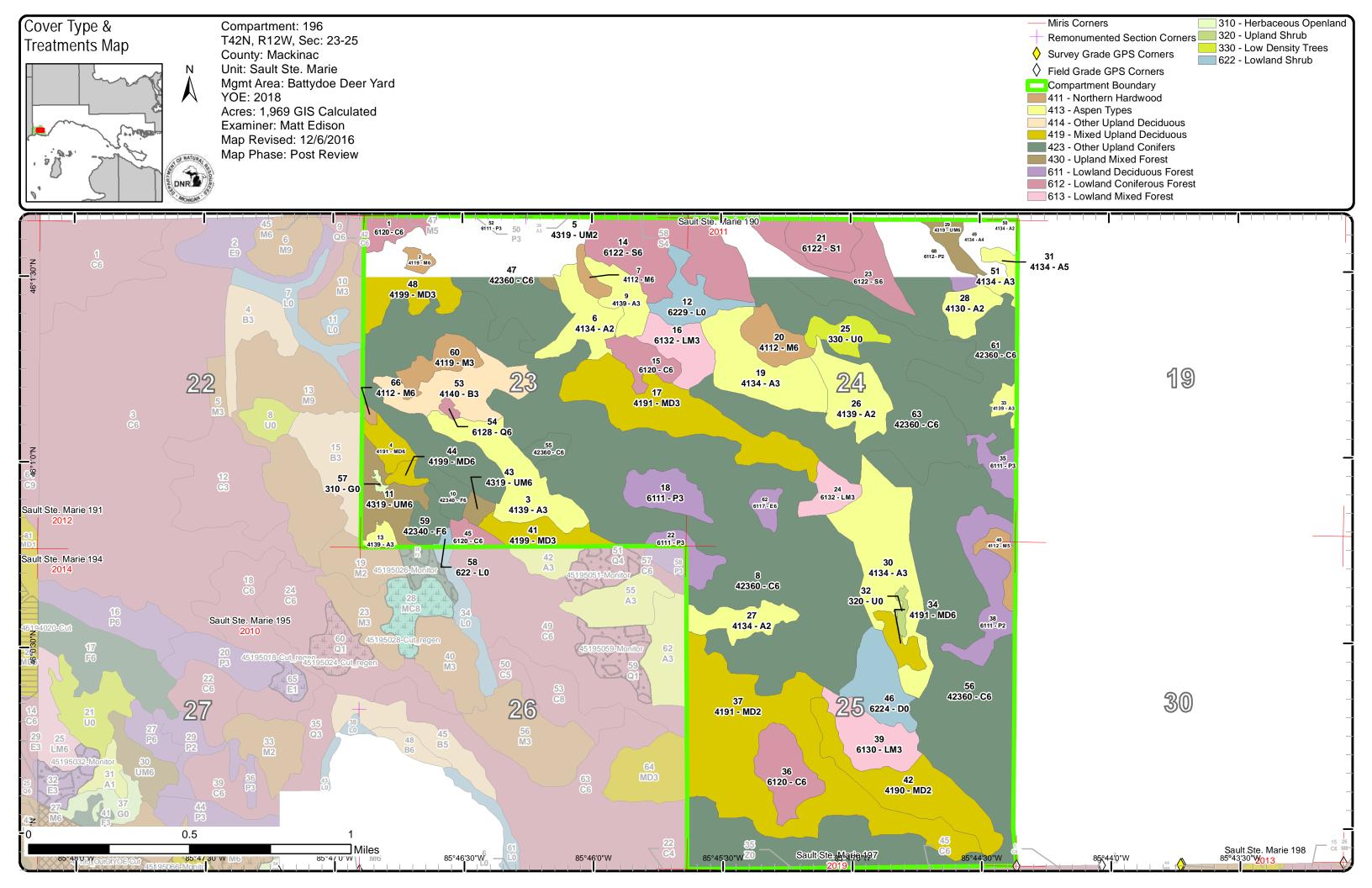
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

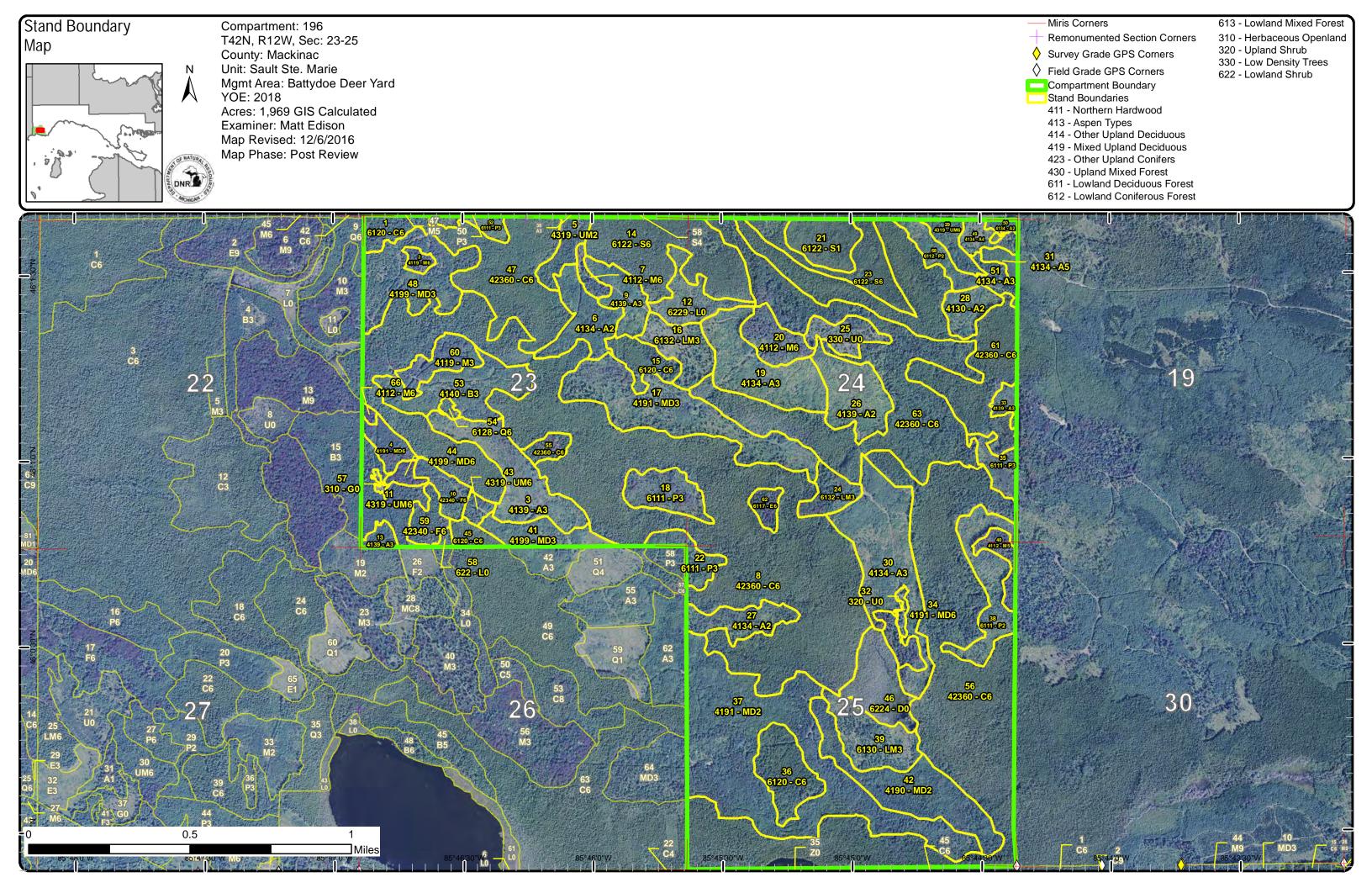
The following information is displayed, where pertinent, on the attached compartment maps:

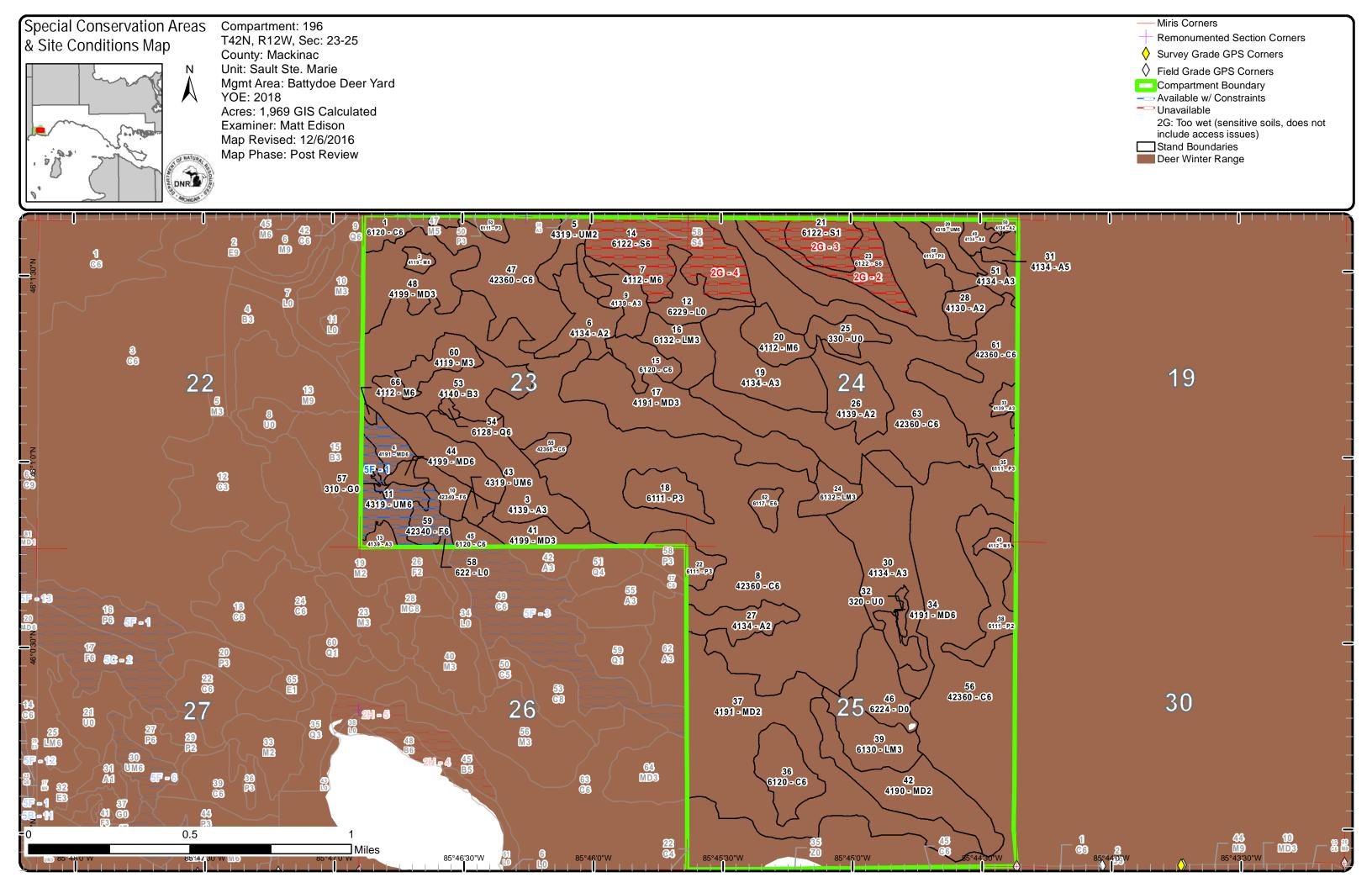
Base feature information, stand boundaries, cover types, and numbers Proposed treatments

Site condition boundaries

Details on the road access system







Compartment 196 Year of Entry 2018

Sault Ste. Marie Mgt. Unit

Matt Edison: Examiner



# Age Class

	<sub>₹</sub> ó	4 de la companya de l		\$ / %	\$ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	8 /4	\$ 10°	% %		,		\$ / <sub>0</sub> /	20,20	\$\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \	S. S.	\$ 15°	R. J.	St Jug	A LOS
Aspen	0	159	54	4	43	0	0	0	0	0	0	0	0	0	0	0	0	0	260
Cedar	0	0	0	0	0	0	0	0	0	0	10	886	13	31	0	0	0	0	939
Herbaceous Openland	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Low-Density Trees	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Lowland Aspen/Balsam Poplar	0	18	56	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85
Lowland Conifers	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Lowland Deciduous	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
Lowland Mixed Forest	0	19	0	26	0	0	0	0	11	0	0	0	0	0	0	0	0	0	56
Lowland Shrub	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
owland Spruce/Fir	0	0	0	0	0	0	0	0	0	25	76	0	0	0	0	0	0	0	101
Mixed Upland Deciduous	0	62	16	39	184	0	12	0	0	0	0	0	0	0	0	0	0	0	313
Northern Hardwood	0	0	0	15	0	0	11	0	15	1	0	0	0	0	0	0	0	5	45
Paper Birch	0	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
Treed Bog	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
Upland Mixed Forest	0	0	0	0	11	34	0	0	0	0	0	0	0	0	0	0	0	0	45
Upland Shrub	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Upland Spruce/Fir	0	0	0	10	0	10	0	0	0	0	0	0	0	0	0	0	0	0	20
Total .	61	258	126	138	238	50	23	2	26	26	86	886	13	31	0	0	0	5	1966



# **Report 2 – Treatment Summary**

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

**Acres of Harvest** 

Compartment 196
Total Compartment Acres: 1,969

Commercial Harvest -

Harvests with Site Condition - 0

Next Step Harvest - 0

Habitat Cut - 0

Report 3 -- Treatments Compartment: s Year of Entry: t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type Approval** n Age Density Age Name CoverType Range Type Method Objective Structure Status d

#Type!

Mgt. Unit

**Habitat Cut: Site Condition:** 

**Prescription** Specs:

Next Step Treatments:

<u>Acceptable</u> Regen:

Other Comment:

Proposed Start Date:

**Total Treatment** Acreage Proposed:

0.0

Sault Ste. Marie Mgt. Unit

Matt Edison: Examiner

Compartment: 196
Year of Entry: 2018

# Availability for Management Total Acres Acres Avail Acres Dominant Site Conditions Acres Available With Condition Net Available

Acres	Available	With Condition	Not Available		5F	2G
261	261	0	0	Aspen		
939	939	0	0	Cedar		
1	0	1	0	Herbaceous Openland	1	
13	13	0	0	Low-Density Trees		
85	85	0	0	Lowland Aspen/Balsam Poplar		
2	2	0	0	Lowland Conifers		
6	6	0	0	Lowland Deciduous		
56	56	0	0	Lowland Mixed Forest		
19	17	1	0	Lowland Shrub	1	
101	0	0	101	Lowland Spruce/Fir		101
313	304	9	0	Mixed Upland Deciduous	9	
47	47	0	0	Northern Hardwood	0	
33	33	0	0	Paper Birch		
26	26	0	0	Treed Bog		
45	23	22	0	Upland Mixed Forest	22	
2	2	0	0	Upland Shrub		
19	10	9	0	Upland Spruce/Fir	9	
1,969	1,825	43	101	Total Forested Acres	43	101
·	93%	2%	5%	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	<b>Dominant Site Condition</b>	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Available	5F: Evaluated for Forest Health Considerations	43	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Monitor for SBW							

# **Report 4 – Site Conditions**

Sault Ste. Marie Mgt. Unit

Matt Edison : Examiner

Compartment: 196 Year of Entry: 2018

2	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	27	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
3	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	21	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
4	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	57	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						

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: 196
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	Habitat Area	An area that provide some specific need for the life cycle of and Waterfowl Production Areas, deer wintering complexes openings and savannas. Habitat areas are distinct from criti endangered or threatened species (such as Kirtland's warbl general in nature, are not primarily associated with threaten covered by species recovery plans that are developed in co-	in lowland conifer communities, grassland ical habitat designated for recovery of ler or piping plover areas) in that they are more led or endangered species, and are not					



s t	Sault Ste. Marie	Mgt. Unit		Report 7	- Forested	Stands Compartment: 196 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	9.8	90	81-110	Wet ground cedar with mix of birch, balsam, and balm.
2	4119 - Mixed Northern Hardwoods	Poletimber Well	3.4	53	81-110	Select cut in 2013: Chuck's Buck Stop Mix 45-128-08-01. Island stand of hardwood. Average quality.
3	4139 - Aspen, Mixed Deciduous	Sapling Well	37.4	10	Immature	Aspen mixed regeneration. Stand was cut in 2006. Flying Finn 45-135-99-01.
4	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	9.3	31	111-140	Variable stand with some areas of very wet ground. Overall avg. diameters are pole, but there are some sparse areas with small diameter trees. No signs of SBW, so monitor for now.
5	4319 - Mixed Upland Forest	Sapling Medium	10.7	32	Immature	Aspen and spruce/fir mixed regeneration. Good looking regen on wet variable ground.
6	4134 - Aspen, Spruce/Fir	Sapling Medium	22.5	32	Immature	Aspen and spruce/fir mixed regeneration. Good looking regen on wet variable ground.
7	4112 - Maple, Beech, Cherry Association	Poletimber Well	4.5	55	81-110	Thinned in 2010: Chuck's Buck Stop 45-121-08-01
8	42360 - Upland Cedar	Poletimber Well	359.0	105	Unspecified	Part of large cedar swamp. Very wet ground with dense cedar in places. Scateerd balsam/spruce and occasional mixed aspen and birch on some higher ground.
9	4139 - Aspen, Mixed Deciduous	Sapling Well	15.4	9	Immature	Cut in 2007: Broken Igloo 45-133-99-01. Good looking mixed regeneration. Some very low areas in stand.
10	42340 - Upland Spruce/Fir	Poletimber Well	9.9	28	1-50	Mixed conifer with some scattered aspen mixed. Stand is sparsely stocked with openings throughout.
11	4319 - Mixed Upland Forest	Poletimber Well	21.7	42	111-140	Variable stand with some areas of very wet ground. Overall avg. diameters are pole, but there are some sparse areas with small diameter trees. No signs of SBW, so monitor for now.
13	4139 - Aspen, Mixed Deciduous	Sapling Well	3.9	21	Unspecified	Mixed regeneration of Aspen, mixed deciduous.
14	6122 - Black Spruce	Poletimber Well	57.4	95	Unspecified	Very wet spruce bog; No commercial potential as is.
15	6120 - Lowland Cedar	Poletimber Well	13.0	114	Unspecified	Small island of thick cedar/ balsam surrounded by clearcut. Smaller size trees. Save for cover.
16	6132 - Mixed Lowland Forest with Cedar	Sapling Well	19.1	6		Cut in 2010: Chuck's Buck Stop 45-121-08-01. Low ground, very wet at times. Mixed regeneration doing well. Cedar that was left uncut remains.

s t	Sault Ste. Marie	Mgt. Unit		Report 7	- Forested	Stands Compartment: 196 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
17	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	61.6	9	Immature	Cut in 2007: Broken Igloo 45-133-99-01. Mixed regeneration, thicker in some areas than others, Variable ground, wetter on fringes.
18	6111 - Lowland Balsam Poplar	Sapling Well	18.2	9	Immature	Wet area of regen. Mostly balm, with mix of balsam, birch, and aspen. Cut in 2007: Flying Finn 45-135-99-01
19	4134 - Aspen, Spruce/Fir	Sapling Well	40.6	9	Immature	Stand was cut in 2007: Broken Igloo 45-133-99-01.
20	4112 - Maple, Beech, Cherry Association	Poletimber Well	15.2	70	81-110	Thinned in 2004. Decent looking hardwood poles. Lost the Beech that was present.
21	6122 - Black Spruce	Sapling Poor	18.7	91	1-50	Very wet spruce bog. Unproductive.
22	6111 - Lowland Balsam Poplar	Sapling Well	10.8	22	Immature	Wet area of decent regen. mostly balm, aspen with some scattered birch and balsam.
23	6122 - Black Spruce	Poletimber Well	25.2	80	Unspecified	Very wet, low quality black spruce.
24	6132 - Mixed Lowland Forest with Cedar	Sapling Well	11.3	77	Unspecified	Very wet ground left out of previous harvest.
26	4139 - Aspen, Mixed Deciduous	Sapling Medium	27.6	9	Immature	Stand was cut in 2007: Broken Igloo 45-133-99-01. Paper birch was left, but falling out. Overall good mixed regeneration.
27	4134 - Aspen, Spruce/Fir	Sapling Medium	16.5	9	Immature	Balm, birch, and balsam regen. Cut in 2007: Flying Finn Aspen 45-35-99-01.
28	4130 - Aspen	Sapling Medium	12.0	12	Immature	Patchy regen of Aspen, balm and birch. Thick in spots, not so much in others. Cut in 2004: Waldo's VW 45-136-99-01.
29	4319 - Mixed Upland Forest	Poletimber Well	8.5	45	51-80	Patchy stand of residual/regen from 1981 clearcut that runs along road. Mix of balsam, aspen, and b. cherry. Not merchantable yet.
30	4134 - Aspen, Spruce/Fir	Sapling Well	59.2	9	Immature	Stand was clear-cut in 2009: Broken Igloo 45-133-99-01. Low pockets throughout with balm in the wetter areas. Overall good looking mixed regeneration.
31	4134 - Aspen, Spruce/Fir	Poletimber Medium	4.2	35	Unspecified	Variable stand of mixed aspen/ balsam. Poor ground with exposed bed-rock. Clearcut in 1981.
33	4139 - Aspen, Mixed Deciduous	Sapling Well	4.7	12	Immature	Mixed aspen regeneration is patchy. Looks good where present.  Cut in 2004: Waldo's VW 45-136-99-01

4191 - Mixed Upland Deciduous with Conifer

34

Poletimber

Well

7.8

50

81-110

Thinned in 04. Poorer quality mr stand with balsam, birch, spruce, and cedar residual.

S t				Report 7	- Forested	Stands Compartment: 196 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
35	6111 - Lowland Balsam Poplar	Sapling Well	9.9	12	Immature	Mixed regen looks good. Mostly balm, Q. aspen. Cut in 2004: Waldo's VW 45-136-99-01.
36	6120 - Lowland Cedar	Poletimber Well	24.2	122	Unspecified	Very dense stand of almost pure cedar. There is some balsam & paper birch. Stand is an island surrounded by clearcut.
37	4191 - Mixed Upland Deciduous with Conifer	Sapling Medium	130.5	35	51-80	Variable stand of mixed B. cherry, poor quality r. maple, aspen, and birch.
38	6111 - Lowland Balsam Poplar	Sapling Medium	29.0	12	Immature	Mixed regeneration mostly balm and aspen. Cut in 2004: Waldo's VW 45-136-99-01.
39	6130 - Fir, Aspen, Maple	Sapling Well	26.1	21	Unspecified	Regen. after stand area was burned in 1995. Mix of Balm, balsam, cherry, and some birch.
40	4112 - Maple, Beech, Cherry Association	Poletimber Medium	8.0	57	81-110	Sugar maple pole stand thinned in '02. Smaller diameter. Check in 10 years.
41	4199 - Other Mixed Upland Deciduous	Sapling Well	16.2	19	Immature	Mixed aspen, birch regeneration. Higher ground than stand adjacent to north.
42	4190 - Mixed Upland Deciduous with Cedar	Sapling Medium	44.7	35	51-80	Variable stand of mixed B. cherry, poor quality r. maple, aspen, and birch.
43	4319 - Mixed Upland Forest	Poletimber Well	4.0	41	111-140	Stand of mature birch, balsam, and mixed aspen and conifer.  Providing diversity as it is the only mature, tall stand in adjacent area. Leave for now.
44	4199 - Other Mixed Upland Deciduous	Poletimber Well	3.9	51	81-110	Mixed hardwood stand with confir. BA not too high yet, check in 10 years.
45	6120 - Lowland Cedar	Poletimber Well	6.3	121	Unspecified	Stand is northern part of a large cedar stand in adjacent compartment to the south.
47	42360 - Upland Cedar	Poletimber Well	60.4	105		Part of large cedar swamp. Very wet ground with dense cedar in places. Scateerd balsam/spruce and occasional mixed aspen and birch on some higher ground.
48	4199 - Other Mixed Upland Deciduous	Sapling Well	39.2	20	Immature	Mixed regeneration, wet and sparse in some places.
49	4134 - Aspen, Spruce/Fir	Poletimber Poor	8.1	35	1-50	Borders on being an opening, very sparse and patchy mixed regen from old cut in 1981?
50	4134 - Aspen, Spruce/Fir	Sapling Medium	2.6	35	Unspecified	Variable stand of mixed aspen/ balsam. Poor ground with exposed bed-rock. Clearcut in 1981.

51

4134 - Aspen, Spruce/Fir Sapling Well

6.4

35

1-50

Patchy stand of residual/regen from 1981 clearcut that runs along road. Mix of balsam, aspen, and b. cherry.

s



t						Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
52	6111 - Lowland Balsam Poplar	Sapling Well	6.5	17	Immature	Aspen/balm regen with light balsam mixed interior, heavier on road edge. Cut in 1999, "Old Swede" Sale.
53	4140 - Other Upland Deciduous	Sapling Well	33.3	23		Mixed birch and red maple regeneration.
54	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	1.7	69		Pocket of cedar, lowland mix left from past harvest. Providing good diversity. Check in 10 years for treatment when enough other acres in compartment.
55	42360 - Upland Cedar	Poletimber Well	5.8	105	51-80	Part of large cedar swamp that has a area of wet balm and blow down.
56	42360 - Upland Cedar	Poletimber Well	233.3	105	Unspecified	Part of large cedar swamp
59	42340 - Upland Spruce/Fir	Poletimber Well	9.5	40	111-140	Variable stand with some areas of wet ground. Overall avg. diameters are pole, but there are some sparse areas with small diameter trees. Hold stand for added growth and check in 10 years. No sign of sbw at this point, Monitor and harvest if sbw becomes an issue.
60	4119 - Mixed Northern Hardwoods	Sapling Well	14.5	23	Immature	Mostly red maple regeneration with mix of birch and fir.
61	42360 - Upland Cedar	Poletimber Well	95.8	105	Unspecified	Part of large cedar swamp. Very wet ground with dense cedar in places. Scateerd balsam/spruce and occasional mixed aspen and birch on some higher ground.
62	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	5.8	40	81-110	
63	42360 - Upland Cedar	Poletimber Well	131.5	105	Unspecified	Part of large cedar swamp. Very wet ground with dense cedar in places. Scateerd balsam/spruce and occasional mixed aspen and birch on some higher ground.
66	4112 - Maple, Beech, Cherry Association	Poletimber Well	1.3	89	51-80	Thinned as part of timber sale from other adjacent compt. 195.
68	6112 - Lowland Aspen	Sapling Medium	10.9	18	Unspecified	Patchy regen of Aspen, birch, balm with balsam. Thick in spots, not so much in others. Part of Deer Camp Birch cut in 1998.

Compartment: 196 Year of Entry: 2018



Stand	Cover Type	Acres	Managed Site	General Comments:
12	6229 - Mixed lowland shrub	17.2	No	Wetland stand of sparse black spruce and a few scattered cedar on fringe. Flooded in the south part. No productivity.
25	330 - Low-Density Trees	12.7	No	Cut in 2013: Chuck's Buck Stop Mix 45-121-08-01. Variable mixed regeneration looks good.
32	320 - Upland Shrub	2.4	No	
46	6224 - Treed Bog	25.7	No	Part of large cedar swamp. Very wet ground with dense cedar in places. Scateerd balsam/spruce and occasional mixed aspen and birch on some higher ground.
57	310 - Herbaceous Openland	1.1	No	
58	622 - Lowland Shrub	1.4	No	