

Compartment Review Presentation

Sault Ste. Marie Forest Management Unit

Compartment 45156
Entry Year 2020
Acreage: 1,932
County Mackinac

Management Area: Mackinac Mix

Revision Date: 2018-08-01

Stand Examiner: Matt Edison

Legal Description:

T44N R8W Sections: 20, 21, & 22

Hudson Township

Identified Planning Goals:

Compartment is located 2 miles north of Garnet. The compartment is within the Mackinac Mix Management Area. This entry, timber management will focus on single tree selection harvests of several Northern Hardwood stands to promote regeneration and to bring stand into regulation. There is a MWR stand in this compartment.

Soil and topography:

Compartment is level to slightly rolling. Markey and Carbondale mucks dominate the lowlands with Croswell-Spot complex. The uplands are comprised of Springlake loamy sands and Wallace sands.

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

This compartment and surrounding areas are comprised solely of state lands. Borgstrom Road was recently upgraded from a good county gravel road to an all season paved road. Therefore, more traffic is using this road and it gives us more opportunities for trucking access on timber sales.

Unique Natural Features:

There are recorded occurrences of threatened and endangered species in this compartment per MNFI database. There is also potential for other rare, threatened, or endangered plant and animal species within the compartment.

Archeological, Historical, and Cultural Features:

None noted.

Special Management Designations or Considerations:

The ORV trail runs throughout the compartment and needs to be signed and kept cleared during logging operations. Cutting is discouraged along snowmobile trails during snowmobile season unless snow base is left on trail and trail is signed. A Wetland mitigation pond is located in section 20.

Watershed and Fisheries Considerations:

Big Dollar Lake is the primary waterbody in this compartment. Yellow perch are present in this lake and has served as a fishery in previous years to local anglers. The prescribed treatment in stand 49 should at a minimum buffer the lake 100 feet. Buffers should also be defined in stands 4, 11, and 20 using current water levels. Standard BMP's should be applied to all treatment types when near surface water.

Wildlife Habitat Considerations:

This compartment is part of the Mackinac Mix MA where featured wildlife species include black bear, pileated woodpecker, ruffed grouse, snowshoe hare, and white-tailed deer. Part of the compartment is in deer wintering complex. Stand types vary across the compartment with red pine, northern hardwoods, aspen, wetlands, and lowland conifers all being represented. Red pine stands are on the eastern side. Lowland cedar is more common on the west side (and continues west of the compartment), although lowland conifer stands are present in various locations throughout. Some treatments are already taking place in northern hardwood stands to increase age class and structure diversity within the stands; two experimental treatments are being conducted by researchers to examine wildlife use and forest regeneration following varying harvest types. Some other hardwood stands will be treated to increase diversity within them, which will benefit deer, bear, and other species. Snags will be left and will offer habitat to pileated woodpeckers and other cavity nesting species. Other types will be left to continue maturing. Lowland conifers will be retained to provide cover for wildlife, including wintering deer. Wetlands and streams will be buffered during any treatments to protect these habitats.

Mineral Resource and Development Concerns and/or Restrictions

Three active, state-owned sand/gravel pits are located in the area (Dollar Lake, Borgstrom Road/Dogman, and South

Pond Ridge), two in the compartment and one just outside. All three are currently leased to the county road commission. There is also known bedrock limestone potential in this area. Graymont's proposed underground limestone mine is projected to extend beneath a portion of the compartment, and the state recently sold the limestone rights to Graymont. There is no known metallic mineral potential in this part of the state, and there is currently no economical oil and gas potential in the UP.

Vehicle Access:

Decent vehicle access exists for the upland areas of the compartment. Borgstrom Road, an all season county road, runs north-south between sections 20 and 21. Giddings Road, a DNR road, accesses the northern portion of the compartment. Weasel Road, a DNR road accesses the northern portions of section 22. Dollar Lake Rd. runs through Sec. 21 and crosses Borgstrom Rd. then continues west a short distance before leaving the compartment. A few other two-tracks exist, mainly accessing old timber sales.

Survey Needs:

None needed this entry.

Recreational Facilities and Opportunities:

Snowmobile trail number 2 crosses Borgstrom Road just to the south of the northern compartment boundary and continues through the compartment to the southeast and west along Old Hendricks Road (Dollar Lake Road) and Hemlock Ridge Road. The ORV trail winds in and out of the compartment stands to the east and north sides of Big Dollar Lake and dips in and out of the compartment west of Borgstrom Rd. Other recreational opportunities include hunting all types of game species, bird watching, mushroom and berry picking, and photography.

Fire Protection:

: There is good access to most of the upland areas in the compartment. There are stands of red pine and other mixed pines, which would be the areas of highest concern. There are large grass openings that would bring fire potential also. Water sources within the compartment could be Big Dollar Lake as well as many small ponds. Ignition sources are common during the fall hunting seasons as the area is commonly used for hunting and setting up camps.

Additional Compartment Information:

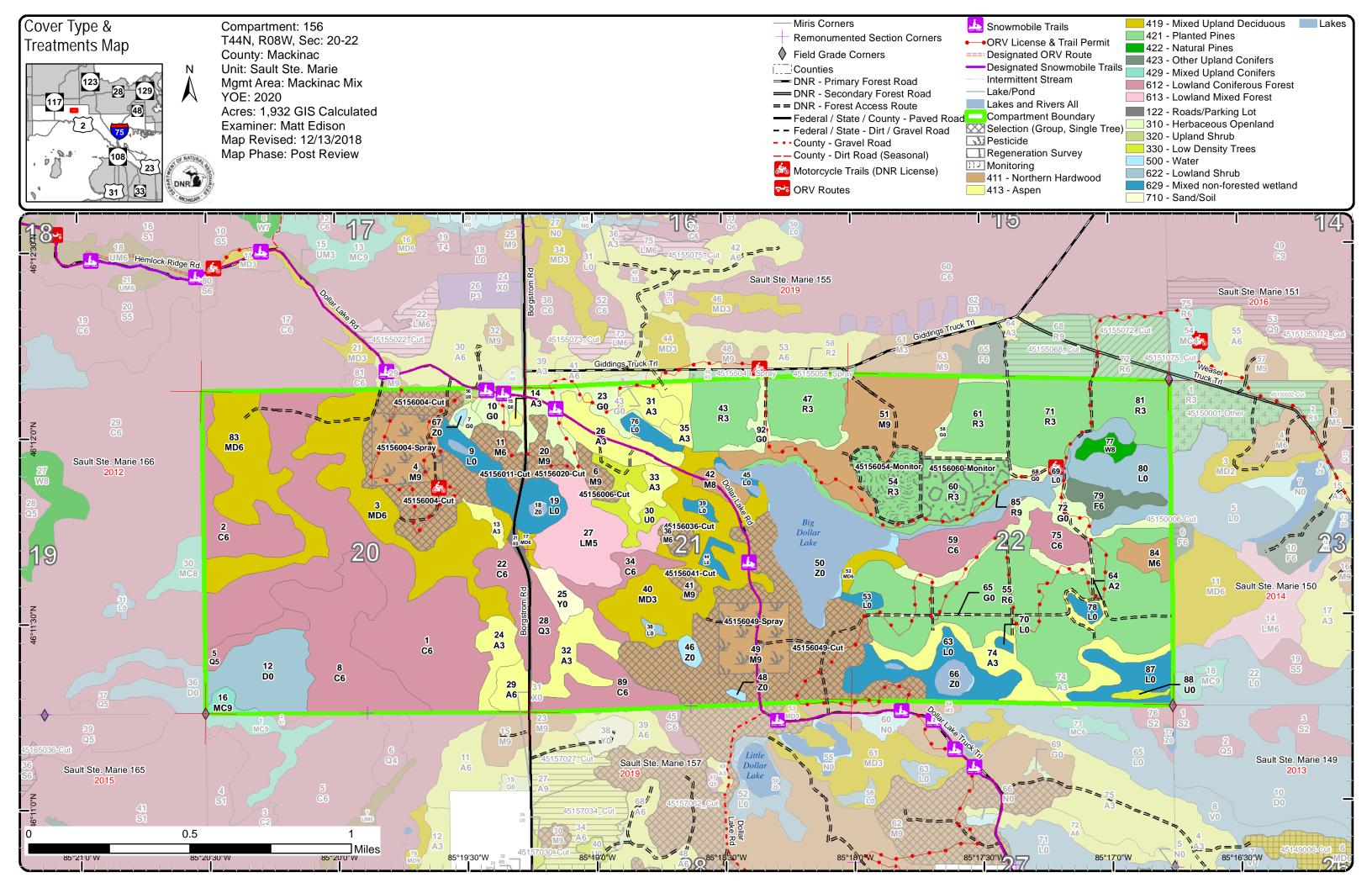
The following reports from the Inventory are attached:

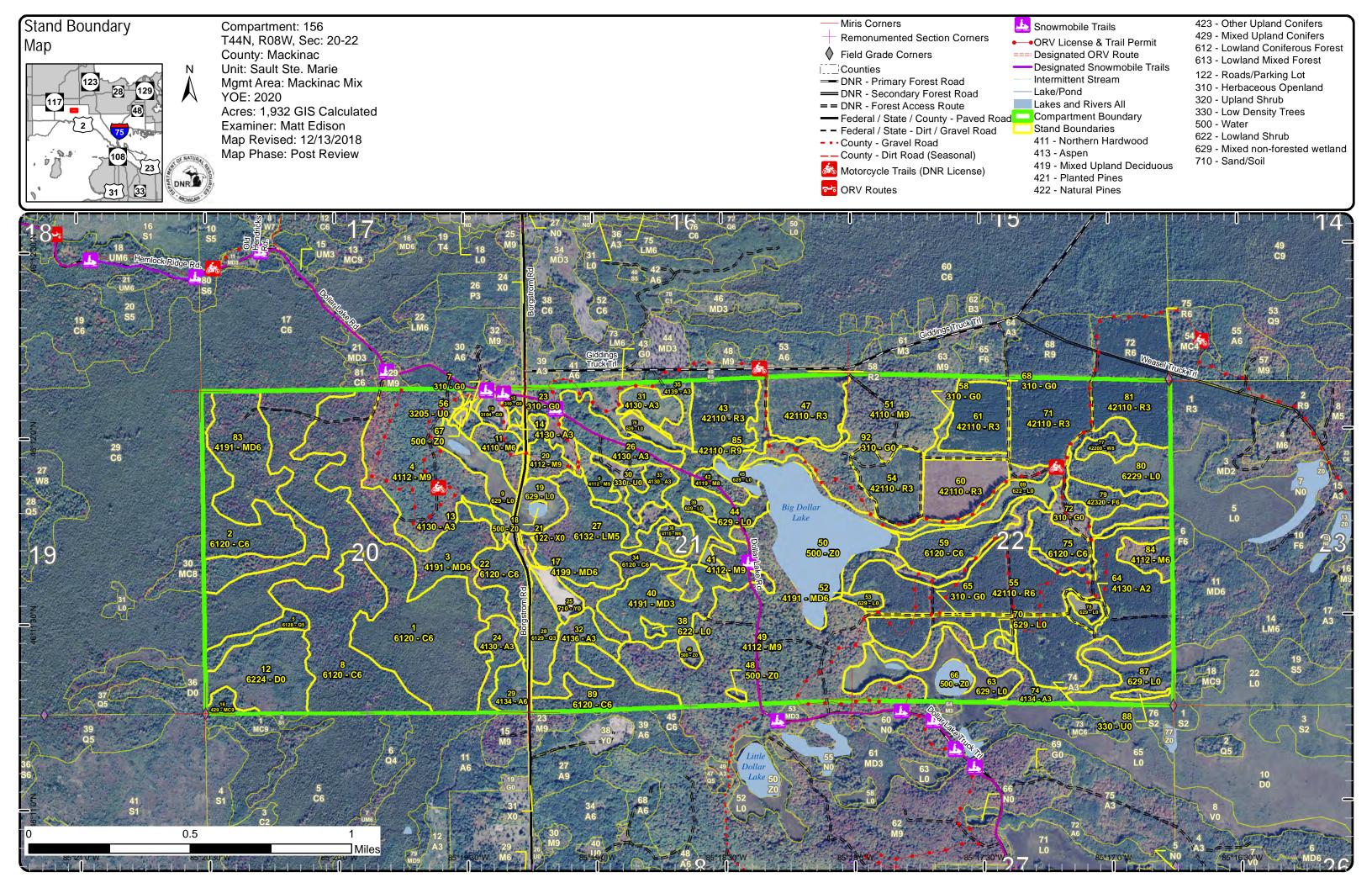
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

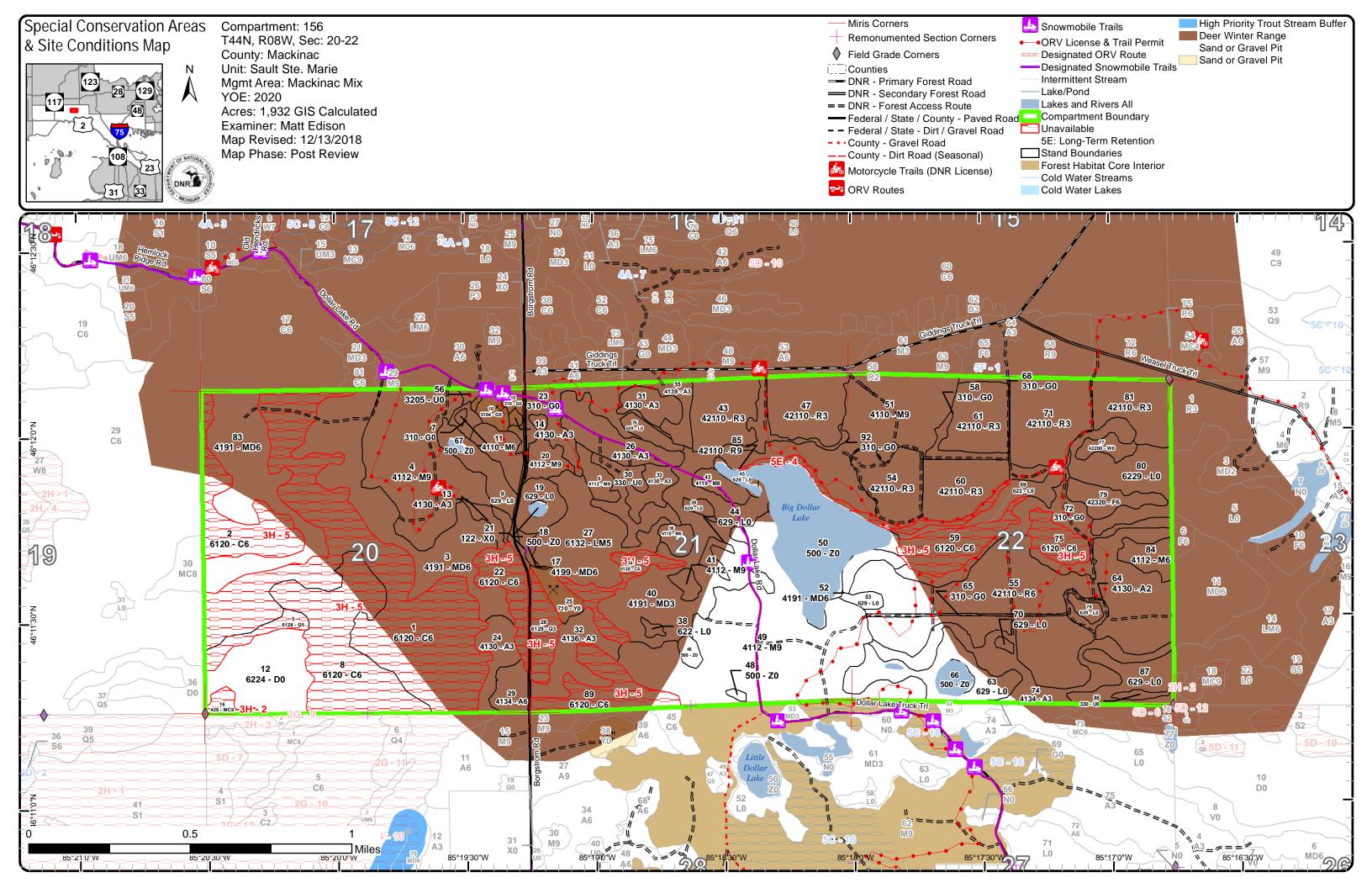
The following information is displayed, where pertinent, on the attached compartment maps:

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

Details on the road access system







Compartment 156 Year of Entry 2020

Sault Ste. Marie Mgt. Unit

Matt Edison: Examiner



Age Class

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	No.	A SE SE						, % /&					0, 0,	,			LE LE	A Just	No. No.
Aspen	0	10	0	76	51	0	0	0	0	0	0	0	0	0	0	0	0	0	137
Cedar	0	0	0	0	0	0	0	0	0	0	53	173	16	106	0	0	0	0	348
Herbaceous Openland	81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
Low-Density Trees	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Lowland Conifers	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	14
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	44	0	0	0	0	0	0	0	0	44
Lowland Shrub	146	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	146
Mixed Upland Deciduous	0	0	0	0	85	0	0	73	0	0	0	0	0	0	0	0	0	0	157
Northern Hardwood	0	0	0	0	0	0	10	0	243	0	0	0	0	0	0	0	0	88	341
Red Pine	0	27	56	118	0	0	156	0	0	0	0	0	0	0	0	0	0	0	357
Sand, Soil	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Treed Bog	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
Upland Spruce/Fir	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Urban	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Water	73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73
White Pine	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	6
Total	376	37	56	206	136	0	180	73	243	50	53	173	16	106	0	0	0	88	1790



Report 2 – Treatment Summary

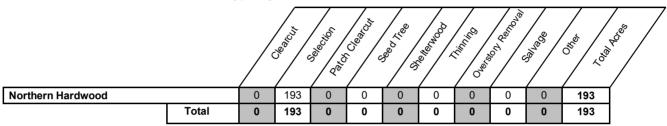
Sault Ste. Marie Mgt. Unit Year of Entry: 2020

Acres of Harvest

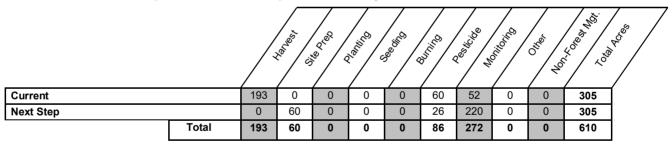
Compartment 156
Total Compartment Acres: 1,932

Commercial Harvest - 193 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



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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
54 Habit Presc Specs		25.8	42110 - Planted Red Pine Site Condition:	Sapling Well	14	Immatu re	Monitoring	Herbicide Use	42110 - Planted Red Pine	Even-Aged	Draft Field Boundary
	ments: otable RP	cide, (Inac	tive)Aerial								
Other Comn Propo		t to Treat : 12/18	= 100% 3/2017								
Presc Specs Next S	<u>3:</u>	26.5 Monitorinç	42110 - Planted Red Pine Site Condition:	Sapling Well	3	Immatu re	Monitoring	Artificial Regen(3yr)	42110 - Planted Red Pine	Even-Aged	Draft Field Boundary

Proposed Start Date:

Total Treatment
Acreage Proposed:

Acceptable red pine Regen:

<u>Other</u>

Comment:

52.3

12/27/2017

Percent to Treat = 100%

Sault Ste. Marie Mgt. Unit

Matt Edison: Examiner

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Availability for Management Total Acres Acres Avail Acres

Dominant Site Conditions

Acres	Available	With Condition	Not Available	
	0	0	0	Aspen
	0	0	0	Cedar
	0	0	0	Herbaceous Openland
	0	0	0	Low-Density Trees
	0	0	0	Lowland Conifers
	0	0	0	Lowland Mixed Forest
	0	0	0	Lowland Shrub
	0	0	0	Mixed Upland Deciduous
	0	0	0	Northern Hardwood
	0	0	0	Red Pine
	0	0	0	Sand, Soil
	0	0	0	Treed Bog
	0	0	0	Upland Spruce/Fir
	0	0	0	Urban
	0	0	0	Water
	0	0	0	White Pine
				Total Forested Acres
				Relative Percent

^{*}Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
2	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	5E: Long-Term Retention	12	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 4 – Site Conditions

Sault Ste. Marie Mgt. Unit

Matt Edison : Examiner

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5	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	398	Unspecified	Unspecified	Unspecified	Unspecified
C	comments:						

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Compartment: 156 Year of Entry: 2020



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
Mackinac County Road Commission	Mineral Resource Area	Sand or Gravel Pit	Error	9
Comments				
Mackinac County Road Commission	Mineral Resource Area	Sand or Gravel Pit	Error	11
Comments				

Sault Ste. Marie Mgt. Unit Compartment: 156





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	HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA I	Habitat Area	and Waterfowl Production Areas, deer wintering com- openings and savannas. Habitat areas are distinct fro	om critical habitat designated for recovery of 's warbler or piping plover areas) in that they are more hreatened or endangered species, and are not

s t	Sault Ste. Marie	Sault Ste. Marie Mgt. Unit			– Forested	Stands Compartment: 156 Year of Entry: 2020
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6120 - Lowland Cedar	Poletimber Well	173.4	101	141-170	Small, dense cedar, very wet. limited ability to enter stand. Composition Data from previous inventory.
2	6120 - Lowland Cedar	Poletimber Well	34.9	94	141-170	
3	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	72.5	61	81-110	Very mixed bag of what is left after a series of patch cutting. Let it be and become whatever it will be before management decision.
4	4112 - Maple, Beech, Cherry Association	Sawtimber Well	77.2	75	111-140	Mark remaining stand around the MWR treatment.
8	6120 - Lowland Cedar	Poletimber Well	69.9	121	111-140	Data from stand to south visited in adjacent compartment.
11	4110 - Sugar Maple Association	Poletimber Well	11.2	69	81-110	Thinned last entry "Throbbing Finger Hardwood". Check again in 10 years
13	4130 - Aspen	Sapling Well	4.2	27	Immature	Clear Cut in 1991.
14	4130 - Aspen	Sapling Well	1.1	27	Immature	Aspen regeneration clump in opening next to Borgstrom Road.
17	4199 - Other Mixed Upland Deciduous	Poletimber Well	4.3	39	81-110	Stand is on ridge that is adjacent to wetland. Great visual enhancement along Borgstro Road. Best if left for aesthetics.
20	4112 - Maple, Beech, Cherry Association	Sawtimber Well	9.9	76	111-140	Thinned last entry, "Throbbing Finger Hardwood"
22	6120 - Lowland Cedar	Poletimber Well	18.3	93	141-170	Wet stand of cedar along Borgstrom road. Mixed with balsam, birch, etc.
24	4130 - Aspen	Sapling Well	13.6	26	Immature	Clear cut in 1992- Borgstrom curve mix.
26	4130 - Aspen	Sapling Well	23.3	35	81-110	Cut in 1982-1983
27	6132 - Mixed Lowland Forest with Cedar	Poletimber Medium	44.3	82	111-140	Sparse mixed stand of cedar with mix. Brushy,not much to see here for a couple of decades.
28	6129 - Mixed Coniferous Lowland Forest	Sapling Well	14.1	51	141-170	Very wet, poor quality cedar mix. Not merchantable. Alot of Tamarack .
 29	4134 - Aspen, Spruce/Fir	Poletimber Well	9.6	37	111-140	Clear cut in 1981- Nice stand, but still small poles. Check in next entry.

31

4130 - Aspen

Sapling Well

10.4

7

Immature

Nice aspen mix regeneration. Cut in 2001

S t	Sault Ste. Marie Mgt. Unit			Report 7	– Forested	Stands Compartment: 156 Year of Entry: 2020
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
32	4136 - Aspen, Mixed Conifer	Sapling Well	20.6	26	Immature	Aspen regeneration. Cut in 1992.
33	4130 - Aspen	Sapling Well	9.1	35	111-140	Aspen clumps within large grass opening. Small diameter this entry, consider for hearvest in 10-20 years.
34	6120 - Lowland Cedar	Poletimber Well	15.6	110	141-170	Mixed cedar stand. Good cover.
35	4139 - Aspen, Mixed Deciduous	Sapling Well	8.9	35	51-80	Poor quality maple, aspen, basically brush along red pine plantation.
36	4110 - Sugar Maple Association	Poletimber Well	5.5	76	111-140	Thinned in 2002 "Black Wolf Hdwds." Thin this entry with adjaent stands.
40	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	74.4	36	81-110	Stand was cut in 1979. Large, variable, semi-sparse, mixed stand. Some low pockets. Check it i 10 years.
41	4112 - Maple, Beech, Cherry Association	Sawtimber Well	3.8	78	111-140	Thinned in 2000. Black Wolf Hardwoods. Thin this entry with adjacent stands.
42	4119 - Mixed Northern Hardwoods	Sawtimber Medium	6.8	71	51-80	Shelterwood cut in 2002.
43	42110 - Planted Red Pine	Sapling Well	27.1	22	Immature	Ped Pine planted in 1996. Monitor for RHPSF. Edges sprayed for RHPSF infestation on 2004.
47	42110 - Planted Red Pine	Sapling Well	30.3	15	Immature	Red Pine planted in 2003. Monitor for release.
49	4112 - Maple, Beech, Cherry Association	Sawtimber Well	145.3	79	111-140	MWR Treatment completed in 2018. Remainder of stand is prescribed this entry. Stand data retained for inventory use.
51	4110 - Sugar Maple Association	Sawtimber Well	71.3	78	81-110	Thinned in 2014.
52	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	6.0	35	81-110	
54	42110 - Planted Red Pine	Sapling Well	25.8	14	Immature	red pine cut in 2002. Regeneration check passed in 2008.
55	42110 - Planted Red Pine	Poletimber Well	155.5	57	81-110	Second thinned in 2015. Check in 10 years.
59	6120 - Lowland Cedar	Poletimber Well	23.1	120	141-170	Lowland cedar. Small trees and patchy.

42110 - Planted Red

Pine

60

Sapling Well

3

Immature

26.6

Planted in 2015. ! Year regen check passed in 2016. 721 trees per acre. All around good planting with sporadic volunteers.

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Compartment: 156 Year of Entry: 2020

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t						Tear of Entry: 2020
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
61	42110 - Planted Red Pine	Sapling Well	25.1	22	Immature	Red pine plantation. Planted in 1996. Looks good.
71	42110 - Planted Red Pine	Sapling Well	40.1	24	Immature	Red Pine panted in 1994
74	4134 - Aspen, Spruce/Fir	Sapling Well	36.9	23	Immature	Clear cut in 1995-
75	6120 - Lowland Cedar	Poletimber Well	13.2	120	141-170	Lowland dense cedar in a little bowl areae. alot of tag Alder where wettest.
77	42200 - Natural White Pine	Sawtimber Medium	5.9	80	81-110	Nice white pine.
79	42320 - Upland Spruce	Poletimber Well	12.0	23	81-110	Stand was cut in 1995.
81	42110 - Planted Red Pine	Sapling Well	25.8	24	Immature	Red pine planted in 1994. Monitor for release/bugs.
84	4112 - Maple, Beech, Cherry Association	Poletimber Well	9.7	59	51-80	Carry over RX: Clear cut to make brush stand for wildlife. Poor quality hardwood.

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Stand	Cover Type	Acres	Managed Site	General Comments:
7	310 - Herbaceous Openland	3.1	Yes	
9	629 - Mixed non-forested wetland	15.2	No	
10	3104 - Degraded	5.2	No	Borrow/Spoil Pit
12	6224 - Treed Bog	40.5	No	
15	310 - Herbaceous Openland	5.8	No	
18	500 - Water	1.3	No	
19	629 - Mixed non-forested wetland	11.8	No	
21	122 - Road/Parking Lot	7.6	No	
23	310 - Herbaceous Openland	24.0	No	
25	710 - Sand, Soil	7.8	No	
30	330 - Low-Density Trees	16.4	No	
38	622 - Lowland Shrub	1.6	No	
39	629 - Mixed non-forested wetland	2.8	No	
44	629 - Mixed non-forested wetland	3.6	No	
45	629 - Mixed non-forested wetland	4.5	No	
46	500 - Water	3.4	No	
48	500 - Water	1.0	No	
50	500 - Water	60.8	No	

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Stand	Cover Type	Acres	Managed Site	General Comments:
53	629 - Mixed non-forested wetland	3.3	No	
58	310 - Herbaceous Openland	5.8	No	Stand is strip along road between R3 and mature red pine plantations.
63	629 - Mixed non-forested wetland	28.7	No	
65	310 - Herbaceous Openland	2.9	No	
66	500 - Water	6.1	No	
68	310 - Herbaceous Openland	6.0	No	
69	622 - Lowland Shrub	13.9	No	
70	629 - Mixed non-forested wetland	1.2	No	
72	310 - Herbaceous Openland	27.7	No	
78	629 - Mixed non-forested wetland	3.4	No	
80	6229 - Mixed lowland shrub	36.0	No	
87	629 - Mixed non-forested wetland	19.9	No	
88	330 - Low-Density Trees	2.4	No	