

Compartment Review Presentation

Sault Ste. Marie Forest Management Unit

Compartment 45029 Entry Year 2020 Acreage: 677

County Mackinac

Management Area: Huron Patterned Outcrop

Revision Date: 2018-08-07 **Stand Examiner:** Jeff Wise

Legal Description:

T42N R1E, Sec 5, 7, & 8

Identified Planning Goals:

To develop an optimal age class distribution of aspen stands for sustainable forestry and wildlife values. To rotate hardwood treatments for optimum regeneration and stocking of all age classes. Maintain current openings as needed for diversity and enhancement of wildlife benefits. To provide reasonable public access for multiple use benefits such as hunting, trail riding, camping, and hiking, while protecting the natural resources. This YOE, one light thinning and a small clear cut will be prescribed for treatment.

Soil and topography:

Markey-Battydoe-Shelter Association. Nearly level to steep, very deep soils that are very poorly drained to somewhat excessively drained. Land is generally flat with a few deep ravines

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

The compartment is surrounded by private land with a few hunting camps in the area. The State owns a gravel pit here which has been used for county as well as State timber projects. Two roads give the public access for hunting trapping etc. One leads to the gravel pit and one to a private hunting camp. Hunting is the main activity here. Almost a quarter of this compartment is landlocked.

Unique Natural Features:

MNFI lists no element occurrences in this compartment.

Archeological, Historical, and Cultural Features:

Nothing known at this time.

Special Management Designations or Considerations:

None this YOE.

Watershed and Fisheries Considerations:

This compartment contains portions of McKay Creek and Rapson Creek. McKay Creek is classified as cold-transitional while Rapson Creek is classified as a cold stream. A 300-foot buffer (no clear cuts) should be kept adjacent to McKay Creek. Prescribed treatments are appropriate for the protection of these waterbodies.

Wildlife Habitat Considerations:

This compartment is part of the Huron Patterned Outcrop Management Area, where featured wildlife species include pileated woodpecker, ruffed grouse, snowshoe hare, and white-tailed deer. The compartment contains primarily upland and lowland aspen types as well as northern hardwoods. McKay Creek and Rapson Creek both flow through parts of the compartment, providing wetland and riparian habitat for beaver and other wetland wildlife. Many stands were treated in the past, and have regenerated. These stands will be left to mature to offer habitat for ruffed grouse, snowshoe hare, and deer. A hardwood stand will be thinned to increase diversity, and a mature mixed deciduous stand will be treated to continue to provide young early successional habitat for these wildlife species. Cedar stands will be left to provide cover for a variety of wildlife, and wetland and riparian areas will be protected for wetland wildlife and as travel corridors for other species.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand & gravel and postglacial alluvium sometimes thin to discontinuous over bedrock. The glacial drift thickness varies between 10 and 50 feet. The Silurian Engadine Group subcrops below the glacial drift. The Engadine is quarried for stone/dolomite in the UP. A gravel pit is located in Section 8 and there should be potential. There is no current economic oil and gas production in the UP.

Vehicle Access:

Winberg Road is a county road and provides year round access to the east side of this compartment. A two track, called Backwoods Road, provides good access vehicle access to the southern part in snow free conditions for hunting.

Survey Needs:

The north half of Section 5.

Recreational Facilities and Opportunities:

No facilities. Opportunities for hunting, perhaps trapping, and other nature watching activities. No trails of any type.

Fire Protection:

There is good access from Winberg Road. Water sources would be limited to ravines and drainages. McKay creek may provide water with a hose lay.

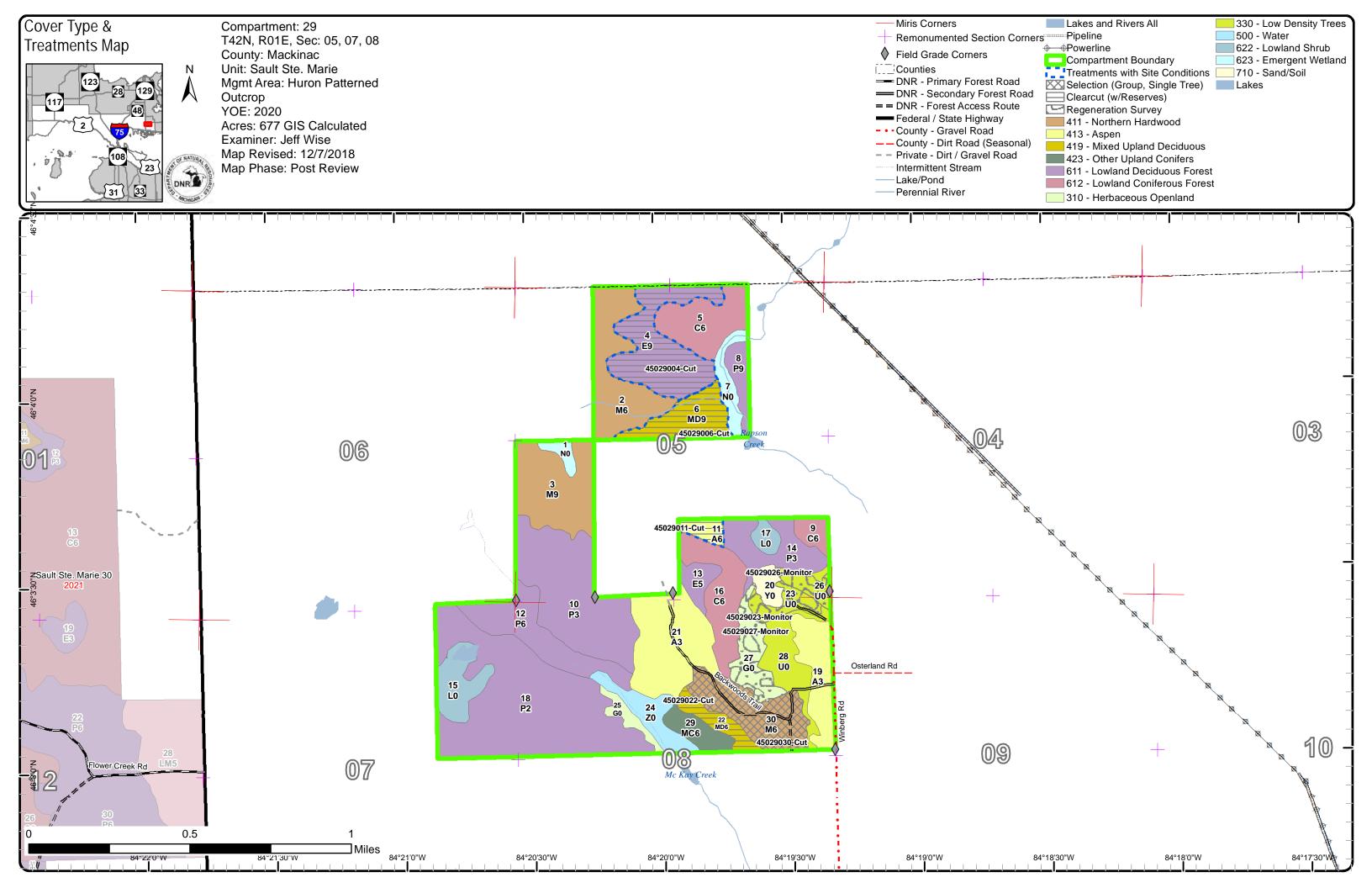
Additional Compartment Information:

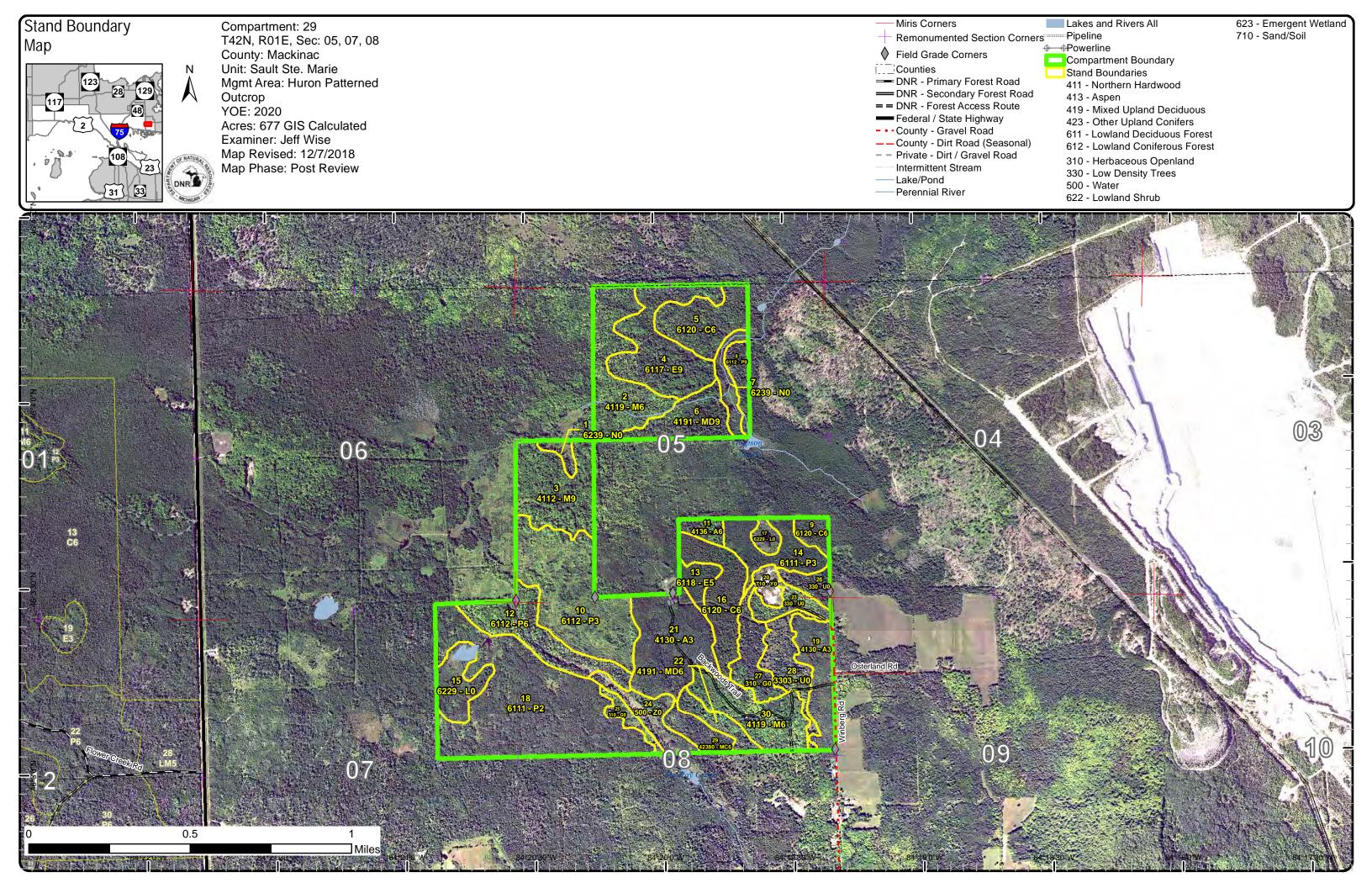
The following reports from the Inventory are attached:

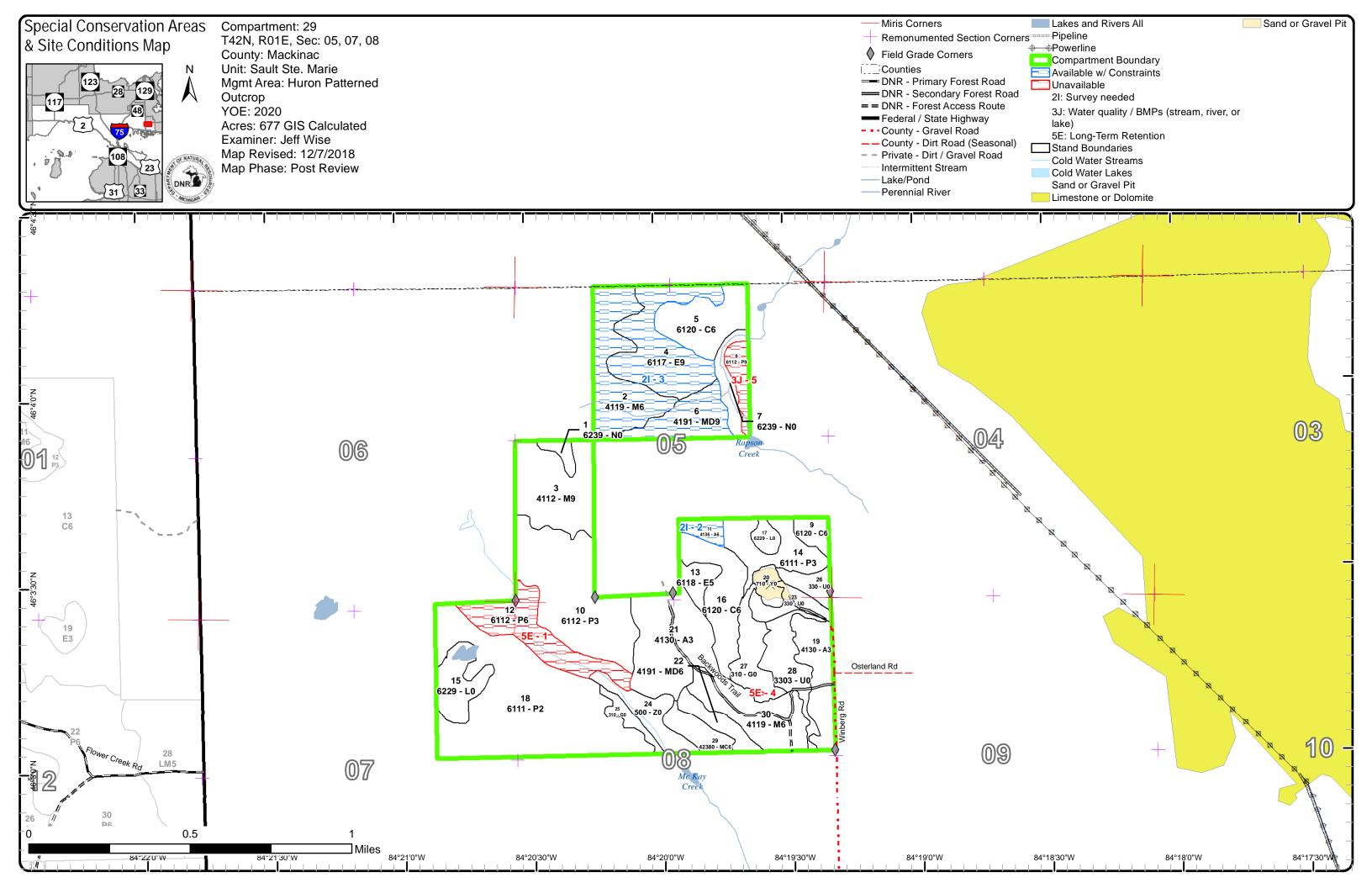
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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

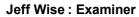






Compartment 29 Year of Entry 2020

Sault Ste. Marie Mgt. Unit





Age Class

	No.	A STATE OF THE STA	3 / 2	27.05	\$ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	8 / 4	8 . S.	\$,	80,00	\$ /6	20,20	§ / %	, & / %	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Line Line	St Jue	No. No.
Aspen	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	50	72
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	59
Herbaceous Openland	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
Low-Density Trees	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
Lowland Aspen/Balsam Poplar	0	64	0	129	0	0	0	0	0	31	0	0	0	0	0	0	0	9	233
Lowland Deciduous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	50
Lowland Shrub	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
Marsh	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	30
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	0	38	0	0	0	0	0	71	109
Sand, Soil	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10
Water	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Total	113	64	0	152	0	0	0	0	0	31	0	38	0	0	0	0	0	279	676



Report 2 – Treatment Summary

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

Acres of Harvest

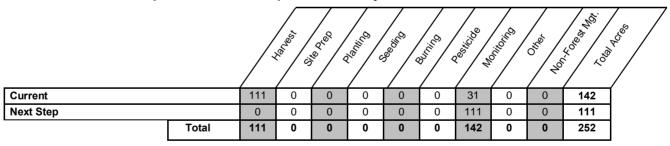
Compartment 29
Total Compartment Acres: 677

Commercial Harvest - 42 Harvests with Site Condition - 69 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method

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Aspen		6	0	0	0	0	0	0	0	0	6	ĺ
Lowland Deciduous		43	0	0	0	0	0	0	0	0	43	
Mixed Upland Deciduous	•	30	0	0	0	0	0	0	0	0	30	
Northern Hardwood	•	0	32	0	0	0	0	0	0	0	32	
_	Total	79	32	0	0	0	0	0	0	0	111	

Proposed and Next Step Treatments by Method



Sault Ste. Marie Mgt. Unit Report 3 -- Treatments Compartment: 29 s Year of Entry: 2020 а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type Approval** n Age Type Method Objective Name Structure **Status** d CoverType Density Age Range 45029004-Cut 43.0 6117 - Lowland Sawtimber 81 81-110 Harvest Clearcut with 611 - Lowland Uneven-Draft Field Deciduous, Mixed Well Retention Deciduous Aged Boundary Coniferous Forest **Habitat Cut: No** Site Condition: Survey Needed Prescription Harvest all trees to 4 inch DBH, except cedar, hemlock, pine, yellow birch, and any oak. Treatment acres will be reduced due to survey and wet Specs: areas. Follow BMP guidance for Trout streams, (300 ft buffer). Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable present species Regen: Other Comment: **Proposed Start Date:** 10/1 /2019 Draft Field 20.8 81 81-110 4199 - Other 45029006-Cut 4191 - Mixed Sawtimber Harvest Clearcut with Even-Aged **Upland Deciduous** Well Retention Mixed Upland Boundary with Conifer Deciduous **Habitat Cut: No** Site Condition: Survey Needed Prescription Harvest all trees except hemlock, cedar, pine, oak, and yellow birch. Buffer streams and gullies as needed, and follow Trout stream guidelines for eastern boundary along Rapson creek. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable Present species with MO being aspen and red maple. Regen: Other Comment: **Proposed Start Date:** 10/1 /2019 11 45029011-Cut 5.5 4136 - Aspen, Mixed Poletimber 81 51-80 Harvest Clearcut with 413 - Aspen Even-Aged Draft Field Conifer Well Retention Boundary **Habitat Cut: No** Site Condition: Survey Needed Prescription Harvest all trees except pine, cedar, yellow birch, and any hemlock and pine. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable Present species with MO of aspen.

Regen:

Other Comment:

Proposed Start Date: 10/1 /2019

45029022-Cut 60 81-110 Even-Aged Draft Field 9.6 4191 - Mixed Poletimber Clearcut with 4319 - Mixed Harvest **Upland Deciduous** Well Retention **Upland Forest** Boundary

with Conifer

Site Condition:

Prescription Harvest all species except white pine. If possible, create some brush piles when processing where practical to benefit hare, particularly along edges. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Habitat Cut: No

Acceptable Present species.

Regen: Other

Comment:

Proposed Start Date: 10/1 /2019

Sault Ste. Marie Mgt. Unit Report 3 -- Treatments Compartment: 29 s Year of Entry: 2020 а Approval **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** n Age Method Objective Name Density Age Range Structure **Status** d CoverType Type 45029023-Natural Regen 4199 - Other 23 8.2 330 - Low-Density Nonstocked 0 Unspec Monitoring Even-Aged Field Boundary Mixed Upland Monitor Trees ified (Intermediate) Deciduous **Habitat Cut: No Site Condition:** Prescription regen check as per the work instructions Specs: Next Step Treatments: Acceptable Acceptable regen includes aspen, birch, spruce, fir, maple, oak, pine. Regen: FTP C45-187 designates this stand as a Tribal sap collection area. Other Comment: Proposed Start Date: 10/1 /2022 Even-Aged Field Boundary 28 45029026-6.0 3303 - Mixed Low Nonstocked Unspec Monitoring Natural Regen 429 - Mixed Monitor **Density Trees** ified (Intermediate) **Upland Conifers Habitat Cut: No Site Condition:** Prescription regen check as per the work instructions. Specs: Next Step Treatments: Acceptable Acceptable regen includes spruce, fir, apsen, maple and pine. Regen: Other Percent to Treat = 100% Comment: **Proposed Start Date:** 10/1 /2022 27 45029027-16.5 310 - Herbaceous Nonstocked Unspec Monitoring Natural Regen 4319 - Mixed Even-Aged Field Boundary Monitor Openland ified (Intermediate) **Upland Forest Habitat Cut: No Site Condition:** Prescription Regen Check as per the work instructions. Specs: Next Step Acceptable Acceptable regen includes aspen, birch, maple, spruce, fir and pine. Regen: Other Percent to Treat = 100% Comment:

Treatments:

Proposed Start Date: 10/1 /2022

45029030-Cut 31.9 4119 - Mixed Poletimber 81-110 411 - Northern Draft Field Harvest Single Tree Uneven-Well Selection Hardwood Aged Boundary

Northern Hardwoods **Site Condition:**

Habitat Cut: No Prescription Mark individual trees for harvest, do not mark oak and white pine, leave 70-80 BA.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable present species

Regen: Other

Comment:

Proposed Start Date: 10/1 /2019

Total Treatment 141.5 Acreage Proposed:

Sault Ste. Marie Mgt. Unit

Jeff Wise: Examiner

Compartment: 29
Year of Entry: 2020

Availa	ability for	Managemer	nt					
Total	Acres	Acres Avail	Acres	D	ominaı	nt Sit	e Cond	itit
Acres	Available	With Condition	Not Available		21	3J	5E	
72	67	5	0	Aspen	5			
59	59	0	0	Cedar				
22	22	0	0	Herbaceous Openland			0	
35	35	0	0	Low-Density Trees				
232	193	0	40	Lowland Aspen/Balsam Poplar		9	31	
50	7	43	0	Lowland Deciduous	43			
22	22	0	0	Lowland Shrub				
13	13	0	0	Marsh				
30	10	21	0	Mixed Upland Deciduous	21			
109	70	39	0	Northern Hardwood	39			
6	6	0	0	Sand, Soil				
10	10	0	0	Upland Conifers				
15	15	0	0	Water				
677	529	108	40	Total Forested Acres	108	9	31	
	78%	16%	6%	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.

1 Unavailable Comments: 5E: Long-Term Retention 31 Unspecified Unspecified Unspecified Unspecified 2 Available Comments: 2I: Survey needed 6 2B: Unknown if access through adjacent landowner(s) is possible Unspecified Unspecified Unspecified Comments:	Site No.			Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
2 Available 2I: Survey needed 6 2B: Unknown if access Unspecified Unspecified Unspecified through adjacent landowner(s) is possible	1	Unavailable	5E: Long-Term Retention	31	Unspecified	Unspecified	Unspecified	Unspecified
through adjacent landowner(s) is possible		Comments:						
Comments:	2	Available	2l: Survey needed	6	through adjacent	Unspecified	Unspecified	Unspecified
	(Comments:						

Report 4 – Site Conditions

Sault Ste. Marie Mgt. Unit

Jeff Wise : Examiner

Compartment: 29 Year of Entry: 2020

3	through		2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified	Unspecified	
	Comments:						
4	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	9	2I: Survey needed	Unspecified	Unspecified	Unspecified
	Comments:						

Sault Ste. Marie Mgt. Unit

Compartment: 029
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	5
Comments				

Sault Ste. Marie Mgt. Unit Compartment: 29
Year of Entry 2020



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.

Conservati Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions stocked trout populations and those of other coldwater fish speconditions for coldwater fishes may occur in Michigan lakes if the groundwater inflows, or are located in colder (northern) areas of Director's action and designated as trout resources by Fisheries	cies to persist from year to year. Suitable ney are relatively deep, have substantial f the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen constocked trout populations and those of other coldwater fish speryear to year. Coldwater streams in Michigan typically provide the 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

s t				Report 7	- Forested	Stands Compartment: 29 Year of Entry: 2020
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	4119 - Mixed Northern Hardwoods	Poletimber Well	39.1	81	51-80	Hemlock grove in SW corner, scattered w pine, aspen in clones, ravine separates from stand 6, no legal access. Sparse in the north, only 50 BA.
3	4112 - Maple, Beech, Cherry Association	Sawtimber Well	38.4	104	51-80	Select cut in 2012, hemlock and cedar reserved, retention and unknown nest in NW corner.
4	6117 - Lowland Deciduous, Mixed Coniferous	Sawtimber Well	43.0	81	81-110	No legal access, large cedar and hemlock, open in some areas, low and wet in other areas.
5	6120 - Lowland Cedar	Poletimber Well	26.2	81	Unspecified	no legal access
6	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	20.8	81	81-110	No legal access, scattered w. pine and hemlock, drainage separates from st 2. Higher BA than stand 2.
8	6112 - Lowland Aspen	Sawtimber Well	8.6	81	Unspecified	No legal access, and would need a bridge.
9	6120 - Lowland Cedar	Poletimber Well	6.2	90	Unspecified	
10	6112 - Lowland Aspen	Sapling Well	64.1	6	Unspecified	Cut in 2012, cedar reserved, could be wet in some areas, lots of tag alder. 2017 Regeneration 100% of stand.
11	4136 - Aspen, Mixed Conifer	Poletimber Well	5.5	81	51-80	Leave for natural succession.
12	6112 - Lowland Aspen	Poletimber Well	31.0	84	Unspecified	Uncut part of stand 10 and stream buffer.
13	6118 - Lowland Deciduous with Cedar	Poletimber Medium	7.3	90	Unspecified	Tag alder swamp with trees, no change since last time.
14	6111 - Lowland Balsam Poplar	Sapling Well	21.7	25	Unspecified	Wet.
16	6120 - Lowland Cedar	Poletimber Well	26.9	90	Unspecified	
18	6111 - Lowland Balsam Poplar	Sapling Medium	107.0	22	Unspecified	
19	4130 - Aspen	Sapling Well	22.5	25	Unspecified	
21	4130 - Aspen	Sapling Well	44.1	37	1-50	Getting into pole size, south part has an area of cedar, black spruce, and tag alder.
22	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	9.6	60	81-110	Was part of stand 30 but has quite different canopy species.

s t	Sault Ste. Marie	Mgt. Unit		Report 1	– Forested	Year of Entry: 2020
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
29	42380 - Non Pine Upland Conifer, Mixed Deciduous	Poletimber Well	10.3	37	1-50	Getting into pole size, has an area of cedar, black spruce, and tag alder.
30	4119 - Mixed Northern Hardwoods	Poletimber Well	31.9	60	81-110	Lower BA than desired but could use a light thinning.

Compartment: 29 Year of Entry: 2020



Stand	Cover Type	Acres	Managed Site	General Comments:
1	6239 - Mixed Emergent Wetland	3.9	No	
7	6239 - Mixed Emergent Wetland	9.0	No	
15	6229 - Mixed lowland shrub	17.0	No	
17	6229 - Mixed lowland shrub	4.5	No	Beaver flooding, has become larger than previously mapped.
20	710 - Sand, Soil	5.7	No	Gravel pit
23	330 - Low-Density Trees	9.4		Stand was cut as part of Winberg Mix SBW 45-003-17 in May 2017. Scattered maple trees left in this stand, see Draft Treatment Notes.
24	500 - Water	15.0	No	
25	310 - Herbaceous Openland	5.7	No	
26	330 - Low-Density Trees	7.3		Stand was cut as part of Winberg Mix SBW 45-003-17 in May 2017. Scattered maple trees were left.
27	310 - Herbaceous Openland	16.7		Stand was cut as part of Winberg Mix SBW 45-003-17 in June 2017. Scattered maple trees left in the southern portion of this stand.
28	3303 - Mixed Low Density Trees	18.6	No	This stand was an opening filling in with spruce and fir. It was cut as part of Winberg Mix SBW 45-003-17 in June 2017. Look at this stand when inventoried and determine if a follow up treatment will be needed to keep it non forested or if we are okay with it filling in with trees again. Survey corner in NE part along pvt. South half was another stand before both were cut.