



# Compartment Review Presentation

Sault Ste. Marie Forest Management Unit

Compartment 45115

Entry Year 2019

Acreage: 1,875

County Mackinac

Management Area: Mackinac Mix

**Revision Date:** 2017-07-05

**Stand Examiner:** Cory Luoto

**Legal Description:**

T43N-R6W Sections 27, 28 & 29; Moran Township

**Identified Planning Goals:**

This compartment lies approximately 4½ miles north of Brevort. Management in this compartment is limited by access and merchantability. The western portion is marginal hardwood ground that has been harvested within the last twenty years. The white pine and hemlock regeneration within these stands is doing phenomenal. The rest is primarily swamp conifer. There is one small northern hardwood stand in the northeast corner that can be included with the compartment to the north when it is ready for harvest.

**Soil and topography:**

Lowlands and swamps consist primarily of Markey and Carbondale mucks, with Markey-Spot-Finch and Spot-Finch complexes. Uplands are generally Paquin sand and Paquin-Finch sands. Level lowlands to rolling uplands.

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

Compartment is completely surrounded by state land. The SENW of section 27 is privately owned and landlocked.

**Unique Natural Features:**

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 Bald Eagles have been documented in this area.

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

None noted.

**Special Management Designations or Considerations:**

None noted.

**Watershed and Fisheries Considerations:**

The Little Brevoort River is found in this compartment and supports a fish community of brook trout, pearl dace, northern redbelly dace, Iowa darter, brook stickleback and sculpin spp. This compartment is in both the Northern Lake Huron watershed and the Northern Lake Michigan Watershed. Since there are no treatments prescribed in this compartment, NLHMU has no comments.

**Wildlife Habitat Considerations:**

Compartment 115 is part of the Mackinac Mix Management Area where featured wildlife species include black bear, pileated woodpecker, ruffed grouse, snowshoe hare, and white-tailed deer. Cedar stands are dominant in this compartment, although northern hardwoods and white pine are also common. Hemlock is a common component in northern hardwoods and white pine stands. Hemlock, white pine, and cedar will be maintained where they exist, providing cover for a variety of wildlife species ranging from black bear and snowshoe hare to migratory birds. Regenerating hardwoods treated during the last entry will increase age class diversity in the long term while providing food and cover resources for some species including wintering deer in the southwestern part of the compartment. Streams and ponds will remain intact as habitat for beaver and other wetland wildlife. Snags and other woody debris common in various locations will be left to provide habitat for species ranging from woodpeckers to marten.

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

Sand/gravel pits are not located in the area and potential appears to be limited. There may be limestone/dolostone potential, but geologic information for the area is lacking. There is no current economic oil and gas production in the UP and there is no known metallic mineral potential in this region.

**Vehicle Access:**

The western portion is accessed from the Brevort River Road. The northern portion is accessed from the Dells Mills Road. Access to the interior of the compartment is very difficult to completely non-existent

**Survey Needs:**

None.

**Recreational Facilities and Opportunities:**

Bear hunting is common along Dells Mills and Brevort River Road Road. There is potential for trapping and deer, rabbit, and game bird hunting where access permits. Limited access makes actual recreational use within this compartment minimal.

**Fire Protection:**

This compartment has lower fire intensity potential with the hardwood stands and lowlands. The problem of ground fire does exist in this portion of the compartment.

**Additional Compartment Information:**

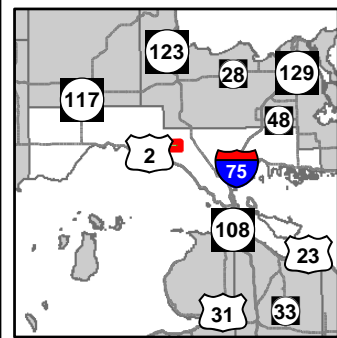
**The following reports from the Inventory are attached:**

- 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:**

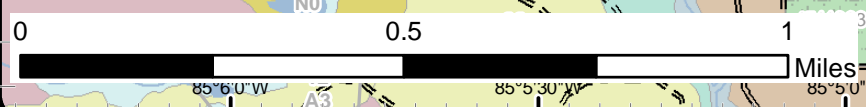
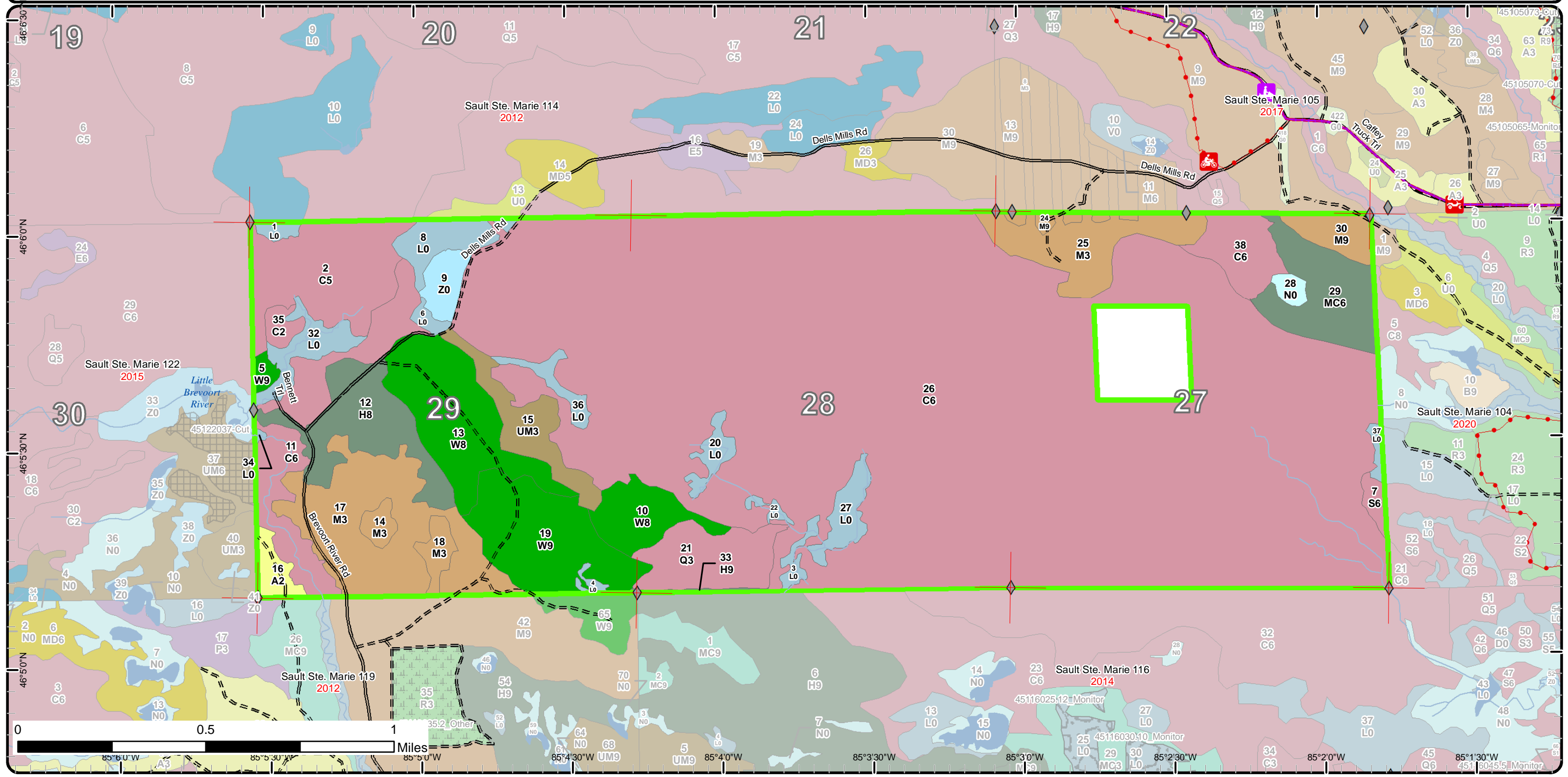
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Cover Type & Treatments Map



Compartment: 115  
 T43N, R06W, Sec: 27-29  
 County: Mackinac  
 Unit: Sault Ste. Marie  
 Mgmt Area: Mackinac Mix  
 YOE: 2019  
 Acres: 1,875 GIS Calculated  
 Examiner: Cory Luoto  
 Map Revised: 7/30/2018  
 Map Phase: Post Review

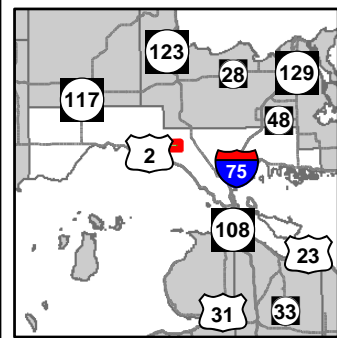
- Miris Corners
- ◆ Field Grade Corners
- Counties
- DNR - Primary Forest Road
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- 🏍️ Motorcycle Trails (DNR License)
- 🛵 ORV Routes
- 🛷 Snowmobile Trails
- ORV License & Trail Permit
- - - Designated ORV Route
- Designated Snowmobile Trails
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Compartment Boundary
- 411 - Northern Hardwood
- 413 - Aspen
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 430 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- Lakes



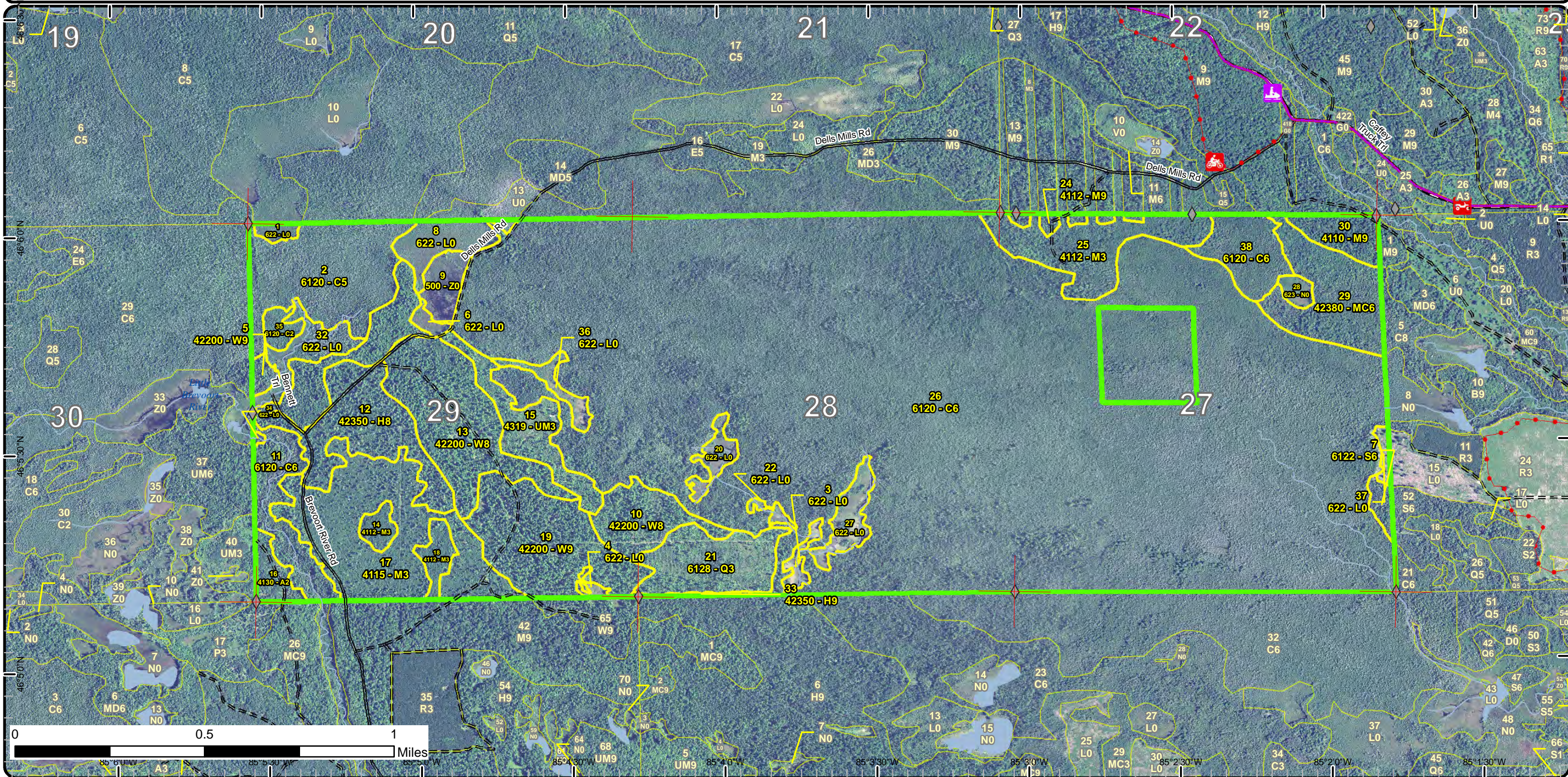
85°16'0"W 85°13'0"W 85°10'0"W 85°7'0"W 85°4'0"W 85°1'0"W 85°0'0"W 85°30'0"W 85°33'0"W 85°36'0"W 85°39'0"W 85°42'0"W 85°45'0"W 85°48'0"W 85°51'0"W 85°54'0"W 85°57'0"W 85°60'0"W  
 46°50'0"N 46°53'0"N 46°56'0"N 46°59'0"N 47°0'0"N 47°3'0"N 47°6'0"N 47°9'0"N 47°12'0"N 47°15'0"N 47°18'0"N 47°21'0"N 47°24'0"N 47°27'0"N 47°30'0"N 47°33'0"N 47°36'0"N 47°39'0"N 47°42'0"N 47°45'0"N 47°48'0"N 47°51'0"N 47°54'0"N 47°57'0"N 48°0'0"N

# Stand Boundary Map

Compartment: 115  
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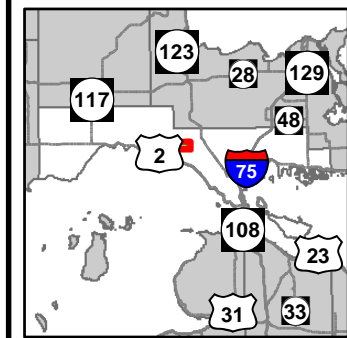


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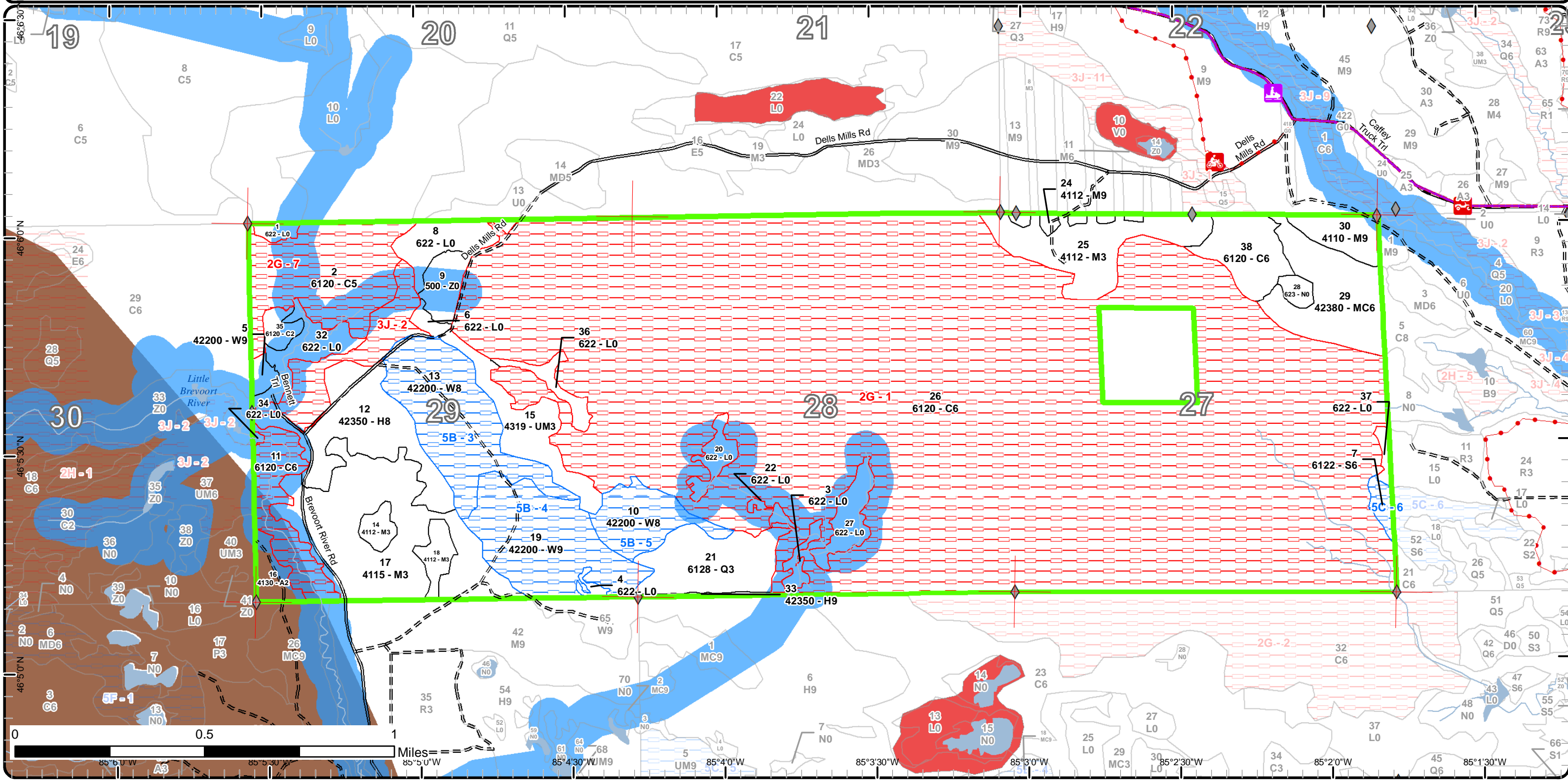


# Special Conservation Areas & Site Conditions Map

Compartment: 115  
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- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 5B: Maintain for regeneration purposes
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 2G: Too wet (sensitive soils, does not include access issues)
- 3J: Water quality / BMPs (stream, river, or lake)
- Stand Boundaries
- Ecological Reference Areas
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer
- Deer Winter Range



Report 1 – Total Acres by Cover Type and Age Class



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Cedar	0	0	0	0	5	0	0	0	62	0	23	0	0	0	0	0	1219	0	1309
Hemlock	0	0	0	0	0	0	0	0	0	0	0	0	2	48	0	0	0	0	50
Lowland Conifers	0	0	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
Lowland Shrub	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
Marsh	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Northern Hardwood	0	0	86	0	54	0	0	0	0	18	0	0	0	0	0	0	0	0	158
Upland Conifers	0	0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	0	0	42
Upland Mixed Forest	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
Water	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
White Pine	0	0	0	0	0	0	0	0	0	0	0	0	0	61	60	28	0	0	149
<b>Total</b>	<b>92</b>	<b>0</b>	<b>147</b>	<b>9</b>	<b>59</b>	<b>42</b>	<b>0</b>	<b>0</b>	<b>62</b>	<b>0</b>	<b>41</b>	<b>5</b>	<b>0</b>	<b>2</b>	<b>109</b>	<b>60</b>	<b>1247</b>	<b>0</b>	<b>1874</b>



## Report 2 – Treatment Summary

**Sault Ste. Marie Mgt. Unit**  
**Year of Entry: 2019**

**Compartment 115**  
**Total Compartment Acres: 1,875**

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### Acres of Harvest

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

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S t 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
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#Type!

**Habitat Cut:**PrescriptionSpecs:Next StepTreatments:AcceptableRegen:OtherComment:Proposed Start Date:**Site Condition:**

<b>Total Treatment Acreage Proposed:</b>	<b>0.0</b>
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## Report 4 – Site Conditions

Sault Ste. Marie Mgt. Unit

Cory Luoto : Examiner

Compartment: 115

Year of Entry: 2019

### Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	5B	5C	2G	3J
		With Condition	Not Available					
9	9	0	0	Aspen				
1310	28	0	1281	Cedar			1,225	56
50	50	0	0	Hemlock				
35	35	0	0	Lowland Conifers				
76	76	0	0	Lowland Shrub				
5	0	5	0	Lowland Spruce/Fir		5		
4	4	0	0	Marsh				
158	158	0	0	Northern Hardwood				0
42	42	0	0	Upland Conifers				
26	26	0	0	Upland Mixed Forest				
11	11	0	0	Water				
149	3	145	0	White Pine	145			
1,875	443	150	1,281	Total Forested Acres	145	5	1,225	56
	24%	8%	68%	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
1	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	1,163	5F: Evaluated for Forest Health Considerations	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
2	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	56	5F: Evaluated for Forest Health Considerations	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

**Report 4 – Site Conditions**

Sault Ste. Marie Mgt. Unit

Cory Luoto : Examiner

Compartment: 115

Year of Entry: 2019

3	Available	5B: Maintain for regeneration purposes	61	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
4	Available	5B: Maintain for regeneration purposes	60	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
5	Available	5B: Maintain for regeneration purposes	24	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
7	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	62	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
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Comments

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## 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.

ERA = Ecological Reference Area  
 HCVA = High Conservation Value Area  
 SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	6120 - Lowland Cedar	Poletimber Medium	61.9	76	51-80	Stand is extremely wet. A lot of the tamarack that appeared healthy last entry is now dead. Lots of beaver activity in the vicinity.
5	42200 - Natural White Pine	Sawtimber Well	3.5	152	141-170	Isolated sand ridge loaded with huge white pine. Really nice stand in the middle of alot of poor ground.
7	6122 - Black Spruce	Poletimber Well	4.6	107	111-140	The north part of the stand was cut in 2016. A majority of the stand is in the compartment to the east.
10	42200 - Natural White Pine	Sawtimber Medium	24.3	154	1-50	The white pine and hemlock are a little heavier in this stand than the stand to the north, also the white pine and hemlock regen is a more prevalent.
11	6120 - Lowland Cedar	Poletimber Well	56.0	154	141-170	Cedar stand that is the corridor for the Little Brevort River.
12	42350 - Upland Hemlock	Sawtimber Medium	47.5	133	1-50	Hemlock and white pine regen doing great. This is a sound example of how successful Shelterwood cuts can be to regenerate white pine and hemlock in this area.
13	42200 - Natural White Pine	Sawtimber Medium	61.1	133	1-50	White pine hemlock shelterwood. Regen is doing great. Numerous white pine and hemlock saplings. Also the red maple and yellow birch are coming back nicely.
14	4112 - Maple, Beech, Cherry Association	Sapling Well	5.3	36	1-50	Really thick maple and cherry regen.
15	4319 - Mixed Upland Forest	Sapling Well	26.3	13	1-50	The large operatory is white pine hemlock. Very mixed regeneration. Stand look good.
16	4130 - Aspen	Sapling Medium	9.2	21	Immature	Aspen regen is spotty in some places. Overall this stand is doing ok.
17	4115 - Y.Birch, Hemlock NH	Sapling Well	85.5	15	Immature	This area is a great example of doing Shelterwood in this area. Nice amounts of white pine, hemlock, yellow birch and red maple regen.
18	4112 - Maple, Beech, Cherry Association	Sapling Well	7.6	36	1-50	Very thick mixed hardwood regen. The sugar maple look the healthiest.
19	42200 - Natural White Pine	Sawtimber Well	60.1	147	81-110	Heavier hemlock and white pine residual than in stand 13 and 10. Regen doing great.
21	6128 - Lowland Coniferous, Mixed Deciduous	Sapling Well	34.9	15	1-50	A mixed lowland stand. Tamarack is the largest component now.
24	4112 - Maple, Beech, Cherry Association	Sawtimber Well	4.7	92	81-110	This stand was thinned with the compartment to the north.

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Sault Ste. Marie Mgt. Unit

## Report 7 – Forested Stands

Compartment: 115  
Year of Entry: 2019

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
<b>25</b>	4112 - Maple, Beech, Cherry Association	Sapling Well	40.9	37	1-50	Extremely dense mixed hardwood stand.
<b>26</b>	6120 - Lowland Cedar	Poletimber Well	1,163.3	162	111-140	Part of a large cedar complex. There are patches of other species throughout the stand but it is all pretty much cedar.
<b>29</b>	42380 - Non Pine Upland Conifer, Mixed Deciduous	Poletimber Well	42.2	45	51-80	This is a Mackinac mix stand that is heavier to spruce and balsam. The southern portion has more red maple.
<b>30</b>	4110 - Sugar Maple Association	Sawtimber Well	13.6	94	81-110	This stand is part of a larger stand in the adjacent compartments. Put this up with stand 9 in comp 105.
<b>33</b>	42350 - Upland Hemlock	Sawtimber Well	2.3	129	81-110	Small part of a large stand in the compartment to the south.
<b>35</b>	6120 - Lowland Cedar	Sapling Medium	5.4	37	1-50	Stand was flooded years ago and killed all of the trees. Now the cedar is coming back really good.
<b>38</b>	6120 - Lowland Cedar	Poletimber Well	23.1	92	81-110	Wetter cedar mix stand. Water is pretty deep in some spots.



Stand	Cover Type	Acres	Managed Site	General Comments:
1	622 - Lowland Shrub	3.1	No	Lots of beaver activity.
3	622 - Lowland Shrub	4.3	No	
4	622 - Lowland Shrub	2.0	No	
6	622 - Lowland Shrub	2.9	No	
8	622 - Lowland Shrub	16.5	No	
9	500 - Water	11.0	No	
20	622 - Lowland Shrub	7.4	No	
22	622 - Lowland Shrub	2.2	No	Humongous cedar stand! There are patches of other species throughout the stand but it is all pretty much cedar.
27	622 - Lowland Shrub	12.1	No	
28	623 - Emergent Wetland	3.9	No	
32	622 - Lowland Shrub	15.6	No	
34	622 - Lowland Shrub	0.6	No	
36	622 - Lowland Shrub	7.1	No	
37	622 - Lowland Shrub	2.7		Small part of a stand that was cut in 2016. A majority of the stand is in the compartment to the east.