



# Compartment Review Presentation

Sault Ste. Marie Forest Management Unit

Compartment 45155

Entry Year 2019

Acreage: 1,905

County Mackinac

Management Area: Mackinac Mix

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**Revision Date:** 2017-08-03

**Stand Examiner:** Steve Touvila

**Legal Description:**

T44N-R8W Sections 15, 16 & 17; Hudson Township

**Identified Planning Goals:**

This compartment is located 3 miles north of Garnet, along the Borgstrom Road. The area is largely a swamp type with some upland areas of aspen/birch/maple. There are also some red pine plantations within the compartment, and bordering to the south. One red pine plantation with a very full hardwood understory was cut in 2016 with the objective to naturally revert back to a mixed deciduous stand. Mixed upland and aspen types have good age class diversity so far, with cuttings done over the past 4 decades. Two small lowland mixed stands are proposed to be harvested to enhance age class diversity while retaining the existing cedar within these stands. Two red pine stands in the southeast corner of the compartment are proposed for treatment, one being a final harvest and replanting to red pine and the other being a third-row thinning. Two stands in the northern part of the compartment are proposed for harvest enhance age class diversity. West of Borgstrom road a treatment is proposed in half of a mixed deciduous stand to enhance age class diversity in that area.

**Soil and topography:**

The large low swamp occupying depressions and/or nearly level areas is primarily Markey and Carbondale mucks, with some Markey-Spot-Finch complex to the north along Borgstrom Road. The northwest bog area (closed depressions) is comprised of Dawson and Loxley peats. The mixed upland ridges consist of Paquin-Spot complex, and cover nearly level and undulating areas with areas of depressions. The rolling to steep areas along the north side of the marshes is Pullup fine sand. The hardwood and pine area along the southern boundary are nearly level and undulating areas, and are comprised of Springlake loamy coarse sand, with a little band of Heinz sandy loam along the cedar swamp. And finally, the low ridges in the west central end of the compartment are Finch-Dawson-Pullup complex.

**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:**

None noted. There is a potential for rare, threatened, or endangered plant and animal species within the compartment.

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

None noted.

**Special Management Designations or Considerations:**

The compartment is entirely within a deer wintering complex.

**Watershed and Fisheries Considerations:**

Fisheries Values: Minimal

Fisheries Concerns: This compartment contains headwaters to the East Branch Sage River. A small tributary to the Sage drainage exists and is classified as a coldwater stream in the valley segment classification system. This is not a designated trout stream. Standard buffers should be applied in stands with treatments of aspen. All proposed treatments for this YOE are buffered appropriately.

**Wildlife Habitat Considerations:**

This compartment 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. It is part of deer wintering complex. Cedar stands are most common followed by aspen and mixed deciduous types. Cedar and mixed lowland conifer stands will be left to provide cover for wintering deer. Aspen and mixed deciduous stands will be managed to provide age class diversity while maintaining early successional habitat for grouse, woodcock, snowshoe hare, deer, and a variety of other species.

Hemlock and cedar will be retained to maintain diversity and cover. Treatments will take place during the winter months so tops are available as browse for wintering deer.

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

Sand/gravel pits are located in the area including state pits currently leased to the county road commission in sections 20, 21, & 28. There may be additional sand and gravel potential within the compartment. There is some potential for high-purity (high-calcium) limestone beneath the compartment. Graymont's proposed underground mine is located just to the south and Hendricks Quarry is located a couple of miles to the northwest. However, based on what is known of the Graymont mine area, the Fiborn Limestone is likely too deep here to be economical to mine. 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:**

Decent vehicle access exists for the upland areas of the compartment. Borgstrom Road, an all season county road, runs north-south between sections 16 and 17. Giddings Road, a DNR gravel road, accesses the eastern portion of the compartment. Weasel Road, a DNR gravel road; and Pat Road, a DNR sand road, accesses the southern and northern portions of section 15 respectively. Old Hendricks Road (Dollar Lake Road) snakes along upland ridges west of Borgstrom Road and out through the bog. Hemlock Ridge Road, a DNR sand road, picks up mid-way through Old Hendricks Road and heads west towards Cranberry Lake Road. A few other two-tracks exist, mainly accessing old timber sales.

### **Survey Needs:**

None needed for timber sale purposes; however, some bearing trees (and corners?) may have been lost during road construction on Borgstrom Road.

### **Recreational Facilities and Opportunities:**

Snowmobile trail number 2 crosses Borgstrom Road just to the south of the compartment boundary and continues westerly along Old Hendricks Road (Dollar Lake Road) and Hemlock Ridge Road. The ORV trail winds in and out of the compartment along the southern boundary. Other recreational opportunities include hunting all types of game species, bird watching, mushroom and berry picking, and photography.

### **Fire Protection:**

Protection would be adequate to most of the upland areas as they are located along well traveled routes. The exception would be the upland area located off the end of the Pat Road. This area would take longer to access, but the road system is in place to start from. The areas of heavier, lowland soils may be harder to access depending on where the fire was to occur, and may pose mop-up difficulties. Hudson Township Fire Hall is located 4 miles away.

### **Additional Compartment Information:**

None.

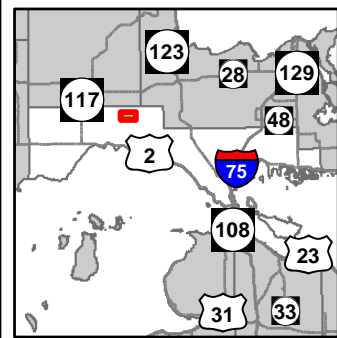
### **The following reports from the Inventory are attached:**

- 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:**

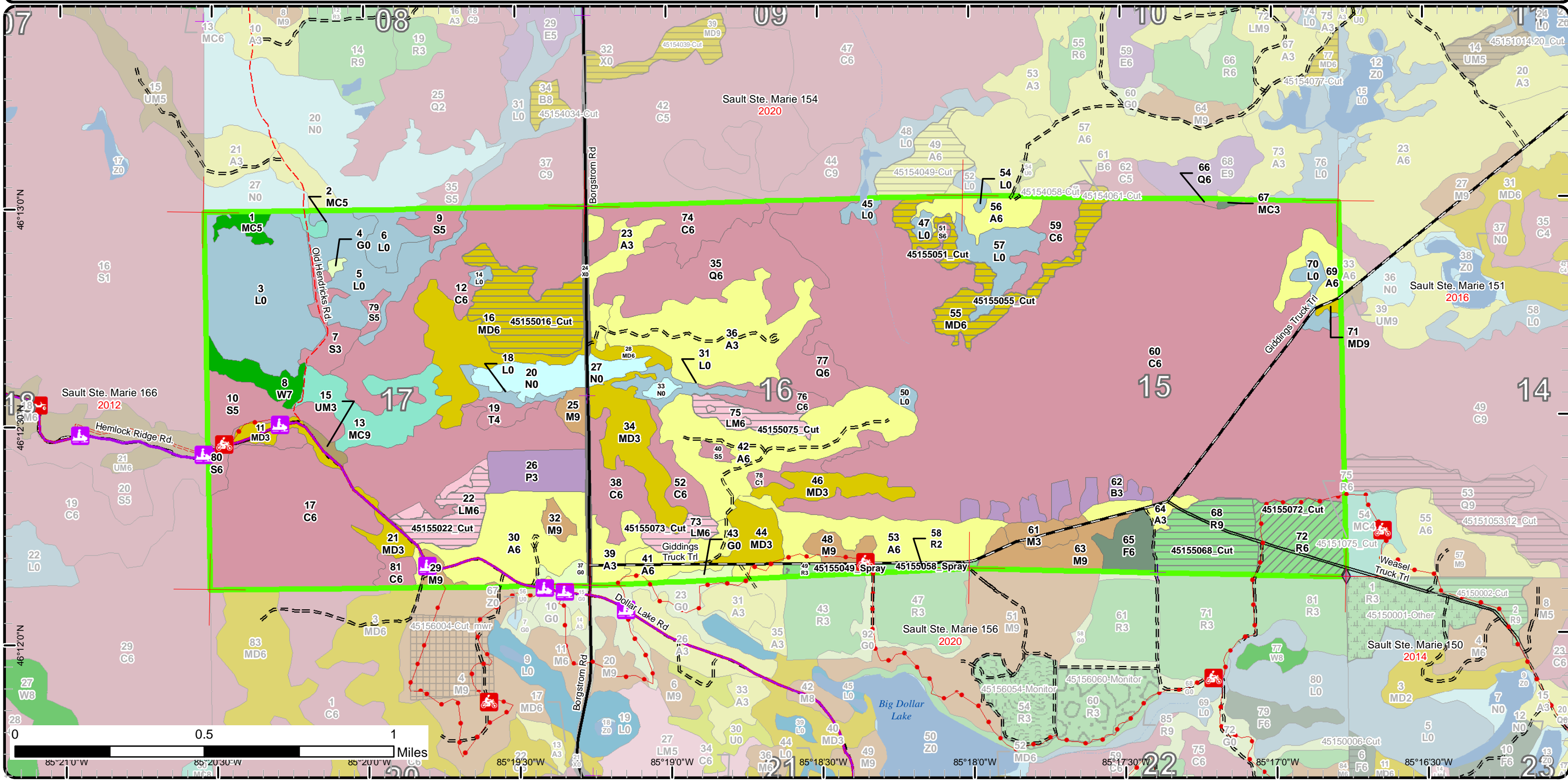
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Cover Type & Treatments Map



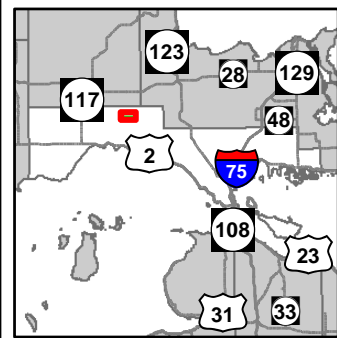
Compartment: 155  
 T44N, R08W, Sec: 15-17  
 County: Mackinac  
 Unit: Sault Ste. Marie  
 Mgmt Area: Mackinac Mix  
 YOE: 2019  
 Acres: 1,905 GIS Calculated  
 Examiner: Steve Touvila  
 Map Revised: 7/30/2018  
 Map Phase: Post Review

- Miris Corners
- Remonumented Section Corners
- Field Grade Corners
- Counties
- DNR - Primary Forest Road
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- Federal / State - Dirt / Gravel Road
- County - Dirt Road (Seasonal)
- Motorcycle Trails (DNR License)
- ORV Routes
- Snowmobile Trails
- ORV License & Trail Permit
- Designated ORV Route
- Designated Snowmobile Trails
- Intermittent Stream
- Island in Lake or River
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Compartment Boundary
- Clearcut (w/Reserves)
- Pesticide
- Thinning (Crown, Low, Systematic)
- 411 - Northern Hardwood
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 122 - Roads/Parking Lot
- 310 - Herbaceous Openland
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- Lakes

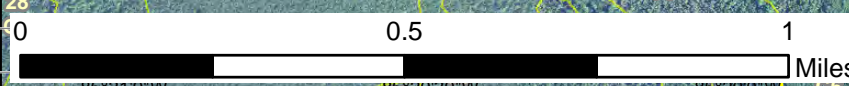
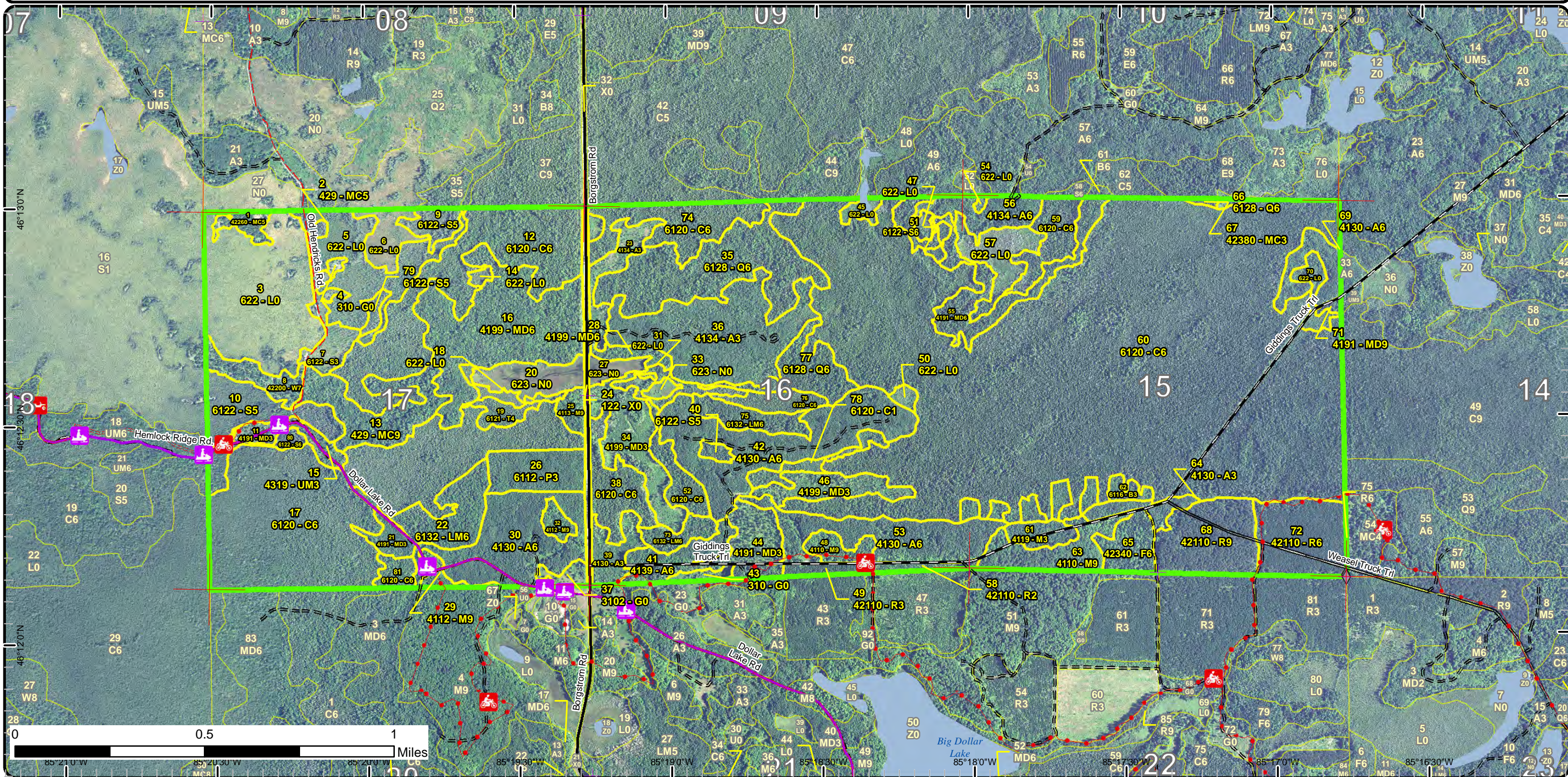


# Stand Boundary Map

Compartment: 155  
 T44N, R08W, Sec: 15-17  
 County: Mackinac  
 Unit: Sault Ste. Marie  
 Mgmt Area: Mackinac Mix  
 YOE: 2019  
 Acres: 1,905 GIS Calculated  
 Examiner: Steve Touvila  
 Map Revised: 7/30/2018  
 Map Phase: Post Review



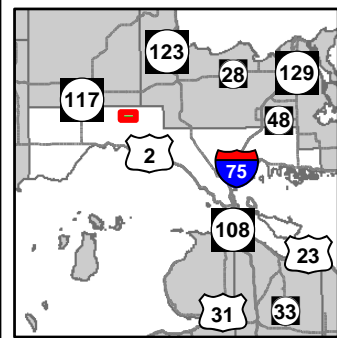
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- County - Dirt Road (Seasonal)
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- 🚙 ORV Routes
- 🚙 Snowmobile Trails
- ORV License & Trail Permit
- Designated ORV Route
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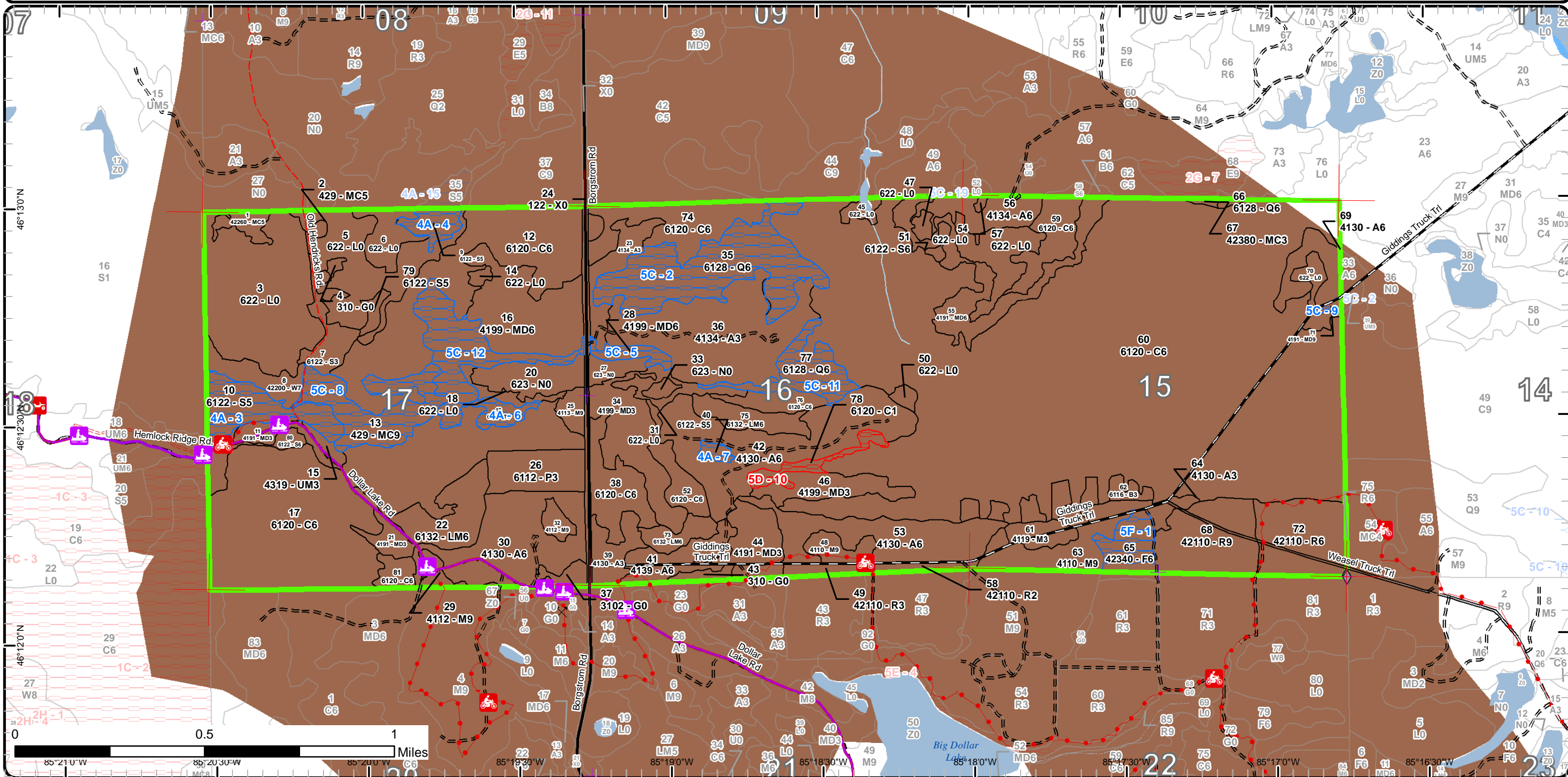
85°21'0"W 85°20'30"W 85°20'0"W 85°19'30"W 85°19'0"W 85°18'30"W 85°18'0"W 85°17'30"W 85°17'0"W 85°16'30"W 85°16'0"W

# Special Conservation Areas & Site Conditions Map

Compartment: 155  
 T44N, R08W, Sec: 15-17  
 County: Mackinac  
 Unit: Sault Ste. Marie  
 Mgmt Area: Mackinac Mix  
 YOE: 2019  
 Acres: 1,905 GIS Calculated  
 Examiner: Steve Touvila  
 Map Revised: 7/30/2018  
 Map Phase: Post Review



- Miris Corners
- Remonumented Section Corners
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- Counties
- DNR - Primary Forest Road
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- Designated Snowmobile Trails
- Intermittent Stream
- Island in Lake or River
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 4A: No Markets Available for these Forest Products
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 5D: Unproductive Forest Land
- Stand Boundaries
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer
- Deer Winter Range
- Sand or Gravel Pit



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	24	0	60	190	0	0	0	0	0	0	0	0	0	0	0	0	0	274
Cedar	0	0	0	0	0	0	0	0	0	0	0	772	0	106	15	0	0	0	893
Herbaceous Openland	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Lowland Aspen/Balsam Poplar	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Lowland Conifers	0	0	0	0	0	0	0	0	0	72	0	1	0	0	0	0	0	0	73
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	18	20	0	0	0	0	0	38
Lowland Shrub	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	155
Lowland Spruce/Fir	0	12	0	0	0	0	3	7	0	32	0	0	0	0	0	0	0	0	54
Marsh	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Mixed Upland Deciduous	0	61	0	7	0	0	0	71	1	29	0	0	0	0	0	0	0	0	169
Natural Mixed Pines	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5
Northern Hardwood	0	0	0	0	7	0	0	0	0	32	0	7	0	0	0	0	0	0	46
Paper Birch	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Red Pine	0	0	4	5	30	0	0	0	0	31	0	0	0	0	0	0	0	0	70
Tamarack	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	5
Upland Conifers	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	28	0	31
Upland Mixed Forest	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Upland Spruce/Fir	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	12
Urban	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
White Pine	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	11
<b>Total</b>	<b>194</b>	<b>97</b>	<b>5</b>	<b>74</b>	<b>258</b>	<b>0</b>	<b>15</b>	<b>83</b>	<b>8</b>	<b>196</b>	<b>0</b>	<b>809</b>	<b>20</b>	<b>106</b>	<b>15</b>	<b>0</b>	<b>28</b>	<b>0</b>	<b>1908</b>



## Report 2 – Treatment Summary

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

Acres of Harvest

Compartment 155  
Total Compartment Acres: 1,905

Commercial Harvest - 163  
Harvests with Site Condition - 0  
Next Step Harvest - 0  
Habitat Cut - 0

### Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Lowland Mixed Forest	34	0	0	0	0	0	0	0	0	34
Lowland Spruce/Fir	2	0	0	0	0	0	0	0	0	2
Mixed Upland Deciduous	66	0	0	0	0	0	0	0	0	66
Red Pine	31	0	0	0	0	30	0	0	0	61
<b>Total</b>	<b>133</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>163</b>

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	163	0	0	0	0	9	0	0	0	171
Next Step	0	31	31	0	31	70	233	0	0	395
<b>Total</b>	<b>163</b>	<b>31</b>	<b>31</b>	<b>0</b>	<b>31</b>	<b>78</b>	<b>233</b>	<b>0</b>	<b>0</b>	<b>566</b>



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
16	45155016_Cut	37.3	4199 - Other Mixed Upland Deciduous	Poletimber Well	67	111-140	Harvest	Clearcut with Retention	4191 - Mixed Upland Deciduous with Conifer	Even-Aged	Draft Field Boundary

**Habitat Cut: No****Site Condition:**

Prescription Winter cut (Dec.1-March 31) so tops are available as browse to wintering deer. Cut all deciduous 2" or more and conifer 4" or more. Leave a healthy representative mature tree spaced every 75'. Don't cut any red pine, cedar, white pine or hemlock. Actual treatment size will be based on any field line adjustments. Stay out of any of the small hemlock groves and don't reach in for trees there. Stay on bottom of hill on southwest and south side of treatment area.

Next Step Monitoring, Natural Regen (Intermediate)  
Treatments:

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

Regen:

Other  
Comment:

Proposed Start Date: 10/01/2018

22	45155022_Cut	16.4	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	114	111-140	Harvest	Clearcut with Retention	613 - Lowland Mixed Forest	Two-Aged	Draft Field Boundary
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**Habitat Cut: No****Site Condition:**

Prescription Winter cut (Dec.1-March 31) so tops are available as browse to wintering deer. Cut all deciduous 2" or more and conifer 4" or more. Leave a healthy representative mature tree spaced every 75'. Only cut cedar if needed for operation and stay out of any thicker cedar areas. Be sure to mark some paper birch and/or aspen with red paint as part of the red line in wind protected areas to leave as some retention for budding trees and leave a few out of the sale if possible. Don't cut any yellow birch, white pine or hemlock. Actual treatment size will be based on any field line adjustments.

Next Step Monitoring, Natural Regen (Intermediate)  
Treatments:

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

Regen:

Other Leave scattered brush piles for rabbit habitat.

Comment:

Proposed Start Date: 10/01/2018

49	45155049_Spray	4.7	42110 - Planted Red Pine	Sapling Well	22	Immature	Pesticide	Aerial	42111 - Planted Red Pine, Mixed Deciduous	Even-Aged	Draft Field Boundary
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**Habitat Cut: No****Site Condition:**

Prescription Manage with larger stand in Compartment 156. Monitor for RHPS and spray when/if necessary. Aerial spray with pesticide recommended by Forest Health Specialist/TMS (previously Dimlin has been used). Could spray with backpack or mist blower if populations are small enough.

Next Step Monitoring, Herbicide Use; Pesticide, Aerial  
Treatments:

Acceptable RP

Regen:

Other Part of larger stand to the south in Compartment 156. Planted in 1996; released twice. FTP C44-395. Some scattered dead red pine present.  
Comment: Misc hardwood species are acceptable within this pine plantation. Old next step comments: Continue to monitor for sawfly.

Proposed Start Date: 12/12/2016





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
51	45155051_Cut	1.8	6122 - Black Spruce	Poletimber Well	85	111- 140	Harvest	Clearcut with Retention	6122 - Black Spruce	Even-Aged	Draft Field Boundary

**Habitat Cut: No****Site Condition:**

Prescription Winter cut (Dec.1-March 31) so tops are available as browse to wintering deer. Cut all deciduous 2" or more and conifer 4" or more. Leave a healthy representative mature tree spaced every 75'. Don't cut white pine. Buffer a tree length around any vernal ponds.

Next Step Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Black spruce, balsam fir, cedar, tamarack, white pine, hemlock, aspen, and maple.

Other Comment: Part of Double Trouble Mix which was terminated. Old red line still there but refresh if needed. Cut with stand 55 and with stands in compartment 154 due to access.

Proposed Start Date: 10/04/2017

55	45155055_Cut	28.8	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	80	111- 140	Harvest	Clearcut with Retention	4199 - Other Mixed Upland Deciduous	Even-Aged	Draft Field Boundary
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**Habitat Cut: No****Site Condition:**

Prescription Winter cut (Dec.1-March 31) so tops are available as browse to wintering deer. Cut all deciduous 2" or more and conifer 4" or more. Don't cut cedar, white pine, or hemlock. Leave a healthy representative mature tree spaced every 75'. Be sure to mark some paper birch and/or aspen with red paint as part of the red line in wind protected areas to leave as some retention for budding trees and leave a few out of the sale if possible. Leave some wolfy aspen and buffer a tree length around any vernal ponds.

Next Step Monitoring, Natural Regen (Intermediate)

Acceptable Regen: Aspen, maple, cherry, beech, yellow and paper birch, ironwood, balsam fir, white spruce, black spruce, cedar, tamarack, hemlock, and white pine.

Other Comment: Cut this stand and stand 51 with the treatments in compartment 154 (stands 34, 39, 49, 58, 61, and 77) due to access. This was a sale that didn't sell (Double Trouble Mix 451021001). Treatment size may vary due to ground conditions, old line still there and may need to refresh line.

Proposed Start Date: 10/04/2017

58	45155058_Spr ay	3.9	42110 - Planted Red Pine	Sapling Medium	15	Immatu re	Pesticide	Aerial	42111 - Planted Red Pine, Mixed Deciduous	Even-Aged	Draft Field Boundary
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**Habitat Cut: No****Site Condition:**

Prescription Monitor for release and spray with appropriate herbicide where/if necessary. Monitor for RHPS and spray when/if necessary with appropriate insecticide (previously have used Dimlin). Aerial spray when/if needed with pesticide recommended by Forest Health Specialist/TMS. Could spray with backpack or mist blower if area is too small for aerial spraying.

Next Step Monitoring, Herbicide Use; Pesticide, Aerial

Acceptable Regen: RP

Other Comment: RP plantation planted in 2003. Released in 2005. Unit was not burned prior to trenching and planting. FTP C44-521. RP about 2' - 3' tall. Old next step comments: Continue to check regeneration if necessary. Continue to monitor for release needs. Continue to monitor for RHPS and other pests, and spray if necessary. Although this is a red pine plantation, some levels of aspen/maple/cherry are acceptable. Currently the red pine doesn't have full canopy cover due to its age.

Proposed Start Date: 12/12/2016



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
68	45155068_Cut	30.6	42110 - Planted Red Pine	Sawtimber Well	81	141-170	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary

**Habitat Cut: No****Site Condition:**

Prescription Cut all conifers and deciduous to 2" diameter for preparation of replanting. Retention of red pine is not needed due to aerial spray safety concerns. ORV trail runs on east edge of sale so add trail spec to sale.

Next Step Burn, Slash; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Herbicide Use; Pesticide, Aerial;  
Treatments: Monitoring, Artificial Regen(3yr); Monitoring, Herbicide Use; Pesticide, Aerial

Acceptable Regen: red pine

Other Comment:

Proposed Start Date: 10/01/2018

72	45155072_Cut	30.0	42110 - Planted Red Pine	Poetimber Well	34	171-200	Harvest	Systematic Thinning	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
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**Habitat Cut: No****Site Condition:**

Prescription Red pine third row thin. Cut all species within each third row. ORV trail runs through stand so add trail protection spec.

Next Step  
Treatments:

Acceptable Regen:

Other Comment:

Proposed Start Date: 10/01/2018

73	45155073_Cut	7.2	6132 - Mixed Lowland Forest with Cedar	Poetimber Well	103	141-170	Harvest	Clearcut with Retention	613 - Lowland Mixed Forest	Two-Aged	Draft Field Boundary
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**Habitat Cut: No****Site Condition:**

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Next Step Monitoring, Natural Regen (Intermediate)  
Treatments:

Acceptable Regen: Aspen, maple, cherry, beech, yellow and paper birch, balsam fir, white spruce, hemlock, white pine and cedar

Other Comment:

Proposed Start Date: 10/01/2018

75	45155075_Cut	10.6	6132 - Mixed Lowland Forest with Cedar	Poetimber Well	101	Unspecified	Harvest	Clearcut with Retention	613 - Lowland Mixed Forest	Two-Aged	Draft Field Boundary
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**Habitat Cut: No****Site Condition:**

Prescription Winter cut (Dec.1-March 31) so tops are available as browse to wintering deer. Cut all deciduous 2" or more and conifer 4" or more. Leave a healthy representative mature tree spaced every 75'. Only cut cedar if needed for operation and stay out of any thicker cedar areas. Be sure to mark some paper birch and/or aspen with red paint as part of the red line in wind protected areas to leave as some retention for budding trees and/or leave a few out of the sale if possible. Don't cut any white pine or hemlock.

Next Step Monitoring, Natural Regen (Intermediate)  
Treatments:

Acceptable Regen: Aspen, balsam poplar, maple, cherry, beech, yellow and paper birch, balsam fir, white spruce, black spruce, cedar, tamarack and white pine.

Other Comment:

Proposed Start Date: 10/01/2018



Stand	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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Total Treatment  
Acreage Proposed: 171.3

## Report 4 – Site Conditions

Sault Ste. Marie Mgt. Unit

Steve Touvila : Examiner

Compartment: 155

Year of Entry: 2019

### Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	4A	5C	5F	5D
		With Condition	Not Available					
273	273	0	0	Aspen		0		
892	885	0	7	Cedar				7
7	7	0	0	Herbaceous Openland				
18	18	0	0	Lowland Aspen/Balsam Poplar				
73	1	72	0	Lowland Conifers		72		
38	38	0	0	Lowland Mixed Forest				
155	155	0	0	Lowland Shrub	0			
54	24	30	0	Lowland Spruce/Fir	30			
21	21	0	0	Marsh				
168	134	35	0	Mixed Upland Deciduous		35		
5	5	0	0	Natural Mixed Pines				
45	45	0	0	Northern Hardwood				
13	13	0	0	Paper Birch				
69	69	0	0	Red Pine				
5	0	5	0	Tamarack	5			
31	3	28	0	Upland Conifers		28		
2	2	0	0	Upland Mixed Forest				
12	0	12	0	Upland Spruce/Fir			12	
9	9	0	0	Urban				
11	11	0	0	White Pine				
1,905	1,715	183	7	Total Forested Acres	36	135	12	7
	90%	10%	0%	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	Dominant Site Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Available		5F: Evaluated for Forest Health Considerations	12	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>								

Report 4 – Site Conditions

Sault Ste. Marie Mgt. Unit

Steve Touvila : Examiner

Compartment: 155

Year of Entry: 2019

2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	55	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
3	Available	4A: No Markets Available for these Forest Products	21	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
4	Available	4A: No Markets Available for these Forest Products	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
5	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Available	4A: No Markets Available for these Forest Products	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
7	Available	4A: No Markets Available for these Forest Products	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

**Report 4 – Site Conditions**

Sault Ste. Marie Mgt. Unit

Steve Touvila : Examiner

Compartment: 155

Year of Entry: 2019

8	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	28	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
9	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
10	Unavailable	5D: Unproductive Forest Land	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
11	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	17	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
12	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	29	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.



Stand	Sault Ste. Marie Mgt. Unit		Report 7 – Forested Stands			Compartment: 155 Year of Entry: 2019	
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	
1	42260 - Natural Pine, Mixed Deciduous	Poletimber Medium	5.2	63	51-80	Upland island surrounded by bog.	
2	429 - Mixed Upland Conifers	Poletimber Medium	2.2	73	51-80	Semi-open spots with thick spruce along edges. Upland to transition ground to bog.	
7	6122 - Black Spruce	Sapling Well	11.9	6	Immature		
8	42200 - Natural White Pine	Sawtimber Poor	10.6	103	1-50		
9	6122 - Black Spruce	Poletimber Medium	6.8	84	1-50		
10	6122 - Black Spruce	Poletimber Medium	21.3	83	51-80	Spruce - boggy area - edges thicker. Basal area varies somewhat and averages around 50. Trees are smaller to the west.	
11	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	6.8	6	Immature	Cut in 2012. ORV trail runs through the stand. Small hemlock grove in southern part of stand.	
12	6120 - Lowland Cedar	Poletimber Well	71.4	124	Unspecified		
13	429 - Mixed Upland Conifers	Sawtimber Well	28.3	156	81-110	Large hemlock and white pine with paper birch and red maple mixed in. East side of stand is a U shaped ridge with large hemlock and white pine.	
15	4319 - Mixed Upland Forest	Sapling Well	2.4	26	Unspecified	Small cut area. Thick mixed regeneration.	
16	4199 - Other Mixed Upland Deciduous	Poletimber Well	65.8	67	111-140	Rolling terrain with ridge on southern peninsula that also extends east along southern border of wetland.	
17	6120 - Lowland Cedar	Poletimber Well	146.2	103	141-170	Some upland micro sites throughout stand.	
19	6121 - Tamarack	Poletimber Poor	5.4	75	1-50	Low, boggy tamarack and cedar - some with dead tops. Edge of marsh with usually high water table.	
21	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	6.7	26	Immature	Thick regeneration coming back but small yet.	
22	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	19.5	114	111-140	Good looking stand with nice cedar and large paper birch and red maple.	
23	4134 - Aspen, Spruce/Fir	Sapling Well	13.1	5	Immature	Cut in 2013.	





	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
25	4113 - R.Maple, Conifer	Sawtimber Well	4.6	87	81-110	Large red maple over mainly balsam understory and patches of cedar. Evidence of thinning and especially heavy in south half of stand-good amount of red maple and balsam fir regeneration in south half. Low areas within stand.
26	6112 - Lowland Aspen	Sapling Well	17.9	34	1-50	Similar stand to the south, but on lower ground. Outer strips cut in 1974; inner strip cut in 1984.
28	4199 - Other Mixed Upland Deciduous	Poletimber Well	5.1	67	81-110	High steep ridge along wetland.
29	4112 - Maple, Beech, Cherry Association	Sawtimber Well	4.2	89	81-110	Part of larger stand to the south in compartment 156. The few paper birch have died off. Balsam regen is heavier on small knob north of road.
30	4130 - Aspen	Poletimber Well	44.4	33	1-50	Majority of stand cut in 1985. Portion south of Old Hendricks road cut in 1992. Good aspen regeneration entering poled size with a good amount at 5-7" dbh.
32	4112 - Maple, Beech, Cherry Association	Sawtimber Well	3.8	85	81-110	
34	4199 - Other Mixed Upland Deciduous	Sapling Well	26.2	5	Immature	Stand cut in 2013. Good regeneration coming in.
35	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	54.9	86	81-110	Variable stand with large mix. Some tag alder areas. Paper birch and all species are healthy looking.
36	4134 - Aspen, Spruce/Fir	Sapling Well	59.9	26	Unspecified	Beech was left after harvest - scattered - most succumbing to BBD. A few aspen just into pole size.
38	6120 - Lowland Cedar	Poletimber Well	18.6	103	141-170	Cedar with mature paper birch. Some tag alder areas.
39	4130 - Aspen	Sapling Well	10.7	7	Immature	Cut in 2011.
40	6122 - Black Spruce	Poletimber Medium	2.2	83	1-50	Small bog spruce type in middle of aspen stand.
41	4139 - Aspen, Mixed Deciduous	Poletimber Well	14.7	37	51-80	Cut in 1981 and 1983, with residual trees left. Good regeneration.
42	4130 - Aspen	Poletimber Well	57.2	32	1-50	Good looking stand. Well stocked with good regeneration entering pole size.
44	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	13.7	2	1-50	Super canopy of red pine.
46	4199 - Other Mixed Upland Deciduous	Sapling Well	14.2	7	Immature	Cut in 2011.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
48	4110 - Sugar Maple Association	Sawtimber Well	6.9	103	51-80	
49	42110 - Planted Red Pine	Sapling Well	4.7	22	Immature	Planted in 1996.
51	6122 - Black Spruce	Poletimber Well	1.8	85	111-140	Small bog spruce stand within larger aspen/birch stand. Should harvest with adjacent stand due to access.
52	6120 - Lowland Cedar	Poletimber Well	10.2	103	171-200	Cedar with mature paper birch. Some tag alder areas.
53	4130 - Aspen	Poletimber Well	39.5	37	51-80	On edge between sapling and pole. Narrow opening inclusions. Small hardwood inclusions. Some hard maple logs left - scattered. Also, some older aspen scattered. Area south of Giddings road was cut in 1983.
55	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	28.8	80	111-140	Aspen old and dying. Some slash from dead balsam.
56	4134 - Aspen, Spruce/Fir	Poletimber Well	14.5	36	1-50	Some pockets of low tag alder ground in center and eastern edge of the stand.
58	42110 - Planted Red Pine	Sapling Medium	3.9	15	Immature	Planted in 2003. Released in 2005. Unit was not burned prior to trenching and planting. FTP C44-521. RP about 12-15' tall.
59	6120 - Lowland Cedar	Poletimber Well	14.7	131	141-170	Boggy, low ground. Beavers have flooded edges over the years.
60	6120 - Lowland Cedar	Poletimber Well	585.0	103	1-50	Large low swamp type. Pockets of blowdown and root sprung trees. Some higher microsites scattered in stand; as well as poorer pole/tag alder sites.
61	4119 - Mixed Northern Hardwoods	Sapling Well	7.1	30	1-50	Some transitional ground and some scattered cedar that were left uncut from the timber sale. Good regeneration coming in.
62	6116 - Lowland Birch	Sapling Well	13.4	31	1-50	Old strip cedar cuts. Filling in nicely with birch but not a lot of cedar regeneration.
63	4110 - Sugar Maple Association	Sawtimber Well	18.9	88	81-110	Good looking stand with age class diversity entering this stand. Some 18"+ sugar maple.
64	4130 - Aspen	Sapling Well	7.6	37	1-50	On edge between sapling and pole. Good regeneration coming in.
65	42340 - Upland Spruce/Fir	Poletimber Well	12.1	53	81-110	Pockets of balsam fir have blown down in the last 5-10 years.
66	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	0.9	107	141-170	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
67	42380 - Non Pine Upland Conifer, Mixed Deciduous	Sapling Well	0.8	15	Immature	Small part of larger stand in Comp 154 (Pat Road Popple). This portion not as much regen as large part of cut to the north. More of an open hill with scattered trees that drops into low ground.
68	42110 - Planted Red Pine	Sawtimber Well	30.6	81	141-170	Ready for final harvest, could also be thinned again but recommend final harvest as diameters are getting too big. Lots of hardwood sub-canopy, cut down to 2" to prepare for planting.
69	4130 - Aspen	Poletimber Well	12.0	33	1-50	Good stand regeneration.
71	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	1.2	71	111-140	Small upland, including similar small stand in adjacent compartment (151) that was left when stand on other side of the road was harvested.
72	42110 - Planted Red Pine	Poletimber Well	30.0	34	171-200	Red pine averages as four stick trees. Rows about 8' apart. Rows run east-west. Cherry is scattered throughout stand. Other misc species primarily on west and north edges. Originally planted in 1980. Due to diseased stock it was replanted in 1984. ORV trail runs along western and northern edges of stand. Ready for third row thinning.
73	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	7.2	103	141-170	Stand was separated out from larger stand. The larger stand has graduated to two cedar stands.
74	6120 - Lowland Cedar	Poletimber Well	26.2	127	111-140	A few scattered micro upland sites.
75	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	11.0	101	Unspecified	Lowland area with mature trees. The quaking aspen and balsam poplar are large and mature. A few small blow down areas.
76	6120 - Lowland Cedar	Poletimber Well	7.9	123	141-170	Cedar is smaller in northern 1/3 of stand.
77	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	17.4	82	111-140	Descent stand with some blowdown along stand 36 edge midway up the stand. Lots of balsam fir regeneration in the blowdown area.
78	6120 - Lowland Cedar	Sapling Poor	7.2	101	Unspecified	Low area with a lot of tag alder and a few scattered balsam poplar and black spruce.
79	6122 - Black Spruce	Poletimber Medium	2.7	56	51-80	
80	6122 - Black Spruce	Poletimber Well	7.4	69	81-110	
81	6120 - Lowland Cedar	Poletimber Well	5.1	103	141-170	Some upland micro sites throughout stand.



Stand	Cover Type	Acres	Managed Site	General Comments:
3	622 - Lowland Shrub	66.0	No	
4	310 - Herbaceous Openland	1.0	No	
5	622 - Lowland Shrub	35.1	No	
6	622 - Lowland Shrub	10.2	No	
14	622 - Lowland Shrub	1.5	No	
18	622 - Lowland Shrub	4.1	No	
20	623 - Emergent Wetland	14.2	No	
24	122 - Road/Parking Lot	9.5	No	
27	623 - Emergent Wetland	5.0	No	
31	622 - Lowland Shrub	7.2	No	
33	623 - Emergent Wetland	2.1	No	
37	3102 - Grass	3.6	No	
43	310 - Herbaceous Openland	2.9	No	
45	622 - Lowland Shrub	3.2	No	
47	622 - Lowland Shrub	2.1	No	
50	622 - Lowland Shrub	2.2	No	
54	622 - Lowland Shrub	0.7	No	
57	622 - Lowland Shrub	16.4	No	



Stand	Cover Type	Acres	Managed Site	General Comments:
70	622 - Lowland Shrub	6.1	No	