



Compartment Review Presentation

Grayling Forest Management Unit

Compartment 72218

Entry Year 2020

Acreage: 1,061

County Crawford

Management Area: AuSable Outwash

Revision Date: 2018-06-27

Stand Examiner: Sarah Itchue

Legal Description:

T27N R3W Sections 28, 29 and 30

Identified Planning Goals:

To maintain species diversity while also addressing sustainability, forest health, productivity, wildlife habitat requirements, aesthetics and best management practices. Furthermore, to provide for multiple use and military training needs as allowed by the twenty year management agreement.

Soil and topography:

Topography within this compartment is flat to very gently rolling with some ridges existing in the northern portions of section 30. As far as landforms present, this area consists of low flat's, depressions and drainage ways where saturated soils persists and upland ridges coupled with outwash plains on higher ground within compartment. This area is located near numerous tributaries to the east branch of the Ausable River and therefore Tawas-Leafriver mucks persist as the main soil type throughout. This soil type is characterized very poorly drained with highwater tables common throughout the year. Equipment limitation, seedling mortality and windthrow are the most common major management concerns. Other areas within the compartment consist mainly of Grayling/Graycalm sands that are characterized by being somewhat excessively drained with rapid permeability. Major management concerns include equipment limitations and seedling mortality. These soils are mainly found in the northern portions of sections 29 and 30 as well as within the state land boundary of section 28. High water tables persist in many of these areas as evidenced by certain ground flora species that are present throughout.

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

The majority of this compartment is contiguous state land with blocks of private ownership mainly concentrated along M-93 and to the eastern portions of the compartment along the east branch of the AuSable River. Recreation is quite popular in this area with fishing, hunting and camping being quite common. Wildlife viewing is also a major form of recreation in this region. The Grayling DNR Field Office is located within the compartment near the junction of M-93 and I-75. Military lease lands are present in sections 29 and 30.

Unique Natural Features:

The East Branch of the AuSable River along with many tributaries run through or directly adjacent to this compartment. This has created a great deal of densely wooded areas providing excellent habitat for numerous species of wildlife. The compartment is also located directly south of Hartwick Pines State Park which contains much of the old growth white pine and hemlock forests of the lower peninsula

Archeological, Historical, and Cultural Features:

Special Management Designations or Considerations:

There is potential for dry prairie plants in grassy openings to include pine barren's species of Hill's thistle, rough fescue, Alleghany plum and pale agoseris. There also is potential for pine barren's species including dusted skipper, grizzled skipper and red-legged spittlebug to be present in these openings. Warbler species will be found in the young jack pine stands that abound in the western areas of this compartment. There is also the potential for eastern massasauga rattler, wood turtle and loon to exist within the riparian zones of this compartment. Bald Eagle have been documented in this area.

Watershed and Fisheries Considerations:

The East Branch of the AuSable River and accompanying tributaries exist within this compartment. This watercourse supports healthy populations of trout and is managed and designated as a Natural River and one of the main tributaries to the storied AuSable River.

Wildlife Habitat Considerations:

A multitude of wildlife species abound in this area due to the diverse forest types present along with plentiful sources of

water throughout the area.

Mineral Resource and Development Concerns and/or Restrictions

Mineral development is limited in this area because of wetland/watercourse issues and subsequent setbacks that are required. Surface sediments consist of ice-contact and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is the Marshall Sandstone. The Marshall was previously used as a building stone. A gravel pit is located in Section 20 and potential is good on the upland areas. None of the Compartment is currently leased for oil and gas development.

Vehicle Access:

Access to the entire compartment is adequate. The swamp areas that are adjacent to M-93 and Lewiston Grade Road create access issues. This provides nice roadless areas where foot access is required.

Survey Needs:

Survey records are good for this area.

Recreational Facilities and Opportunities:

The Grayling non-motorized trail corridor is in the road right of way along Hartwick Pines Road (M-93). Snowmobile Trails #47 occurs along the southern edge of section 30, then uses Lewiston Grade in section 29. In the winter a seasonal parking lot off Wilcox Bridge Road is available for a staging. The Shore to Shore equestrian trail utilizes the county roads in Section 29 before joining the power line corridor in the east half of section 29. Due to the proximity to Grayling this compartment receives heavy dispersed recreational use occurs throughout the year for hunting game, mushroom or berry picking, and wildlife viewing.(A.2018)

Fire Protection:

Jack pine and red pine are common in localized areas of this compartment and therefore fire is a potential risk and concern in this area.

Additional Compartment Information:

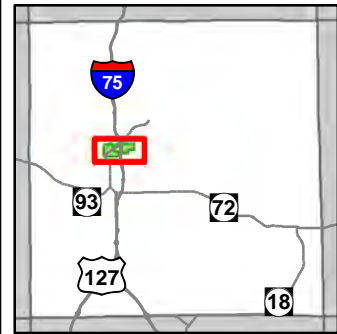
The following reports from the Inventory are attached:

- 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:

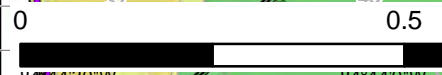
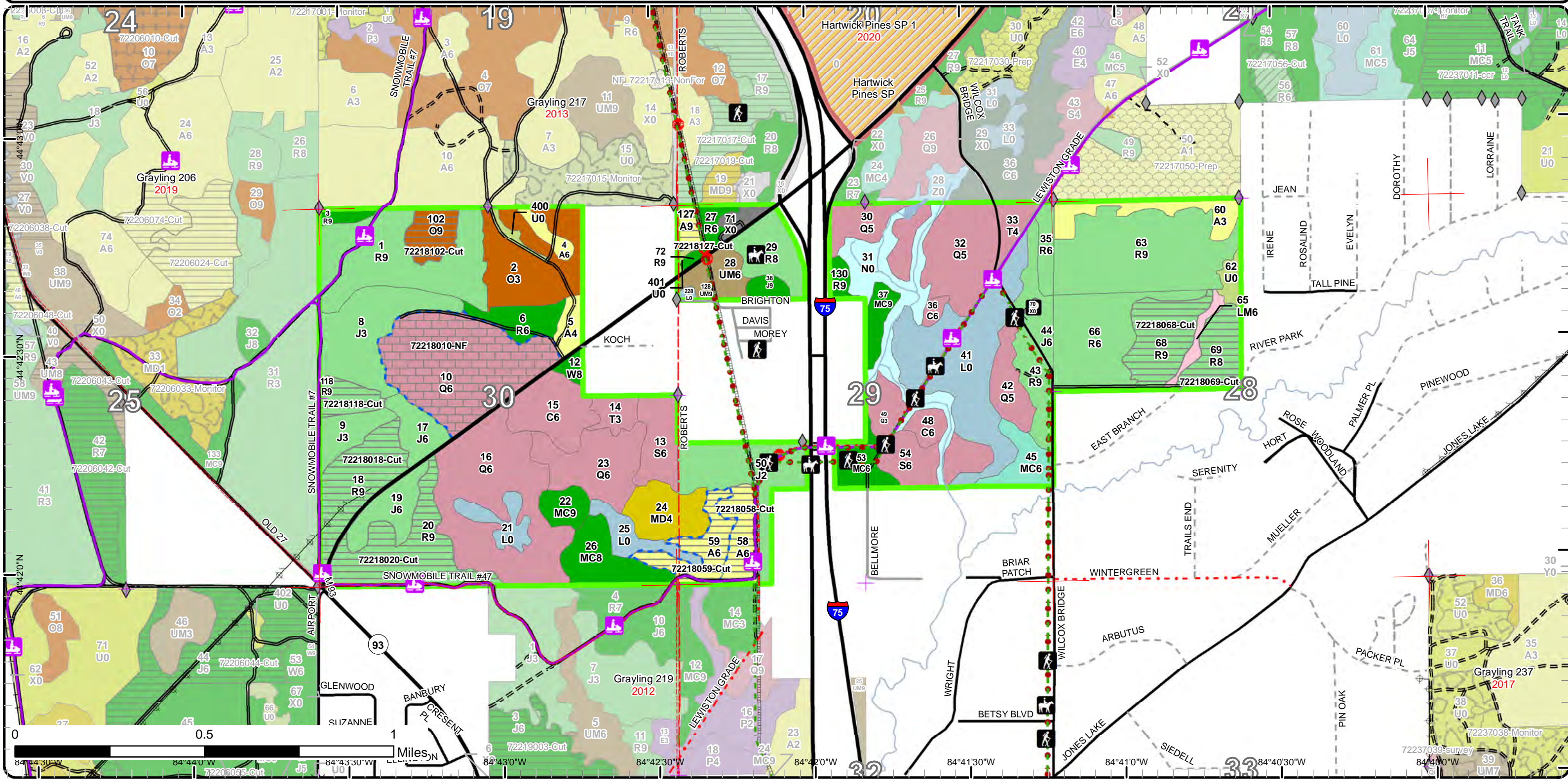
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map



Compartment: 218
 T27N, R03W, Sec. 28-30
 County: Crawford
 Unit: Grayling
 Mgmt Area: AuSable Outwash
 YOE: 2020
 Acres: 1,061 GIS Calculated
 Examiner: Sarah Itchue
 Map Revised: 1/28/2019
 Map Phase: Post-Review

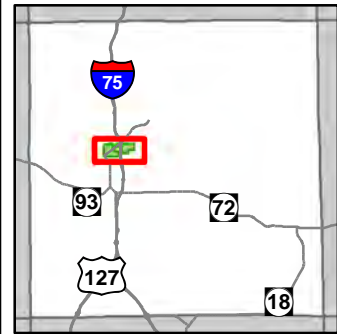
- Miris Corners
- Remonumented Section Corners
- ◆ Field Grade Corners
- Counties
- DNR - Secondary Forest Road
- == DNR - Forest Access Route
- Federal / State Highway
- Federal / State / County - Paved Road
- - - Federal / State - Dirt / Gravel Road
- . - . County - Gravel Road
- - - County - Dirt Road (Seasonal)
- Private - Paved Road
- - - Private - Dirt / Gravel Road
- Active Railroads
- Hiking Trails
- Horse Trails
- Snowmobile Trails
- Designated Hiking Trails
- Designated Equestrian Trails
- Designated ORV Route
- Designated Snowmobile Trails
- ▲ Berms
- P Parking Lot
- Sign
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Pipeline
- Powerline
- Compartment Boundary
- Clearcut (w/Reserves)
- Habitat Structures
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 122 - Roads/Parking Lot
- 320 - Upland Shrub
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- Lakes
- Camp Grayling Gates
- Camp Grayling Fence
- Camp Grayling Tank Trail



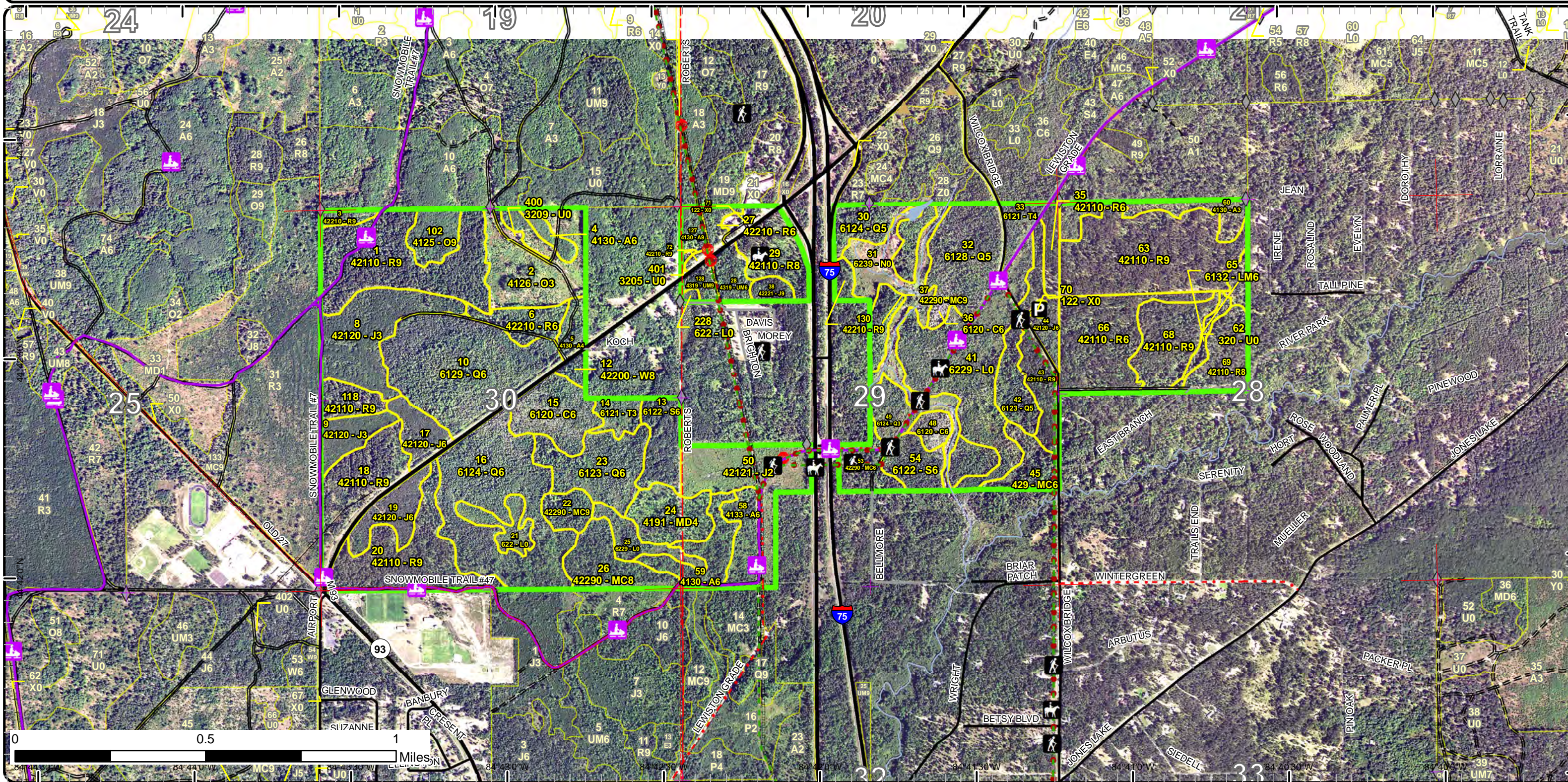
84°44'30"W 84°44'0"W 84°43'30"W 84°43'0"W 84°42'30"W 84°42'0"W 84°41'30"W 84°41'0"W 84°40'30"W

Stand Boundary Map

Compartment: 218
 T27N, R03W, Sec. 28-30
 County: Crawford
 Unit: Grayling
 Mgmt Area: AuSable Outwash
 YOE: 2020
 Acres: 1,061 GIS Calculated
 Examiner: Sarah Itchue
 Map Revised: 1/28/2019
 Map Phase: Post-Review

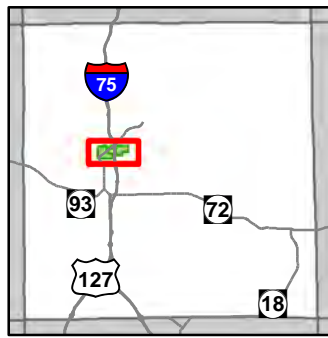


- Miris Corners
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- Counties
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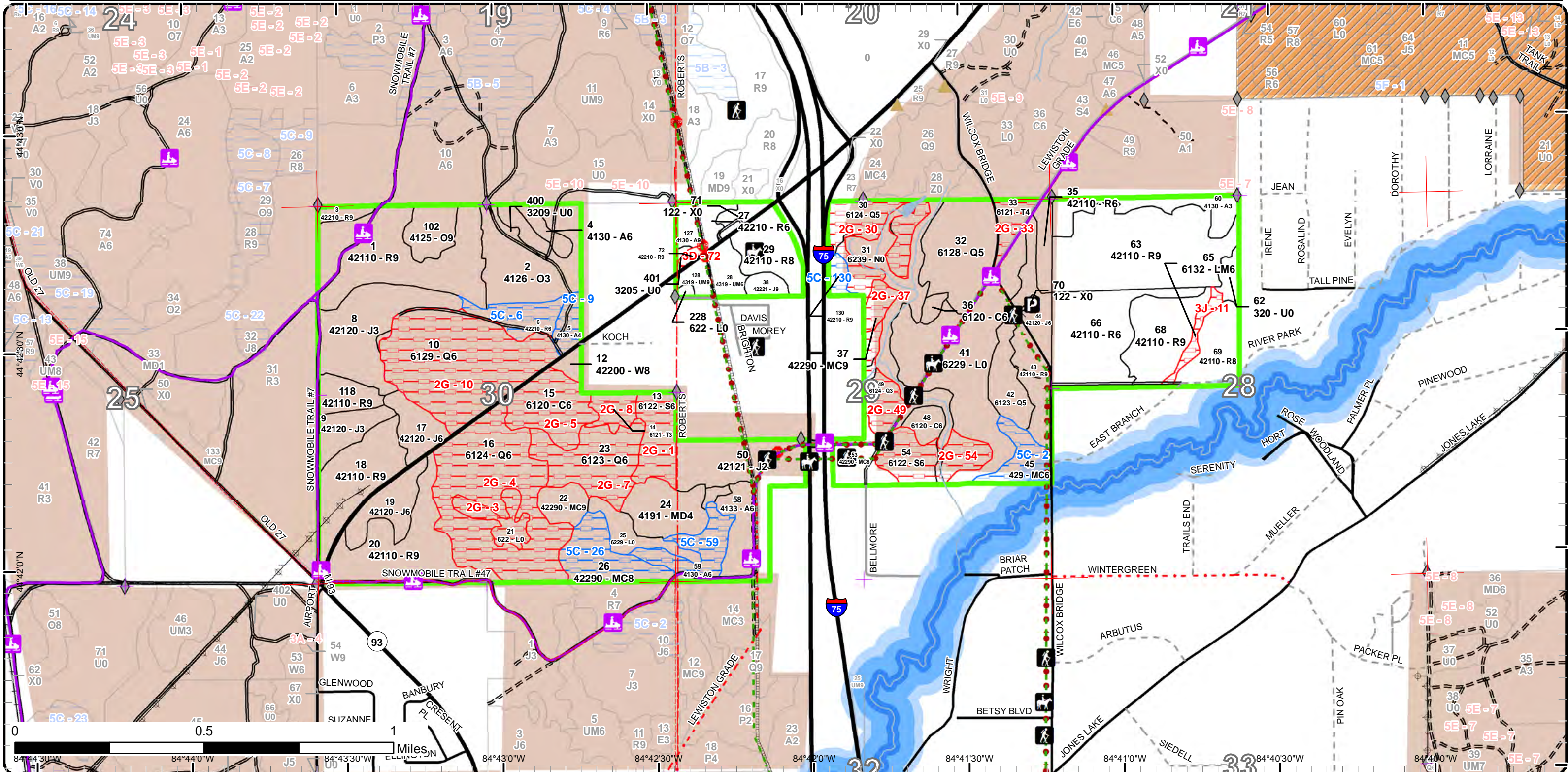


Special Conservation Areas & Site Conditions Map

Compartment: 218
 T27N, R03W, Sec. 28-30
 County: Crawford
 Unit: Grayling
 Mgmt Area: AuSable Outwash
 YOE: 2020
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- Horse Trails
- Snowmobile Trails
- Designated Hiking Trails
- Designated Equestrian Trails
- Designated ORV Route
- Designated Snowmobile Trails
- Berms
- Parking Lot
- Sign
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Pipeline
- Powerline
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 2G: Too wet (sensitive soils, does not include access issues)
- 3D: Recreational / Scenic values
- 3J: Water quality / BMPs (stream, river, or lake)
- Stand Boundaries
- Natural Rivers Vegetative Buffer
- Natural Rivers Zoning District
- Eastern Massasauga Managed Land
- Cold Water Streams
- High Priority Trout Stream Buffer
- Research, Development, and Military Lands
- Camp Grayling Gates
- Camp Grayling Fence
- Camp Grayling Tank Trail



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	15	0	18	0	6	0	0	21	0	0	0	0	0	0	0	0	60
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	21	7	0	0	0	0	28
Jack Pine	0	33	11	34	13	11	11	0	4	0	0	0	0	0	0	0	0	0	116
Lowland Conifers	0	0	0	0	0	12	0	30	0	91	0	27	0	0	0	0	0	63	223
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4
Lowland Shrub	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	0	15	0	19	0	0	0	0	0	34
Marsh	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
Mixed Upland Deciduous	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Natural Mixed Pines	0	0	0	0	0	0	0	0	19	0	0	0	19	7	0	0	0	0	45
Oak	0	36	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	46
Red Pine	0	0	0	0	0	7	59	54	66	46	37	39	4	11	0	0	0	0	323
Tamarack	0	0	0	0	7	0	0	0	0	0	0	7	0	0	0	0	0	0	14
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	11
Upland Mixed Forest	0	0	0	0	0	0	0	4	0	8	0	0	0	0	0	0	0	0	12
Upland Shrub	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Urban	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
White Pine	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
Total	125	69	44	34	38	30	76	88	89	181	52	84	66	25	0	0	0	63	1062



Report 2 – Treatment Summary

Grayling Mgt. Unit

Year of Entry: 2020

Acres of Harvest

Compartment 218

Total Compartment Acres: 1,061

Commercial Harvest - 143
 Harvests with Site Condition - 16
 Next Step Harvest - 16
 Habitat Cut - 16

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	35	0	0	0	0	0	0	0	0	35
Oak	11	0	0	0	0	0	0	0	0	11
Red Pine	114	0	0	0	0	0	0	0	0	114
Total	160	0	0	0	0	0	0	0	0	160

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	160	0	0	0	0	0	0	63		222
Next Step	16	228	114	0	0	228	274	0	0	861
Total	176	228	114	0	0	228	274	0	63	1084



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
10	72218010-NF	62.8	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	119	51-80	NonForestMgt	Brushpile/Woody Debris Creation	6125 - Lowland Black Spruce, Jack Pine	Uneven-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:** Too Wet

Prescription Non-commercial harvest hinge cutting along swamp edge to be done by wildlife.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

18	72218018-Cut	28.9	42110 - Planted Red Pine	Sawtimber Well	81	111-140	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No **Site Condition:**

Prescription Clear cut using minimal retention. Trench and plant to red pine. Protect paved bike trail.

Specs:

Next Step SitePrep, Trenching; Planting, Initial Plant; SitePrep, Roller Chopping; Pesticide, Skidder - Site Prep; Pesticide, Skidder - Release;

Treatments: Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Fully stocked stand of planted red pine.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

20	72218020-Cut	36.9	42110 - Planted Red Pine	Sawtimber Well	93	111-140	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No **Site Condition:**

Prescription Final harvest red pine with minimal retention. Protect oak regeneration and snowmobile trail.

Specs:

Next Step SitePrep, Trenching; Planting, Initial Plant; Pesticide, Skidder - Site Prep; Pesticide, Skidder - Release; SitePrep, Roller Chopping;

Treatments: Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Planted red pine stand with pockets of protected oak regeneration.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

58	72218058-Cut	13.9	4133 - Aspen, Mixed Pine	Poletimber Well	38	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary
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Habitat Cut: No **Site Condition:**

Prescription Final harvest with retention. Add rec trail specs. If harvested in winter, haul to SW to avoid trail.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen plus other upland deciduous species.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019



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
59	72218059-Cut	16.3	4130 - Aspen	Poletimber Well	86	51-80	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:** Age-Class or Site Quality

Prescription Clear cut with retention. Add rec trail spec. Haul to SW if harvested in winter.

Specs:

Next Step Harvest, Other - Specify; Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen plus a mix of other upland deciduous species.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

68	72218068-Cut	23.4	42110 - Planted Red Pine	Sawtimber Well	103	111-140	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No **Site Condition:**

Prescription Clear cut with minimal retention.

Specs:

Next Step SitePrep, Trenching; SitePrep, Roller Chopping; Pesticide, Skidder - Site Prep; Planting, Initial Plant; Monitoring, Artificial Regen(1yr);

Treatments: Monitoring, Artificial Regen(3yr); Pesticide, Skidder - Release

Acceptable Fully stocked stand of planted red pine.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

69	72218069-Cut	16.3	42110 - Planted Red Pine	Sawtimber Medium	103	81-110	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No **Site Condition:**

Prescription Clear cut with minimal retention focused along wet stand to the west.

Specs:

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant; Pesticide, Skidder - Site Prep; Pesticide, Skidder - Release;

Treatments: Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Fully stocked stand of planted red pine.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

102	72218102-Cut	10.5	4125 - Black, N. Pin Oak	Sawtimber Well	83	111-140	Harvest	Clearcut with Retention	4122 - Oak, Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No **Site Condition:**

Prescription Clear cut following standard retention guidelines.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable A mix of oak, maple, and pine species.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019



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
118	72218118-Cut	8.7	42110 - Planted Red Pine	Sawtimber Well	81	81-110	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Clear cut and replant to red pine. No retention due to small stand size.

Specs:

Next Step SitePrep, Trenching; Planting, Initial Plant; SitePrep, Roller Chopping; Pesticide, Skidder - Site Prep; Pesticide, Skidder - Release;

Treatments: Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable A fully stocked stand of planted red pine.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

127	72218127-Cut	4.7	4130 - Aspen	Sawtimber Well	81	111-140	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary
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Habitat Cut: No **Site Condition:**

Prescription Final harvest with retention. If green up issues is a concern, focus retention in north end of stand.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen with mixed deciduous species.

Regen:

Other

Comment:

Proposed Start Date: 1 /1 /2019

Total Treatment Acreage Proposed: 222.4

Report 4 – Site Conditions

Grayling Mgt. Unit
Sarah Itchue : Examiner

Compartment: 218
Year of Entry: 2020

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions				
		With Condition	Not Available		5C	2G	3D	3J	5E
60	39	21	0	Aspen	21				0
28	7	0	21	Cedar		21			
116	116	0	0	Jack Pine	0	0			
224	43	0	180	Lowland Conifers	0	180			
4	0	0	4	Lowland Mixed Forest				4	
77	69	0	9	Lowland Shrub	0	9			
34	0	0	34	Lowland Spruce/Fir		34			
34	27	0	7	Marsh	0	7			
18	18	0	0	Mixed Upland Deciduous	0	0			
45	19	19	7	Natural Mixed Pines	19	7			
46	46	0	0	Oak	0				
321	305	14	1	Red Pine	14	0	1		
14	0	0	14	Tamarack		14			
11	0	11	0	Upland Conifers	11				
12	12	0	0	Upland Mixed Forest			0		
7	7	0	0	Upland Shrub			0		
5	5	0	0	Urban					
3	3	0	0	White Pine	0	0			
1,061	718	65	277	Total Forested Acres	65	272	1	4	0
	68%	6%	26%	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)	15	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Grayling Mgt. Unit
Sarah Itchue : Examiner

Compartment: 218
Year of Entry: 2020

2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	11	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
3	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
4	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	65	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
5	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	21	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	11	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Grayling Mgt. Unit
Sarah Itchue : Examiner

Compartment: 218
Year of Entry: 2020

7	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	27	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
8	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
9	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
10	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	62	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
11	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
26	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	19	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Grayling Mgt. Unit
Sarah Itchue : Examiner

Compartment: 218
Year of Entry: 2020

30	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	23	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
33	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	7	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							
37	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							
49	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	12	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							
54	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	20	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Grayling Mgt. Unit
Sarah Itchue : Examiner

Compartment: 218
Year of Entry: 2020

59	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	15	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
72	Unavailable	3D: Recreational / Scenic values	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
130	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	4	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



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 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	Research and Military Areas	These areas provide facilities and lands specifically dedicated for research, or other purposes. They include the 5,847 acre Forest Fire Experiment Station, the 12,000 acre Houghton Lake Wildlife Research Area, the Beaver Islands Archipelago Wildlife Research Area (that includes most of Garden Island, all of High and Hog Islands, all state owned land on Beaver, South Fox and North Fox Islands), the Cusino Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Research Station, the 125 acre Wyman Nursery, and over 144,000 acres of Military Lands.
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.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42110 - Planted Red Pine	Sawtimber Well	50.8	78	81-110	Planted red pine. Oak regent very thick in underscore on omen areas. Some red maple is present in overstory, consider harvesting. OPIC - FMD: Nice red pine stand that has pruned itself better than stands directly to the south. Numerous areas of J3 in openings and where overstory is slightly more open. There is also a fair amount of oak and red maple regen throughout with minimal browsing occurring within stand. Northern and eastern portions of stand are denser and have more red maple in sapling size class. Size class seems to shift 1-2 inches higher in some areas north of the snowmobile trail. Areas of stand are more open and are converting to hardwood/oak species in eastern areas of stand where it borders stand 2. (old comment)USE ANCHOR CHAINS TO START REGEN RIGHT AFTER THINNING. LEAVE OAK. 1998 field inspection the red pine is not regenerating.
2	4126 - White, Black, N. Pin Oak	Sapling Well	35.8	4	1-50	Stand was cut under 72-008-10-01 Over the hill rp and oak. OPIC - FMD: Descent quality oak stand with some nice sawlog sized trees. Red maple is also a major component throughout, mainly in the sapling layer (3-6"). Red pine is also scattered throughout and white pine is becoming more of a component in the understory, namely on the western edge due to an area of white pine that is beginning to seed. Aspen is also present however not on a consistent basis. Terrain is somewhat hilly with a ridge running parallel to the 2-track that bisects the stand. Ground flora along with tree species/growth/form indicate that this is falls into Kotar's VHa classification and it should be expected that red maple will continue to become more prevalent and in some cases may overtake the stand as it is beginning to do in areas. To treat, cut canopy gaps throughout stand in order to obtain oak regeneration in these openings. Between canopy gaps, pockets can be thinned based on timber quality and composition as well as to improve access through stand for equipment. Aspen clones can be harvested as well to increase aspen component in stand and maintain diversity that is present. Residual BA following harvest will be variable with some areas higher based on quality and species composition. Regeneration of oak species, red maple, aspen and white/red pine should be considered successful following harvest. (old comment) FAIR TO GOOD RED OAK - MANAGE FOR SAWTIMBER. ALOT OF HYBRID OAK (NORTHERN PIN, RED OAK).Per variance approved on 2/4/10- change prescription to final harvest with retention islands of 1-3 acre around highest quality oak trees and thinning within these islands. Exepect around 3-4 islands in the stand. This is to improve oak stump sprouting and regen. SJT
3	42210 - Natural Red Pine	Sawtimber Well	3.3	81	81-110	Red pine stand located on a ridge north of stand 1. Has a greater component of jack pine, which is in heavy decline. Fair amounts of oak regen throughout, signs of wildlife use. OPIC - FMD: Red pine stand of descent quality. Very similar to stand 1 however with quite a bit more jack pine common throughout. Some areas of quite desne understory, mostly red maple with some aspen stmes and red and jack pine saplings in more open areas. Lots of wildlife use within stand, could not find survey corner at northwestern corner of stand at time of inventory. (old commnet) TREAT WITH STAND TWO
4	4130 - Aspen	Poletimber Well	4.3	37	81-110	OPIC - FMD: Narrow aspen stand with growth hindered at edges. Transitions quickly into surrounding types. Aspen is growing well overall and is of moderate quality. (old comment) GOOD HEALTH ASPEN REGENERATION.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
5	4130 - Aspen	Poletimber Poor	6.1	55	51-80	OPIC - FMD: Somewhat poor quality aspen stand. Extremely variable throughout with areas of A3 as well as open areas that have been seeded by brushy species including hawthorn and juneberry. Red pine are also scattered throughout with white pine and balsam fir in understory. Red maple also constitutes a major component in sapling layer. A3 and open areas are localized near 2-track and at stand edges. (old comment) SOME POLE SIZE ASPEN, BUT MOSTLY A3
6	42210 - Natural Red Pine	Poletimber Well	10.6	123	171-200	OPIC - FMD: Dense red pine stand of natural origin. Areas are quite open or are mainly made up of overstory. Stand is growing fairly well with crop trees spaced nicely in areas. The large super canopy trees that exist are in good shape and are not declining. Have provided good seed source/crop over the years. Could possibly thin stand removing more than 1/3. Damage to residual would be high if less trees are taken out. (old comment) CAN NOT REMOVE OVERSTORY BECAUSE OF UNDERSTORY, AND HEAVY REGEN. HOLD TEN YEARS AND THIN
8	42120 - Planted Jack Pine	Sapling Well	33.7	28	Immature	Very dense stand with many signs of wildlife using the area. Ground cover includes blueberry and bracken fern, with some scattered cherry near openings. Growing well.
9	42120 - Planted Jack Pine	Sapling Well	10.5	18	Immature	OPIC - FMD: Thiskc J3 stand growing quite well. Lots of cherry brush throughout with scattered oak and red pine of merchantable or close to merch size. Was prescribed to be final harvested and planted to red pine however stand was planted to jack pine following harvest. Stand was furrow seeded to JP in spring 2002- no germination per inspection in fall 2002 so site was planted to JP in spring 2003 under FTP C72-458. (old comment) Stand harvested summer 2001. Sale number 72025001-01. FINAL HARVEST AND REPLANT TO RED PINE.
10	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	62.8	119	51-80	OPIC - FMD: Dense stand of spruce/fir/tamarack with scattered white pine present on hummocks throughout stand. Lots of wildlife activity! Red maple scattered throughout which adds to a nice diversified stand. Some blow-down has occurred at edges of stand and near some areas where stand fazes more into an L-type. (old comment) NO TREATMENT UNTILL WE CAN DEVELOP SOME REGEN. AFTER HARVESTING
12	42200 - Natural White Pine	Sawtimber Medium	2.9	110	1-50	OPIC - FMD: small white pine stand with large individuals present. High water table in areas, especially to the south and west. Numerous other species combine to make this a unique, albeit small white pine stand. Density is low overall, with regen making up the bulk in some areas while other have higher percentage of sawlog sized trees. (no old comment)
13	6122 - Black Spruce	Poletimber Well	14.9	93	51-80	OPIC - FMD: Spruce stand with some quality jack pine present throughout. Large amounts of balsam fir present throughout stand. Similar to stand 60 with less jack pine and what seems to be a higher water table. May have been influenced in the past by the creation and maintenance of Roberts road. This is actually an 2-track that is not passable in places because of high water table. (old comment) ONLY BLACK SPRUCE AND BALSAM FIR ARE REGENERATING



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
14	6121 - Tamarack	Sapling Well	6.7	33	Immature	OPIC - FMD: Low density stand with tamarack being the dominant species with adequate regen from tam and spruce species. Fair amount of balsam fir regen around perimeter of stand. High water table, many indicator species throughout. (old comment) USED OLD SI. STAND CUT 1986.
15	6120 - Lowland Cedar	Poletimber Well	20.9	110	81-110	OPIC - FMD: Stand difficult to access. Only made it a short distance from M-93 at time of inventory due to wet ground and dense understory. Lots of balsam in places. Cedar growing fairly well, not great height. Some cedar regen in places, mainly in areas of dense overstory and heavy understory. (no old comment)
16	6124 - Lowland Spruce-Fir	Poletimber Well	64.5	86	81-110	High water table and standing water found in depressions between trees. Cedar pockets found throughout adding nice diversity, but not dispersed throughout the stand. OPIC - FMD: Mixture of q-type species with cedar interspersed throughout stand. Some areas cedar is quite dominant although still not a very high density in terms of BA. Trees are growing fairly well, quite a bit of conifer regen in places. Higher water table with some areas containing standing water in small depressions. Recommend not to treat stand as mentioned in past OI comment. (old comment) TREAT NEXT YEAR OF ENTRY
17	42120 - Planted Jack Pine	Poletimber Well	11.1	44	Unspecified	OPIC - FMD: stand is extremely dense, approximately 20-22' in height. Growing quite slow when compared to last YOE data. Scattered merchantable trees do exist however I felt it better to describe this stand as a J3 rather than J4. Very soon to be a J6 stand. (old comment) AVERAGE HEIGHT 20 FEET, DIA. 3 INCHES, SHOULD BE POLE SIZE NEXT YOE.
18	42110 - Planted Red Pine	Sawtimber Well	28.9	81	111-140	Little to no regeneration in the understory. There is blueberry and bracken fern as ground cover, with a few scatter maple and oak. Red Pines are limby and open grown in some areas throughout the stand. Snowmobile trail to the west of stand.
19	42120 - Planted Jack Pine	Poletimber Well	13.4	37	111-140	OPIC - FMD: J3 stand, approximately 15' tall with 3-4" DBH, getting very close to being merchantable. Trees that are >5" DBH do not quite contain an 8" stick. Lot's of wildlife activity throughout with deer trails traversing throughout. Southern edge is slightly thinner since red pine have been shading this area since the plantation was established. (old comment) USED OLD SI.
20	42110 - Planted Red Pine	Sawtimber Well	36.9	93	111-140	Oak regen VERY thick to western end of stand, thinning as the stand moves east and towards the swamp. Maple regen becomes more prevalent on the wetter ground to the east. Varying age classes of regen found, making it a good candidate for natural regeneration after harvest. OPIC - FMD: Stand has more oak regen when compared to stands to the north. Red pine is of good quality. Scattered red pine regen along with small pockets of J2/J3. Lichen on ground indicates lower water table and dryer site when compared to stand to the north. Snowmobile trail forms southern border of stand. Stand has nice interface with wetter q-type to the east. Fair amount of wildlife use near this edge as swampland to the east provides excellent retreat. (no old comment)



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
22	42290 - Natural Mixed Pine	Sawtimber Well	7.7	75	81-110	<p>Red maple and spruce present in the wet areas of the stand. Larger diameter red and white pine, good diversity through the stand providing good wildlife cover.</p> <p>OPIC - FMD: Mixed stand with nice overstory red pine bordered by swamp on both sides. Large red and white pine create a very nice stand which because of it's location is very desirable to many wildlife species. There is a poor quality transition stand between this stand and stand 26 to the south. This transition area is made up of red pine/white pine, jack pine poles along with poor quality oak. Thick wintergreen exists on ground with bracken fern/blueberry above. Areas of bunchberry indicate wet soils in places. Red maple present along with fir and spruce in understory near edges of stand. Overall this is a nice stand with many unique characteristics. Old comment says to hold ten years. Not sure what was meant to be done but I would recommend leaving the stand as is because of size, accessibility, etc. (old comment) HOLD TEN YEARS</p>
23	6123 - Lowland Fir	Poletimber Well	26.8	83	51-80	<p>OPIC - FMD: q-type, difficult to access. Did not get abundant data from stand due to access issues at time of inventory. Wet stand overall with spruce/swamp conifer species dominating throughout. Areas of thick balsam fir regen and overstory growth. Some cedar scattered throughout stand. (no old comment)</p>
24	4191 - Mixed Upland Deciduous with Conifer	Poletimber Poor	17.6	18	Immature	<p>OPIC - FMD: Red pine/white pine seedtree with red pine being slightly more prevalent throughout in overstory percentage. Red maple and aspen present in understory with red and white pine present in lesser numbers. Overall this is a very nice stand responding well to harvest. BA variable in areas however overall it looks to be in the 30-40 sq ft/acre range. Good quality residual. (old comment) Stand harvested and completed summer 2001.CHECK WATER TABLE BEFORE CUTTING. MARK 20 BA OF RED PINE AND 10 BA OF WHITE PINE TO BE LEFT.</p>
26	42290 - Natural Mixed Pine	Sawtimber Medium	18.9	113	51-80	<p>Large diameter red and white pine make up most of overstory, with jack pine heavier in the south and red maple present along wet edges. More white pine present in this stand than in stand 22 to the north.</p> <p>southern edge containing jack pine. Significant natural regen of red and white pine is present along with balsam fir in understory. Some oak seedlings and red maple poles are present as well. Nice stand, this are coupled with stand 22 would make a nice SCA. Limited access and very little use of this area. (no old comment)</p>
27	42210 - Natural Red Pine	Poletimber Well	4.7	81	51-80	<p>OPIC - FMD: Nice red pine, red maple is clumpy and of poor quality as is jack pine. Stand is quite mixed with many species being represented in the 10-20 BA range. Fair amount of oak regen with some in sapling/small pole size range. Some red pine regen, albeit quite suppressed. Some enormous red pine exist in this stand, however the height of these trees indicates slow growth rate. More aspen exist in the northern portions of the stand, along the pipeline. The area west of the pipeline has been separated into a new stand which typed out to be an A9 stand. This new stand is now referred to as stand 127. (no old comment)</p>



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
28	4319 - Mixed Upland Forest	Poletimber Well	7.7	81	111-140	OPIC - FMD: A very mixed stand with red pine, red maple and aspen common throughout. The stand typed to be a R6 stand but in places could be considered an R9 or M6 stand. Aspen is fair to poor quality as is red maple for the most part. Red pine is of good quality with scattered large individuals accompanied by natural regen. Some very large individual trees in the central/western portion of the stand. Red pine regen is being suppressed by overstory red maple and aspen regen. Jack pine exists throughout the stand in low numbers and is declining rapidly. Pockets of different species result in variable stand. (no old comment)
29	42110 - Planted Red Pine	Sawtimber Medium	16.9	65	51-80	Stand was thinned under 72-008-10-01 Over the hill RP and Oak. OPIC - FMD: Descent quality red pine with jack pine, oak and red maple scattered throughout. Open understory that varies between blueberry and bracken fern groundcover. Some areas have thick sedge. Some small areas of red and jack pine regeneration. Aspen is also present in small numbers, mainly along road and in small open areas. Some open pockets exist throughout stand and jack pine becomes more common towards I-75. Thin stand by removing jack pine, oak, aspen and red maple. Leave all red pine except in areas where red pine BA is high, most likely concentrated in north and eastern portions of the stand. Special care should be taken not too damage any of the red pine/jack pine regeneration within the stand.
30	6124 - Lowland Spruce- Fir	Poletimber Medium	18.0	109	51-80	OPIC - FMD: swamp stand with tributaries running in a southerly direction towards the E Branch AuSable river. Wet in places with understory varying in density throughout. Red pine sawlog sized trees are common and make up a good percentage of the BA. Some places areas could be typed M5/6 or R7/8. Did not look at stand as extensively as usual because of stand conditions. (no old comment)
32	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Medium	30.3	65	1-50	Very wet throughout, some shrubs and conifer in underscore. OPIC - FMD: Somewhat open understory, however the understory is thick near ground level up to about 5 feet with fir spruce species and tamarack regen. Cedar regen is present in places, surprisingly thick in areas, albeit short and suppressed. Red maple and birch are also present in low numbers with black ash also common throughout. (old comment) BEAVER ACTIVITY
33	6121 - Tamarack	Poletimber Poor	7.1	103	1-50	Low density, lots of snags, trace spruce, white pine, red maple, paper birch. OPIC - FMD: Difficult to move through in areas because of suck thick brush and understory. Lot's of deadfalls and standing snags. Birch is declining and this can be seen by the number of snags present. (no old comment). Herbicide treatment for Eurasian Phragmites and Loosestrife July, 2011 per C72-653.
35	42110 - Planted Red Pine	Poletimber Well	6.6	43	81-110	OPIC - FMD: Descent red pine however the stand has been suppressed for quite awhile. Stand has narrow rows which may present issues when cutting. Stand should be thinned removing every third row while also removing all aspen and jack pine regardless of what row it is in. Stand has a nice level of balsam fir throughout. This is currently providing a good refuge for songbirds and also grouse within the stand. For this reason, all balsam fir should be left. (old comment) CUT WHEN STAND 42 IS CUT. 10/5/11 treated under Eight Point Red Pine 72-006-10-01.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
36	6120 - Lowland Cedar	Poletimber Well	2.3	123	141-170	OPIC - FMD: Small cedar stand that creates an island within stand 32. Interesting stand with descent cedar throughout. Lots of browse on lower branches with minimal understory. Looks to provide good cover for wildlife, mainly deer and some turkey possibly. (old comment) A SMALL POCKET OF HEALTH CEDAR
37	42290 - Natural Mixed Pine	Sawtimber Well	7.2	121	141-170	OPIC - FMD: Small island of natural origin white pine with numerous other species, namely red pine, common throughout. May be some issues with the private land interface, possibly a trespass in some areas along with deer blinds that look to be on state land. Could not confirm survey markers to delineate this line. Difficult to access/inaccessible by vehicle. Entered stand from I-75 and crossed swamp north of private property. White pine looks to be growing well, some individuals are very large. Q-type fazes in and out of stand from adjacent types and fir is common along edges of stand. Ground is wet in places and cedar are relatively common in low numbers throughout understory. Red pine is a major component throughout making up approximately 40% of the BA. Red maple is dominant in understory throughout northern portions of the stand. Would make a very nice SCA in combination with stand 130. (no old comment)
38	42221 - Natural Jack Pine, Mixed Deciduous	Sawtimber Well	4.0	71	51-80	OPIC - FMD: Open J9 stand with heavy red maple understory. Borders private land and is somewhat isolated making it an interesting stand. Areas of stand are quite open while others are well stocked, moreso as you near I-75. Overall a descent stand although jack pine looks rather unhealthy with some browning of needles occurring along with some mortality in places. If left will most likely convert to M6 stand over time. Heavy blueberry as groundcover. (no old comment) TREAT WITH STAND 29
42	6123 - Lowland Fir	Poletimber Medium	12.4	46	1-50	Balsam fir with some spruce mixed in. Oak found along edges of pine stand. OPIC - FMD: Thick stand of balsam fir with spruce species present. Lots of wildlife activity, difficult to walk through in spots because of tangled brush and thick regeneration. Some areas of deadfalls along with areas of overstory white pine. Dead standing snags are providing good habitat for numerous bird species. (old comment) USED OLD SI
43	42110 - Planted Red Pine	Sawtimber Well	13.5	71	81-110	Decent quality red pine with mixed deciduous/spruce fir components due to proximity to swamp areas. Provides wildlife cover as well as visually appealing along Wilcox Bridge Rd. OPIC - FMD: Descent red pine stand, high water table is evident by spruce fir component along with bunchberry on ground in some places. Red maple are scattered throughout along with oak species. Overall a very nice stand with good visual properties and excellent wildlife habitat. (old comment) Stand thinned 2000
44	42120 - Planted Jack Pine	Poletimber Well	11.1	58	51-80	OPIC - FMD: Sparse low quality mixed stand surrounding old gaswell that is now serving as Wilcox bridge snowmobile trail parking lot for Snowmobile trail #47. Parking lot is closed by gates and locked until December 1st unless significant snowfall justifies them being opened earlier. Sign is posted at parking lot. Stand stretches to the north running west of stand 35. (no old comment)



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
45	429 - Mixed Upland Conifers	Poletimber Well	11.3	103	51-80	OPIC - FMD: M6 stand with red pine, white pine and some cedar in places. Quite a diverse stand, lots of wildlife activity throughout. Timber is of fair quality with a high water table persisting in stand. Areas of wet soils with standing water in depressions mainly in western portions of stand. Some trails have been cut through stand, possibly for hunting/trapping and look to be overgrowing quite rapidly. Balsam fir dominates understory with other swamp conifers common as well. Stand is combination of old stands 45 and 46. (no old comment)
48	6120 - Lowland Cedar	Poletimber Well	5.1	126	51-80	Cedar dying back along edge of creek. Stand appears to retain water in many spots year round. OPIC - FMD: Mossy ground cover throughout. Stand interfaces with creek/n-type and has signs that it is wet throughout a good portion for the year. Cedar is growing fairly well however cedar is beginning to dieback at creek edge. (no old comment)
49	6124 - Lowland Spruce- Fir	Sapling Well	8.7	103	51-80	OPIC - FMD: Q/L-type. Thick with tag alder along with areas of young, small diameter swamp hardwoods and conifers. Stand interfaces with private land on the western edge. Could not locate survey markers to delineate this line. (no old comment)
50	42121 - Planted Jack Pine, Mixed Deciduous	Sapling Medium	32.6	8	Immature	Cut fall 2008 (720800401). FTP C72-599 submitted to trench & plant or seed JP. Jack Pine planted May, 2010 per C72-599. JC update: JP was re-planted in 2011. Passed Year 3 regen survey with a mix of planted JP and significant deciduous components (A-BC-M). Canopy updates based on the treatment reports & past inventory data, not a site visit.
53	42290 - Natural Mixed Pine	Poletimber Well	11.5	77	51-80	OPIC - FMD: Very mixed conifer stand with relatively low quality throughout. Northern portion of stand, areas north of Lewiston Grade Road not inventoried in last OI when it was typed as a Q3. Lots of poor quality oak and aspen along with some open areas. Overall not very highly stocked and quite variable in terms of stocking, composition and quality. Southern portion of stand has a number of large red and white pine. Snowmobile trail traverses the stand in an east west direction. (no old comment)
54	6122 - Black Spruce	Poletimber Well	18.7	114	51-80	OPIC - FMD: Black spruce stand with tamarack present in lower numbers. Thick stand, did not do a very long sample traverse. (no old comment)
58	4133 - Aspen, Mixed Pine	Poletimber Well	13.9	38	81-110	OPIC - FMD: A3/U-type with patches of nonmerchantable/barely merchantable aspen. Cherry bruch and red maple clumps are also present. Beginning to convert to an A4 stand. Possible location to burn and maintain and grassy opening? (no old comment)
59	4130 - Aspen	Poletimber Well	16.3	86	51-80	OPIC - FMD: Low quality aspen mixed with small number of jack pine and red maple. Occasional white pine and oak regen throughout. Patchy BA at edges, wetland indicators within stand at northern edge. Red maple within understory is thick in areas but overall is an M2 understory. (no old comment)



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
60	4130 - Aspen	Sapling Well	15.1	19	Immature	OPIC - FMD: A3/J3 stand with scattered oak remaining in overstory. Lots of cherry bruch throughout as well as red maple being mixed in. Nice mixture of species, area being used heavily by many wildlife species, namely grouse. (old comment) final harvested 2000.
63	42110 - Planted Red Pine	Sawtimber Well	58.8	55	81-110	OPIC - FMD: Descent red pine stand, not quite the overall quality of stand 66 for some reason. Row thinned in 2000 and responding relatively well. Fair amount of open areas with pockets of R3, J3, A3 and occasional W2. Density increases in the eastern/northern portions of the stand, DBH increases slightly. Blue berry is thick in places serving well as low ground cover. Some illegal ORV use throughout this area. Thin stand again removing 1/3, possibly slightly more in some places in order to enhance open areas and stimulate understory regeneration. This will leave some areas more open but this will help to diversify stand. Thin to improve overall form by removing forked, suppressed or otherwise lesser quality trees. Could wait until next YOЕ but stand BA is high enough to warrant thinning at this time. 11/09-found a few deer blinds within stand with trails leading from the east, continued ORV traffic within stand. (old comment) stand third row thinned 2000. 10/5/11 stand treated under Eight Point Red Pine 72-006-10-01.
65	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	4.2	87	51-80	OPIC - FMD: Wet stand throughout with black ash being most common species. Cedar prevalent along edges and moreso in the northern portions of the stand. Areas of alder as well and some pockets of good DWD. Overall a nice stand creating a valuable wildlife corridor as well as an area that breaks up the surrounding red pine stands. (no old comment)
66	42110 - Planted Red Pine	Poletimber Well	36.8	60	81-110	OPIC - FMD: Nice red pine stand that has been third row thinned with possibly a subsequent thinning. Variable size distribution as well as density in some places. Some open spots as well as some porky damage that has caused pockets of top dieback. Scattered oak exist throughout stand and are of very poor quality. Edge of stand has noticeably greater DBH. 10/5/11 stand treated under Eight Point Red Pine 72-006-10-01.
68	42110 - Planted Red Pine	Sawtimber Well	23.4	103	111-140	Excellent form, large diameter red pine. White pine is heavily present to the southern portion of the stand, with some scattered hardwoods. OPIC - FMD: Nice red pine stand with large diameter and excellent form. White pine becomes more of a component in the south and is very well formed also. There are areas of white pine regeneration in understory throughout stand. Extremely high quality stand, little understoryaside from whit epine and the occasional oak seedling. There is also red maple present in low numbers. Some merchantable red and whit eoak exists but is of poor quality. Red pine cored to be in the low 90 year old age class as did whit epine. Average heights for both were red pine-93 and white pine-115 respectively. Overall very nice stand. (old comment) STAND IS HEALTH, HOLD UNTILL NEXT YOЕ.1998



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
69	42110 - Planted Red Pine	Sawtimber Medium	16.3	103	81-110	OPIC - FMD: Continuation of stand 68, almost identical in size and form. White pine component is less in this stand however it continues to be present and makes up the dominant understory species, albeit in low numbers. There is little to no red pine regeneration within this stand. Stand has areas in northern portions that are a bit more sparse leading into adjacent stand 65. Still the same size/form red pine however more pole sized individuals are present. Oak are again scattered throughout but continue to be of poor quality. Private interface along eastern edge of stand. (no old comment)
72	42210 - Natural Red Pine	Sawtimber Well	1.4	75	171-200	OPIC - FMD: Minimal understory throughout stand, oak is present but at low levels. Red pine of good quality with nice spacing. Blueberry common with scattered oak/maple throughout understory. Jack pine represents a fair amount of the stand but is of low quality and declining very rapidly. Stand provides an excellent visual/scenic buffer and section of the paved bicycle trail as well as M-93 (old comment) BUFFER ALONG M-93 (HARTWICK RD.)
102	4125 - Black, N. Pin Oak	Sawtimber Well	10.5	83	111-140	Mixed oak stand located mostly on a ridge top, with fair amounts of regen including oak spp and red maple. In the southern half of the stand there is scattered red pine of pole and log size, with sapling sized white pine located in the northern half of the stand. OPIC - FMD: Descent quality oak stand with some nice sawlog sized trees. Red maple is also a major component throughout, mainly in the sapling layer (3-6"). Red pine is also scattered throughout and white pine is becoming more of a component in the understory, namely on the western edge due to an area of white pine that is beginning to seed. Aspen is also present however not on a consistent basis. Terrain is somewhat hilly. Ground flora along with tree species/growth/form indicate that this falls into Kotar's VHa classification and it should be expected that red maple will continue to become more prevalent and in some cases may overtake the stand as it is beginning to do in areas. This is a copy of stand 2 and is separated from the original stand 2 by a narrow section of stand 1. Stand 2 is prescribed to be thinned/shelterwood harvested however this stand should be left to increase diversity in the area as well as to create variation in timber types/stocking levels throughout the compartment. Hold ten years and then prescribe with appropriate prescription. (old comment) FAIR TO GOOD RED OAK - MANAGE FOR SAWTIMBER. ALOT OF HYBRID OAK (NORTHERN PIN, RED OAK).
118	42110 - Planted Red Pine	Sawtimber Well	8.7	81	81-110	Small stand with limby red pine. Open grown in areas, with an understory of bracken fern and blueberry. There is some oak and maple regenerating. OPIC - FMD: Small R9 stand that was left out of past inventory. It looks like this stand was once connected to stand 18 and therefore the data from that stand was copied for this stand. Red pine is of good quality however quite limby. Relatively open ground with mediocre stocking. There are a few scattered bogs throughout the stand made up of small depressions where leatherleaf is dominant and ground is soft/boggy. Understory is low stocked oak with red maple also present along with a few areas of J2 where canopy is a bit more open and along perimeter of stand. Overall, a nice stand that breaks up the jack pine plantings in the area quite well. (no old comment)



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
127	4130 - Aspen	Sawtimber Well	4.7	81	111-140	OPIC - FMD: New stand separated out from original stand 27. This stand lies to the west of the pipeline and contains the DNRFM test cruise plot. The aspen within this stand are very large in terms of height and diameter however they are exhibiting surprisingly good growth and overall form. Little decline is occurring aside from normal snag development and the occasional fallen tree. This stand, similar to stand 27 is quite mixed as many species are represented in the overall BA. One notable difference within this stand is the dramatic increase in the prevalence of maple-leaved viburnum. Could possibly set this stand aside for educational/training purposes. (no old comment)
128	4319 - Mixed Upland Forest	Sawtimber Well	4.4	62	81-110	OPIC - FMD: Part of stand 28 however it was separated from this stand by pipeline/road. Small swamp area was separated from this stand in SW corner. Scattered balsam/spruce around perimeter of swamp creating nice cover and good wildlife refuge. Stand consists of seed tree/super canopy red pine with natural regene throughout. Regen is in the 50 year age class and is approximately 8 inches on average. Seed trees are 110 years of ag+ and average 13 inches in diameter. Bunchberry in ground flora at northern edge of swamp indicating a high water table. Moss species are also common in the area. The stand has an M1 understory with blueberry and bracken fern making up the remainder of the ground cover throughout the stand. (no old comment)
130	42210 - Natural Red Pine	Sawtimber Well	3.6	114	171-200	OPIC - FMD: Nice natural origin red pine stand with large white pine along perimeter where stand meets the q-type to the east and north. Trees are growing very well and are tall with a great deal of character throughout the stand. The understory red pine is suppressed by these larger red pine and are growing at a somewhat slow rate but are well formed. DBH decreases slightly in southern portions of stand but there continues to exist numerous large super canopy red pine. There are multiple large jack pine snags throughout stand that are providing nice habitat and are beginning to break up providing increased coarse woody debris. Balsam fir provide a nice border around stand where it interfaces with q-type. Black spruce are also regenerating here providing excellent low ground cover. This in conjunction with stand 37 would create an excellent opportunity for an SCA. (new stand that was not identified on previous OI map)



Stand	Cover Type	Acres	Managed Site	General Comments:
21	622 - Lowland Shrub	8.7	No	OPIC - FMD: Open L-type/U-type with some sapling sized conifers present in low numbers. Unique stand used heavily by wildlife of many kinds. Creates quite a sanctuary amongst surround these conifer stands. High water table, assuming this stand is quite wet in the spring. (old comment) USED STAND 22 SI
25	6229 - Mixed lowland shrub	9.3	No	OPIC - FMD: L-type with scattered paper birch. Tamarack and spruce are present in low #'s. Alder quite thick in spots. Lots of cardinal flower and irises throughout stand, namely along edge. Wet areas common within stand during late summer months. Probably very wet during spring. (old comment) USED STAND 24 SI
31	6239 - Mixed Emergent Wetland	33.6	No	Creek with scattered dead trees, mixed lowland shrubs and grasses. OPIC - FMD: stand has dead standing cedar trees as well as some tamarack and other swamp conifers. Somewhat inaccessible, not able to get a very thorough assessment of stand. (no old comment)
41	6229 - Mixed lowland shrub	58.3	No	Full coverage of shrubs with scattered trees. OPIC - FMD: L-type stand with balsam fir, birch, red maple and tamarack scattered through in low density. Some areas with low overstory BA however overall the stand is tag alder with the above mentioned species present.
62	320 - Upland Shrub	4.3	No	OPIC - FMD: U-type stand could be typed as J4 in places however overall upland brush and nonmerchantable jack pine aspen and cherry dominate. (no old comment)
70	122 - Road/Parking Lot	0.9	No	OPIC - FMD: Wilcox Bride snowmobile trail head and parking lot for snowmobile trail #47. Area is locked by DNR gate because of trespass issues. Gates are opened and area is maintained beginning December 1st. (old comment) SNOWMOBILE PARKING LOT
71	122 - Road/Parking Lot	4.5	No	OPIC - FMD: Headquarters area for Grayling FMU. Some area within this stand are made up of R9 timber type however because of the use of this area, it was typed XO. (old comment) DNR FIELD HEADQUARTERS
228	622 - Lowland Shrub	1.0	No	OPIC - FMD: Small swamp area separated from stand 128 in SW corner. Made up mostly of tag alder with the occasional swamp conifer mixed throughout. Holds standing water during spring and early summer as evidenced by water lines within stand. (no old comment)
400	3209 - Upland Shrub (OI)	2.3	No	OPIC - FMD: Narrow grassy opening with red maple and some white pine scattered throughout. 2-track runs in a north south direction through stand. The entire stand is in a small valley with the higher ridge on the western side of the stand. (old comment) THERE IS A TWO TRACK WITHIN THE GRASSY OPENING
401	3205 - Mixed Upland Shrub	0.8	No	OPIC - FMD: Small grassy opening adjacent to 2-track and private land to the west. Some upland brush within opening along with red pine and jack pine regeneration around the edges, most likely recruits from adjacent stand 72. Nice opening, maintain in the future. (no old comment)