



Compartment Review Presentation

Grayling Forest Management Unit

Compartment 72242

Entry Year 2017

Acreage: 1,742

County Crawford

Management Area: Camp Grayling

Revision Date: 2015-09-01

Stand Examiner: Paul Roell

Legal Description:

T28N R03W Sections: 24, 25 and 36

Identified Planning Goals:

To provide for military training while maintaining forest health, productivity, sustainability, species diversification and structural diversity of the resources while providing for multiple uses of the land.

Soil and topography:

Topography varies from slightly rolling to hilly with areas of swampy lowland. The soils in section 36 are a Tawas-Leafriver-Lupton association. This association is nearly level, very poorly drained with mucky soils and outwash plains found on low flats, depressions, and drainage ways. Sections 24 and 25 are a Rubicon-Kalkaska-Blue Lake association. This association is characterized by broad upland flats, knolls, hills and ridges. These are sandy soils on outwash plains, stream terraces, and remnant moraines.

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

Approximately 1/3 of the parcels in this compartment are State Military Board Lands. The remainder of state land in the compartment is under the 1935 long term lease agreement (L-1479) with the Michigan National Guard (Department of Military and Veteran Affairs) to provide for military usage with no permanent buildings or improvements to be erected (Act 154, P.A., 1935). Military training has precedence over resource management activities on these lands. The DNR will coordinate all prescribed activities with the National Guard to ensure they are compatible with military training needs.

A small portion of the Military's Range 40 can be found in the northeast corner of the compartment. This area is fenced and not open to public use. Jones Lake Base Camp which has permanent structures is located in the southeast of section 25. There is approximately 175 acres of private property found in the northwest of section 36 and much of the south 1/2 of section 25 within this compartment.

Unique Natural Features:

Gavia immer (Common Loon) has been known to exist in this compartment.

Archeological, Historical, and Cultural Features:

There are multiple archeological concerns within this compartment. No treatments impact the sites.

Special Management Designations or Considerations:

This area is provided for National Guard training. Jones Lake Base Camp and a portion of the Range 40 impact area are located in this compartment. Range 40 is closed to the public and is bound by a fence. The area is posted and may contain hazardous ordinances. There are scattered firing point locations within the compartment used by different types of military operations for target practice.

Watershed and Fisheries Considerations:

This compartment contains part of the East Branch Au Sable River, a designated trout stream and Natural River, as well as Hardgrove Lake. Prescribed treatments are appropriate for the protection of this water body.

Wildlife Habitat Considerations:

The cedar/spruce corridor along the Au Sable River provides a winter deer yard. Upland grouse, snowshoe hare may be found in this compartment and should be acknowledge through management activities where applicable.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of ice-contact outwash and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 600 and 800 feet. Beneath the glacial drift is the Coldwater Shale. The Coldwater does not have an economic use. The nearest gravel pit is located in Section 26 (Federal govt.) and potential is good on the uplands. The compartment is not leased for oil and gas development. The compartment is south of Antrim Shale

development.

Vehicle Access:

County road 612 splits the compartment. A small portion of a military tank trail is in the southeast of section 36. Vehicle access is limited in the west half of section 36. The rest of the compartment is easily accessible by two-tracks and military trails. No roads have been identified for closure.

Survey Needs:

None needed at this time.

Recreational Facilities and Opportunities:

Dispersed recreational use occurs throughout the compartment. There are various hunting, fishing, and gathering opportunities. Hardgrove Lake is not a major fishery but does have a primitive launch in the north.

Fire Protection:

Range 40 is found in the Northeast of section 24 and is frequented by fire activity. The majority of cover types found in this compartment however, are not prone to frequent fire events. If a wildfire does occur, Hardgrove Lake, Jones Lake, and the East Branch Au Sable River are water sources available for suppression needs. The west half of section 36 poses several problems for vehicle access

Additional Compartment Information:

The following reports from the Inventory are attached:

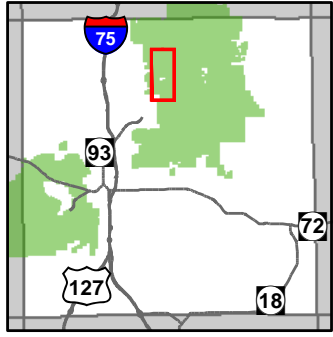
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

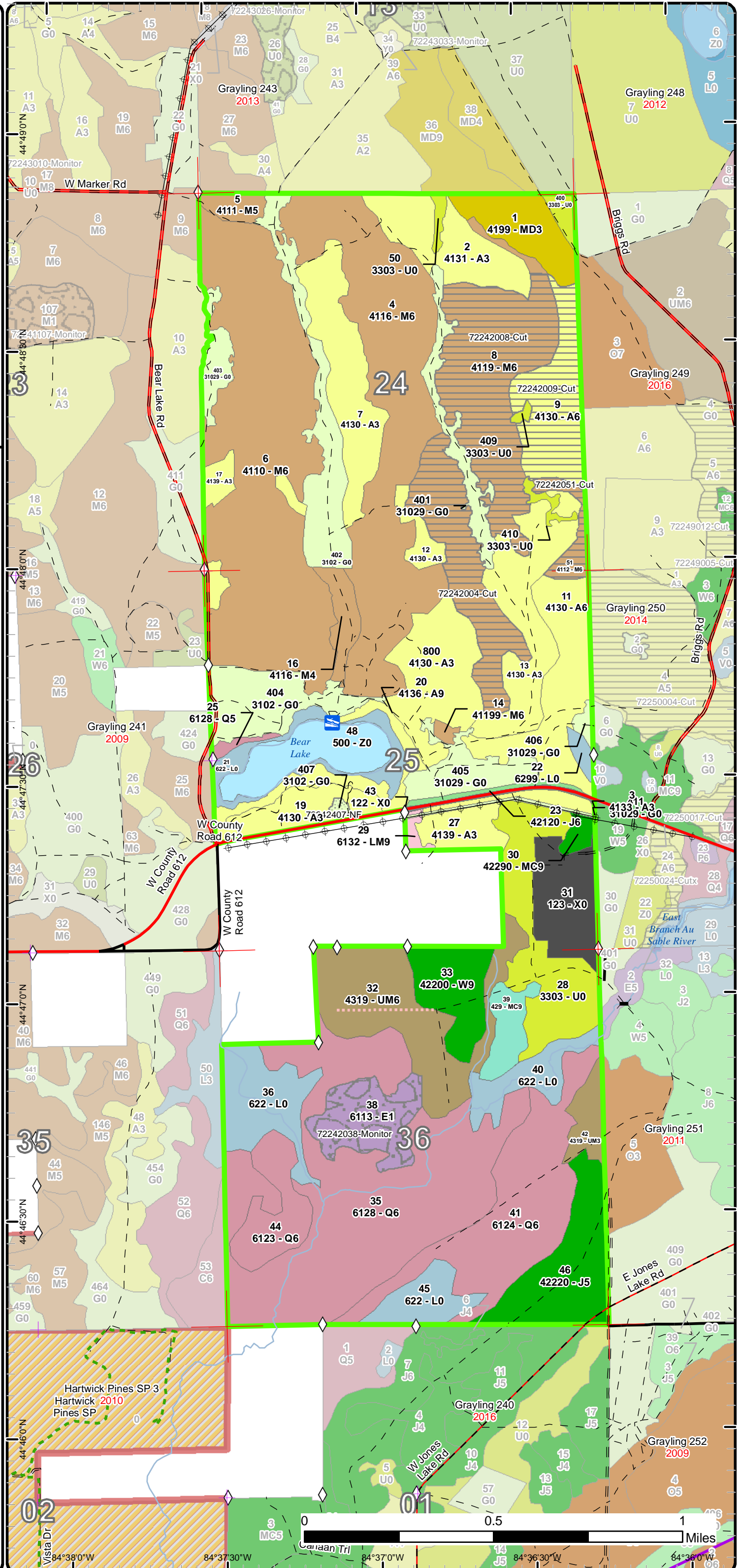
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 242
 T28N,R03W, Sec. 24, 25, 36
 County: Crawford
 Unit: Grayling
 Mgmt Area: Camp Grayling
 YOE: 2017
 Acres: 1742 GIS Calculated
 Examiner: Paul Roell
 Map Revised: 5/17/2016
 Map Phase: Post-Review

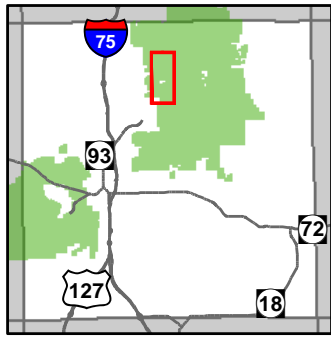


- Miris Corners
- + Remonumented Section Corners
- ◇ Field Grade GPS Corners
- Bridges
- Boating Access Site
- Designated Hiking Trails
- Designated Snowmobile Trails
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- - - Poor Dirt Roads
- County Poor Dirt Roads
- - - Closed Roads
- Rivers
- Powerline
- Compartment Boundary
- Clearcut (w/Reserves)
- Regeneration Survey
- Mowing
- 411 - Northern Hardwood
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Fores
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 122 - Roads/Parking Lot
- 123 - Other High Intensity Urban
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- Lakes

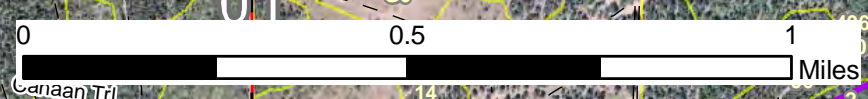
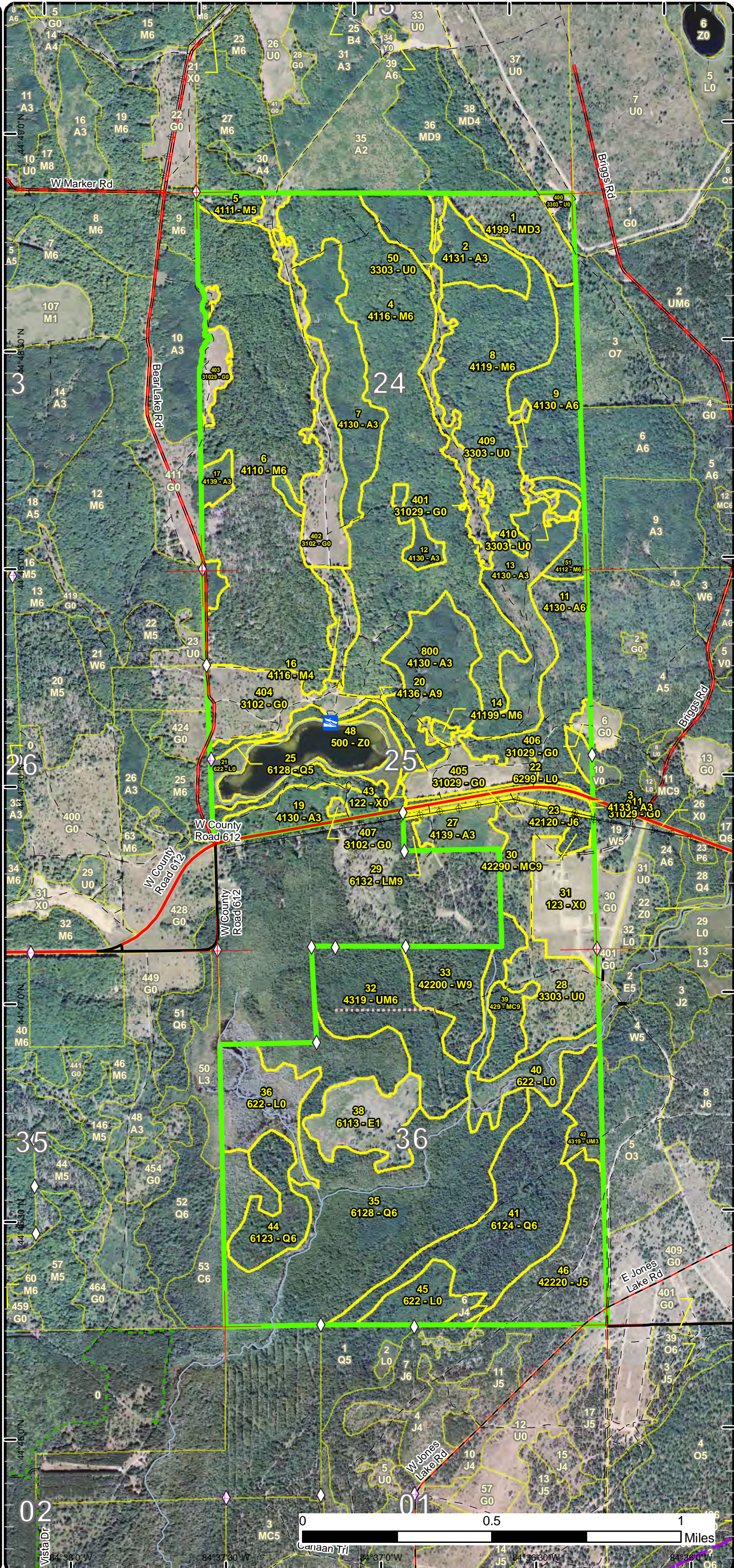


Stand Boundary Map

Compartment: 242
 T28N,R03W, Sec. 24, 25, 36
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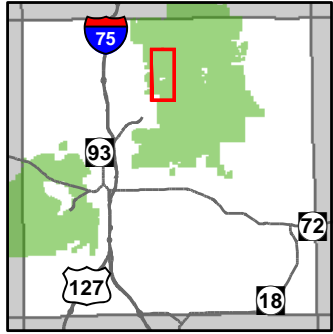
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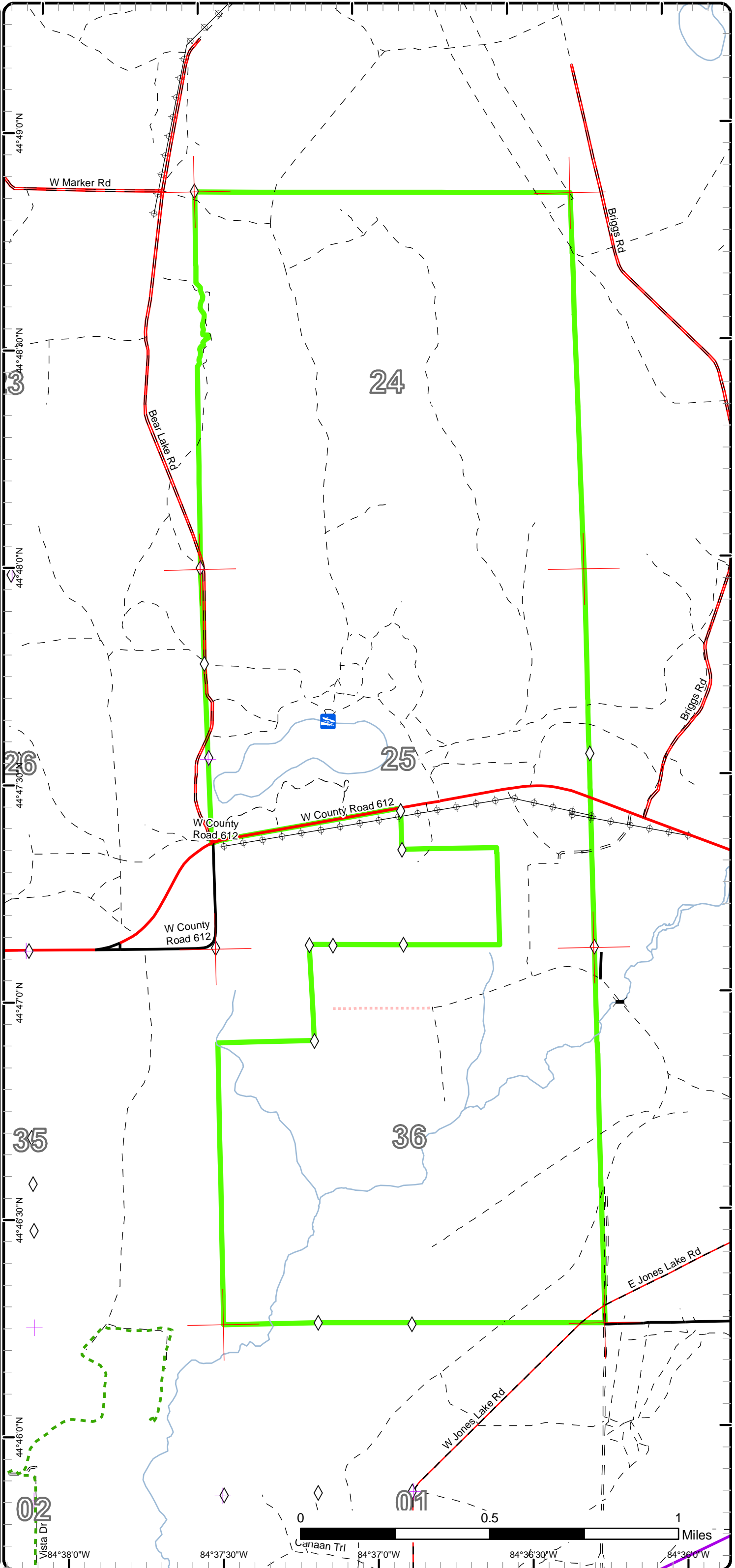
Vista Dr. 44°16'0"N 84°33'0"W 01 02 44°18'30"N 84°37'0"W 44°18'30"N 84°37'0"W 44°16'0"N 84°36'30"W 44°18'30"N 84°36'0"W

Special Conservation Areas & Site Conditions Map

Compartment: 242
 T28N,R03W, Sec. 24, 25, 36
 County: Crawford
 Unit: Grayling
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- - - Closed Roads
- Rivers
- Powerline
- Compartment Boundary
- SCA
- SCA Removal
- 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)
- 3F: Military easement / lease
- 3J: Water quality / BMPs (stream, river, or lake)
- 5E: Long-Term Retention
- Stand Boundaries
- Special Conservation Areas
- Natural Rivers Vegetative Buffer
- Natural Rivers Zoning District
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer
- Research, Development, and Military Lands
- Sand or Gravel Pit
- Sand or Gravel Pit
- Other SCA (No Category Assigned)



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	43	70	126	0	47	0	18	41	0	0	0	0	0	0	0	0	0	345
Herbaceous Openland	127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	127
Jack Pine	0	0	0	0	48	0	0	4	0	0	0	0	0	0	0	0	0	0	52
Low-Density Trees	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65
Lowland Conifers	0	0	0	0	0	0	27	0	0	189	83	0	0	0	0	0	0	0	299
Lowland Deciduous	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
Lowland Mixed Forest	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
Lowland Shrub	93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	93
Mixed Upland Deciduous	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	505	505
Upland Conifers	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	14
Upland Mixed Forest	0	0	13	0	0	68	0	0	0	0	0	0	0	0	0	0	0	0	81
Urban	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
Water	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
White Pine	0	0	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	28
Total	353	100	83	126	48	115	27	22	44	235	83	0	0	0	0	0	0	505	1741



Report 2 – Treatment Summary

Grayling Mgt. Unit

Year of Entry: 2017

Acres of Harvest

Compartment 242

Total Compartment Acres: 1,742

Commercial Harvest - 182
 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
Aspen	41	0	0	0	0	0	0	0	0	41
Northern Hardwood	141	0	0	0	0	0	0	0	0	141
Total	182	0	0	0	0	0	0	0	0	182

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	182	0	0	0	0	31	0	1		214
Next Step	0	0	0	0	0	182	0	0		182
Total	182	0	0	0	0	213	0	1		396



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
4	72242004-Cut	48.2	4116 - Mixed N. Hardwood - Aspen	Poletimber Well	93	81-110	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	Proposal

Habitat Cut: No

Site Condition:

Prescription Clear cut all trees two inches and greater in diameter.

Specs:

Next Step

Treatments:

Acceptable A fully stocked stand of aspen and mixed northern hardwoods.

Regen:

Other Comment: This stand is stocked with a lot of beech and lower quality hardwoods. This portion of the stand contains enough aspen that it should regenerate to a aspen mixed deciduous. Old next step comments:

Proposed Start Date: 10/1 /2016

8	72242008-Cut	83.2	4119 - Mixed Northern Hardwoods	Poletimber Well	90	81-110	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Clear cut all trees two inches and larger in diameter. Leave all white and red pine. Include the drumming log spec and the military spec in the sale contract. Place a retention island within this treatment of minimal size.

Specs:

Next Step

Treatments:

Acceptable A fully stocked stand of aspen and mixed northern hardwoods.

Regen:

Other Comment: This stand contains a lot of beech. We should try to promote aspen and oak to establish desirable regeneration.. Old next step comments:

Proposed Start Date: 10/1 /2016

9	72242009-Cut	41.2	4130 - Aspen	Poletimber Well	75	81-110	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Clear cut all trees 2 inches and greater in diameter.

Specs:

Next Step

Treatments:

Acceptable A fully stocked stand of aspen and mixed northern hardwoods.

Regen:

Other Comment: Cut all oak to promote oak regeneration. Old next step comments:

Proposed Start Date: 10/1 /2016

38	72242038-Monitor	31.2	6113 - Lowland Maple	Sapling Poor	3	Immature	Monitoring	Natural Regen (Intermediate)	613 - Lowland Mixed Forest	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription

Specs:

Next Step

Treatments:

Acceptable A mixture of aspen, red maple, balsam, spruce, hemlock, and cedar that meets minimum stocking.

Regen:

Other Comment: Percent to Treat = 100% Old next step comments:

Proposed Start Date: 10/1 /2018



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	72242051-Cut	9.5	4112 - Maple, Beech, Cherry Association	Poletimber Well	90	81-110	Harvest	Clearcut	4139 - Aspen, Mixed Deciduous	Even-Aged	Proposal

Habitat Cut: No

Site Condition:

Prescription Clear cut all trees two inches and greater in diameter. No retention.

Specs:

Next Step

Treatments:

Acceptable A fully stocked stand of aspen and mixed northern hardwoods.

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

407	72242407-NF	1.2	3102 - Grass	Nonstocked		Unspec ified	NonForestMgt	Mowing	3102 - Grass		Proposal
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Habitat Cut: No

Site Condition:

Prescription Wildlife opening maintenance.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

Total Treatment Acreage Proposed: 214.4

Report 5 – Site Conditions

Grayling Mgt. Unit
Paul Roell : Examiner

Compartment: 242
Year of Entry: 2017

Availability for Management

Total Acres	Acres Available	Acres Avail		Acres Not Available	Dominant Site Conditions				
		With Condition			5C	3F	3J	5E	
345	326	0		19	Aspen			18	1
127	127	0		0	Herbaceous Openland				
51	48	0		4	Jack Pine		4		
65	65	0		0	Low-Density Trees				
300	29	271		0	Lowland Conifers	271			
31	31	0		0	Lowland Deciduous				
3	3	0		0	Lowland Mixed Forest				
93	93	0		0	Lowland Shrub				
26	26	0		0	Mixed Upland Deciduous				
4	4	0		0	Natural Mixed Pines				
505	505	0		0	Northern Hardwood				
14	14	0		0	Upland Conifers				
81	81	0		0	Upland Mixed Forest				
36	34	0		2	Urban		2		
32	32	0		0	Water				
28	28	0		0	White Pine				
1,742	1,447	271		24	Total Forested Acres	271	6	18	1
	83%	16%		1%	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	3J: Water quality / BMPs (stream, river, or lake)	18	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
2	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 5 – Site Conditions

Grayling Mgt. Unit
Paul Roell : Examiner

Compartment: 242
Year of Entry: 2017

3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	83	Unspecified	Unspecified	Unspecified	Unspecified
Comments: I would delay treatment to see what regeneration comes back within stand 38. This is a wet stand but there is some nice timber and I think parts of it could be treated.							
4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	187	Unspecified	Unspecified	Unspecified	Unspecified
Comments: There is a buffer because of the river and I would delay treatment to see what regeneration comes back within stand 38. This is a wet stand but there is some nice timber and I think parts of it could be treated.							
23	Unavailable	3F: Military easement / lease	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Mgt. Unit

Compartment: #Type!

Year of Entry:



Report 6 – 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 7 – 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	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	4199 - Other Mixed Upland Deciduous	Sapling Well	25.9	8	Immature	Stand was treated under Anthropogenic Paradigm Mix 72-638-07-01 with 10-20 ba residual over story.
2	4131 - Aspen, Oak	Sapling Well	36.0	27	Immature	Traces of white pine and jack pine. Nice oak stump sprout regen on the eastern side.
3	4133 - Aspen, Mixed Pine	Sapling Well	6.2	3	Immature	Stand was treated under Anthropogenic Paradigm Mix 72-638-07-01.
4	4116 - Mixed N. Hardwood - Aspen	Poletimber Well	197.0	93	81-110	All the white ash in this stand is dead and there is several areas with BBD present. A portion of the stand will be prescribed for a final harvest to regenerate aspen. Did QD. OPIC - FMD: Heavy military vehicle influence in this stand. Several areas w/ severe damage. Heavy to beech and basswood in the north. Don't think there was a maple seedling over 6" high in stand. Hold stand to evaluate the success of stand 6 treatment it is a similar type but better quality.
5	4111 - S.Maple, Hard Mast Association	Poletimber Medium	7.2	90	1-50	
6	4110 - Sugar Maple Association	Poletimber Well	192.1	89	81-110	Stand was harvested under contract 72-651-07-01. There are traces of dead ash, aspen and northern red oak throughout the stand. There currently is some beech bark disease within the stand. There was very little residual damage from the recent harvest and there was some blow down in the southern portion of the stand.
7	4130 - Aspen	Sapling Well	46.0	28	Immature	Stand was harvested with the Hardgrove Lk. Blk. sale, 72-032-87-01.
8	4119 - Mixed Northern Hardwoods	Poletimber Well	86.1	90	81-110	Did QD on this stand white and red pine each had 1 percent of canopy BA.
9	4130 - Aspen	Poletimber Well	41.2	75	81-110	OPIC - FMD: this stand has the best hard maple regen in the compartment M2-M3 (5 - 10'). Looks like it was picked through when stand 11 was cut in late 70's. There are pockets of aspen (mostly overmature/poor quality), others of hdwd, some areas of A3, others of M3. Area is kind of a mess. I recommend that we let the hdwd regen better establish and let the aspen fall down. Maybe NYOE what is left in the overstory can be removed.
11	4130 - Aspen	Poletimber Well	46.7	46	81-110	The southern part of this stand has more stocking and healthier trees than the north. Stand should hold for ten years with all of the other aspen harvests that are being prescribed. Traces of red pine are also in the stand.
12	4130 - Aspen	Sapling Well	7.6	19	Immature	
13	4130 - Aspen	Sapling Well	50.2	18	Immature	There are areas in the stand with stunted cherry and aspen. I think these are old open areas filling in from the last harvest there also is more cherry in these areas.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
14	41199 - Northern Hardwood (OI)	Poletimber Well	1.8	178	81-110	
16	4116 - Mixed N. Hardwood - Aspen	Poletimber Poor	11.4	90	1-50	OPIC - FMD: OI Stand Year Origin was 555
17	4139 - Aspen, Mixed Deciduous	Sapling Well	11.8	18	Immature	Stand was harvested under sale number 72-009-97-01, Hardgrove Aspen Block. The sale was completed in march 1998.
19	4130 - Aspen	Sapling Well	22.3	8	Immature	Stand was cut in the late fall of 2007 and closed out in the winter of 2008. A corridor along the lake to the north was left. All pine and oak were left in the stand. Overall super canopy oak component didn't reach 2%. Military restrictions work well w/ MNFI recommended Loon restrictions. Stand should regenerate to aspen w/ mixed hdwd and conifer. (updated comments) Stand harvested in December 2007, final harvest with reserves. Scattered white and red pine left, T-Sale # 72-617-07-01.
20	4136 - Aspen, Mixed Conifer	Sawtimber Well	18.0	69	51-80	Stand was left as a corridor along the lake.
23	42120 - Planted Jack Pine	Poletimber Well	3.6	62	81-110	OPIC - FMD: PLANTED STRIP ALONG COUNTY ROAD. OVERMATURE TREES CONTINUING TO DECLINE RAPIDLY. LEAVE WHITE AND RED PINE. PLANT BACK TO JACK OR RED. (underplant if stand is not designated for harvest) July 2007: National guard would not approve sale due to cutting of this buffer strip along their firing points. So this strip was removed from the Hardgrove hardwood sale and will remain as is per military request. SJ Thiel, UM
25	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Medium	2.4	85	Unspecified	
27	4139 - Aspen, Mixed Deciduous	Sapling Well	14.6	3	Immature	Stand was treated under Anthropogenic Paradigm Mix 72-638- 07-01. There are a few white pine, cedar, and hemlock which were left from the harvest. An easement has been requested for legal access to the property to the south.
29	6132 - Mixed Lowland Forest with Cedar	Sawtimber Well	2.7	70	Unspecified	This is possibly retention from the adjacent harvest. The stand has a lot of dead black ash in it.
30	42290 - Natural Mixed Pine	Sawtimber Well	4.3	88	81-110	This stand is also a fenced in military facility.
32	4319 - Mixed Upland Forest	Poletimber Well	68.5	40	Unspecified	There are traces of black spruce, jack pine, hemlock, paper birch and BAM in the over story. I took multiple ages on various species and 40 is a good average. There are some cut records for this stand that support the age. Possibly consider treating next entry.
33	42200 - Natural White Pine	Sawtimber Well	28.2	83	81-110	Some scattered cherry in the stand. 5 BA swings

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Grayling Mgt. Unit

Report 8 – Forested Stands

Compartment: 242
Year of Entry: 2017

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
35	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	187.3	85	Unspecified	EAST BRANCH AUSABLE R. FLOWS THROUGH THIS STAND. There are traces of hemlock and aspen in the over story. Stand is a code 8 HCVA. This accounts for the 400' corridor buffer.
38	6113 - Lowland Maple	Sapling Poor	31.2	3	Immature	Stand was treated under Anthropogenic Paradigm Mix 72-638-07-01. There is currently very poor regeneration in the majority of the stand. I think more time is needed to let softwood tree species regenerate.
39	429 - Mixed Upland Conifers	Sawtimber Well	14.0	82	81-110	There are traces of oak, red maple and spruce in the stand. 4 BA swings
41	6124 - Lowland Spruce-Fir	Poletimber Well	83.4	91	Unspecified	Any portion of stand found within 400' of the river should be considered HCVA SC8 the part outside of this range is an SCA due to historic deer ranges.
42	4319 - Mixed Upland Forest	Sapling Well	12.5	13	Immature	Timber Sale # 72-042-01-01 Briggs Convoy Trail. There are scattered pockets of pole sized jack pine and balsam that were left from the harvest.
44	6123 - Lowland Fir	Poletimber Well	26.8	50	81-110	Stand is historic deer yard SCA -8- The part of tth stand which is within 400" of the natural river is HCVA. 1995: The stand is INACCESSABLE because of a creek.
46	42220 - Natural Jack Pine	Poletimber Medium	47.8	36	Unspecified	There are three different size classes of jack pine in this stand there are scattered log sized trees that where cored at 63 years old.
51	4112 - Maple, Beech, Cherry Association	Poletimber Well	9.5	90	81-110	
800	4130 - Aspen	Sapling Well	44.6	28	Immature	Stand was harvested with the Hardgrove Lk. Blk. sale, 72-032-87-01.



Stand	Cover Type	Acres	Managed Site	General Comments:
21	622 - Lowland Shrub	17.3	No	MAJORITY IF NOT ALL OF THE STANDING TIMBER IS DEAD.
22	6299 - Lowland Shrub (OI)	3.6	No	Some lowland mixed lowland deciduous and coniferous trees scattered throughout the stand.
28	3303 - Mixed Low Density Trees	53.6	No	Scattered cherry, aspen, fir, jack pine, and white pine. Gets heavy vehicle traffic from the military.
31	123 - Other High Intensity Urban	32.1	No	LAKE MILITARY BASE CAMP. NEW Military operations, PROJECT NAME: Forward Operating Base. PROJECT #: 001-2006. Jones Lake Base camp has been modified by the constuction of a 6 foot high chain link fence with ant-climb barbed wire. Fence dimensions are 1000 x 1000 feet. There are gravel an concrete tent pads w/ culvert type saftey bunkers inside the fence.
36	622 - Lowland Shrub	34.1	No	Very wet stand with very few trees most of the timber is dead. Mostly tag alder and cat tails wiith a few balsam, spruce and cedar. To wet to walk through.
40	622 - Lowland Shrub	19.6	No	Natural river corridor SC8-HCVA
43	122 - Road/Parking Lot	3.8	No	OPIC - FMD: 2/22/12, FTP SUBMITTED TO PLANT RED PINE C72-709. PLANTED STRIP ALONG COUNTY ROAD. STAND IN DECLINE. PLANT BACK TO RED PINE OR JACK PINE. (underplant if not designated for harvest). 2/22/12 stand was treated under Anthropogenic Paradigm Mix 72-638-07-01.
45	622 - Lowland Shrub	18.8	No	Some trace amounts of cedar, tamarack, and spruce in the stand.
48	500 - Water	31.6	No	Hardgrove or bear lake there is a boat launch. I think it is dirt.
50	3303 - Mixed Low Density Trees	2.6	No	
400	3303 - Mixed Low Density Trees	4.7	No	PART OF INSIDE THE RANGE 40 FENCE FP 520
401	31029 - Grass (OI)	18.0	No	Some brush mostly open.
402	3102 - Grass	37.6	No	SOME CHERRY BRUSH MILITARY FIRING PTS
403	31029 - Grass (OI)	10.5	No	Grass opening and a military firing point.
404	3102 - Grass	33.7	No	There is scattered cherry, sumac, hawthorn, a few apple trees, and some aspen. The sumac is getting thick in spots and has been browsed back SEE OFS POINT.
405	31029 - Grass (OI)	21.1	No	MILITARY FIRING PTS



Stand	Cover Type	Acres	Managed Site	General Comments:
406	31029 - Grass (OI)	2.7	No	MILITARY FIRING PTS
407	3102 - Grass	1.2	No	Grass opening starting to fill in. It is not used by military.
409	3303 - Mixed Low Density Trees	1.1	No	NOT USED BY MILITARY.
410	3303 - Mixed Low Density Trees	2.9	No	
411	31029 - Grass (OI)	2.8	No	OPIC - FMD: POWER LINE