



Compartment Review Presentation

Grayling Forest Management Unit

Compartment 240

Entry Year 2016

Acreage: 1,747

County Crawford

Management Area: Camp Grayling

Revision Date: 03/24/2014

Stand Examiner: Matthew Foster

Legal Description:

T27N, R3W, SEC. 1,12,13

Identified Planning Goals:

The primary goal is to provide for military training while maintaining for health, productivity, species and structural diversity, and sustainability throughout the compartment. Management should facilitate military training while providing for multiple use opportunities for the public where it does not conflict with military training needs.

Soil and topography:

The majority of this compartment is comprised of Grayling sands, 0 – 10% slopes. The East half of sections 12 and 13 have greater slope intensities ranging from 10 – 40%. The wetland areas within the compartment are mostly comprised of Dawson and Leafriver mucks.

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

A majority of the compartment is state land except for some private parcels along the west edge of sections 1 and 13. Some parcels are State Military Board Lands while the remainder of state land in the compartment is under a long term lease (L-1479) with the Michigan National Guard, DMA to provide for military usage with no permanent buildings or improvements to be erected (Act 154, P.A., 1935). The compartment contains a portion of the Military's Range 30 impact area. This area is fully fenced and not open for public use. This compartment is adjacent to the eastern boundary of Hartwick Pines State Park.

Unique Natural Features:

Kirtland's warbler (*Denroica kirtlandii*), Rough Fescue (*festuca scabrella*), Hill's thistle (*cirsium hillii*), and False-violet (*Dalibarda repens*) are known to exist, or have existed, in this compartment. Management activities taking place where these species have been recorded will take into account the requirements of these species.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

A portion of the Range 30 Impact Area is located in the southeastern portion of the compartment. This area is closed to the public and is bounded by a fence. The area is posted and may contain hazardous ordinances from military use.

Watershed and Fisheries Considerations:

The East Branch of the AuSable River is located ¼ mile to ¾ miles to the west of this compartment. No streams, rivers, or lakes are located within the compartment boundaries.

Wildlife Habitat Considerations:

Compartment 240 has potential to sustain about 130 acres of Pine Barrens habitat in section one, depending on the amount of Military disturbance. The southeastern portion of the compartment has many mixed oak stands, providing mast and habitat for several species of wildlife, including game species such as whitetail deer, turkey, eastern gray squirrel, and fox squirrel. The remaining areas of the compartment have varying age classes of jack pine.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of ice-contact and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 800 feet. Beneath the glacial drift are the Marshall Sandstone and Coldwater Shale. The Marshall was quarried for building stone in the past. A gravel pit is located in Section 12 and potential is good in the upland areas. None of the compartment is leased for oil and gas, as it is in the Military area. The nearest production is from the Antrim Shale, six miles to the northwest. There does not appear to be Antrim Shale potential in this Compartment.

Vehicle Access:

County Roads of Lewiston Grade and Jones Lake Road bisect the compartment. There are several trail roads leading off

from the main county roads of this compartment. Most are used significantly by the military during summer months. These trail roads are also used readily by snowmobilers for non-groomed recreational trail riding during the winter months. A military tank trail also exists in sections 12 and 13 along the boundary of Range 30.

Survey Needs:

The west 1/4 corner of Section 13 was found disturbed along Jones Lake Rd and needs to be reestablished.

Recreational Facilities and Opportunities:

Designated snowmobile trail #47 (Grayling-Lovells Route) bisects the compartment, running along Lewiston grade, crossing Jones Lake road, then continuing along forest trail roads to the eastern boundary of the compartment.

Fire Protection:

There does not appear to be any immediate need for fire prevention activities in this compartment at this time. In the event a wildfire occurs within the compartment, there are several water sources for suppression needs to the north at Jones Lake, and to the west at the East Branch of the AuSable River.

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 & Treatment Map

Compartment: 240
 T27N R03W Sec. 01, 12, 13
 County: Crawford
 Unit: Grayling
 YOE: 2016
 Acres: 1,747 GIS Calculated
 Examiner: Matthew Foster
 Map Revised: 09/04/2014
 Map Phase: Pre-Review

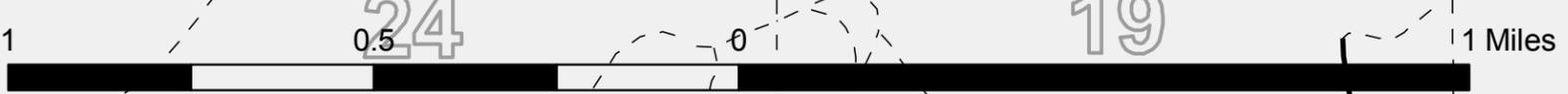
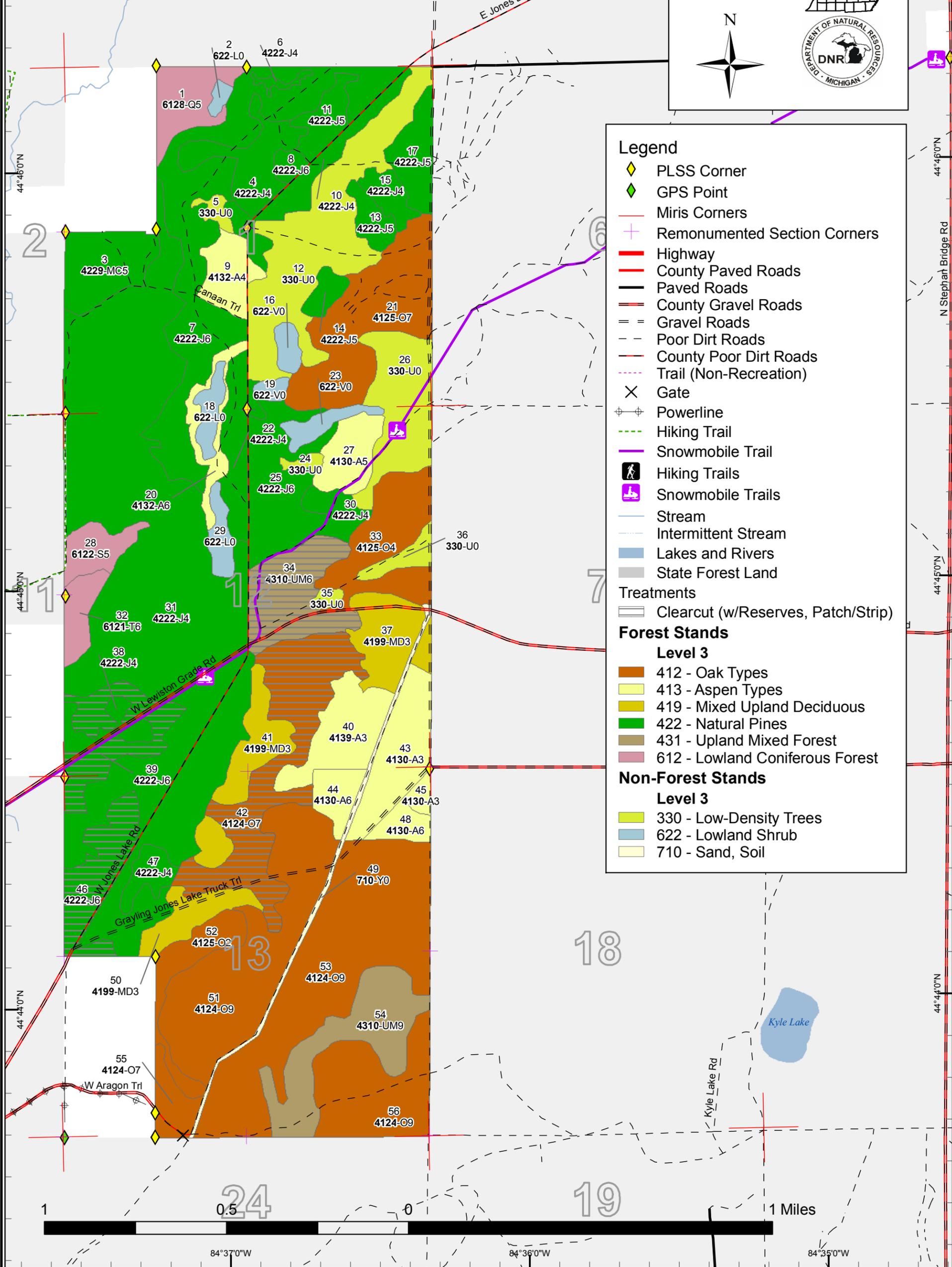
Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code

1
 12
 13



Legend

- ◆ PLSS Corner
 - ◆ GPS Point
 - Miris Corners
 - + Remonumented Section Corners
 - Highway
 - County Paved Roads
 - Paved Roads
 - County Gravel Roads
 - Gravel Roads
 - Poor Dirt Roads
 - County Poor Dirt Roads
 - - - Trail (Non-Recreation)
 - × Gate
 - ⊕ Powerline
 - - - Hiking Trail
 - Snowmobile Trail
 - Hiking Trails
 - Snowmobile Trails
 - Stream
 - Intermittent Stream
 - Lakes and Rivers
 - State Forest Land
- Treatments**
- ▨ Clearcut (w/Reserves, Patch/Strip)
- Forest Stands**
- Level 3**
- 412 - Oak Types
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 422 - Natural Pines
 - 431 - Upland Mixed Forest
 - 612 - Lowland Coniferous Forest
- Non-Forest Stands**
- Level 3**
- 330 - Low-Density Trees
 - 622 - Lowland Shrub
 - 710 - Sand, Soil



84°37'0"W 84°36'0"W 84°35'0"W

Stand Boundary Map

Compartment: 240
 T27N R03W Sec. 01, 12, 13
 County: Crawford
 Unit: Grayling
 YOE: 2016
 Acres: 1,747 GIS Calculated
 Examiner: Matthew Foster
 Map Revised: 09/04/2014
 Map Phase: Pre-Review

Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code

Legend

- ◆ PLSS Corner
- ⊕ Remonumented Section Corners
- Miris Corners
- ◆ GPS Point
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- == Gravel Roads
- - Poor Dirt Roads
- - County Poor Dirt Roads
- - - Trail (Non-Recreation)
- × Gate
- ⊕ Powerline
- Snowmobile Trail
- - - Hiking Trail
- 🚶 Hiking Trails
- 🚙 Snowmobile Trails
- Stream
- - - Intermittent Stream
- Lakes and Rivers
- Stand Boundaries

Forest Stands

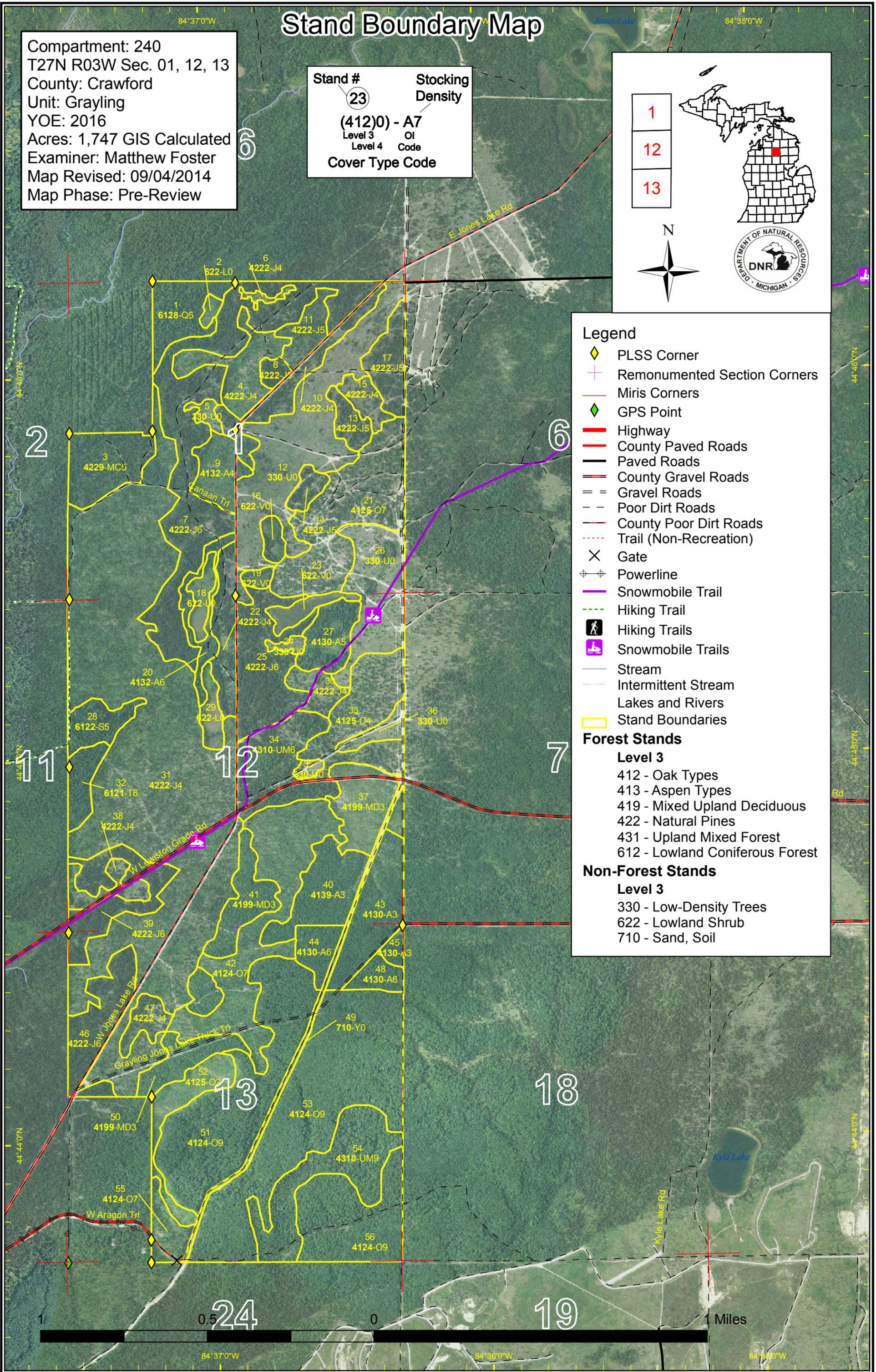
Level 3

- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 422 - Natural Pines
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands

Level 3

- 330 - Low-Density Trees
- 622 - Lowland Shrub
- 710 - Sand, Soil



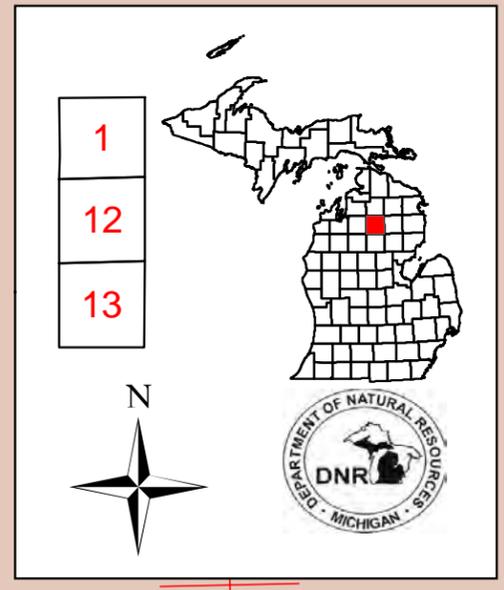
0.5 Miles

84°37'0"W 84°36'0"W 84°35'0"W

Special Conservation Areas & Site Conditions Map

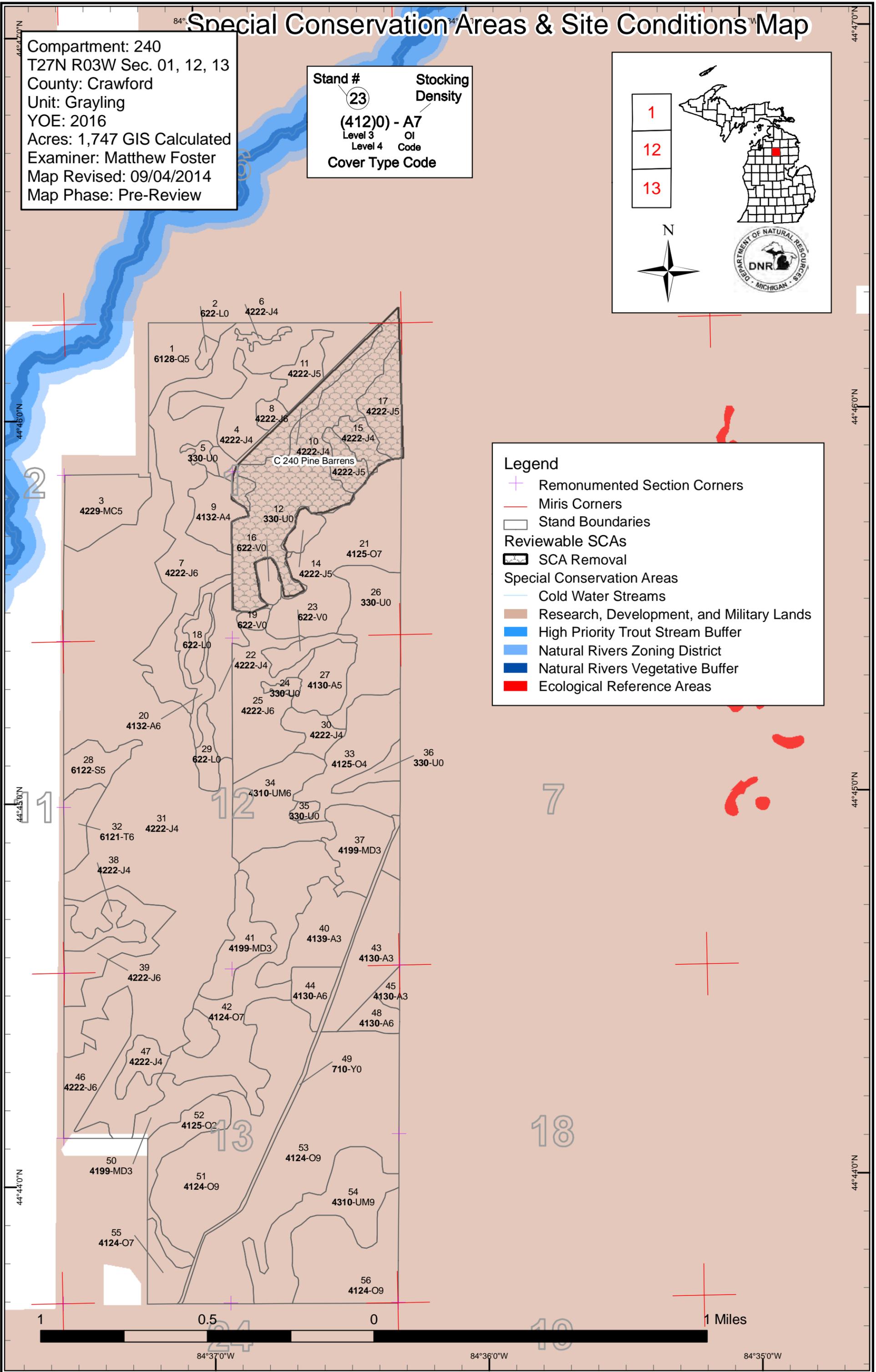
Compartment: 240
 T27N R03W Sec. 01, 12, 13
 County: Crawford
 Unit: Grayling
 YOE: 2016
 Acres: 1,747 GIS Calculated
 Examiner: Matthew Foster
 Map Revised: 09/04/2014
 Map Phase: Pre-Review

Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



Legend

- + Remonumented Section Corners
- Miris Corners
- Stand Boundaries
- Reviewable SCAs**
- SCA Removal
- Special Conservation Areas**
- Cold Water Streams
- Research, Development, and Military Lands
- High Priority Trout Stream Buffer
- Natural Rivers Zoning District
- Natural Rivers Vegetative Buffer
- Ecological Reference Areas



84°37'0"W 84°36'0"W 84°35'0"W

Report 1 – Total Acres by Cover Type and Age Class



	Age Class														Total
	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 +	Uneven Age	
Aspen	37	31	0	37	18	12	0	0	0	0	0	0	0	0	135
Bog	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Jack Pine	0	0	378	18	83	199	30	0	0	0	0	0	0	0	708
Low-Density Trees	139	0	0	0	0	0	0	0	0	0	0	0	0	0	139
Lowland Conifers	0	0	0	0	0	0	0	22	0	0	0	0	0	0	22
Lowland Shrub	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Lowland Spruce/Fir	0	0	0	0	0	0	0	14	0	0	0	0	0	0	14
Mixed Upland Deciduous	29	0	45	0	0	0	0	0	0	0	0	0	0	0	73
Natural Mixed Pines	0	0	0	28	0	0	0	0	0	0	0	0	0	0	28
Oak	21	0	0	0	41	66	0	0	74	280	0	0	0	0	482
Sand, Soil	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Tamarack	0	0	0	0	0	0	0	0	12	0	0	0	0	0	12
Upland Mixed Forest	0	0	0	0	0	38	0	0	0	49	0	0	0	0	87
Total	271	31	423	83	143	316	30	36	86	329	0	0	0	0	1747



Report 2 – Proposed Treatment Summaries

Grayling Mgt. Unit
Year of Entry 2016

Compartment 240
Total Compartment Acres: 1,747

Acres by Treatment Type

Commercial Harvest - 174	Tree Planting - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	

Cover Type by Harvest Method

	<i>Clearcut</i>	<i>Selection</i>	<i>Seed Tree</i>	<i>Shelterwood</i>	<i>Thinning</i>	<i>Other - Specify</i>	<i>Total Acres</i>
Natural Pines	61	0	0	0	0	0	61
Oak Types	74	0	0	0	0	0	74
Upland Mixed Forest	38	0	0	0	0	0	38
Total	174	0	0	0	0	0	174



S
t
a
n
d

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
34 72240034-Cut	38.4	4310 - Pine, Oak Mix	High Density Pole	55	51-80	Harvest	Clearcut with Reserves	4122 - Oak, Pine	Cmpt. Review Proposal

Prescription Final harvest stand and let regenerate naturally. Do not leave standard retention, protect pockets of advanced regeneration on the north facing slope. Protect the snowmobile trail, Lewiston Grade Rd, and Jones Lake Rd.

Other This stand has a nice oak understory, should regenerate well as a mixed stand.
Comments:

Next Regeneration survey, will accept a jack pine/oak mix.
Steps:

Proposed
Start Date: 10/01/2015

39 72240039-Cut	30.9	42220 - Natural Jack Pine	High Density Pole	57		Harvest	Clearcut	4222 - Natural Jack Pine	Cmpt. Review Proposal
-----------------	------	---------------------------	-------------------	----	--	---------	----------	--------------------------	-----------------------

Prescription Final harvest, leave no retention to maximize regeneration. Protect snowmobile trail (Lewiston Grade Rd) with proper specs. Add military time restrictions.

Other Stand 38 will be left to serve as visual buffer along Lewiston Grade Rd and the snowmobile trail.
Comments:

Next Regeneration survey, will accept jack pine or jack pine/oak mix.
Steps:

Proposed
Start Date: 10/01/2015

42 72240042-Cut	74.3	4124 - Red with White Oak	Low Density Log	87	1-50	Harvest	Clearcut	412 - Oak	Cmpt. Review Proposal
-----------------	------	---------------------------	-----------------	----	------	---------	----------	-----------	-----------------------

Prescription Overstory removal - Remove overstory left from previous harvest, no retention. Protect oak regeneration as much as possible. Leave any hollow den trees for wildlife. Add military time restrictions and require a roundwood operation. Do not allow chipping of the tops.

Other Stand has oak and red maple regenerating in the understory.
Comments:

Next Regeneration survey.
Steps:

Proposed
Start Date: 10/01/2015

46 72240046-Cut	30.2	42220 - Natural Jack Pine	High Density Pole	62		Harvest	Clearcut with Reserves	4222 - Natural Jack Pine	Cmpt. Review Proposal
-----------------	------	---------------------------	-------------------	----	--	---------	------------------------	--------------------------	-----------------------

Prescription Final harvest stand, leave no retention due to budworm issues. Add military time restrictions.
Specs:

Other Stand has been hit by budworm. This stand has good potential for pine barrens. If stand does not regenerate well manage for pine barrens.
Comments:

Next Regeneration survey, will accept jack pine/oak mix.
Steps:

Proposed
Start Date: 10/01/2015

**Total Treatment
Acreage Proposed: 173.7**



S
t
a
n
d

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
----------------	-------	-----------	--------------	-----------	----------	----------------	------------------	----------------------	-----------------

#Type! #Type!

Prescription
Specs:

Other
Comment:

Next
Steps:

Proposed
Start Date: #Type!

Limiting Factor

**Total Treatment
Acreage Proposed: 0.0**

Report 5 – Site Conditions

Grayling Mgt. Unit

Matthew Foster : Examiner

Compartment 240

Year of Entry 2016

Availability for Management

Total Acres	Acres		Dominant Site Conditions	No	5C	5B	3F	2G
	Available	Not Available						
135	122	13	Aspen	110	12		13	
708	708		Jack Pine	708				
22	22		Lowland Conifers	22				
14	14		Lowland Spruce/Fir	14				
73	73		Mixed Upland Deciduous	73				
28	28		Natural Mixed Pines	28				
482	307	175	Oak	203	92	12	175	
12		12	Tamarack					12
87	38	49	Upland Mixed Forest	38			49	
1,562	1,313	249	Total Forested Acres	1,197	104	12	237	12
	84%	16%	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
003	Not Available	3F: Military easement / lease	241				
Comments: Fenced Range 30 Impact Area							
004	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	12				
Comments:							
005	Available	5B: Maintain for regeneration purposes	12				
Comments:							

Report 5 – Site Conditions

Grayling Mgt. Unit
Matthew Foster : Examiner

Compartment 240
Year of Entry 2016

006	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	92
-----	-----------	--	----

Comments:

007	Not Available	2G: Too wet (sensitive soils, does not include access issues)	12
-----	---------------	---	----

Comments:



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
C 240 Pine Barrens	Habitat Areas or Corridors	Other Habitat Area	SCA Removal	133.8
Comments				
Burned in 2008 for Camp Grayling Pine Barrens Management				



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	Archaeological Site	An aquatic or terrestrial area of the State that contains physical remains of human occupation. These are sites of cultural and historical significance that may occur upon terrestrial areas and Great Lakes bottomlands. They include thousands of Native American settlements and burial sites, as well as French and British outposts, nineteenth century logging camps, mines and homesteads. Beneath the waters of the Great Lakes, there are shipwrecks and other remains documenting the maritime trade. Such sites may be identified by Natural heritage data from the State Historic Preservation Office. Proposed treatments in this compartment will be implemented in such a manner as to maintain the integrity of these sites. Due to the sensitive nature of this information, no further detail about location is available.
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.
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	22.2	74		Stand has a few open areas full of tag alder. The majority of the white cedar is in the southern half of the stand, black spruce and tamarack are more dominant in northern part of the stand. A few spots in the stand look to be very wet.
3	42290 - Natural Mixed Pine	Medium Density Pole	28.5	34	1-50	Stand was harvested in 1984 Salvage cut due to budworm damage (TS#72-084-83-02). This is a diverse stand with scattered large red pine.
4	42221 - Natural Jack Pine, Mixed Deciduous	Low Density Pole	24.7	24		Stand was harvested in 1989, north and west fingers harvested in 1987. Very sparse stand with open grown jack pine and cherry clumps. A small revine filled with shrubs is included in the stand.
6	42220 - Natural Jack Pine	Low Density Pole	2.2	40		Open area with scattered, poor quality jack pine. Cherry clumps also scattered throughout the stand.
7	42220 - Natural Jack Pine	High Density Pole	103.2	53		Large winding stand, mostly two aged, some dense pockets of jack pine and some sparse areas. Some areas look like they could have been planted. Let stand grow another 10 years and then consider harvesting.
8	42220 - Natural Jack Pine	High Density Pole	4.0	44		Stand was excluded from harvest in 1987 (TS# 72-052-86-01). Stand may have been planted and has a sparse understory.
9	4132 - Aspen, Jack Pine	Low Density Pole	16.9	30		Variable stand with scattered, poor quality aspen pockets mixed with jack pine in the overstory. Shrub formed cherry clumps make up the majority of the understory.
10	42220 - Natural Jack Pine	Low Density Pole	22.5	55		Sparse jack pine stand, serves as a buffer along Jones Lake Rd.
11	42220 - Natural Jack Pine	Medium Density Pole	12.5	25		Stand was harvested in 1989. Some sparse areas, poor quality jack pine and cherry clumps scattered throughout the stand.
13	42220 - Natural Jack Pine	Medium Density Pole	8.8	35		Mixed age of jack pine, stand has some sparse areas, Age was taken on the younger, more representative age class. Stand was burned in 2008 under FTP C72-553, Burn ID 20-41-08, as part of the North Camp Grayling Pine Barrens Management Plan.
14	42220 - Natural Jack Pine	Medium Density Pole	6.4	45		Small jack pine stand with some oak mixed in, mostly pole sized.
15	42220 - Natural Jack Pine	Low Density Pole	8.9	37		Stand is sparse with open grown, poor quality jack pine. Does not have older age class that are found in stands 17 and 14. Stand was burned in 2008 under FTP C72-553, Burn ID 20-41-08, as part of the North Camp Grayling Pine Barrens Management Plan.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
17	42220 - Natural Jack Pine	Medium Density Pole	17.7	47		Mixed age of jack pine. Has good oak regeneration under jack pine overstory, the open areas have good jack pine regeneration. Stand has some sparse areas throughout, noticed a couple of jack pine trees declining. Stand was burned in 2008 under FTP C72-553, Burn ID 20-41-08, as part of the North Camp Grayling Pine Barrens Management Plan.
20	4132 - Aspen, Jack Pine	High Density Pole	12.3	52		Aspen with some jack pine mixed in some areas. Stand is variable with areas of pole sized aspen and areas of log sized aspen with log sized trees closer to lowland areas. A couple of areas starting to decline, look to harvest when adjacent jack pine stands are harvested.
21	4125 - Black, N. Pin Oak	Low Density Log	66.0	58	1-50	Sparse stand of log/pole sized oak stump sprouts. Looks like heavy ORV/military use in the area. A few pockets of jack pine included in the stand with some jack pine seedlings in the open areas.
22	42220 - Natural Jack Pine	Low Density Pole	22.4	48		Some dense and open pockets of jack pine along Jones Lake Rd. Stand borders two different lowland shrubs areas.
25	42220 - Natural Jack Pine	High Density Pole	42.3	54		Stand has a few small pockets of trees declining, budworm damage was observed in some areas of the stand. Old imagery shows a wildfire went through the area in the 1950's. Most of the stand either came back naturally or was planted very dense resulting in tall, small diameter trees. Some larger diameter trees are found where the tree density is lower. Some open strips through the stand, most likely from military traffic. Hold stand for another 10 years then look to harvest.
27	4130 - Aspen	Medium Density Pole	18.3	45		Stand has mixed pockets of pole, log, and sapling sized aspen. Stand has a small lowland shrub area in the middle (<1 acre), and borders another wetland to the north. A nice log sized pocket of aspen borders the snowmobile trail.
28	6122 - Black Spruce	Medium Density Pole	14.3	77	51-80	Some blowdown occurring due to wet conditions. Stand has some supercanopy white pine and a few canopy gaps filled with tag alder.
30	42220 - Natural Jack Pine	Low Density Pole	10.3	47		Scattered pole sized jack pine with some younger jack pine seeding in. Snowmobile trail goes through the stand.
31	42221 - Natural Jack Pine, Mixed Deciduous	Low Density Pole	340.8	26		Stand was harvested in 1988 (TS# 72-050-86-01). Sparse jack pine and cherry stand, some pockets of aspen found throughout, mostly in the northern half of stand.
32	6121 - Tamarack	High Density Pole	12.1	84	81-110	Almost a pure tamarack stand with black spruce and tag alder in the understory. Blowdown occurring throughout the stand, site is very wet.
33	4125 - Black, N. Pin Oak	Low Density Pole	41.1	45	1-50	Rolling hills with scattered oak and a couple of jack pine pockets. Sparse stand with some jack pine seedlings in the open areas.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
34	4310 - Pine, Oak Mix	High Density Pole	38.4	55	51-80	Jack pine and oak with some sparse areas in the Northeast portion of the stand. Jack pine is declining along with some of the oak. A couple of pockets of advanced regeneration are located on the north facing slope. Snowmobile trail traverses through the stand.
37	4199 - Other Mixed Upland Deciduous	High Density Sapling	28.5	5		Stand was final harvested in 2009. Stand has regenerating oak and red maple stump sprouts. Some deer browsing is occurring on the shorter saplings.
38	42220 - Natural Jack Pine	Low Density Pole	10.7	49		Sparse, open grown jack pine. Snowmobile trail traverses through the stand.
39	42220 - Natural Jack Pine	High Density Pole	30.9	57		A few open areas within stand, mortality is occurring in a few pockets. Stand has been hit hard by budworm. Some areas look like they may have been planted.
40	4139 - Aspen, Mixed Deciduous	High Density Sapling	30.6	17		Stand was harvested in 1997, should be pole sized next YOE.
41	4199 - Other Mixed Upland Deciduous	High Density Sapling	27.9	26		Final harvested in 1988. This is a mixed stand with some oak in understory. Scattered red pine in the northern half of the stand.
42	4124 - Red with White Oak	Low Density Log	74.3	87	1-50	Stand was seedtree harvested in 2009 (72-622-06-01). Harvest ended up being more of a shelterwood with 40-50BA left throughout the stand. Was supposed to be burned to set back red maple but burn was cancelled. A good amount of oak regeneration, majority is about 4ft tall and being heavily browsed, oak stump sprouts have made it above browse line. Red maple stump sprouts throughout the stand, more concentrated in the northern half of the stand.
43	4130 - Aspen	High Density Sapling	33.3	2		Stand was cut in 2012 (72-619-12-01) for a new military range, but funding was pulled after the stand was cut. This stand has aspen saplings 3-5 ft tall with red maple stump sprouts, oak sprouts are more concentrated in the northern half of the stand.
44	4130 - Aspen	High Density Pole	11.5	37		Stand was final harvested in 1977. Nice aspen stand with some red maple and oak mixed throughout.
45	4130 - Aspen	High Density Sapling	3.6	2		Stand was cut in 2012 for a new military range but funding was pulled. Made edge call from observations from the fence and data from stand 100.
46	42220 - Natural Jack Pine	High Density Pole	30.2	62		Jack pine has been hit by budworm and is declining. Good amount of oak in the understory. Some mortality and blowdown occurring throughout the stand.
47	42220 - Natural Jack Pine	Low Density Pole	9.4	44		Sparse stand, scattered jack pine, black cherry and a few oak.
48	4130 - Aspen	High Density Pole	8.4	37		Fenced Range 30 Impact Area. Stand was final harvested in 1977. Used observations from the fence and data from stand 42 which was harvested at the same time.

S
t
a
n
d

Grayling Mgt. Unit

Report 8 – Forested Stands

Compartment: 240
Year of Entry: 2016

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
50	4199 - Other Mixed Upland Deciduous	High Density Sapling	17.0	26		Stand was final harvested in 1988 (TS# 72-057-86-01). A lot of red maple stump sprouts mixed with oak and a few scattered jack pine. This stand is currently a borderline sapling/pole stand.
51	4124 - Red with White Oak	High Density Log	91.7	94	111-140	This is a nice quality oak stand, was thinned in 1999 (TS# 72-039-96-01), Includes pocket of large red pine along tank trail. Mostly red maple and some oak is regenerating from stump sprouts. Was supposed to be underburned to knock back red maple but burn was cancelled. Red maple stump sprouts regenerating makes up the majority of the understory, There are a couple of thick pockets of white pine and red pine regeneration. The farther south you go in the stand the more white oak is present in the overstory. Some gypsy moth egg masses noticed on north end of stand,
52	4125 - Black, N. Pin Oak	Medium Density	20.9	5		Stand final harvested in 2009 (TS# 72-622-06-01). Oak saplings and stump sprouts mixed with red maple stump sprouts. Heavy deer browse is occurring on the oak.
53	4124 - Red with White Oak	High Density Log	126.1	93		Fenced Range 30 Impact Area. Used OI data and observations from fence for data collection.
54	4310 - Pine, Oak Mix	High Density Log	48.8	93		Fenced Range 30 Impact Area. Used imagery to estimate level 4 call, looks like a jack pine/oak mix.
55	4124 - Red with White Oak	Low Density Log	12.0	91	1-50	Stand was harvested in 2009 (TS# 72-622-06-01). This was previously two stands, south half was marked to 40 BA, in the north half all oak was left. Oak and red maple stump sprouts coming back well. Deer are browsing on oak and red maple.
56	4124 - Red with White Oak	High Density Log	50.0	93		Fenced Range 30 Impact Area.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
2	622 - Lowland Shrub	2.5	No	Unspecified	Open lowland area with bog birch and grey and red osier dogwood. A few spruce seeding along the edges.
5	330 - Low-Density Trees	3.5	No	Unspecified	Open stand with a few scattered poor quality cherry clumps and a couple of jack pine trees.
12	330 - Low-Density Trees	82.4	Yes	Low	Was burned in 2008 under FTP C72-553, Burn ID 20-41-08, as part of the North Camp Grayling Pine Barrens Management Plan. Need to revisit in the summer and see if the site needs to be burned again.
16	6225 - Bog	5.3	No	Unspecified	Small wetland with some snags throughout the stand. Small buffer of jack pine is included.
18	622 - Lowland Shrub	7.9	No	Unspecified	South half relatively open, north half full of red osier dogwood and other lowland shrubs. Some aspen creeping in from the edges.
19	6225 - Bog	3.1	No	Unspecified	Small wetland with some snags throughout the stand. Small buffer of jack pine is included.
23	6225 - Bog	7.9	No	Unspecified	Oval shaped bog, surrounded by dense jack pine. Standing snags throughout the bog with some jack pine seeding in from the edges.
24	330 - Low-Density Trees	2.5	No	Unspecified	Cherry shrubs and a few scattered sapling/pole sized jack pine trees.
26	330 - Low-Density Trees	41.2	No	Unspecified	Scattered poor quality, pole sized oak and jack pine. A few oak and cherry clumps scattered throughout the stand. A few jack pine seedlings seeding in also. Two small shrub areas surrounded by jack pine included in the stand.
29	622 - Lowland Shrub	8.1	No	Unspecified	South half relatively open, North half has red osier dogwood, bog birch, and other various lowland shrubs. Stand is surrounded by jack pine and aspen.
35	330 - Low-Density Trees	2.4	No	Unspecified	A few jack pine saplings with a couple of oak and cherry clumps.
36	330 - Low-Density Trees	7.2	No	Unspecified	Small valley with very sparse jack pine, oak, and a couple of cherry clumps.
49	710 - Sand, Soil	10.2	No	Unspecified	Wide road along Range 30 fence.