

Compartment Review Presentation

Grayling Forest Management Unit

Compartment 13 Entry Year 2015 Acreage: 1,746 County Oscoda Management Area: Avery Hills

Revision Date: 07/29/2013

Stand Examiner: Patrick Potter

Legal Description:

T27N, R03E, Sections 3-6, 9 & 10 T28N, R03E, Section 34

Identified Planning Goals:

To maintain forest health, productivity, sustainability, species diversification, and structural diversity throughout the compartment while providing for multiple use and visual management.

Soil and topography:

The soils consist of predominately Kalkaska, Roselawn, Rubicon and Grayling sands which are well drained. In addition there are a few areas of poorly drained Emmet sandy loam soil, Rifle peat and spots of organic soils. The terrain is mostly gently rolling hills with a few very steep areas and a few low spots of poor drainage.

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

The compartment is a mix of state land and private property. Section six and the west half of section 5 are entirely state owned. The remaining state land has many private property interfaces but is accessible by county roads, except for a forty acre parcel located in section 10 (SENW) which is being proposed to be disposed of.

Unique Natural Features:

There is potential for rare dry prairie plants and insects to occur in grassy openings. Haliaeetus leucocephalus (Bald eagle) also has potential to be found within the compartment.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

MFRA demo Area

Watershed and Fisheries Considerations:

The Perry Lakes chain-of-Lakes (North, Middle and South Lakes) is located just to the south of the compartment. Some of the area within the compartment is part of the Perry Creek drainage. The lakes receive moderate fishing pressure for bluegill and bass. Comins Township maintains an access site/park on the north shore of North Perry lake.

Wildlife Habitat Considerations:

The compartment's wide range of cover types – ranging from northern hardwoods, aspen and oak, and super-canopy stature pine -- provide habitat for a variety of game and non-game wildlife species.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and an end moraine of mediumtextured glacial till. The glacial drift thickness varies between 600 and 800 feet. Beneath the glacial drift is the Coldwater Shale. There is not an economic use for the Coldwater Shale. The nearest gravel pit is in Section 4 and potential appears to be good. The sections in T27N-R3E are leased for oil and gas development. This area appears to be too far south to be productive from the Antrim Shale.

Vehicle Access:

The current system of state highway (M-33) and certified county roads (Mount Tom, Cedar Run, Reber Road and Velda trail) provide good access throughout the compartment. All of the roads provide access for the private residences. There are no access easements in compartment and no existing roads needs to be closed at this time. All new roads created through management activities are to be closed upon completion.

Survey Needs:

None at this time

Recreational Facilities and Opportunities:

They is one designated trail (Mio Route) run through sections five and six. The compartment's main forms of dispersed recreation are hunting, fishing, camping.

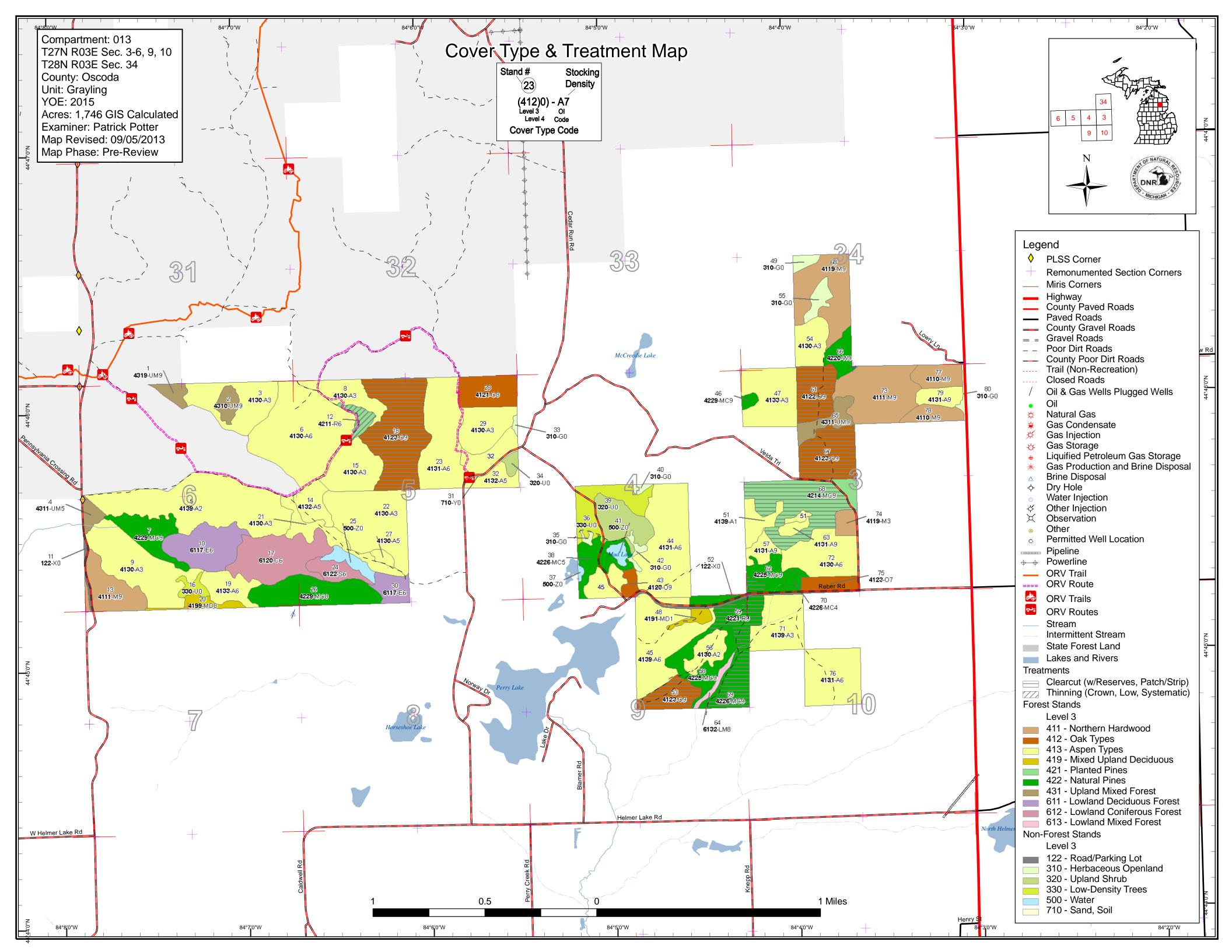
Fire Protection:

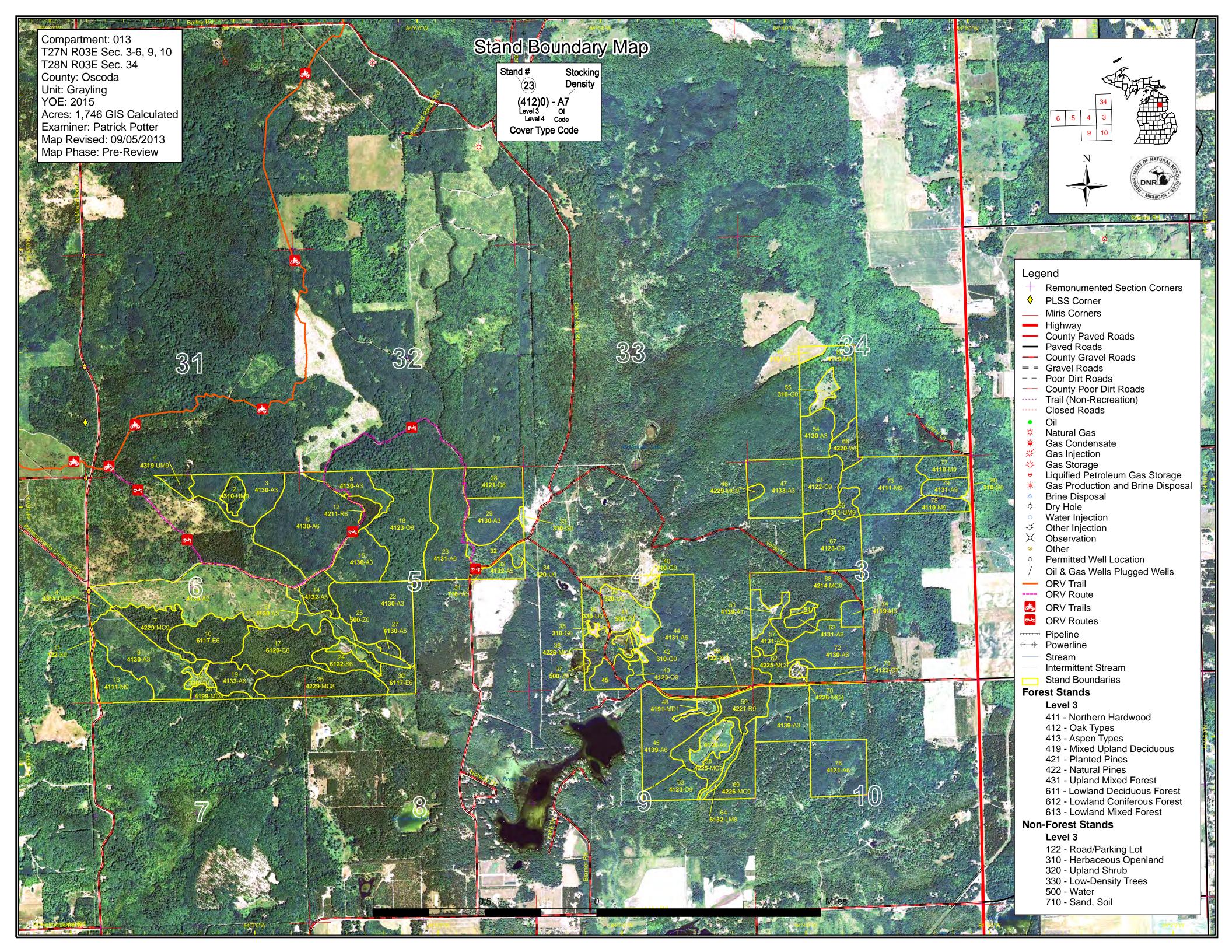
The compartment's vehicle access is adequate along existing roads. North Perry Lake and Mud Lake are a potential water sources.

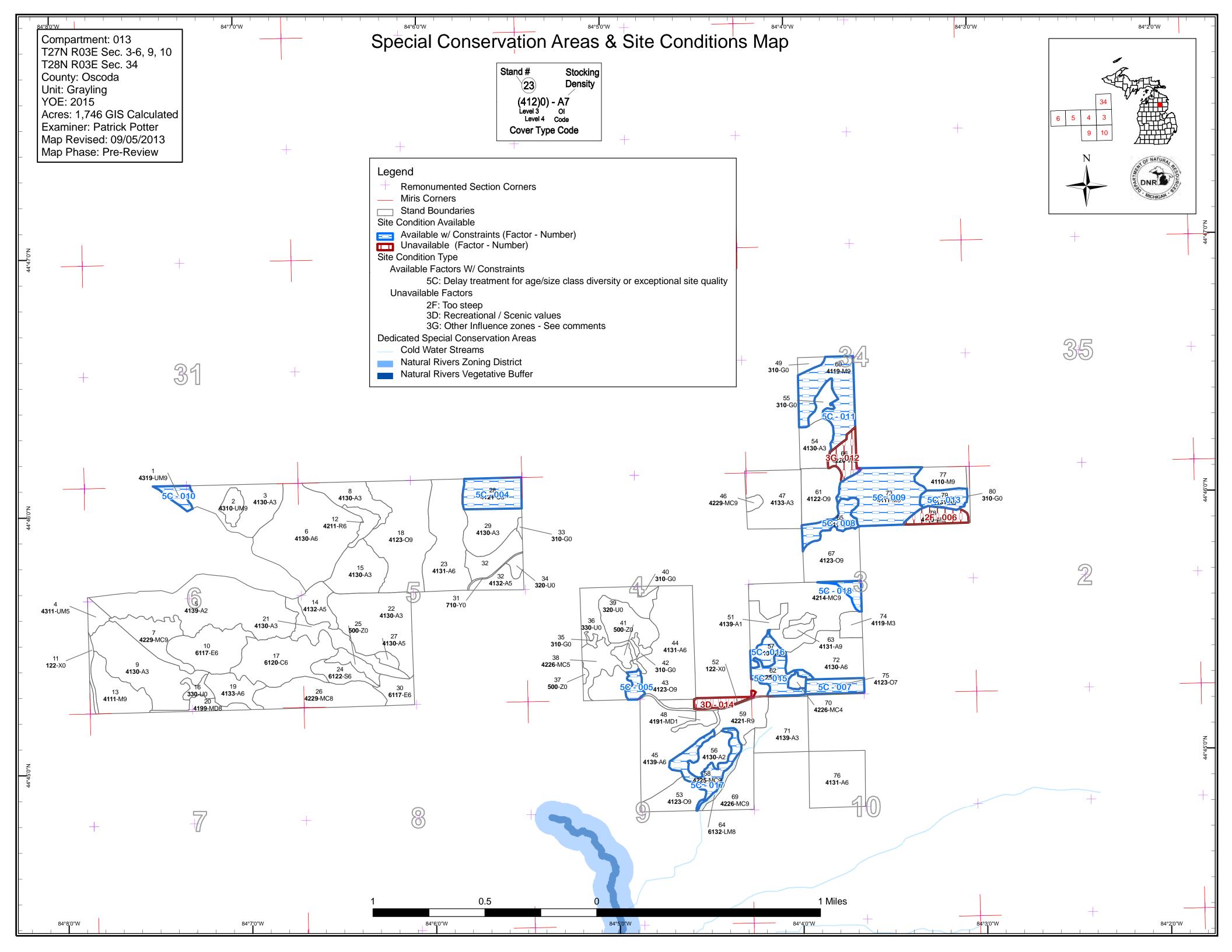
Additional Compartment Information:

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







Report 1 – Total Acres by Cover Type and Age Class

Grayling Mgt. Unit Craig Farrer : Examiner

Compartment 013 Year of Entry 2015



Age Class

	/	00	⁷ a ⁷ 9	2022	30.00 000	AD AT	Se Se	80.00 0000	100	89 89 89	899	001.001.	12a,77g	200× 100	A AS	
Aspen	110	119	462	167	18	0	0	10	0	4	8	0	0		899	$\left(\right)$
Cedar	0	0	0	0	0	0	0	0	0	0	47	0	0	0	47	
Herbaceous Openland	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21	
Low-Density Trees	32	0	0	0	0	0	0	0	0	0	0	0	0	0	32	1
Lowland Deciduous	0	0	0	0	36	12	0	0	0	0	0	0	0	0	47	1
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	1
Lowland Spruce/Fir	0	0	0	0	0	0	11	0	0	0	0	0	0	0	11	
Mixed Upland Deciduous	0	5	0	0	0	0	0	0	8	0	0	0	0	0	13	
Natural Mixed Pines	0	0	0	3	0	17	26	0	16	40	45	0	0	0	147	
Northern Hardwood	0	0	7	0	0	0	0	0	0	0	128	0	0	14	150	
Oak	0	0	0	0	0	0	0	26	109	35	18	0	0	0	188	
Planted Mixed Pines	0	0	0	0	0	0	0	0	0	58	0	0	0	0	58	
Red Pine	0	0	0	0	7	0	0	0	0	27	0	0	0	0	34	
Sand, Soil	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Upland Mixed Forest	0	0	0	0	0	6	0	0	14	0	14	0	0	0	34	
Upland Shrub	28	0	0	0	0	0	0	0	0	0	0	0	0	0	28	
Urban	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
Water	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13	1
White Pine	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	1
Total	212	124	469	170	60	35	38	36	147	176	264	0	0	14	1746	



A . MICHIGAN	Grayling Mgt. Unit Year of Entry 2015				Compartment Total Compartment Acres:	
			Acres by Treat	nent Type		
	Commercial Harvest - 250	Tree Planting - 0	Other - 0			
	Habitat Cut - 0	Opening Maintena	nce - 0			
			Cover Type by	Harvest Method		
			100 CO	Store Start	Solution of the second	
	Natural Pines		41 0 0 0	0 0 41		
	Oak Types		131 0 0 0	0 0 131		
	Planted Pines		70 0 0 0	7 0 77		
		Total	242 0 0 0	7 0 250		

Compartment: 013 Grayling Mgt. Unit **Report 3 -- Treatments Prescribed** Year of Entry 2015 with No Limiting Factor s t а Treatment Acres CoverType Size BA Treatment Treatment Cover Type Stand Approval n Method Objective d Name Density Age Range Type Status 42110 - Planted 7.1 High 49 200+ Harvest Systematic Cmpt. Review 12 72013012-Cut Thinning Red Pine Densitv Proposal Pole Prescription Remove every third row. Protect ORV trail and signs. Specs: Other Protect and sign trail. Comments: <u>Next</u> Steps: Proposed Start Date: 10/01/2014 18 72013018-Cut 70.4 4123 - Red Oak High 87 141-170 Harvest Clearcut with 4190 - Mixed Cmpt. Review Upland Deciduous Reserves Proposal Density Log with Cedar Prescription Harvest all species with the exception of the retention patches. The retention patches will be five -- 1 acre islands plus or minus. Specs: <u>Other</u> Comments: Monitor the success of regeneration the next treatment period. Acceptable regeneration is a moderate to fully stocked stand of oak maple, aspen Next and conifer. Steps: Proposed 10/01/2014 Start Date: 72013053 17.7 42141 - Planted High 98 171-200 Harvest Clearcut with 4122 - Oak. Pine 68 Cmpt. Review Mixed Pine, Mixed Density Log Reserves Proposal Deciduous Prescription Harvest all species with exception for Oak and White pine 18 inches and larger in diameter at DBH. of the retention patch. The retention patch is to be all of the stand north and east of velda Trail. Replant rest of stand to red pine, and allow for site prep as needed. Specs: <u>Other</u> Protect survey corners and pvt line needed. Comments: Monitor the success of regeneration, may need to give it more than one rotation before stand becomes fully stocked.. Next Steps: Proposed 10/01/2014 Start Date: 42210 - Natural 200+ 59 72013059-Cut 20.3 High 92 Harvest Clearcut with Cmpt. Review Red Pine Density Log Reserves Proposal Prescription Harvest all species with the exception of the retention area. The retention area is already delineated on the map and there is no additional Specs: retention in harvest area. Replant stand back to red pine. Allow site prep as needed before planting. Other_ Private line needed. Reber Road traverses through stand and needs to be signed. Comments: Monitor the success of regeneration and allow for post release treatment if needed. Next Steps: Proposed

Start Date: 10/01/2014

S t			Grayl	ing Mgt. Unit	Repo			nents Prescri ting Factor	ibed	Compartment: 013 Year of Entry 2015	DNR DNR
a n d		ment me	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
61	720130	61-Cut	25.8	4122 - Oak, Pine	High Density Log	70 g	111-140	Harvest	Clearcut with Reserves	4117 - Mixed N. Hardwood - Pine	Cmpt. Review Proposal
Preso Spece		Harvest	all species	with the exception of	f the retentio	n patche	s. Retain	3% of stand for r	etention patches, a	nd allow natural regene	eration.
<u>Other</u> Comr	<u>nents:</u>	Private li	ne needs to	be run.							
<u>Next</u> Steps			he success ked stand.	of regeneration. Ac	cceptable reg	generatio	on mix wou	ld be oak, aspen	, sugar & red mapl	e and white pine for a n	noderate to
Propos Start D		0/01/201	4								
67	720130)67-Cut	34.9	4123 - Red Oak	High Density Lo	99 g	81-110	Harvest	Clearcut with Reserves	4117 - Mixed N. Hardwood - Pine	Cmpt. Review Proposal
Presc Spec		Harvest	all species	with the exception of	f the retentio	n patche	s. Retain	3% of stand for r	etention patches, a	nd allow natural regene	eration.
<u>Other</u> Comr	<u>.</u> ments:	Survey ir	nformation ·	they are many do	uble corners	in this c	ompartmer	nt.			
<u>Next</u> Steps			he success ked stand.	of regeneration. Ac	cceptable reg	generatio	on mix wou	ld be oak, aspen	, sugar & red mapl	e and white pine for a n	noderate to
Propos Start D		0/01/201	4								
68	-	3068- exp-0	52.5	42141 - Planted Mixed Pine, Mixed Deciduous	High Density Lo	98 g	171-200	Harvest	Clearcut with Reserves		Cmpt. Review Proposal
Presc Spec:			•	with exception of rete atment area. Replar						ast of velda Trail, whicl	n has been
<u>Other</u> Comr	<u>nents:</u>	Protect s	urvey corn	ers and pvt line need	led.						
<u>Next</u> Steps		Monitor t	he success	of regeneration and	allow for po	st releas	se treatmer	nt if needed.			
<u>Propos</u> Start E		0/01/201	4								
69	720130)69-Cut	20.7	42260 - Natural Pine, Mixed Deciduous	High Density Log		111-140	Harvest	Clearcut with Reserves		Cmpt. Review Proposal
Presc Spec:							etention pa	atch should be lo	cated along lowlan	d stand. After harvest	re-plant stand
<u>Other</u> Comr	<u>.</u> ments:	Protect	survey corn	ers. Private line nee	ded.						
<u>Next</u> Steps		Monitor t	he success	of regeneration and	allow for po	st releas	se treatmer	nt if needed.			
Propos Start D		0/01/201	4								
	Total 1	reatmen	t								

Total Treatment Acreage Proposed: 249.6

S t		Grayli	ng Mgt. Unit	Report 4		eatment imiting	s Prescribed Factor	with	Compartment: 013 Year of Entry 2015	AND DR NATURAL PRODUCTS
a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
		#Type!	#Type!							
Presc Specs Other Comm										
<u>Next</u> Steps	1									
Propo Start [

Grayling Mgt. Unit

Report 5 – Site Conditions

Patrick Potter : Examiner

Compartment 013 Year of Entry 2015

Availability for Management

/ ae	,	nanagomon						
Total	Acres	Acres		Domina	nt Site	e Cone	dition	s
Acres	Available	Not Available		No	5C	3G	3D	2F
898	898		Aspen	880	19			
47	47		Cedar	47				
47	47		Lowland Deciduous	47				
4	4		Lowland Mixed Forest	4				
11	11		Lowland Spruce/Fir	11				
13	13		Mixed Upland Deciduous	13				
147	147		Natural Mixed Pines	111	37			
150	139	11	Northern Hardwood	48	90			11
188	188		Oak	149	39			
58	58		Planted Mixed Pines	53	6			
34	28	6	Red Pine	28			6	
34	34		Upland Mixed Forest	14	20			
12		12	White Pine			12		
1,644	1,615	29	Total Forested Acres	1,405	210	12	6	11
	98%	2%	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.

	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
004	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	23				
C	comments:						
005	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5				
C	comments:						

		ayling Mgt. Unit Potter : Examiner		Report 5 – Site Cone	ditions	Compartment 013 Year of Entry 2015
006	Not Available	2F: Too steep	11	5C: Delay treatment for age/size class diversity or exceptional site quality		
С	omments:					
007	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	11			
С	omments:					
008	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	14			
С	omments:					
009	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	50			
С	omments:					
010	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	7			
С	omments:					

Report 5 – Site Conditions

Grayling Mgt. Unit

Compartment 013 Year of Entry 2015

Patrick Potter : Examiner

011	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	41		
С	comments:				
012	Not Available	3G: Other Influence zones - See comments	12		
	comments: latural White pine	stand mixed with some Red pin	e and other deciduous species. I	_ocated in a kettle hole(va	lley).
013	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10		
C	comments:				
014	Not Available	3D: Recreational / Scenic values	6		
C	comments:				
015	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	16		
C	comments:				
016	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	8		
C	omments:				

		rayling Mgt. Unit Potter : Examiner		Report 5 – Site Conditions	Compartment 013 Year of Entry 2015	
017	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	21			
Co	mments:					
018	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6			
	mments: it as stand rete	ntion.				



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

Comments



Report 7 – DEDICATED CONSERVATION AREA DETAILS

* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

Conservatior Area	п Туре	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area				
SCA	SCA Cold Water Stream Stream Coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduce stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist fre 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 designated as trout resources by Fisheries Order 210.						
HCVA	HCVA Natural Rivers There are two Natural Rivers datasets which are derived from spatial buffers set from an established approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer f most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Dist and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE d folder.						

S t	Grayling Mgt. Unit			Report 8	– Forested	Stands Compartment: 013 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4319 - Mixed Upland Forest	High Density Log	6.5	84	171-200	Small stand of mixed pine(WP&RP) and aspen. Stand also has a major component of Oak sawtimber and Red maple sawtimber and pole timber. North side of std borders private & south side frost pocket. Two track traverses north/south through std.
2	4310 - Pine, Oak Mix	High Density Log	7.9	87	81-110	Small Oak/pine(WP&RP) stand located on two ridges and the valley between them surrounded by aspen sapling std. Oak is dominant followed by White pine and Red pine. Scatterred pockets of pole size WP&RP throughout. Illegal ORV trail throughout std.
3	4130 - Aspen	High Density Sapling	35.6	17		A young aspen sapling std mixed with other deciduous species. Stand treated in 1996 under contract 72-032-95-01.
4	4311 - Pine, Aspen Mix	Medium Density Pole	6.0	54		Small stand of Aspen and mixed pine. Predominately Quaking Aspen with some White pine. White pine is the dominate pine spieces. South end of stand is lowland (drainage).
5	4139 - Aspen, Mixed Deciduous	Medium Density	96.1	5		Stand is dominantly aspen and black cherry . Scattered aspen, red maple and Jack pine seedlings exist throughout stand. Some scattered Red and White pine logs were left. Rabbit habitat specs. were also used. Let aspen and other forested species mature more and break stands out later. Meets regen concerns. North side borders frost pocket.
6	4130 - Aspen	High Density Pole	87.5	27		Aspen/mixed deciduous stand. Some scattered Red & White pine within the stand. Stand was treated n 1986 under contract 72-026-85-01.
7	42290 - Natural Mixed Pine	High Density Log	23.5	69	111-140	Stand is a mix Upland/lowland. White pine is the dominant species followed by Red pine and Quaking aspen. Aspen is showing signs of decay and on its way out.
8	4130 - Aspen	High Density Sapling	19.7	17		Aspen stand mixed with deciduous species. Some scattered pine. Stand treated in 1996 under contract 72-032-95-01.
9	4130 - Aspen	High Density Sapling	57.2	27		Young aspen sapling/pole stand approaching small pole size. Dominantly Quaking aspen, but some pocket or scattered Big tooth aspen mixed with other deciduous species. Also includes some scattered mixed conifer throughout. A couple of small less dense areas are located throughout stand and are made up of cherry brush.
10	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	35.6	41		
12	42110 - Planted Red Pine	High Density Pole	7.1	49	200+	Small planted Red pine stand. Mostly pole size with scattered logs.Some weevil damage in boles throughout. Two track/ORV Route traverses through stand. Quaking aspen scattered throughout in understory and some reaching canopy. In addition Red maple, Oak and cherry make up the understory.

Grayling Mgt. Unit			Report 8	Stands Compartment: 013 Year of Entry: 2015	
Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
4111 - S.Maple, Hard Mast Association	High Density Log	27.2	104	81-110	A Northern hardwood std. FDF std/Hardwoood Demonstration area(MSU/DNR) TSI done in 1981. Large dia. Red Oak scattered throughout the std. Dominantly Sugar maple throughout stand(pole/log)mixed with Basswood(Log/pole), Beech, P. birch, R. maple.
4132 - Aspen, Jack Pine	Medium Density Pole	14.4	42		Aspen/Upland brush std with pockets of Jack pine. Scattered Balsam fir understory with the upland brush. Some of the fir reaches overstory.
4130 - Aspen	High Density Sapling	29.3	17		A young aspen sapling std mixed with other deciduous species. Stand treated in 1996 under contract 72-032-95-01.
6120 - Lowland Cedar	High Density Pole	47.1	104	111-140	A mix of lowland conifers. Sawlog and pole size. Large diameter White pine and spruce scattered throghout the stand and overtopping the primary canopy(super canopy). Heavy Balsam fir/spruce understory. Cedar and spruce the primary species with components of Tamerack, White pine and Balsam fir.
4123 - Red Oak	High Density Log	70.4	87	141-170	Stand was treated under TS# 72-031-95-01, from 8-95-2-96, all trees two inches or larger were harvested except for Oak, Ash and Green marked trees. Heavy understory of Red maple.
4133 - Aspen, Mixed Pine	High Density Pole	17.8	36		A stand of mixed Aspen with a mix of conifer. Aspen varies from small 4 inch poles to 8 inch poles. Mixed conifer consists of Red, White and Jack pine along with Balsam fir of pole and log size. Also some scattered Red maple. Dense undersory of mixed conifer and deciduous species including cherry brush.
4199 - Other Mixed Upland Deciduous	Medium Density Log	8.0	81	81-110	Small std of mature Oak with some mature aspen/pine with a pole hdwd component. Two age std. North side borders pvt.
4130 - Aspen	High Density Sapling	21.0	17		Narrow sapling std of Quaking Aspen. Final harvested in 1996 under contract 72-030-95-01. Two track traverses through the stand. Stand is healthy and growing nicely.
4130 - Aspen	High Density Sapling	59.8	27		Stand treated under TS # 72-027-85-01, all trees 4 or more in diameter were harvested. Aspen is regenerating and is healthy. Stand also has scattered white pine trees which offer good grouse cover.
4131 - Aspen, Oak	High Density Pole	53.3	37	81-110	Majority of std is aspen averaging six inches in diameter on slope an in valley. Top of ridge is Aspen/Red pine mixed with matue Oak & some Red pine log.
6122 - Black Spruce	High Density Pole	11.4	65		Dominantly black spruce stand with a low percentage of balsam fir in canopy and a trace amount of cedar. Very heavy understory of balsam fir and some spruce. Very wet.
	Level 4 Cover Type 4111 - S.Maple, Hard Mast Association 4132 - Aspen, Jack Pine 6120 - Lowland Cedar 6120 - Lowland Cedar 4123 - Red Oak 4133 - Aspen, Mixed Pine 4130 - Aspen 4130 - Aspen 4130 - Aspen 4130 - Aspen	Level 4 Cover TypeSize Density4111 - S.Maple, Hard Mast AssociationHigh Density Log4132 - Aspen, Jack PineMedium Density Pole4130 - AspenHigh Density Sapling6120 - Lowland CedarHigh Density Pole4123 - Red OakHigh Density Log4130 - Aspen, Mixed PineHigh Density Log4130 - Aspen, Mixed PineHigh Density Log4130 - AspenHigh Density Log4130 - AspenHigh Density Pole4130 - AspenHigh Density Sapling4130 - AspenHigh Density Sapling4130 - AspenHigh Density Pole4131 - Aspen, OakHigh Density Pole6122 - Black SpruceHigh Density Pole	Level 4 Cover TypeSize DensityAcres4111 - S.Maple, Hard Mast AssociationHigh Density Log27.24132 - Aspen, Jack PineMedium Density Pole14.44130 - AspenHigh Density Sapling29.36120 - Lowland CedarHigh Density Pole47.14123 - Red OakHigh Density Log70.44133 - Aspen, Mixed PineHigh Density Pole70.44130 - AspenHigh Density Log70.44130 - Aspen, Mixed PineMedium Density Log8.04130 - AspenHigh Density Sapling21.04130 - AspenHigh Density Sapling59.84130 - AspenHigh Density Sapling59.84131 - Aspen, OakHigh Density Pole53.36122 - Black SpruceHigh Density High Density11.4	Level 4 Cover TypeSize DensityAcresStand Age4111 - S.Maple, Hard Mast AssociationHigh Density Density Pole27.21044132 - Aspen, Jack Pine Mast AssociationMedium Density Pole14.4424130 - AspenHigh Density Sapling29.3176120 - Lowland Cedar PoleHigh Density Pole47.11044123 - Red Oak PineHigh Density Pole70.4874133 - Aspen, Mixed PineHigh Density Pole17.8364130 - Aspen PineHigh Density Pole17.8364130 - Aspen PineHigh Density Pole21.0174130 - Aspen PoleHigh Density Sapling21.0174130 - Aspen PoleHigh Density Sapling59.8274131 - Aspen, Oak PoleHigh Density Pole53.3376122 - Black SpruceHigh Density Pole11.465	Level 4 Cover TypeSize DensityAcresStand AgeBA Range4111 - S.Maple, Hard Mast AssociationHigh Density Density Log27.210481-1104132 - Aspen, Jack Pine Medium Density Pole14.442424130 - AspenHigh Density Sapling29.3176120 - Lowland CedarHigh Density Pole47.1104111-1404133 - Aspen, Mixed PineHigh Density Pole70.487141-1704133 - Aspen, Mixed PineHigh Density Pole17.836364139 - Other Mixed PineMedium Density Log8.08181-1104130 - AspenHigh Density Pole21.017174130 - AspenHigh Density Sapling21.017111-1404130 - AspenHigh Density Sapling59.82711104130 - Aspen, OakHigh Density Sapling59.33781-1106122 - Black SpruceHigh Density High Density Tota11.4651110

S t	Grayling	Grayling Mgt. Unit			– Forested	Stands Compartment: 013 Year of Entry: 2015	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	
26	42290 - Natural Mixed Pine	Medium Density Log	40.2	91	111-140	Stand is primarily two age Red pine with scattered White pine, Spruce, Balsam fir and some Aspen and Red maple reaching overstory. Heavy Pole/sapling Balsam fir unerstory with aspen and red maple. Two track traverses through north side of std & separates this upland stand from mixed lowland conifer. Some of Red pine appears to have been planted. Stand was harvested well over 40 years ago, leaving the Red & White pine. One of the BA readings was 170BA of Balsam fir.	
27	4130 - Aspen	Medium Density Pole	3.3	47	81-110	Small stand of Aspen/mixed pine.	
28	4121 - Oak, Aspen	Medium Density Log	22.9	84	1-50	Mature Oak stand with an Aspen understory. Stand harvested in 1986. All Oak left and some pine. Aspen understory is sapling/pole. Aspen is 27 years old.	
29	4130 - Aspen	High Density Sapling	26.2	28		Aspen sapling stand mixed with other deciduous species and some scattered pine. Final harvested in 1986 under contract 72 053-85-01. Aspen is growing nicely and healthy	
30	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	11.8	51		Lowland stand with a stream running through. A small porrtion is upland with aspen/jack pine. Aspen is pole/log sized mixed with Balsam fir and White pine. In addition there are scattered large dia WP.	
32	4132 - Aspen, Jack Pine	Medium Density Pole	26.3	39		Primarily Quaking Aspen of some with scattered Jack pine. There is a small pocket of Jack in the southeast corner. Stand also has pockets of upland brush(cherry) and scatterred cherry trees. The north side, north of road has scattered open grow Oak, RP & WP. Two track/ORV Route traverses through the west side of stand.	
38	42260 - Natural Pine, Mixed Deciduous	Medium Density Pole	17.5	54	111-140	Mixed stand of Jack pine, aspen and cherry brush. Aspen patches better quality. A Red pine patch near water hole of goo quality.	
43	4123 - Red Oak	High Density Log	5.0	87	81-110	Red oak ridge connecting Mud Lake to Reber Rd. Aspen, Red maple and some pine scattered throughout.	
44	4131 - Aspen, Oak	High Density Pole	64.0	27		Stand was treated in the mid 80's, and is regenerating nicely.	
45	4139 - Aspen, Mixed Deciduous	High Density Pole	69.5	36		Young Aspen pole stand mixed with other deciduous species and Red and White pine.	
46	42290 - Natural Mixed Pine	High Density Log	2.6	65	171-200	Small mature Red/White pine stand mixed with deciduous species.	
47	4133 - Aspen, Mixed Pine	High Density Sapling	38.7	27		Young aspen stand approaching pole size, mixed with other deciduous species and Red/White pine. Some scattered pole size timber throughout stand and in pockets. Red and White pine poles somewhat larger.	

S t	Grayling	Grayling Mgt. Unit			– Forested	Stands Compartment: 013 Year of Entry: 2015	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	
48	4191 - Mixed Upland Deciduous with Conifer	Low Density Sapling	4.8	16		Aspen Jack pine and Oak stand. Stand cut as a Logging Expo demonstration. Part of the stand includes a non-forested narrow strip.	
51	4139 - Aspen, Mixed Deciduous	Low Density Sapling	13.9	10		Aspen sapling stand with red maple with some pine mixed in. Stand treated as part of the on going logging expo.	
53	4123 - Red Oak	High Density Log	17.7	104	111-140	Mature Oak stand mixed with other deciduous species and some Red and White pine. Stand appears to have been treated removing all aspen and red maple. Oak diameter range is (11- 20 inches at DBH, with ten years different between the size classes. Stand has scattered white pine and planted red pine	
54	4130 - Aspen	High Density Sapling	18.1	27		Young healthy aspen stand, which was final harvested mid 80's	
56	4130 - Aspen	Medium Density	13.7	8		Aspen sapling std mixed with other deciduous species and some Jack and Red pine. Stand was harvested in 2005 under contract 72-060-05-01. Stand is currently moderate to fully stocked with a mix of aspen and other species. Aspen the dominate species.	
57	4131 - Aspen, Oak	High Density Log	8.4	102	81-110		
58	42250 - Pine, Oak	High Density Log	21.1	104	111-140	Red pine with a large component of Oak & White pine. Scattered aspen and red maple.	
59	42210 - Natural Red Pine	High Density Log	27.3	92	200+	Red pine stand mixed with Oak and Aspen. No planting records found but stand appears to have been planted in the 20's, because of the density and close spacing straight lines. North side of stand borders Reber road with a small pocket north of Reber Rd.	
60	4119 - Mixed Northern Hardwoods	High Density Log	40.7	104	111-140	Mixed N. Hardwood stand (sugar maple/hard mast assoc.). Log/pole std(40%log/60%pole) Stand as large dia Red Oak with scattered Red/White pine. Some large dia aspen also exists in stand, but is beginning to die out. Scattered Ash within stand is dead. East & west side of stand borders pvt The north side has an open field which was farmed in past, and a semi open area in the center of std. Beech appears to be healthy.	
61	4122 - Oak, Pine	High Density Log	25.8	70	111-140	Mature Red Oak stand mixed with pine. White pine is the dominant pine, with some Red pine. Stand was previously harvested 20 yrs ago. Oak and pine were left and all other hardwood removed, including aspen. Heavy hardwood sapling understory.	
62	42250 - Pine, Oak	High Density Log	15.5	88	171-200		
63	4131 - Aspen, Oak	High Density Log	4.1	97	81-110	Aspen/Oak std with some scattered Red pine and Red maple. Stand is located on a ridge surrounded by Red pine and some Oak.	

S t	Grayling	Grayling Mgt. Unit			– Forested	Stands Compartment: 013 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
64	6132 - Mixed Lowland Forest with Cedar	Medium Density Log	3.7	108	111-140	A narrow strip of mixed lowland deciduous and cedar. Drainage. Ash dead. Red maple,sugar maple, paper birch, cedar,balsam fir and some red/white pine on edge. Center less treed. 2-3 chains across.
65	4311 - Pine, Aspen Mix	High Density Log	13.5	102	141-170	White pine mixed with some Red pine and other deciduous species. Located in valley. West and east ends border private.
66	42200 - Natural White Pine	High Density Log	11.5	98	111-140	White pine stand mixed with some Red pine and other deciduous species. Located in a kettle hole(valley). Quite a bit of ice/snow damage from 2012-13 winter. Broken tops. East side borders pvt.
67	4123 - Red Oak	High Density Log	34.9	99	81-110	Red Oak stand with some scattered Sugar maple and Red/ White pine. Treated 20 years ago, removing all species except Oak and some Sugar maple and pine. Heavy hdwd undersory mixed with White pine sapling . West and east side of stand borders pvt.
68	42141 - Planted Mixed Pine, Mixed Deciduous	High Density Log	58.2	98	171-200	Planted Red pine stand mixed with Red Oak & White pine. More or less in valley. East end has a patch of hardwoods (beech,oak,maple). Stand was used in logging expo.
69	42260 - Natural Pine, Mixed Deciduous	High Density Log	24.1	105	111-140	Stand of mixed pine/oak with some aspen,p. birch, red and sugar maple. Std on slope and valley. East side border pvt. Dominantly Red pine and White pine with some Oak.
70	42260 - Natural Pine, Mixed Deciduous	Low Density Pole	2.8	36		Open grown White pine with scattered Oak, Paper birch and Aspen). Planted Jack pine and red pine. Some what open. Garbage is being dumped and camping site.
71	4139 - Aspen, Mixed Deciduous	High Density Sapling	33.1	26		Aspen mixed with other deciduous species sapling/pole stand. Also mixed with pines, especially in valley. Stand treated 1987. A two-three chain wide strip along Raber road all mature Oak was left (80>YRS).
72	4130 - Aspen	High Density Pole	36.9	26		
73	4111 - S.Maple, Hard Mast Association	High Density Log	49.6	106	111-140	Sugar maple, Basswood, Red oak with some Beech. Kettle hole pockets of White pine. Rolling terrain. No road acess to std. Sawlog stand with lots of poles . ALL ASH HAS DIED.
74	4119 - Mixed Northern Hardwoods	High Density Sapling	7.3	26		Mixed hardwood sapling stand (approx. 2-3 inch dbh). A few scattered pole size trees. Scattered White pine in overstory and understory. Mix of several hardwood species.
75	4123 - Red Oak	Low Density Log	11.0	87	51-80	Oak/pine stand on north side of Reber road. Treated in the 80's, with all Oak, Red pine and White pine left. Dense understory of mixed hardwoods. Large dia. trees with an sapling understory.
76	4131 - Aspen, Oak	High Density Pole	40.4	27		Aspen pole std mixed with other deciduous species and pine.

S t a n d	Grayling Mgt. Unit			Report 8 –	Forested	Stands Compartment: 013 Year of Entry: 2015
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
77	4110 - Sugar Maple Association	High Density Log	14.0	Uneven Age	51-80	Stand was harvested last entry year. Rolling terrain. Heavy understory or Ash. East side of stand adjacent to M-33. Sugar maple, Basswood and Oak.
78	4110 - Sugar Maple Association	High Density Log	11.0	104	111-140	
79	4131 - Aspen, Oak	High Density Log	10.3	73	111-140	

Grayling Mgt. Unit

Compartment: 013 Year of Entry: 2015



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
11	122 - Road/Parking Lot	2.9	No	Unspecified	Mt. Tom County Rd(gravel).
16	3303 - Mixed Low Density Trees	5.2	No	Unspecified	
25	50 - Water	8.0	No	Unspecified	Open water pocket surrouned by a 1 chain wide riparian strip of pine, spruce/fir and aspen. Stand is part of a drainage running west to east.
31	710 - Sand, Soil	1.1	No	Unspecified	Cedar Run Road (road become sesonal county road after leaving comp north ward).
33	3104 - Degraded	1.0	No	Unspecified	Old tresspass site. Stand has been degraded with old berms, stump dumpings and etc from adjacent old gravel pit.
34	3205 - Mixed Upland Shrub	3.5	No	Unspecified	New stand added. Stand swapped from Forested to Non- Forested. Stand is primarily cherry brush. Check with wildlife as to treatment or not.
35	3105 - Mixed Upland Herbaceous	1.3	Yes	Unspecified	Managed wildlife opening. Mowed in the past.
36	3303 - Mixed Low Density Trees	26.3	No	Unspecified	Stand swapped from Forested to Non-Forested. Scattered and pockets of cherry brush(seedling to saw). Poor quality(blk knot and Dieback). Also, stand includes open areas of grass or sweet fern and a small pocket of aspen; a small pocket of Jack pine and a small pocket of Red/White/Jack pine and aspen mix.
37	50 - Water	1.0	No	Unspecified	Small water hole/pond that continues on to private land to the west.
39	3205 - Mixed Upland Shrub	24.4	No	Jack Pine	Stand swapped from Forested to Non-Forested. Std was hrvested last entry year. An FTP was created to trench and plant Jack pine, but didn't get submitted. Therefore, regen survey fails. Leave stand as is.
40	3105 - Mixed Upland Herbaceous	1.7	No	Unspecified	
41	50 - Water	4.0	No	Unspecified	Mudd Lake
42	3105 - Mixed Upland Herbaceous	3.1	Yes	Medium	Maintained Wildlife opening. Planted to Rye in 1987. Maintained by mowing annually. Recommend continually by mowing.
49	3105 - Mixed Upland Herbaceous	4.1	No	Unspecified	Large herbacious opening/old farm field. Stand was previously a trespass by adjacent landowners. Survey requested and corner set in previous entry year.

Compartment: 013 Year of Entry: 2015



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
52	122 - Road/Parking Lot	4.8	No	Unspecified	New stand added. Reber Road
55	3105 - Mixed Upland Herbaceous	7.4	No	Unspecified	
80	3105 - Mixed Upland Herbaceous	2.4	No	Unspecified	