

## **Compartment Review Presentation**

**Grayling Forest Management Unit** 

Compartment 72012
Entry Year 2017
Acreage: 1,973
County Oscoda

Management Area: AuSable Outwash

**Revision Date: 2015-06-10** 

Stand Examiner: Patrick Mohney

**Legal Description:** 

T27N R02E Sections 1, 2, 3 T28N R02E Sections 34, 35, 36

#### **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:

Most of the compartment is Grayling /Rubicon sands. A small portion of the compartment is Emmet/Kalkaska loamy sands. The Grayling /Rubicon sands are on ice-contact outwash and glacial outwash sand and are level. The Emmet/Kalkaska loamy sands are hilly (usually with short steep runs). The soils are more fertile but are still droughty. The stands on the Emmet/Kalkaska loamy sands are a mixture of northern red oak and northern hardwoods.

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

The compartment is mostly State ownership with private property to the south.

#### **Unique Natural Features:**

The Pine Barrens Frost Pocket (compartment 029) is located just to the east of the compartment.

#### Archeological, Historical, and Cultural Features:

No known occupational sites occur in the compartment.

## **Special Management Designations or Considerations:**

The compartment contains the burial pit for livestock that were contaminated with polybrominated biphenyl (PBB). The pit was created in 1977. It is a sealed clay pit and has monitor wells associated with it. No activity should occur on or near the pit. Some of the compartment was previously in The Pine Barrens Frost Pocket Area. That portion has been removed from the compartment and all of The Pine Barrens Frost Pocket Area was put into a single compartment, compartment 029 in 2005.

#### **Watershed and Fisheries Considerations:**

Muskrat Lake is located approximately two miles to the west of the compartment.

#### Wildlife Habitat Considerations:

Continue treatments to provide quality habitat for deer, grouse and turkey. There is a small maintained opening in stand 50.

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

Sections 1-3, T27N R2E & Sections 34-36, T28N R2E, Oscoda Co

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. There is not an economic use for the Coldwater Shale. A gravel pit is located in Section 24 (T28N R2E) and potential is good. The compartment is half-leased for oil and gas and the western part of it has been developed for the Antrim Shale.

#### **Vehicle Access:**

The compartment is accessed by Mt. Tom Road (gravel County maintained road), Pennsylvania Crossing Road (dirt County maintained road), Esch Road (dirt County maintained road), Snake Branch Road (dirt County maintained road), Penn Road (dirt County maintained road), and Centerline Road (gravel County maintained road). The snowmobile trail and other forest road provide additional access into and through the compartment. Vehicular access in the compartment is good. No new roads are needed at this time. All new roads created through management activities are to be closed upon completion. Access to an area called The Centerline Pit Area (illegal ORV use area) needs to be curtailed, which will require blocking illegal trails and rerouting of a designated trail.

#### **Survey Needs:**

The location of the PBB pit and associated monitor wells needs to be surveyed or GPS'ed 
There is a double set of survey corners between the two survey townships.

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

A snowmobile trail (Trail #4; Muskrat Lake Trail) and an ORV trail traverse through the compartment. Dispersed recreational use occurs throughout the compartment. Lots of illegal ORV trails occur in the compartment. The compartment contains an illegal and historic scramble area in which efforts have been made to eliminate use in the past via blockade and enforcement efforts. Past efforts have been relatively ineffective. We need to develop a comprehensive plan to address issues in the area, including rerouting the ORV trail out of the area. One hill in the area is completely denuded and experiences lots of erosion.

#### **Fire Protection:**

The compartment consists of mainly of various-aged aspen, and thinned oak stands. A few acres of jack pine are in the compartment. Access to the compartment for fire apparatus is good. There are a few exposures on private property to the south of the compartment. Antrim gas wells are scattered throughout the compartment. An underground pipeline is located on the east side of Penn Road. The closest water point is at Muskrat Lake located approximately 2 miles west o the compartment.

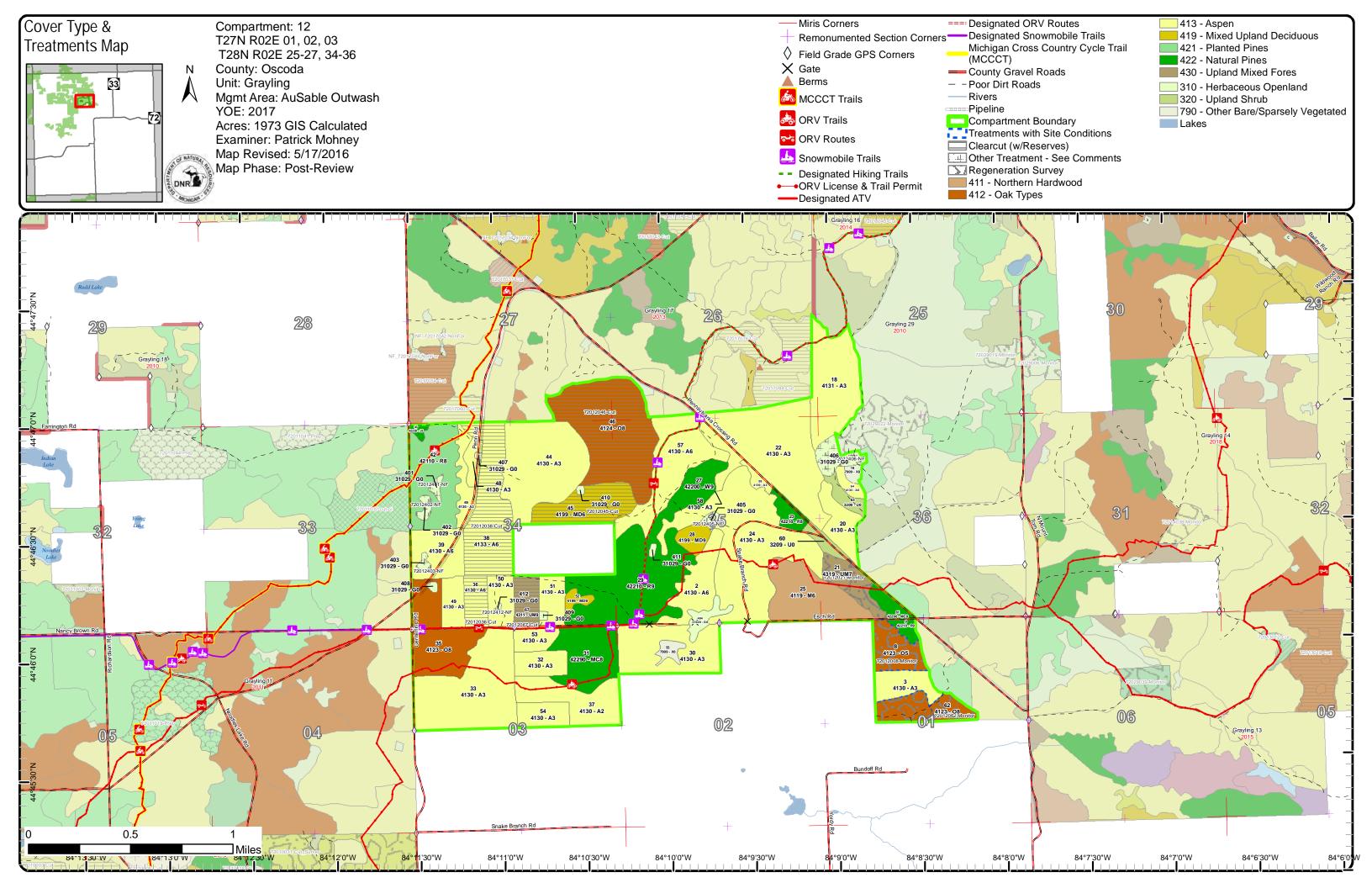
#### **Additional Compartment Information:**

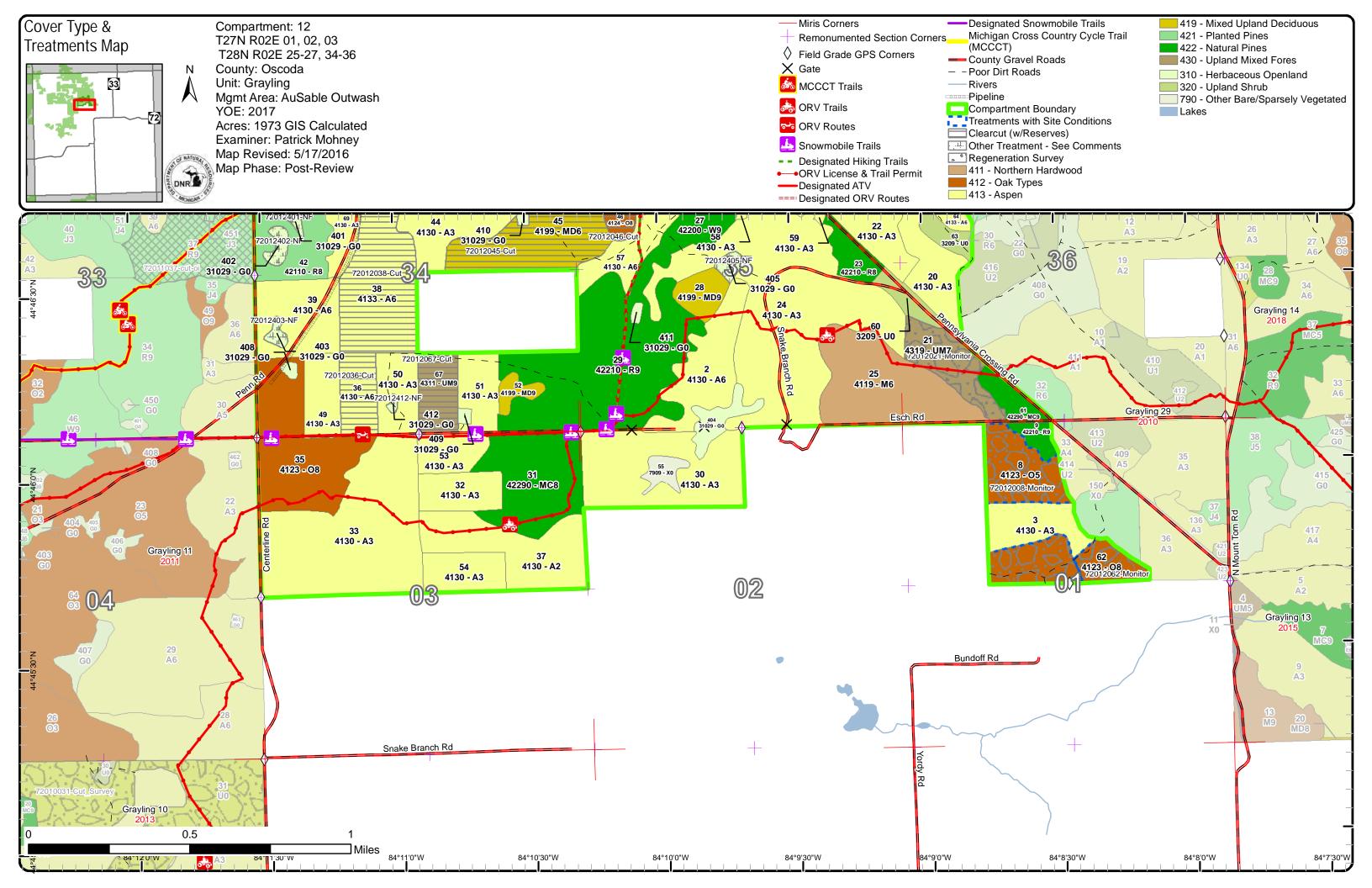
The following reports from the Inventory are attached:

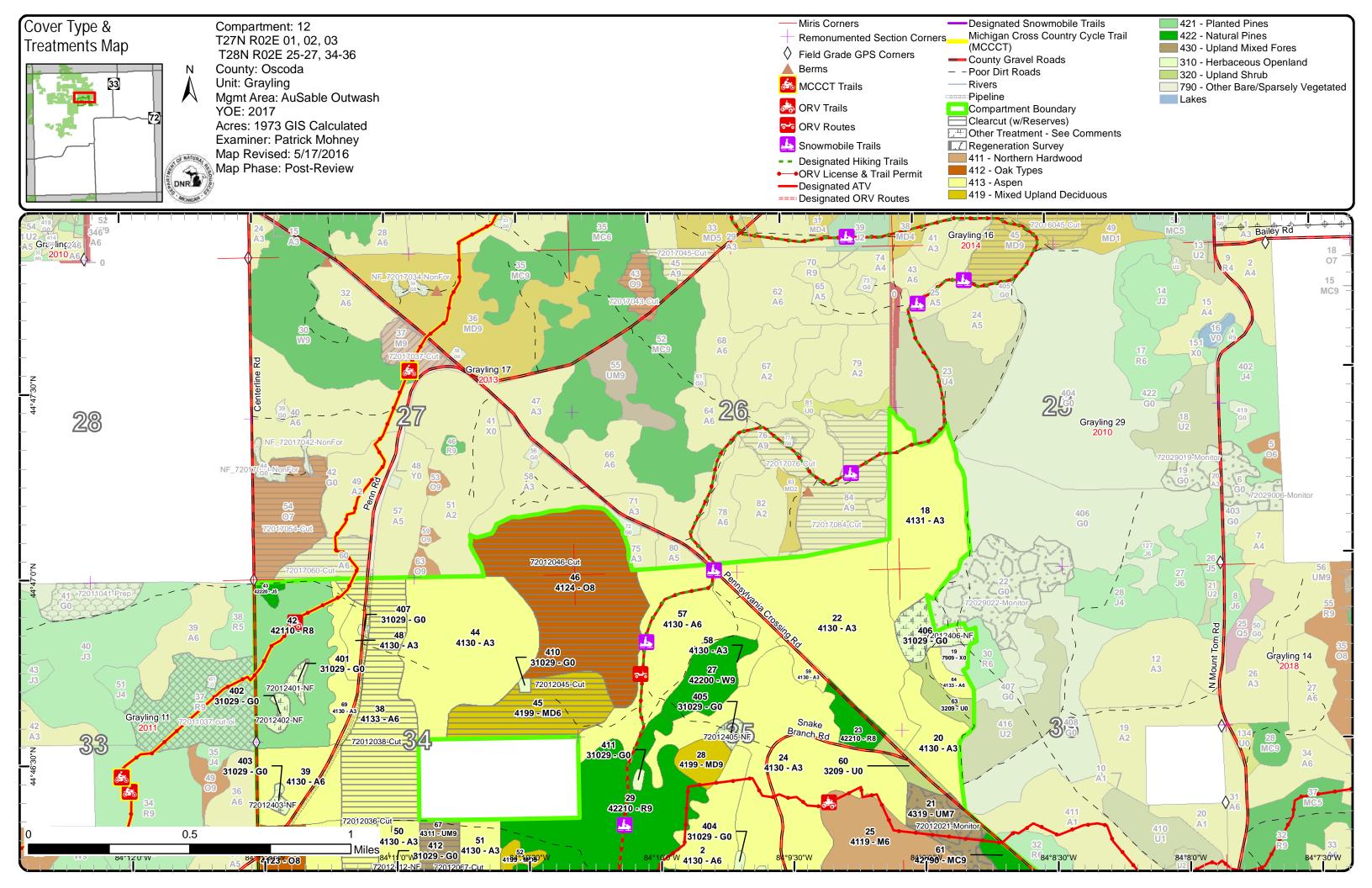
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

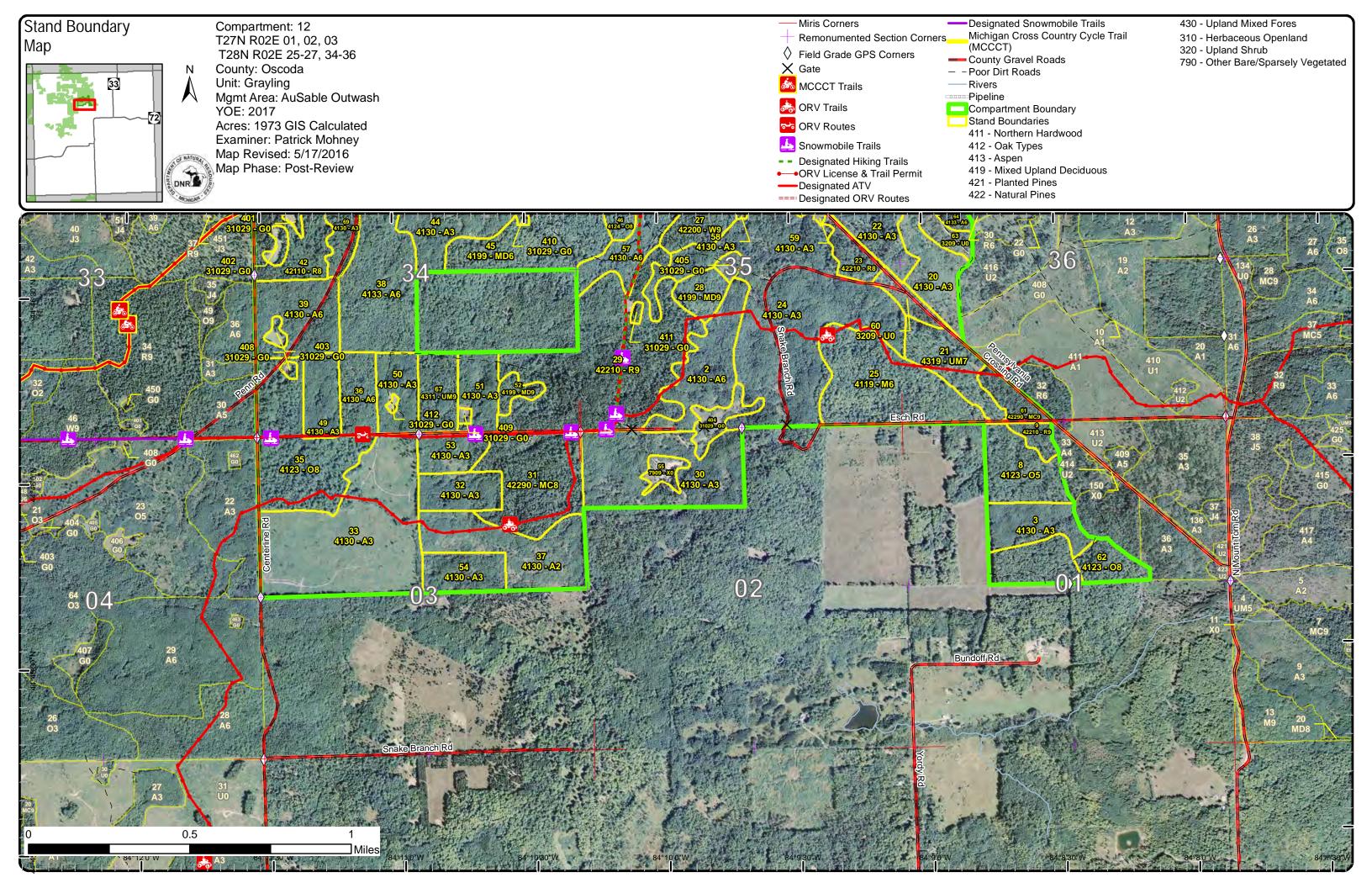
The following information is displayed, where pertinent, on the attached compartment maps:

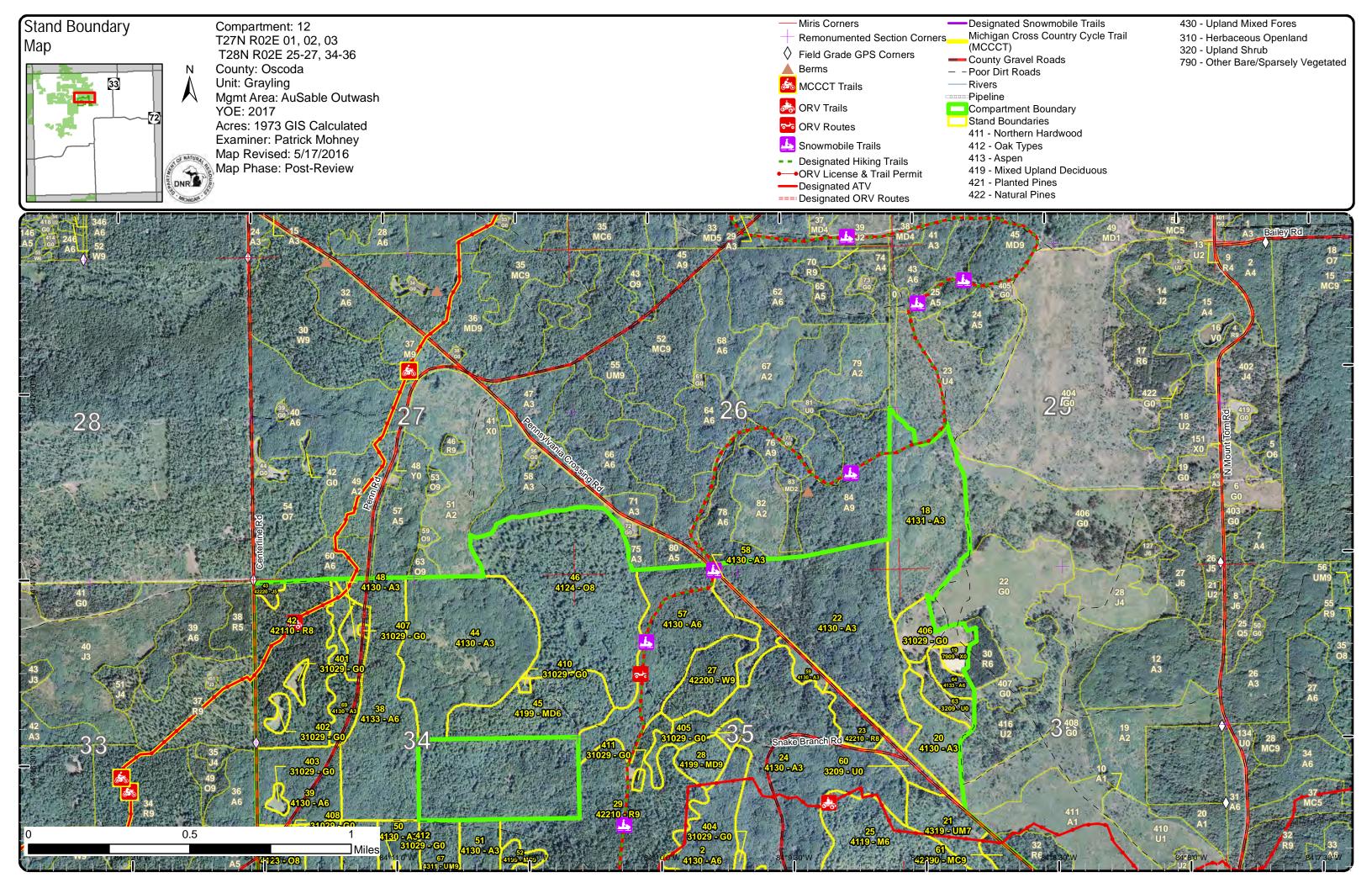
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

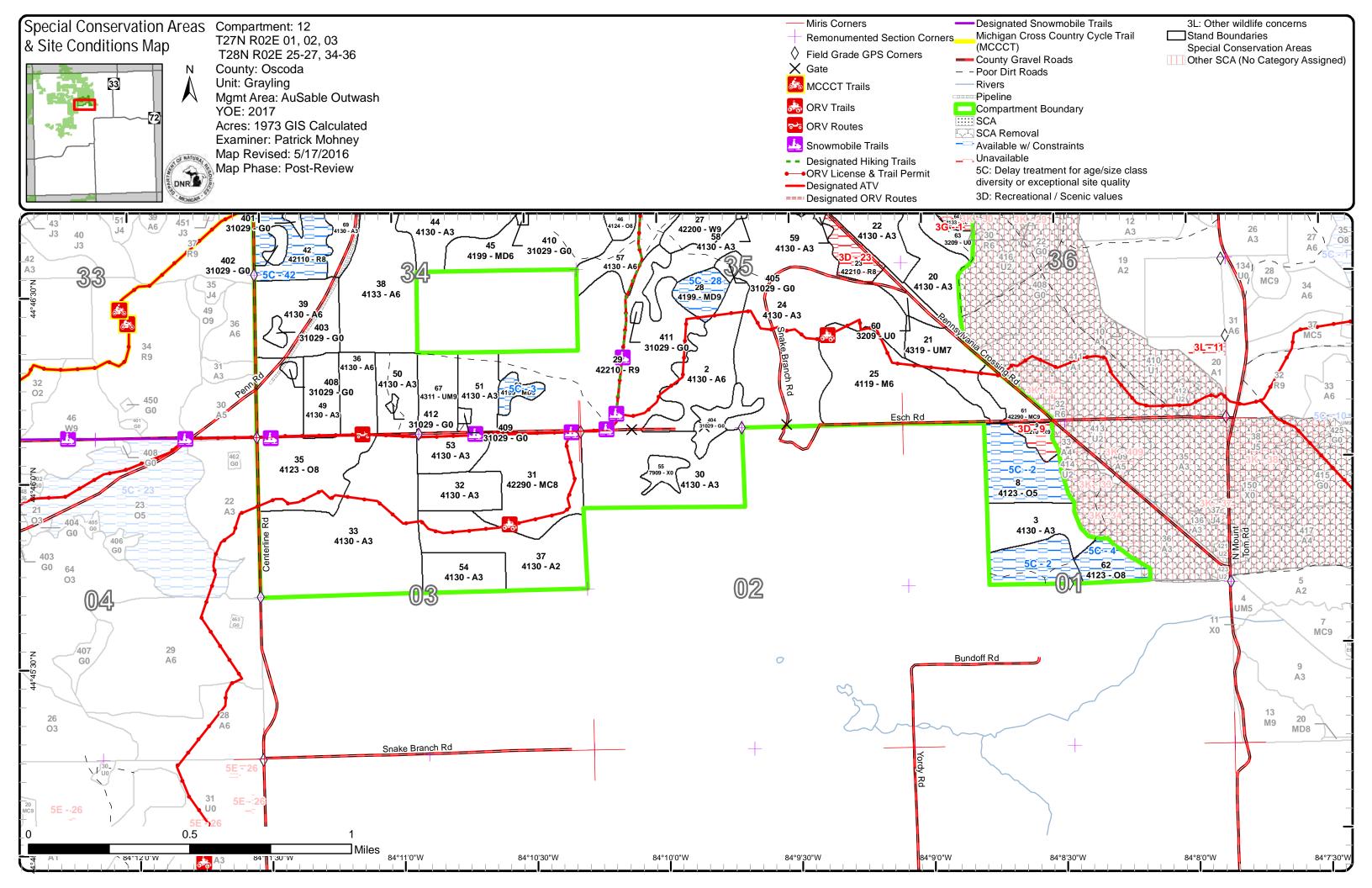


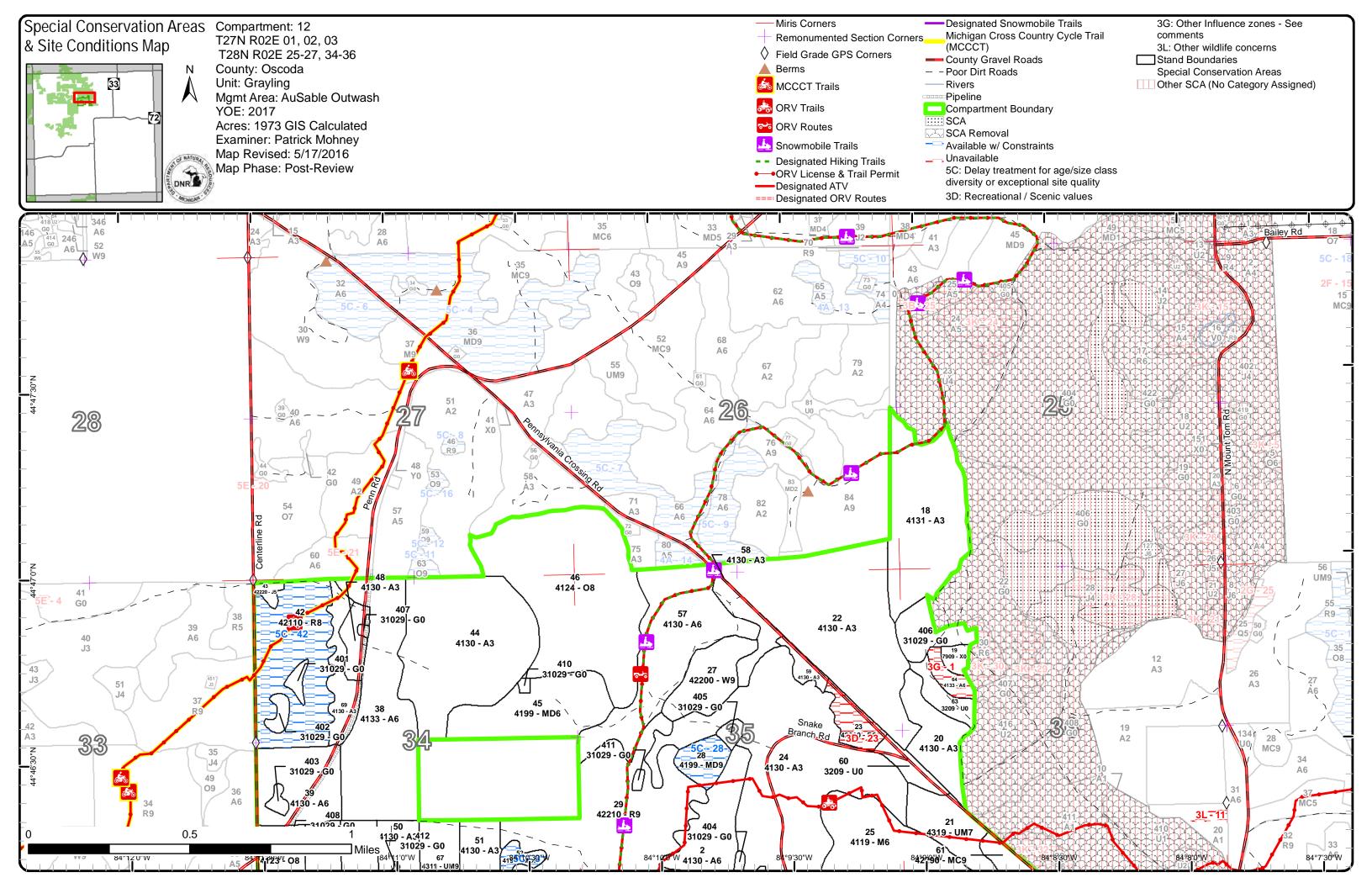












**Grayling Mgt. Unit** 

Compartment 12 Year of Entry 2017



Patrick Mohney: Examiner

### Age Class

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Acnon	0	221	86	471	0	273	85	0	19	0	0			0	0	0	0	0	1155
Aspen	11	0	0	0	0	0	00	0	0	0	0	0	0	0	0	0	0	0	1133
Bare/Sparsely Vegetated		_	_				Ů	_								-	_	-	
Herbaceous Openland	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45
Jack Pine	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	6	12	0	0	0	0	0	0	48	66
Natural Mixed Pines	0	0	0	0	0	0	0	11	54	0	0	0	0	0	0	0	0	0	65
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66	66
Oak	0	0	0	0	0	0	0	0	14	0	118	0	128	0	0	0	0	0	260
Red Pine	0	0	0	0	0	0	0	0	127	87	0	0	0	0	0	0	0	0	214
Upland Mixed Forest	0	0	0	0	0	0	0	0	19	0	27	0	0	0	0	0	0	0	46
Upland Shrub	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
White Pine	0	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0	26
Total	75	221	86	474	0	273	111	11	233	93	157	0	128	0	0	0	0	114	1976



## **Report 2 – Treatment Summary**

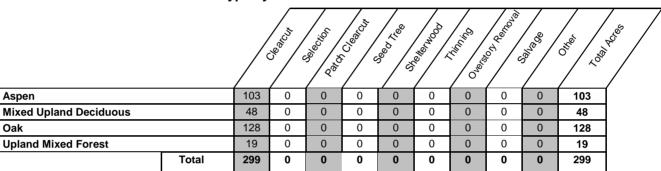
Grayling Mgt. Unit Year of Entry: 2017

#### **Acres of Harvest**

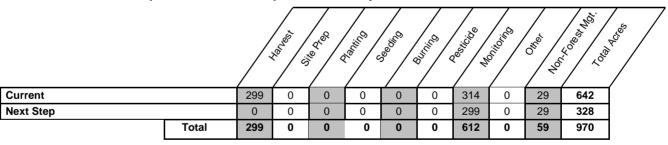
Compartment 12
Total Compartment Acres: 1,973

Commercial Harvest - 299 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

## **Cover Type by Harvest Method**



### **Proposed and Next Step Treatments by Method**



Grayling Mgt. Unit Report 4 -- Treatments Compartment: 12 s Year of Entry: 2017 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age **Approval** n Name CoverType Density Age Range Type Method Objective Structure **Status** d 8 72012008-52.3 4123 - Red Oak Poletimber 51-80 Monitoring Natural Regen 412 - Oak Types Even-Aged Proposal Monitor Medium (Re-Inventory) **Habitat Cut: No** Site Condition: Age-Class or Site Quality Prescription regen survey from previous harvest. Stand is slow to regenerate, recheck next YOE Next Step Treatments: Acceptable Oak, aspen, maple Regen: Other Old next step comments: Comment: **Proposed Start Date:** 10/1 /2016 72012018-413 - Aspen 75.0 4131 - Aspen, Oak Sapling Immatu Monitoring Natural Regen Even-Aged Proposal Well Monitor (Re-Inventory) re **Habitat Cut: No Site Condition:** Prescription regen survey from previous harvest Specs: Next Step Treatments: Acceptable aspen Regen: Other Old next step comments: Comment: **Proposed Start Date:** 10/1 /2016 72012020-26.4 4130 - Aspen Sapling Immatu Monitoring Natural Regen 413 - Aspen Even-Aged Proposal Monitor Well (Re-Inventory) re Site Condition: **Habitat Cut: No** Prescription regen survey from previous harvest. Specs: Next Step **Treatments:** Acceptable aspen Regen: Other Old next step comments: Comment: Proposed Start Date: 10/1 /2016 21 72012021-26.6 4319 - Mixed 4199 - Other Sawtimber 98 1-50 Monitoring Natural Regen Even-Aged Proposal **Monitor Upland Forest** Poor (Re-Inventory) Mixed Upland Deciduous **Habitat Cut: No Site Condition:** Prescription regen survey from previous harvest. Stand has not quite regenerated yet, re-check in ten years.

Specs:

Next Step Treatments:

Acceptable oak, aspen, maple

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

Grayling Mgt. Unit Report 4 -- Treatments Compartment: 12 s Year of Entry: 2017 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age **Approval** n Name CoverType Density Age Range Type Method Objective Structure **Status** d Natural Regen 33 72012033-113.8 4130 - Aspen Sapling 413 - Aspen Even-Aged 3 Immatu Monitoring Proposal Monitor Well (Re-Inventory) **Habitat Cut: No Site Condition:** Prescription regen survey Specs: Next Step **Treatments:** Acceptable aspen Regen: Other Old next step comments: Comment: **Proposed Start Date:** 10/1 /2016 36 72012036-Cut 18.7 4130 - Aspen Poletimber 75 51-80 Clearcut 413 - Aspen Even-Aged Proposal Harvest Well **Habitat Cut: No Site Condition:** Prescription Final harvest stand. No retention. use rec trail spec and drumming log specs. Specs: Next Step **Treatments:** Acceptable Aspen Regen: Other Old next step comments: Comment: 10/1 /2016 **Proposed Start Date:** 59 72012038-Cut 84.8 4133 - Aspen, Poletimber 81-110 Clearcut with 413 - Aspen Even-Aged Proposal -Harvest Mixed Pine Approval Well Retention Pending Edits **Site Condition: Habitat Cut: No** Prescription Final harvest stand. Let regenerate naturally, use island retention. Protect ORV trail, use drumming log spec. Specs: Next Step Treatments: Acceptable aspen, oak, maple Regen: Other Old next step comments: Comment: Proposed Start Date: 10/1 /2016 45 72012045-Cut 47.6 4199 - Other Mixed Poletimber 110 81-110 Harvest Clearcut with 4199 - Other Even-Aged Proposal -Mixed Upland **Upland Deciduous** Well Retention Approval Deciduous Pending Edits **Habitat Cut: No Site Condition:** 

Prescription Final harvest stand. Let regenerate naturally, use island retention.

Specs:

Next Step **Treatments:** 

Acceptable maple, aspen, oak, other hardwood

Regen:

**Other** Old next step comments:

Comment:

**Proposed Start Date:** 10/1 /2016 Other Old next step comments: Comment:

Proposed Start Date: 10/1 /2016

**62 72012062-** 13.8 4123 - Red Oak Sawtimber 78 51-80 Monitoring Natural Regen 412 - Oak Types Even-Aged Proposal Monitor (Re-Inventory)

WOINTO WEALTH

<u>Habitat Cut:</u> No <u>Site Condition:</u> Age-Class or Site Quality

<u>Prescription</u> regen survey from previous harvest. Stand is slow to regenerate, recheck next YOE <u>Specs:</u>

\_\_\_\_

Next Step Treatments:

Acceptable oak, aspen, maple

Regen: Other

Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

**67 72012067-Cut** 19.3 4311 - Pine, Aspen Sawtimber 78 81-110 Harvest Clearcut with 413 - Aspen Even-Aged Proposal -Mix Well Retention Approval Pending Edits

Habitat Cut: No Site Condition:

Prescription Final harvest stand. Let regenerate naturally, use island retention. Protect ORV trail and use drumming log spec.

Specs:

Next Step Treatments:

Acceptable aspen, oak, maple

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

Grayling Mgt. Unit Report 4 -- Treatments Compartment: 12 s Year of Entry: 2017 t а **Treatment** Stand BA **Treatment Treatment Cover Type** Acres Stand Size Age **Approval** n Name CoverType Density Age Range Type Method Objective Structure **Status** d 72012401-NF Unspec NonForestMgt 310 -401 3.0 31029 - Grass (OI) Nonstocked Other - Specify Proposal ified Herbaceous Openland **Habitat Cut: No Site Condition:** Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, food plot seeding, no-till prairie grass drill seeding, mowing, tree Specs: and shrub planting, Rx burning, and herbicide application. Next Step Treatments: <u>Acceptable</u> Regen: Other Old next step comments: Comment: **Proposed Start Date:** 10/1 /2016 3.7 31029 - Grass (OI) Nonstocked Unspec NonForestMgt Other - Specify 310 -Proposal 402 72012402-NF ified Herbaceous Openland **Habitat Cut:** No **Site Condition:** Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, food plot seeding, no-till prairie grass drill seeding, mowing, tree Specs: and shrub planting, Rx burning, and herbicide application. Next Step **Treatments:** Acceptable Regen: Other Old next step comments: Comment: **Proposed Start Date:** 10/1 /2016 403 72012403-NF 2.5 31029 - Grass (OI) Nonstocked 310 -Unspec NonForestMqt Other - Specify Proposal ified Herbaceous Openland **Habitat Cut: No Site Condition:** Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, food plot seeding, no-till prairie grass drill seeding, mowing, tree and shrub planting, Rx burning, and herbicide application. Specs: Next Step **Treatments:** <u>Acceptable</u> Regen:

**Other** 

Old next step comments:

Comment:

**Proposed Start Date:** 10/1 /2016

3.3 31029 - Grass (OI) Nonstocked 405 72012405-NF

Unspec NonForestMgt 310 -Other - Specify ified Herbaceous

Openland

**Habitat Cut: No Site Condition:** 

Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, food plot seeding, no-till prairie grass drill seeding, mowing, tree Specs:

and shrub planting, Rx burning, and herbicide application.

Next Step **Treatments:** 

<u>Acceptable</u> Regen:

Other

Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016 Proposal

Grayling Mgt. Unit Report 4 -- Treatments Compartment: 12 s Year of Entry: 2017 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type Approval** Age n Method Objective d Name CoverType Density Age Range Type Structure **Status** 406 72012406-NF 16.1 31029 - Grass (OI) Nonstocked Unspec NonForestMgt Other - Specify 310 -Proposal ified Herbaceous Openland **Habitat Cut: No Site Condition:** Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, food plot seeding, no-till prairie grass drill seeding, mowing, tree and shrub planting, Rx burning, and herbicide application. Specs: Next Step Treatments: <u>Acceptable</u> Regen: Old next step comments: Other Comment: **Proposed Start Date:** 10/1 /2016

Habitat Cut: No Site Condition:

Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, food plot seeding, no-till prairie grass drill seeding, mowing, tree

ified

Unspec NonForestMgt

310 -

Herbaceous Openland

Other - Specify

Specs: and shrub planting, Rx burning, and herbicide application.

0.8 31029 - Grass (OI) Nonstocked

Next Step Treatments:

412 72012412-NF

Acceptable Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

Total Treatment 641.7 Acreage Proposed:

Proposal

## Report 5 - Site Conditions

**Compartment: 12** 

**Grayling Mgt. Unit** 

Patrick Mohney : Examiner Year of Entry: 2017

#### **Availability for Management** Total Acres Acres Avail Acres **Dominant Site Conditions** Available With Condition Not Available 3D 3G Acres 5C Aspen Bare/Sparsely Vegetated Herbaceous Openland Jack Pine **Mixed Upland Deciduous Natural Mixed Pines** Northern Hardwood Oak Red Pine **Upland Mixed Forest Upland Shrub** White Pine 1,973 1,796 **Total Forested Acres** 91% 1% 8% Relative Percent

<sup>\*</sup>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	3G: Other Influence zones - See comments	7	Unspecified	Unspecified	Unspecified	Unspecified					
	Comments: This stand is being held to protect the cattle burial site and to help define the frost pocket boundary.											
2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	52	Unspecified	Unspecified	Unspecified	Unspecified					
	Comments: Stand was treated recently. It will hold another ten years without any issue. Holding the stand will allow the adjacent stands with smaller trees to grow a little larger and give us greater age class diversity in the immediate area.											

# Report 5 – Site Conditions

Grayling Mgt. Unit

Patrick Mohney : Examiner

Compartment: 12 Year of Entry: 2017

3	Available	5C: Delay treatment for age/size class diversity or	6	Unspecified	Unspecified	Unspecified	Unspecified
		exceptional site quality					
	Comments:						
4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	14	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
9	Unavailable	3D: Recreational / Scenic values	7	Unspecified	Unspecified	Unspecified	Unspecified
1	Comments:						
11	Unavailable	3D: Recreational / Scenic values	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
23	Unavailable	3D: Recreational / Scenic values	12	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
28	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	12	2F: Too steep	Unspecified	Unspecified	Unspecified
	Comments:						

Report 5 – Site Conditions

Grayling Mgt. Unit

Patrick Mohney : Examiner

Compartment: 12 Year of Entry: 2017

42	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	68	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						

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
Comments				

Grayling Mgt. Unit Compartment: 12
Year of Entry 2017



## 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.

Conservation Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
ERA	Ecological Reference Areas	identified as Element Occurrences (EOs) by the context of their natural community classification (Excellent) or B (Good) and a Global (G) or Stathreatened (2), or rare (3) serve as an initial bathe State. The system is comprised of individual managed for restoration and maintenance of maint	quality examples of natural communities that have been the Michigan Natural Features Inventory (MNFI) within the son system. Element Occurrences with viability ranks of A late (S) element (rarity) ranking of endangered (1), late (S) element (1), late (1), late (S) element (1), late (S) element (1), late (S) element

S	Graylin	g Mgt. Unit		Report 8	<ul><li>Forested</li></ul>	Stands Compartment: 12 Year of Entry: 2017
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	4130 - Aspen	Poletimber Well	38.9	45	51-80	Decent quality aspen stand. It is adjacent to a smaller diameter aspen stand. Delineation was somewhat difficult to determine. There is some steep terrain in this stand. Do nothing at this time.
						OPIC - FMD: The stand is along Snake Branch Road. The stand is adjacent to private property. The stand is starting to recruit into a young A6 stand. 08/15/2005 mm
3	4130 - Aspen	Sapling Well	24.2	27	Immature	aspen stand approaching merchantability. Fully stocked. Do nothing.
8	4123 - Red Oak	Poletimber Medium	52.3	98	51-80	Stand was treated as noted in previous comments. Heavy red maple regen in understory. Oak seems fairly healthy in the stand. Southern portion of stand was merged with northern part. They were originally part of the same stand.
						OPIC - FMD: (THIN OAK AND PINE, CC PATCHES OF ASPEN. ASPEN PATCHES ARE STAND 40. Old comment.) Remove red maple and aspen, and mark oak. Stand is hilly. Regeneration will be a mix of red maple, aspen and oak. The stand is along Esch Road and adjacent to private property. The stand is adjacent to Compartment 029, "The Pine Barrens Frost Pocket." 08/15/2005 mm. Harvest update: cut under 720540701 Esch Road Hardwood by Decker for AJD in 2009-2010.
9	42210 - Natural Red Pine	Sawtimber Well	6.5	88	81-110	Large diameter pine stand. Decent quality RP. Decent oak component. Some rolling terrain. Stand was held previously due to recreational use and scenic values. Stand is relatively small sized. Do nothing.
						OPIC - FMD: (CUT ASPEN, RED MAPLE AND DYING OAK. SCARIFY IN GOOD SEED YEAR. Old comment.) The stand is used for seasonal camping (hunting, etc.) The stand is alt the intersection of Esch Road and Pennsylvania Crossing Road. The stand is adjacent to Compartment 029, "The Pine Barrens Frost Pocket." Maintain the stand in its current condition. 06/06/2005 mm
18	4131 - Aspen, Oak	Sapling Well	75.0	7	Immature	Stand has regenerated nicely. Some open areas still but i suspect stand will be fully stocked in the near future. Do nothing at this time.
						OPIC - FMD: (MANAGE WITH STAND TO NORTH. Old comment.) The stand can not be included with the stand to the north. Timber sale # 72-056-04-01 (Frost Pocket Aspen) is just to the north of this stand. This sale was cut by G & G Forest Products in 2005. The stand is adjacent to Compartment 029, "The Pine Barrens Frost Pocket." This stand will regenerate naturally to aspen and oak. 06/06/2005 mm Stand was harvested under contract 72-033-07-01 Bovine Aspen.
20	4130 - Aspen	Sapling Well	26.4	7	Immature	Aspen is filling in stand nicely. Some open areas that aspen and cherry are starting to move into. This stand borders frost pocket area. Do nothing.
						OPIC - FMD: (HOLD 10 FOR DIVERSITY. Old comment.) Final harvest. This sand is along Pennsylvania Crossing Road. The stand is adjacent to Compartment 029, "The Pine Barrens Frost Pocket." The stand will naturally regenerate to aspen. 06/06/2005 mm Stand was harvested under contract 72-033-07-01 Bovine Aspen.

S t	Grayling Mgt. Unit			Report 8	- Forested	Stands Compartment: 12 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
21	4319 - Mixed Upland Forest	Sawtimber Poor	26.6	98	1-50	Stand looks to have most of RM and aspen removed. Oak was thinned. Heavy regen in the understory. Very old and poor quality JP and aspen along Penn Crossing. Most likely left for visual consideration. Very little oak regeneration. OPIC - FMD: Remove aspen and mark oak. The stand is hilly. The stand will regenerate naturally to oak and aspen. The ORV trail traverses through the stand. The stand is adjacent to private property. The stand is along Esch Road and along Pennsylvania Crossing Road. 08/15/2005 mm Stand shelterwood harvested in 2007/2008 under tsale contract 720560701.
22	4130 - Aspen	Sapling Well	117.1	43	1-50	Very mixed stand. quality is very poor. some steep terrain, lots of browse in the stand. some larger diameter stuff along penn crossing road. most likely was left from previous sale for visual. Do nothing at this time. OPIC - FMD: The stand is starting to recruit into a young A6 stand. 08/15/2005 mm
23	42210 - Natural Red Pine	Sawtimber Medium	11.9	85	51-80	OPIC - FMD: (ASPEN, MAPLE, AND RED PINE PULP REMOVED IN 1997. Old comment.) Timber sale # 72-002-97-01 (Snake Crossing) cut in 1998 by Stagg and Sons Forest Products. Jack pine, aspen, red maple, red pine smaller than eight inches, and those red pine marked with orange paint were cut There was a residual of 42 square feet of red pine and 24 square feet of oak. The stand is along Pennsylvania Crossing Road. The stand is located on a small hill. Maintain stand in its current condition. Consider treatment in ten years. 08/15/2005 mm
24	4130 - Aspen	Sapling Well	158.2	27	Immature	Aspen regen. Very dense. History is listed below. Stem size varies a bit throughout the stand. Stand will all be treated as one. OPIC - FMD: (CLOSE ROAD IN NORTH (OFF SNAKE BRANCH). WAS 40% BIRCH. Old comment.) Only a small amount of birch is found in the stand. ORV trail traverses through the stand. The stand is loacted along the west end of Esch Road. The road is very steep and easiliy erodable for a short distance at the west end of the road The stand is along Snake Branch Road. Guard rail has been set in place just west of the intersection of Snake Branch Road and Esch Road. The guard rail is being breached by illegal ORV use. The stand is adjacent to private property. 08/15/2005 mm
25	4119 - Mixed Northern Hardwoods	Poletimber Well	66.0	88	51-80	Nice quality hardwood stand. Lots of decent sugar maple stems. Ash is present but struggling. Oak is of decent quality. Heavy understory in places. Do nothing at this time.OPIC - FMD: (Thinned in 2000/2001 under contract #72-028-98-01, Esch Road Thinning. Old comment.) Residual was 70 square feet outside of regenertion holes. The stand is along Esch Road. The stand is adjacent to private property. Maintain stand is current condition. Consider treatment in ten years. 06/06/2005 mm
27	42200 - Natural White Pine	Sawtimber Well	25.6	59	51-80	Large diameter white pine stand. Aspen is failing and starting to die out. Interesting stand to leave and let aspen fall out of the canopy. Do nothing.
						OPIC - FMD: Let stand continue to grow. Consider possible treatment in twenty years. 08/15/2005 mm

S t	Graylin	g Mgt. Unit		Report 8	<ul><li>Forested</li></ul>	Stands Compartment: 12 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
28	4199 - Other Mixed Upland Deciduous	Sawtimber Well	12.0	97	111-140	Stand has some nice sized and quality hardwood in it. Access could be difficult with this stand. it sits on top of a fairly steep hill.
						OPIC - FMD: The stands is on top of a hill. The terrain may create some difficulty while conducting any treatment  06/06/2005 mm
29	42210 - Natural Red Pine	Sawtimber Well	126.9	70	81-110	Nice red pine. Growth has started to slow a little. BA does not warrant thinning yet. Maybe wait ten years. Do nothing at this time.
						OPIC - FMD: (CUT ALL BUT RED AND WHITE PINE AND OAK. STAND HARVESTED 1999 SALE #0389801. Old comment.) Timber sale # 72-038-98-01 (Double Corner Pine). Cut by Stagg and Sons Forest Products in 1999. No red pine, white pine or cut was cut. Residual basal area was 66 square feet. The snowmobile trail traverses through the stand. The ORV trail traverses through the stand. A gas well site (stand 411) is located within the stand. The stand is adjacent to private property. Maintain stand in current condition. Consider treatment in ten years. 06/06/2006 mm
30	4130 - Aspen	Sapling Well	66.9	25	Immature	immature aspen stand. some other species mixed in the stand. Guard rail is still in place. Some steep terrain. RDR Potential.
						OPIC - FMD: (SOME PINE SEEDING IN. CLOSE ROADS. ORV DAMAGE. Old comment.) Illegal ORV use in area. Numerous illegal trails throughout the stand. Stand 55 (the stand is completely contained within stand 30) is an illegal "scramble area" for ORV's. ORV trail traverses through the northwest corner of the stand. Some erosion is occurring along the illegal ORV trails. Illegal ORV use and/or erosion may be impinging on the private property to the south. Guard rail has been set in place near the northwest corner of the stand. The guard rail is being breached by illegal ORV use. 06/06/2005 mm
31	42290 - Natural Mixed Pine	Sawtimber Medium	53.7	70	51-80	Stand was thinned in 2000. RP is still growing well where I cored and checked. Heavy regen in the understory. Pine is decent quality. Rec trails pass through stand.
						OPIC - FMD: (CUT ASPEN AND MAPLE. WHERE ASPEN IS PRESENT AND RP BA > 50 FT, OPEN UP FOR ASPEN REGENERATION. Cut in 2000 under contract 029-99-01 Blackberry Aspen . Old comment.) Timber sale # 72-029-99-01 (Blackberry Aspen). Cut in 2000 by Shawn Muma Forest Products. Residual basal area of 50 square feet. ORV trail traverses through the stand. The stand is adjacent to the snowmobile trail. Maintain stand in current condition. Consider treatment in ten years. 06/06/2005 mm
32	4130 - Aspen	Sapling Well	20.0	26	Immature	Aspen regen, stand is nearly fully stocked.
						OPIC - FMD: (WEST BOUNDARY NOT ON SURVEY LINE. Old comment.) This stand was part of timber sale # 72-069-87-01 (5 Unit Block). The contract was held by U. S. Plywood and cut in 1988/1989. 08/15/2005 mm

S t	Graylin	g Mgt. Unit		Report 8	<ul><li>Forested</li></ul>	Stands Compartment: 12 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
33	4130 - Aspen	Sapling Well	113.8	3	Immature	Aspen regen. Fully stocked, history is listed below. Some large WP left along the trail.
						OPIC - FMD: Harvested under contract 72-016-11-01. Cold Comment: (EAST BOUNDARY NOT ON SURVEY LINE. MORE RESIDUAL IN EAST. Old comment.) The stand is along Centerline Road. The ORV trail traverses through the stand. The stand is adjacent to private property. The stand is along the snowmobile trail This is a young stand of good growing aspen. 08/15/2005 mm. 2010 update: Proposed for OYOE harvest. Approved at 11-3-10 Compt Review (2012 YOE review): Final harvest with standard retention, protect ORV trail. 2012 Update: Timber Sale was conducted under sale 72-016-11-01 by Shawn Muma during the winter of 2012. Less than 10 BA of scattered pine was left for residual.
35	4123 - Red Oak	Sawtimber Medium	65.6	97	51-80	Heavy regen in the understory. History is listed below. Decent quality oak.
						OPIC - FMD: (REMOVE ALL BUT OAK. ASPEN REMOVED 1955. Centerline row thinning contract #044-97-01 thinned in 1998-1999. Units 2 and 3 to be seeded to white pine FTP# C72-419. 4 ACRES WERE HAND PLANTED TO WHITE PINE BY A CONTRACT CREW IN THE SPRING OF 2000. FTP# 72-0419. Old comment.) Timber sale # 72-044-97-01 (Centerline Road Thinning) was held by Gerogia-Pacific and cut in 1999. No oak was cut. There is a good understory of A3. The residual oak basal area was 40 square feet. The stand is along Centerline Road. Penn Road traverses through the stand. The stand is along the snowmobile trail. There is a well site within the stand.
36	4130 - Aspen	Poletimber Well	18.7	75	51-80	Pole sized stand. Stand was prescribed for treatment last YOE but never got cut for some reason. Trees were difficult to get age on so it was estimated.
						OPIC - FMD: (HOLD 10 FOR AGE DIVERSITY. Old comment.) Final harvest. The stand will naturally regenerate to A3. The stand is along the snowmobile trail. 06/06/2005 mm
37	4130 - Aspen	Sapling Medium	50.6	15	Immature	Aspen regeneration, stand is filling in, should be fully stocked after a while.
						OPIC - FMD: (Cut in 1999 and 2000 under contract 029-99-01 Blackberry Aspen. Old comment.) The sale was cut by Shawn Muma. The stand is adjacent ot private property. 08/15/2005 mm
38	4133 - Aspen, Mixed Pine	Poletimber Well	84.8	59	81-110	Stand was originally prescribed in 2005. Was never cut. Aspen is big and old, RP is decent quality.
						OPIC - FMD: (HOLD TIL ASPEN MATURES. Old comment.) Final harvest. The stand will regenerate naturally to aspen. The stand is along Penn Road. There is a underground gas flowline on the east side of Penn Road. A trail has been, and continues to be, illegally improved for access onto private property. The stand is adjacent to private property. 06/06/2005 mm

S	Grayling Mgt. Unit			Report 8	<ul><li>Forested</li></ul>	Stands Compartment: 12 Year of Entry: 2017
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
39	4130 - Aspen	Poletimber Well	37.4	48	51-80	Stand has reached merchantability. Quality is decent.
		vven				OPIC - FMD: This is a good growing stand of young aspen. Penn Road traverses through the stand. Centerline Road is along the stand. There is a grassy opening that is maintained by Wildlife Division within the stand. 08/15/2005 mm
42	42110 - Planted Red Pine	Sawtimber Medium	67.8	87	51-80	Stand was thinned 15 years ago. It has responded in some areas, not in others.
						OPIC - FMD: (Centerline row thinning #44-97-01 thinned in 1998-1999. Old comment.) The sale was held by Georgia-Pacific and cut in 1998/1999 No red pine or oak was cut. Residual basal area of the stand was 53 square feet. Stand is along Centerline Road. Maintain stand in current condition. Consider treatment in ten years. 06/06/2005 mm
43	42220 - Natural Jack Pine	Poletimber Medium	3.0	29	Immature	Fair quality pine stand. Seems to be growing fairly well. Do nothing at this time.
						OPIC - FMD: Stand is along Centerline Road. 08/15/2005 mm
44	4130 - Aspen	Sapling Well	102.6	27	Immature	Stand is fully stocked in most places. Some open areas near the middle. Quality is decent. Do nothing.
						OPIC - FMD: (GOOD A3. ROAD NEVER CLOSED. CLOSE ASAP. Old comment.) When stand 38 (to the west of this stand) is treated the road can be closed at that time. The stand is adjacent ot private property. 06/06/2005 mm
45	4199 - Other Mixed Upland Deciduous	Poletimber Well	47.6	110	81-110	Stand is mostly pole sized hardwood. There is a fair amount of log sized oak throughout the stand as well. It was not cut when the stand was treated in 1999/2000. Hardwood is poor quality, but on a decent quality site. I am guessing it was grazed in the past contributing to its poor quality. Lots of multi-stemmed trees. Oak is decent quality and larger diameter.
						OPIC - FMD: (Unaware Well Inspector block, contract #041-98-01, thin in 99/00. Old comment.) Cut by the Little Beaver Lumber Company. All sugar maple, red maple, beech, basswood, aspen and those oak trees marked with orange paint. No birch or unmarked oak were cut. Residual basal area of the stand was 67 square feet. The stand is adjacent to a well site. Maintain stand in current condition. Consider treament in ten years. 06/06/2005 mm
46	4124 - Red with White Oak	Sawtimber Medium	128.2	110	51-80	Nice stand of managed oak. Old notes say it was "thinned" in 99/00. It was mostly just a species removal. Stand is decent quality.
						OPIC - FMD: (Unaware Well Inspector block, contract #041-98-01, thin 99/00. Old comment.) Cut by the Little Beaver Lumber Company. All sugar maple, red maple, beech, baswood, aspen and oak trees marked with orange paint were cut. No birch and unmarked oak were cut. Residual basal area of stand was 56 square feet. Maintain stand in current condition. Consider treatment in ten years. 06/06/2005 mm

S t	Graylin	Grayling Mgt. Unit			<ul><li>Forested</li></ul>	Stands Compartment: 12 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
48	4130 - Aspen	Sapling Well	9.4	20	Immature	Poor quality aspen in the stand. some larger diameter rp are mixed in the stand. Do nothing at this time.
						OPIC - FMD: Stand is along Penn Road. There is a well site adjacent to the stand. 08/15/2005 mm
49	4130 - Aspen	Sapling Well	18.2	26	Immature	Well stocked aspen regen. Quality is decent. Do nothing.
						OPIC - FMD: The stand is along the snowmobile trail. This stand was part of timber sale # 72-069-87-01 (5 Unit Block). The contract was held by U. S. Plywood and cut in 1988/1989.  08/15/2005 mm
50	4130 - Aspen	Sapling Well	19.6	26	Immature	Fully stocked aspen regen stand. It is approaching merchantability in some areas. Heavy red maple in some areas as well. Do nothing.
						OPIC - FMD: The stand is along the snowmobile trail. A trail has been, and continues to be, illegally improved for access onto private property. This stand was part of timber sale # 72-069-87-01 (5 Unit Block). The contract was held by U. S. Plywood and cut in 1988/1989. 08/15/2005 mm There is a small maintained opening within the stand. 09/07/2005 mm
51	4130 - Aspen	Sapling Well	18.5	26	Immature	Fully stocked aspen regen. History is listed below. Decent quality. Do nothing.
						OPIC - FMD: The stand is along the snowmobile trail. There is a well site adjacent to the stand. This stand was part of timber sale # 72-069-87-01 (5 Unit Block). The contract was held by U. S. Plywood and cut in 1988/1989. The stand is adjacent to private property. 08/15/2005 mm
52	4199 - Other Mixed Upland Deciduous	Sawtimber Well	6.0	81	81-110	Nice mixed stand. SM is nice quality in places. Small acreage. It will hold no problem another ten years. We can treat when we treat the adjacent R9
						OPIC - FMD: Maintain stand in current condition. Consider treatment in ten years. 08/15/2005 mm
53	4130 - Aspen	Sapling Well	16.2	16	Immature	Stand is fully stocked with aspen regen. Do nothing at this time.
						OPIC - FMD: This stand was part of timber sale # 72-029-99-01 (Blackberry Aspen). It was cut by Shawn Muma in 1999. The stand is a good stand of aspen. The stand is along the snowmobile trail. 08/15/2005 mm
54	4130 - Aspen	Sapling Well	20.2	26	Immature	Aspen maple regen. Stand is fairly well stocked in most areas.  Some are a bit sparse. Quality is decent.
						OPIC - FMD: This stand is adjacent ot private property. This stand was part of timber sale # 72-069-87-01 (5 Unit Block). The contract was held by U. S. Plywood and cut in 1988/1989.  08/15/2005 mm

S t	Grayling	Grayling Mgt. Unit			<ul><li>Forested</li></ul>	Stands Compartment: 12 Year of Entry: 2017		
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:		
57	4130 - Aspen	Poletimber Well	73.0	43	51-80	Aspen stand quality is fair. Some large white pine mixed throughout the stand. Recreational trail passes through stand. Black canker is on the aspen in pockets. Do nothing at this time.		
						OPIC - FMD: The stand is starting to recruit into a young stand of A6. The snowmobile trail traverses through the stand. The stand is adjacent to private property. 08/15/2005 mm		
58	4130 - Aspen	Sapling Well	13.2	25	1-50	Stand was originally typed a U1. That is not the case. It is a mixed stand mostly dominated by aspen. Aspen, JP, oak are all poor quality. Aspen has begun filling in the understory. Do nothing at this time.		
						OPIC - FMD: The stand is along Pennsylvania Crossing Road. 08/15/2005 mm		
59	4130 - Aspen	Sapling Well	5.7	6	Immature	Stand is filling in well. Should be a fully stocked stand. Some areas have some sparse areas that are still taking a little while to fill in, but it should over time. Do nothing at this time.OPIC - FMD: The stand is along Pennsylvania Crossing Crossing Road. The stand will regenerate to a mix of aspen and jack pine. 08/15/2005 mm Stand was harvested under contract 72-033-07-01 Bovine Aspen.		
61	42290 - Natural Mixed Pine	Sawtimber Well	11.4	66	81-110	Mature sized mixed pine stand. Pine is nice quality. aspen is old and dying. Most of JP has died standing.		
						OPIC - FMD: The stand is located at the intersection of Esch Road and Pennsylvania Crossing Road. The stand is adjacent to private property. The stand is adjacent to Compartment 029, "The Pine Barrens Frost Pocket." Maintain stand in current condition. Consider treatment in ten years. 08/15/2005 mm		
62	4123 - Red Oak	Sawtimber Medium	13.8	78	51-80	Stand should have been final harvested originally. Very little oak regeneration coming back. Aspen and red maple are dominating the understory.		
						OPIC - FMD: Remove aspen and maple, and mark oak. The stand is hilly. The stand will regenerate to aspen, maple and oak. The stand is adjacent to private property. The stand is adjacent to Compartment 029, "The Pine Barrens Frost Pocket." 08/15/2005 mm. Harvest update: cut under 720540701 Esch Road Hardwoods by Decker for AJD in 2009-2010.		
64	4133 - Aspen, Mixed Pine	Poletimber Well	6.8	45	51-80	Small mixed stand. Aspen is fair quality, RP is nice quality. Aspen is coming in the understory as well. This stand borders the frost pocket, it has been stated in previous notes that this stand be held to help protect the cattle pit as well as teh definition of the frost pocket boundaries.		
						OPIC - FMD: The stand is adjacent to the cattle burial pit, (stand 19) and adjacent to Compartment 029, "The Pine Barrens Frost Pocket.". Maintain in current condition to help protect the pit. 06/06/2005 mm		
67	4311 - Pine, Aspen Mix	Sawtimber Well	19.3	78	81-110	Stand was originally prescribed for a timber sale, it never happened. Large pocket of white pine and some oak in the middle of the stand.		
						OPIC - FMD: Leave white pine for diversity. The stand is on small hill. The stand will regenerate to aspen and red maple.  08/15/2005 mm		

S t a n d	Grayling Mgt. Unit			Report 8	- Forested	Stands Compartment: 12 Year of Entry: 20	(S)
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	Michigan
69	4130 - Aspen	Sapling Well	18.4	16	Immature	Nice young aspen stand, fully stocked, some la and oak throughout the stand. Do nothin OPIC - FMD: This stand was part of timber sa (Centerline Road Thinning). The sale was reactific and cut in 1998/1999. No red pine or stand was separated out from the other part of (stand 42) because there are only a few very son the very western edge of the stand (less feet). Site index was transferred from adjact 08/15/2005 mm	g at this time.  ale 72-044-97-01  aleld by Georgia-  bak was cut. This  the original stand  cattered red pine  than 10 square

Compartment: 12 Year of Entry: 2017



Stand	Cover Type	Acres	Managed Site	General Comments:
19	7909 - Nonstocked (OI)	4.3	No	OPIC - FMD: (STATE BURIAL PIT FOR PBB TAINTED CATTLE. Old comment.) This stand is the location of the burial pit for livestock that were contaminated with polybrominated biphenyl (PBB). The pit was created in 1987. It is a clay sealed pit and has monitor wells associated with it. No activity should occur on or near the pit. The stand is adjacent to Compartment 029, "The Pine Barrens Frost Pocket." 03/04/05 mm According to David Lindsay, DEQ, Gaylord there are 13 monitoring wells. There northing and easting coordinates are: MW-7S 304.22 192.99; MW-7D 294.61 184.26; RL-9R292.39 644.73; RL-8R 159.25698.20; OB-4 626.72 910.90; OB-5 78.00 1175.58; M1S 349.791124.39; M-1D344.87 1132.75; M-2 929.501623.61; M-3 516.05 1660.47; M-4 274.48 1648.87; M-5 400.54 799.06; M-6 120.40 825.68 09/09/2005 mm
55	7909 - Nonstocked (OI)	6.4	No	No new comments. not much has changed.
				OPIC - FMD: This area receives a tremendous amount of illegal ORV use. The area is locally known as the Centerline Pit. The area is a "bowl" with steep sides. Erosion is occuring and the area has no vegetation. The area has been used for a "scramble area" for a long time and currently receives a lot of similar use. The surrounding area is also used by illegal ORV's. 06/01/2005 mm
60	3209 - Upland Shrub (OI)	8.9	No	This is a fairly open and scrubby stand. mostly cherry and scrubby oak, some pine mixed in.
				OPIC - FMD: The stand is at the intersection of Snake Branch Road and Pennsylvania Crossing Road. 08/15/2005 mm
63	3209 - Upland Shrub (OI)	10.0	No	OPIC - FMD: The stand is adjacent to Compartment 029, "The Pine Barrens Frost Pocket." 08/15/2005 mm
401	31029 - Grass (OI)	3.0	Yes	OPIC - FMD: Maintained wildlife opening. 06/01/2005 mm
402	31029 - Grass (OI)	3.7	Yes	OPIC - FMD: Maintained wildlife opening. 06/01/2005 mm
403	31029 - Grass (OI)	2.5	Yes	Grassy wildlife opening.
				OPIC - FMD: Maintained wildlife opening. 06/01/2005 mm
404	31029 - Grass (OI)	10.5	No	Non forested stand. RP and JP on edges of grassy opening.
				OPIC - FMD: Guard rail has been set in place in the stand to restrict illegal ORV use. The guard rail is being breached by illegal ORV activity. The stand is near stand 55, "The Centerline Pit". 08/15/2005 mm
405	31029 - Grass (OI)	3.3	No	Stand has started filling in with some cherry and pine. Still pretty open.
				OPIC - FMD: This is a unique "G" type. It is a small bowl. Currently it is not being used for illegal ORV activity. 08/15/2005 mm

DNR DNR

Compartment: 12

Year of Entry: 2017

Stand	Cover Type	Acres	Managed Site	General Comments:
406	31029 - Grass (OI)	16.1	No	Stand has virtually no vegetation on it. There are some monitoring wells in the area. Part of the cattle burial pit complex. Do nothing.
				OPIC - FMD: This stand is adjacent to stand 19 (the livestock burial pit). Activities should be limited west of the trail and no activities should occure east of the trail. There are monitoring wells for the livestock burial pit in the area. The stand is adjacent to Compartment 029, "The Pine Barrrens Frost Pocket." 08/15/2005 mm
407	31029 - Grass (OI)	0.8	No	OPIC - FMD: Gas well site. 06/01/2005 mm
408	31029 - Grass (OI)	1.3	No	OPIC - FMD: Gas well site. 06/01/2005 mm
409	31029 - Grass (OI)	1.2	No	Saint Elmer C1-35  OPIC - FMD: Gas well site. 06/01/2005 mm
410	31029 - Grass (OI)	1.0	No	Well site, Delta Oil Co. B4-34 P/N 49315 MPSC 7981  OPIC - FMD: Gas well site. 06/01/2005 mm
411	31029 - Grass (OI)	1.2	No	Saint Elmer C1-35 OPIC - FMD: Gas well site. 06/01/2005 mm
412	31029 - Grass (OI)	0.8	Yes	OPIC - FMD: Maintained wildlife opening. 06/01/2005 mm