

Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32237 Entry Year 2020 Acreage: 1,572

County Marquette

Management Area: Chain Lakes Moraine

Revision Date: 2018-08-06

Stand Examiner: Rankin Smith

Legal Description:

T45N R28W Sec's 19, 20, and 21

Identified Planning Goals:

Management goals range from maintaining and, if possible, improving timber quality and production to improving wildlife habitat as well as protecting water quality. Timber types within this compartment will continue to be managed on an evenaged basis mainly for fiber production with some saw log production occurring on the more productive sites. Managing as such will provide both cover and feed for wildlife.

Soil and topography:

Topography: Soil composition ranges from sandy outwash to low peat and muck wetlands. Topography is nearly level to slightly rolling with steep ridges surround bogs and swamps. Soils range from the Rubicon-Keweenaw complex to Greenwood and Dawson peat. Soil productivity is higher in this compartment with respect to the surrounding landscape to the north and west. Soils grade from sands in the west to loamy sands in the east.

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

Compartment: Ownership in and around the compartment is almost entirely state land. There are some private parcels within the compartment and a hunting club immediately to the northwest of the compartment. There is no development besides the Flat Rock Road and the old ELF ROW. Land use is in timber production and recreation.

Unique Natural Features:

There are 10 stands that were designated as potential old growth at the last entry and have been carried forward for review. These stands include: 5, 6,19, 20, 33, 37, 39, 40, 41, and 69.

Archeological, Historical, and Cultural Features:

None.

Special Management Designations or Considerations:

There are 10 stands that were designated as potential old growth at the last entry and have been carried forward for review. These stands include: 5, 6,19, 20, 33, 37, 39, 40, 41, and 69.

Watershed and Fisheries Considerations:

The western region of this compartment contains an unnamed waterbody and stream which serve as tributaries to Flat Rock Creek. Additionally, this compartment contains reaches of Flat Rock Creek which serves as a tributary to the West Branch of the Escanaba River. The unnamed tributary is a designated Type 1 trout stream less than 50' width. A 300' buffer is recommended for the unnamed tributary in riparian areas susceptible to Aspen regeneration (specifically stands 32 and 34). For areas not susceptible to Aspen regeneration 100' plus 5' per 1% increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices. Flat Rock Creek is a designated trout stream less than 50' width. A 300' buffer is recommended for Flat Rock Creek in riparian areas susceptible to Aspen regeneration (specifically stands 28 and 38). For areas not susceptible to Aspen regeneration 100' plus 5' per 1% increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices. The northeastern region of this compartment contains Wild West Creek which serves as a tributary to Flat Rock Creek. Wild West Creek is a designated Type 1 trout stream less than 50' width. A 300' buffer is recommended for Wild West Creek in riparian areas susceptible to Aspen regeneration (specifically stand 1). For areas not susceptible to Aspen regeneration 100' plus 5' per 1% increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices.

Wildlife Habitat Considerations:

Compartment 237 is found within the Chain Lakes Moraine Management Area; on a Disintegration Moraine in Southwestern Marquette County. The dominant Natural Communities are dry mesic northern forests, poor conifer swamps, and mesic northern forests. This management area offers opportunities to increase diversity and perhaps long-term oak sustainability through under planting white and red pine. Another priority is to maintain or increase wildlife

corridors especially along riparian corridors. Wildlife management issues in the management area are: mast (hard and soft); habitat fragmentation; mature forest conditions; mesic conifer; course woody debris; and retention or development of large living and dead standing trees (for cavities). This management area represents approximately ¼ of the oak resource on WUP state forest.

The following have been identified as featured species for the Chain Lakes Management Area: black bear, gray jay, pileated woodpecker, Northern goshawk, red crossbill.

Mineral Resource and Development Concerns and/or Restrictions

Sand/gravel pits are not located this area, and sand & gravel potential within the compartment appears to be limited. There is no known metallic mineral potential in this area, though there has been metallic mineral leasing in the area in the past. There is no potential for economical oil and gas production in the UP.

Vehicle Access:

Primary access to this compartment is via Co. Rd. CAA (Flat Rock Road). Various two tracks allow access through the remainder of the compartment. Closed roads do exist that will be reopened temporarily for timber sale purposes.

Survey Needs:

Recreational Facilities and Opportunities:

No developed recreation exists in the compartment. Potential for snowmobile trail along the old ELF ROW does exist.

Fire Protection:

This compartment is located within the South Ishpeming-581 Zone dispatch area. Predominate cover type surrounding the compartment is jack pine. Fire prone species do exist within the compartment but not at the scale as adjacent compartments. The majority of this compartment is dominated by aspen. Adequate roads exist to aid in fire protection within the area.

Additional Compartment Information:

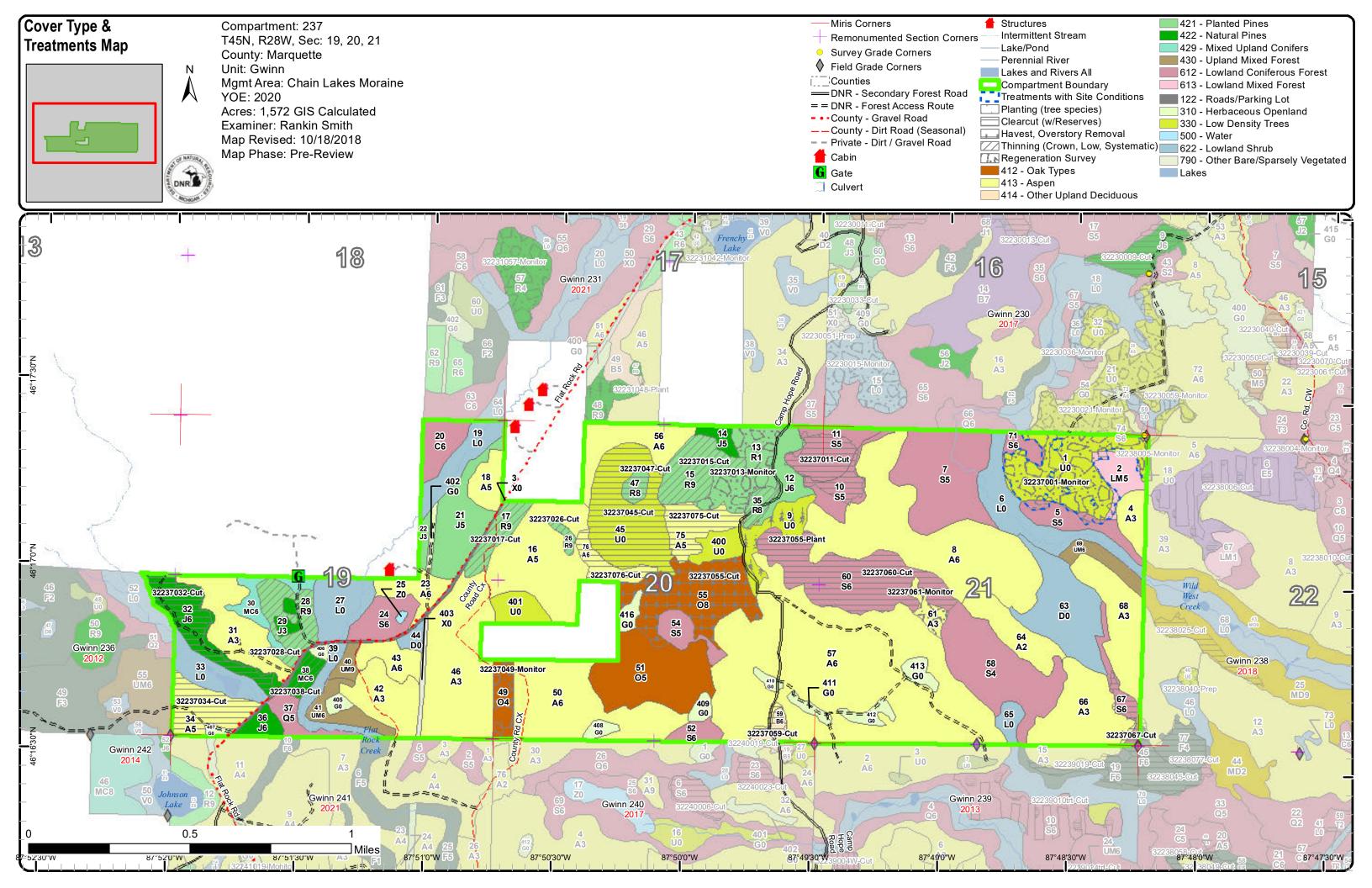
The following reports from the Inventory are attached:

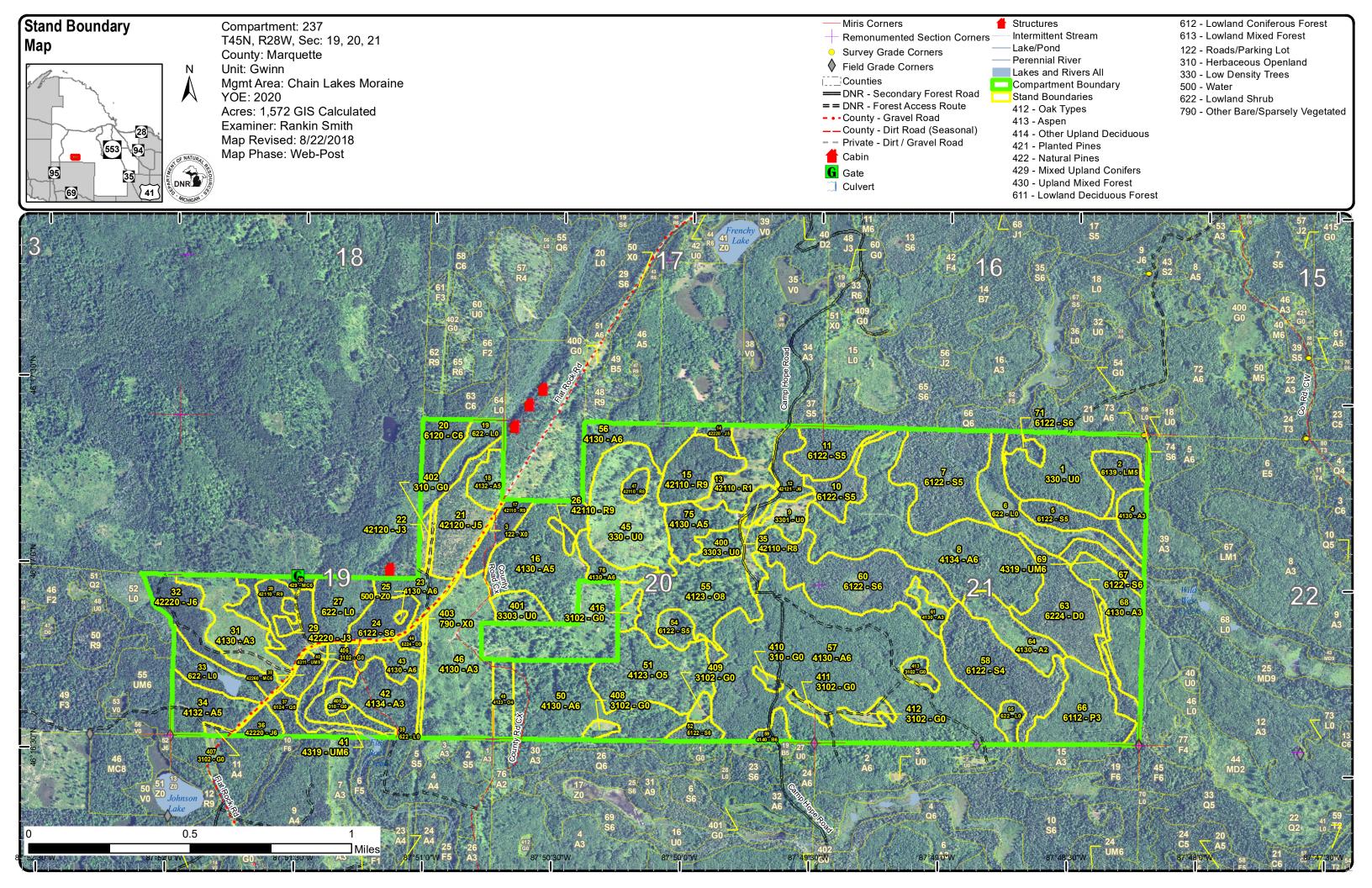
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

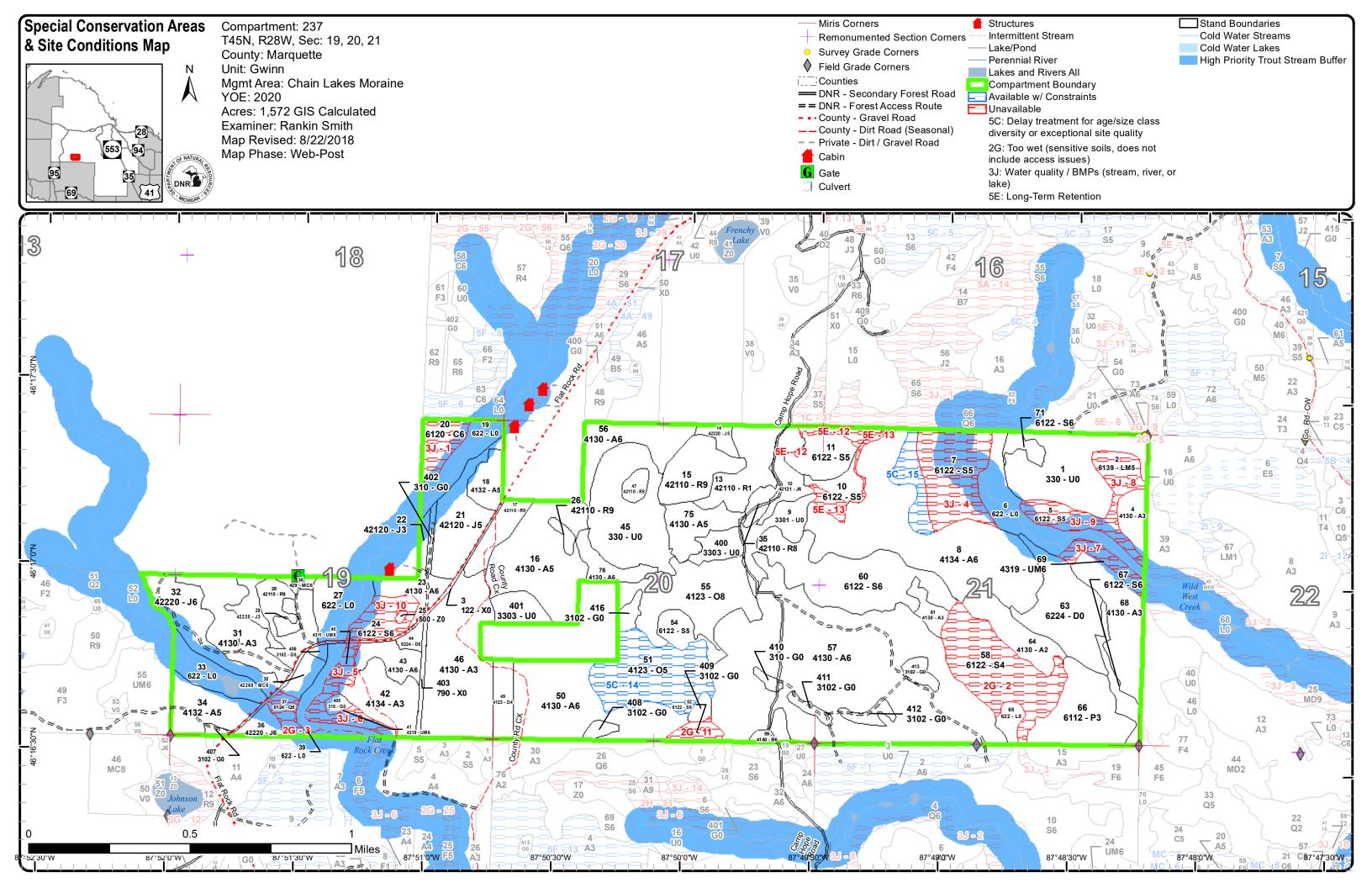
The following information is displayed, where pertinent, on the attached compartment maps:

Base feature information, stand boundaries, cover types, and numbers

Proposed treatments
Site condition boundaries
Details on the road access system







Compartment 237 Year of Entry 2020

Gwinn Mgt. Unit
Rankin Smith: Examiner



Age Class

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	/ 4 0'			/ *	/ "5"	/ *	\ \sigma_{\rightarrow}	/ %	/ ^	/ %	/ %	\ 'a		/ 👯	/ %	/ 💆	/ `	/ Jr.	/ /
Aspen	0	114	39	174	265	78	0	0	0	0	0	0	0	0	0	0	0	0	668
Bare/Sparsely Vegetated	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Cedar	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	12
Herbaceous Openland	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
Jack Pine	0	0	29	26	0	0	25	0	0	0	0	0	0	0	0	0	0	0	79
Low-Density Trees	124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	124
Lowland Aspen/Balsam Poplar	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
Lowland Conifers	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	8
Lowland Mixed Forest	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	11
Lowland Shrub	93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	93
Lowland Spruce/Fir	0	0	0	0	0	13	0	5	23	95	99	0	0	0	0	0	0	0	235
Natural Mixed Pines	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	6
Oak	0	0	0	0	0	0	0	0	0	54	44	0	0	0	0	0	0	0	98
Paper Birch	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
Red Pine	0	23	0	0	0	3	60	0	0	0	0	0	0	0	0	0	0	0	85
Treed Bog	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
Upland Conifers	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	4	23
Urban	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Water	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	298	137	102	210	265	94	91	5	34	176	160	0	0	0	0	0	0	4	1572



Report 2 – Treatment Summary

Gwinn Mgt. Unit

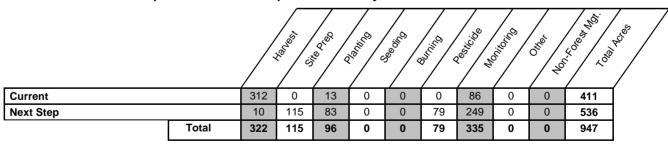
Compartment 237 **Acres of Harvest** Year of Entry: 2020 **Total Compartment Acres: 1,572**

> Commercial Harvest - 312 Harvests with Site Condition - 0 Next Step Harvest - 10 Habitat Cut - 10

Cover Type by Harvest Method

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Aspen		73	0	0	0	0	0	0	0	0	73	
Jack Pine		22	0	0	0	0	0	0	0	0	22	
Low-Density Trees		47	0	0	0	0	0	0	0	0	47	1
Lowland Aspen/Balsam Poplar		6	0	0	0	0	0	0	0	0	6	1
Lowland Spruce/Fir		52	0	0	0	0	0	0	0	0	52	1
Natural Mixed Pines		0	0	0	0	0	6	0	0	0	6	1
Oak		0	0	0	0	0	0	44	0	0	44	
Red Pine		4	0	0	0	0	58	0	0	0	62	
	Total	205	0	0	0	0	64	44	0	0	312	

Proposed and Next Step Treatments by Method



Gwinn Mgt. Unit Report 3 -- Treatments Compartment: 237 s Year of Entry: 2020 t а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age **Approval** n Name CoverType Density Age Range Type Method Objective Structure **Status** d Natural Regen 1 32237001-47.7 330 - Low-Density 413 - Aspen Draft Field Nonstocked 0 Unspec Monitoring Even-Aged Monitor **Trees** ified (Re-Inventory) Boundary **Habitat Cut: No** Site Condition: BMPs Prescription Specs: Next Step Treatments: Acceptable Aspen, spruce-fir. Regen: Other Percent to Treat = 100% Comment: **Proposed Start Date:** 06/20/2017 Poletimber 32237011-Cut 21.2 4134 - Aspen, 26 1-50 Harvest Clearcut with 612 - Lowland Even-Aged Field Boundary Coniferous Spruce/Fir Well Retention Forest **Habitat Cut: No Site Condition:** Prescription Clearcut, harvesting all balsam fir, black spruce and tamarack greater than 6" stump diameter, leaving enough spruce and tamarack to meet 3% retention. Cut no cedar or white pine if present. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) **Treatments:** Acceptable Spruce, tamarack, fir, cedar, white pine. Regen: Other SBW Comment: Proposed Start Date: 01/11/2016 32237013-42110 - Planted Sapling 4211 - Planted Draft Field 13 21.8 Immatu Monitoring Artificial Even-Aged **Monitor** Red Pine Poor re Regen(3yr) Red Pine Boundary **Site Condition: Habitat Cut: No** Prescription Count per TMS spec Specs: Next Step **Treatments:** Acceptable Red pine, oak, mixed hardwood, conifer Regen: Other Comment: **Proposed Start Date:** 10/01/2016 32237015-Cut 42110 - Planted Sawtimber 53 141-Crown Thinning 4211 - Planted Proposal Harvest Even-Aged Red Pine Well 170 Red Pine **Habitat Cut: No Site Condition:** Prescription Row thin Red Pine down to 100-120 BA. Cut all jack pine 2" and up as well as immature aspen. Leave overmature aspen for diversity. Specs:

Next Step Treatments:

<u>Acceptable</u> Regen:

Other Comment:

Proposed Start Date:

10/01/2019

Compartment: 237

Year of Entry: 2020

a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status	"
17	32237017-Cut	11.1	42110 - Planted Red Pine	Sawtimber Well	53	141- 170	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Proposal	_
			0.4 0 1.41									

Habitat Cut: No Site Condition:

Prescription Thin Red Pine to 90-100 BA. Take suppressed and poorly formed trees first. Leave Jack Pine and Aspen for diversity but harvest if needed for operability or in competition with crop red pine. Specs:

Next Step **Treatments:**

Acceptable N/A

Regen:

Other Comment:

Proposed Start Date: 10/01/2019

Sawtimber Systematic 4211 - Planted 26 32237026-Cut 2.5 42110 - Planted 47 141-Harvest Even-Aged Proposal Red Pine Well 170 Thinning Red Pine

Habitat Cut: No Site Condition:

Prescription Row thin. Remove aspen needed for operability leave the rest. Leave oak.

Specs:

Next Step

Treatments:

<u>Acceptable</u> Regen:

Other

Comment:

Proposed Start Date: 10/01/2019

32237028-Cut 42110 - Planted 4211 - Planted 17.9 Sawtimber 53 Crown Thinning Even-Aged Proposal 111-Harvest Red Pine 140 Red Pine Well

Habitat Cut: No Site Condition:

Prescription Selection harvest of Red Pine down to 100-120 BA. Lightly thin west portion and thin eastern portion heavier. Leave aspen for diversity.

Exclude sapling jack pine stand on the interior. Specs:

Next Step **Treatments:**

Acceptable

Regen:

Other Wildlife - Add leave aspen for diversity, pileated woodpecker, Northern Goshawk - Game Fund Purchased

Comment:

Proposed Start Date: 10/01/2019

32237032-Cut 42220 - Natural Poletimber 55 22.1 81-110 Clearcut with 4222 - Natural Even-Aged Proposal Harvest Jack Pine Well Retention Jack Pine

Habitat Cut: No Site Condition:

Prescription Clearcut all trees 2" and larger. Leave a retention pocket as a buffer against unnamed tributary with large slope leading down. Maintain a 100'

Specs: buffer. Leave some larger aspen for retention (try to pick nesting trees).

SitePrep, Scarification; Monitoring, Natural Regen (Intermediate) Next Step

Treatments:

Acceptable Jack pine

Regen:

Wildlife - Retention should also include some larger Aspen look for trees with forked crown for raptor nesting sites - Northern Goshawk. The SE Other

tip of this stand is - Game Fund Purchased Comment:

10/01/2019 **Proposed Start Date:**

Report 3 -- Treatments

DEPARTME	DNR DURAL PRODUCTION OF NATURAL PRODUCTION O

Compartment: 237

Year of Entry: 2020

a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
34	32237034-Cut	20.3 4	132 - Aspen, Jack Pine	Poletimber Medium	43	81-110	Harvest	Clearcut with	413 - Aspen	Even-Aged	Proposal

Habitat Cut: No Site Condition:

Prescription Clearcut with retention on the edge. Cut all species 2" and larger. Leave some mature aspen and jack pine. Leave a 300' buffer from stream Specs:

edge. Retain some larger red and white pine.

Next Step **Treatments:**

Monitoring, Natural Regen (Intermediate)

Acceptable Aspen, Jack Pine

Regen:

Wildlife - Retention should also include some larger Aspen look for trees with forked crown for raptor nesting sites - Northern Goshawk. Favor Other Comment: white pine (5%) – black bear and Red Pine (5%) –Gray Jay. NE tip of stand is– State Game Fund Purchased (MNFI note for Purple Clematis)

10/01/2019 **Proposed Start Date:**

35 32237035-Cut 4.6 42110 - Planted Sawtimber 50 141-Harvest Crown Thinning 4211 - Planted Even-Aged Proposal Red Pine Medium 170 Red Pine

Habitat Cut: No Site Condition:

Prescription Row thin Red pine. Use selection as well to harvest all log size aspen and all jack pine as well. Leave 18" + Red Pine for retention. Leave Specs:

smaller pole size aspen and jack pine as well. Protect oak regeneration.

Next Step **Treatments:**

Acceptable Regen:

Wildlife - Care should be taken around sub-canopy red oak (MNFI note for Purple Clematis) Other

Comment:

10/01/2019 **Proposed Start Date:**

32237038-Cut 42260 - Natural Poletimber 53 4221 - Natural Proposal 6.0 1-50 Harvest Low Thinning Even-Aged Red Pine Pine, Mixed Well

Deciduous

Habitat Cut: No Site Condition:

Prescription Thin red pine, jack pine, aspen, and understory balsam fir and spruce. Leave Birch, Cherry, and some Aspen for diversity. Remove all

Specs: suppressed and declining trees. Maintain a 100' buffer from stream edge.

Next Step Treatments:

Acceptable Red pine, jack pine, aspen.

Regen: Other

Wildlife - Retain all paper birch (5%) - pileated woodpecker (MNFI note for Purple Clematis)

Comment:

10/01/2019 **Proposed Start Date:**

45 32237045-Cut 47.3 330 - Low-Density Nonstocked Unspec Harvest Clearcut 4211 - Planted Even-Aged Proposal

> Red Pine Trees ified

Habitat Cut: No Site Condition:

Prescription Clearcut all aspen, fir, and pine 2" and larger. Retain all red oak.

Specs:

Next Step Pesticide, Skidder/Mechanical; SitePrep, Trenching; Planting, Initial Plant

Treatments:

Acceptable Red Pine

Regen:

Other Wildlife - Retain all Red Oak - Whitetail deer, black bear

Comment:

Proposed Start Date: 10/01/2019

0

Regen:

Other Wildlife- No oversized trees should be cut and leave trees with obvious defects for wildlife habitat- black bear Lower BA to 10-20 sq. ft for Oak

regeneration Comment:

Proposed Start Date: 10/01/2019

32237055-13.0 3301 - Low Density Nonstocked

Planting

Initial Plant

4123 - Red Oak Even-Aged

Plant

Unspec **Deciduous Trees** ified

Habitat Cut: No Site Condition:

Prescription Plant jack pine

Specs:

Next Step Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Treatments:

Acceptable Jack pine mixed conifer

Regen:

Other Comment:

Proposed Start Date:

10/01/2009

Draft Field

Boundary

Gwii S Compartment: 237
Year of Entry: 2020

a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
57	32237059-Cut	5.4	4130 - Aspen	Poletimber Well	32	51-80	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	Field Boundary

Habitat Cut: No Site Condition:

Prescription Clearcut with no reserves.

Specs:

Next Step Pesticide, Skidder/Mechanical; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr)

Treatments:

Acceptable Red pine

Regen:

Other Comment:

Proposed Start Date: 10/01/2016

60 32237060-Cut 52.1 6122 - Black Spruce Poletimber 93 141- Harvest Clearcut with 6122 - Black Even-Aged Proposal Well 170 Retention Spruce

Habitat Cut: No Site Condition:

Prescription Clearcut w/ Retention. Leave all paper birch. Exclude wetter areas for BMP's. Put retention pocket on north side of stand and include some

Specs: tamarack.

Next Step Monitoring, Natural Regen (Intermediate); Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Black Spruce, Tamarack, Balsam Poplar, Cedar.

Regen:

Other Wildlife - Retention should include all some mature Tamarack - Gray Jay

Comment:

Proposed Start Date: 10/01/2019

61 32237061- 6.0 4130 - Aspen Sapling 5 Immatu Monitoring Natural Regen 413 - Aspen Even-Aged Draft Field Monitor Well re (Re-Inventory) Boundary

Habitat Cut: No Site Condition:

Prescription Count per MIFI guidelines.

Specs:

Next Step
Treatments:

Acceptable Aspen

Regen:

Other Comment:

Proposed Start Date: 10/01/2020

66 32237067-Cut 6.1 6112 - Lowland Sapling 16 1-50 Harvest Clearcut with 611 - Lowland Even-Aged Field Boundary Aspen Well Retention Deciduous Forest

Habitat Cut: No Site Condition:

<u>Prescription</u> Clearcut stand leave all white pine, red pine, and oak. Retention will be a narrow strip separating a bog from the an aspen stand.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen, spruce, fir, and mixed hardwood

Regen:

Other Comment:

Proposed Start Date: 07/01/2016

Gwinn Mgt. Unit Report 3 -- Treatments Compartment: 237
Year of Entry: 2020

Harvest

t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type Approval** Age n Method Objective Name CoverType Density Age Range Type Structure **Status** d

Habitat Cut: No Site Condition:

16.5

Prescription Clearcut all aspen 2" and above. Leave retention on the edge and leave all red oak for diversity.

Poletimber

Medium

40

81-110

Specs:

s

75

Next Step Planting, Initial Plant; Pesticide, Skidder/Mechanical; SitePrep, Trenching

4130 - Aspen

Treatments:

Acceptable Replant with jack pine

32237075-Cut

Regen:

Other Wildlife - Make sure prep work does not harm large Red Oak

Comment:

Proposed Start Date: 10/01/2019

76 32237076-Cut 9.6 4130 - Aspen Poletimber 40 81-110 Harvest Clearcut with 4212 - Planted Even-Aged Proposal

Well Retention Jack Pine

4212 - Planted

Jack Pine

Even-Aged

Proposal

Clearcut with

Retention

Habitat Cut: No Site Condition:

Prescription Clearcut all aspen 2" and up. Leave some retention on the edge. Leave all cherry and oak for diversity.

Specs:

Next Step Planting, Initial Plant; Pesticide, Skidder/Mechanical; SitePrep, Trenching

Treatments:

Acceptable Planted Jack Pine.

Regen:

Other Wildlife - Make sure prep work does not harm large Red Oak

Comment:

Proposed Start Date: 10/01/2019

Total Treatment Acreage Proposed:

410.8

Compartment: 237

Gwinn Mgt. Unit

Year of Entry: 2020 **Rankin Smith: Examiner**

Availa	bility for	Managemer	ıt					
Total	Acres	Acres Avail	Acres	D	omina	nt Site	e Con	ditions
Acres	Available	With Condition	Not Available		5C	2G	3J	5E
668	668	0	0	Aspen				
3	3	0	0	Bare/Sparsely Vegetated				
12	0	0	12	Cedar			12	
31	31	0	0	Herbaceous Openland				
80	80	0	0	Jack Pine				
124	124	0	0	Low-Density Trees				
34	34	0	0	Lowland Aspen/Balsam Poplar				
8	0	0	8	Lowland Conifers		8		
11	0	0	11	Lowland Mixed Forest			11	
93	93	0	0	Lowland Shrub				
235	95	12	128	Lowland Spruce/Fir	12	53	64	11
6	6	0	0	Natural Mixed Pines				
98	54	44	0	Oak	44			
5	5	0	0	Paper Birch				
85	85	0	0	Red Pine				
40	40	0	0	Treed Bog				
10	10	0	0	Upland Conifers				
23	0	0	23	Upland Mixed Forest			23	
6	6	0	0	Urban				
1	1	0	0	Water				

Total Forested Acres

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.

61

110

56

	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	12	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

56

4%

1,572

1,333

85%

182

12%

Report 4 – Site Conditions

Gwinn Mgt. Unit
Rankin Smith: Examiner

2	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	47	5D: Unproductive Forest Land	Unspecified	Unspecified	Unspecified
	Comments:						
3	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	8	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	36	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	4	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	10	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	8	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 4 – Site Conditions

Gwinn Mgt. Unit
Rankin Smith: Examiner

8	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	11	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
9	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	14	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
(Comments:						
10	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	13	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
11	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	6	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
12	Unavailable	5E: Long-Term Retention	5	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
•	Comments:						
13	Unavailable	5E: Long-Term Retention	6	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
(Comments:						

Report 4 – Site Conditions

Gwinn Mgt. Unit

Rankin Smith: Examiner

14	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	44	5B: Maintain for regeneration purposes	Unspecified	Unspecified	Unspecified
C	omments:						
15	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	12	Unspecified	Unspecified	Unspecified	Unspecified
C	omments:						

Mgt. Unit

Compartment: #Type! Year of Entry:

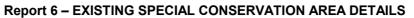


Report 5 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				

Gwinn Mgt. Unit Compartment: 237
Year of Entry 2020





* 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			
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen condition stocked trout populations and those of other coldwater fish specific conditions for coldwater fishes may occur in Michigan lakes if the groundwater inflows, or are located in colder (northern) areas of Director's action and designated as trout resources by Fisheries	es to persist from year to year. Suitable ey are relatively deep, have substantial the state. Such lakes are established by			
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	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high communities are ecologically and socially significant in their effects as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, liversity of plants and wildlife. Riparian cts on water quality and quantity, as well			

S t	Gwinr	Gwinn Mgt. Unit				Stands Compartment: 237 Year of Entry: 2020		
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:		
2	6139 - Mixed Lowland Forest	Poletimber Medium	11.3	70	81-110	Mix of spruce and deciduous trees. Very wet to due to being a depression and a tributary to Wild West Creek just to the south.		
4	4130 - Aspen	Sapling Well	9.1	17	Immature	Southwestern edge of stand is a low area with open spots containing tag alder and some trace black spruce.		
5	6122 - Black Spruce	Poletimber Medium	14.1	83	111-140	Low and wet. Relict log size Red and White Pine, and Aspen on the edges. Will not be harvested due to acting as a buffer to Wild West Creek.		
7	6122 - Black Spruce	Poletimber Medium	48.4	83	51-80	Most mature/merchantable spruce is along the edges. Very wet interior. Acts as a buffer for Wild West Creek.		
8	4134 - Aspen, Spruce/Fir	Poletimber Well	96.7	26	1-50	Aspen stand with diverse mix of conifers. Decent stem quality. Trees are 2-3 sticks.		
10	6122 - Black Spruce	Poletimber Medium	12.8	83	111-140	Drier than adjacent stand 11 with less cedar. Some aspen and red maple included in stand. Currently prescribed with stand 11 for sale. Sale name is Camp Hope combo.		
11	6122 - Black Spruce	Poletimber Medium	19.7	83	81-110	Very wet stand. Is currently prescribed for sale along with part of stand 10. Sale name is Camp Hope combo.		
12	42121 - Planted Jack Pine, Mixed Deciduous	Poletimber Well	12.0	26	Immature	Parts are regenerating to jack pine and part to aspen, and ever some small openings exist. Remnant White and Red pine are left. Heavy densities of volunteer jack pine in spots.		
13	42110 - Planted Red Pine	Sapling Poor	22.8	4	Immature	Harvested in 2012: TS# 105-10-01. Replanted to red pine.		
14	42220 - Natural Jack Pine	Poletimber Medium	4.5	28	1-50	This was an old opening and is now regenerating to jack pine. Stand is half and half of sub-merchantable 2" pine and 5-6" pine.		
15	42110 - Planted Red Pine	Sawtimber Well	21.7	53	141-170	Mostly 4-5 stick red pine. More overstory aspen in southern portion of the stand. Lots of open regeneration areas with jack pine and aspen within stand.		
16	4130 - Aspen	Poletimber Medium	49.3	33	1-50	Highly Variable Stocking. Lots of openings. 2-3 Stick Aspen. Various larger 4-5 stick log/ large pulp aspen.		
17	42110 - Planted Red Pine	Sawtimber Well	11.1	53	141-170	Row thinned in 2012. Lower portion of stand is much less densely stocked than north. Highly variable densities due to planting failures.		
18	4132 - Aspen, Jack Pine	Poletimber Medium	9.9	42	1-50	Mostly 3 and some 4 stick aspen. Decent to good form quality. Cut in next entry (2028).		
20	6120 - Lowland Cedar	Poletimber Well	12.1	95	81-110	Too wet to access and to harvest.		

S t	Gwinn	nn Mgt. Unit		Report 7	– Forested	Stands Compartment: 237 Year of Entry: 2020		
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:		
21	42120 - Planted Jack Pine	Poletimber Medium	25.7	15	Immature	Stand Year Origin was 2003. Stand now fully established. Remnant White and Red pine as well as white spruce on the edges.		
22	42120 - Planted Jack Pine	Sapling Well	3.0	15	Immature	Planted jack pine. Planted the same year as stand 21. Divided by a Right of Way which caused them to be two separate stands.		
23	4130 - Aspen	Poletimber Well	11.1	42	51-80	3 stick aspen with mix of poor and decent quality stems. Western edge of stand is a knob of Paper Birch that is mostly Log and some pole trees. Should be ready to harvest in 2028.		
24	6122 - Black Spruce	Poletimber Well	13.3	45	Unspecified	Lowland conifers with high density of suppressed spruce. Very wet with a lake on the interior of stand.		
26	42110 - Planted Red Pine	Sawtimber Well	2.5	47	141-170	Small patch of red pine located within larger aspen strand (16). Mostly 4 some 5 stick trees. Some overmature aspen included. Mild aspen and Red pine regeneration. Trace amounts of Red Oak.		
28	42110 - Planted Red Pine	Sawtimber Well	17.9	53	111-140	5 stick red pine. Stand was thinned in 2012 under sale name Flat Rock Red Pine. A light thinning will be prescribed.		
29	42220 - Natural Jack Pine	Sapling Well	3.5	26	Immature	This stand was created from the release cutting of the adjacent red pine stand. This stand originated post 1992 harvest. There is some aspen in this stand as well.		
30	429 - Mixed Upland Conifers	Poletimber Well	9.8	26	1-50	Stand was created by the release of the adjacent red pine stand.		
31	4130 - Aspen	Sapling Well	27.8	6	Immature	Harvested in 2012. Full regeneration. Trace amount of red and white pine. Some jack pine volunteers.		
32	42220 - Natural Jack Pine	Poletimber Well	25.1	55	81-110	Previously cut in 1963. Mature jack pine stand on edge of Flat Rock Creek. Mostly 4 some 5 stick trees.		
34	4132 - Aspen, Jack Pine	Poletimber Medium	20.3	43	81-110	Poor quality aspen with large component of jack pine. Mostly 4-5 five stick trees.		
35	42110 - Planted Red Pine	Sawtimber Medium	4.6	50	141-170	A mixture of retention for adjacent harvested stands. Patches of Aspen, row planted red pine and mixed in jack pine. Some areas of aspen regeneration on the edges and some large 18" Red Pine mixed in.		
36	42220 - Natural Jack Pine	Poletimber Well	5.8	27	1-50	Stand is a mix of jack pine and aspen.		
37	6124 - Lowland Spruce- Fir	Poletimber Medium	8.3	80	1-50	Heavy mortality within stand. Very wet stand adjacent to Flat Rock Creek.		

S t	Gwinn	Mgt. Unit		Report 7	Forested	Stands Compartment: 237 Year of Entry: 2020		
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:		
38	42260 - Natural Pine, Mixed Deciduous	Poletimber Well	6.0	53	1-50	Good diversity with aspen and birch. Most birch is stressed or dying and located along Flat Rock road. Mature red pine is 5 sticks and Aspen is 5-6 sticks. Much of the timber is overmature and poorly formed. This stand should be managed simultaneously as stand 28.		
40	4311 - Pine, Aspen Mix	Sawtimber Well	4.2	70	111-140	Buffer along Flat Rock Creek. Dominated by red pine, jack pine, fir and spruce. There is some mature aspen mixed in as well. Spruce Budworm mortality noticeable. Will not be harvested due to proximity to Flat Rock Creek.		
41	4319 - Mixed Upland Forest	Poletimber Well	10.4	80	111-140	Heavy Spruce and Balsam fir mortality. Overmature aspen with scattered mature red pine. Few stems of Aspen and Red Pine but occur as supercanopy and occupy a large portion of the canopy space. Buffer for Flat Rock Creek. Will not be harvested due to proximity to Flat Rock.		
42	4134 - Aspen, Spruce/Fir	Sapling Well	22.4	27	Immature	Heavy mix of spruce and aspen. Lower quality understory of balsam fir, birch and ironwood is quite dense.		
43	4130 - Aspen	Poletimber Well	10.7	42	51-80	Aspen on a ridge with red pine downhill. Better growth on top and less growth downhill.		
46	4130 - Aspen	Sapling Well	60.8	6	Immature	Harvested in 2012: TS# 107-10-01. Heavy rolling topography with very rocky soil. Stand is fully regenerated with over story white and red pine.		
47	42110 - Planted Red Pine	Sawtimber Medium	4.2	53	81-110	This stand is also a site of fire that heavily damaged adjacent stand 45. 3-4 stick Red Pine and Aspen. Lots of skips in the planting plus possible fire caused mortality.		
49	4123 - Red Oak	Poletimber Poor	10.0	88	1-50	Harvested in 2012: TS# 107-10-01 "Broken Binding Aspen". Good regeneration of hardwoods on north side but poor regen on south side. Lots of raspberry. Most birch is dead or dying. Re-evaluate in five years for regeneration success.		
50	4130 - Aspen	Poletimber Well	54.4	23	1-50	Hilly terrain with a larger mix of species adjacent to private property.		
51	4123 - Red Oak	Poletimber Medium	43.9	88	81-110	Thinned in 2012. Variable stocking due to regeneration gaps for oak and red maple recruitment. Most birch is dead or dying. Hopeful that thinning will increase vigor and subsequent regeneration success.		
52	6122 - Black Spruce	Poletimber Well	5.7	78	81-110	Mature spruce and tamarack. 4-5 stick trees. Too wet and to harvest along with a steep slope leading into the depression.		
54	6122 - Black Spruce	Poletimber Medium	8.9	70	81-110	Small stand of black spruce and a small covered bog surrounded by very steep slope.		

S t	Gwinn	Gwinn Mgt. Unit			– Forested	Stands Compartment: 237 Year of Entry: 2020		
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:		
55	4123 - Red Oak	Sawtimber Medium	43.7	90	51-80	Harvested in 2012: TS# 32-106-10-01. Seed tree harvest (birch) leaving all oak and any softwood. Majority of leftover Birch is dead or dying. Full regeneration after harvest. Excellent regeneration in gaps and decent regeneration in the understory.		
56	4130 - Aspen	Poletimber Well	22.6	33	Immature	3 stick aspen. Northern and western edge has more diversity of species and larger log size Aspen and Red Pine.		
57	4130 - Aspen	Poletimber Well	193.3	32	51-80	4 stick aspen. Mostly decent-poor quality.		
58	6122 - Black Spruce	Poletimber Poor	47.0	93	51-80	Variable stand in terms of density. There is a small creek toward the southern end of this stand that merges with other nall creeks that eventually flow into the Wild West Creek. Very wet.		
59	4140 - Other Upland Deciduous	Poletimber Well	4.7	94	81-110	Deteriorating paper birch stand that is prescribed for treatment. Sale name is Camp Hope Combo. 4-5 stick paper birch.		
60	6122 - Black Spruce	Poletimber Well	52.1	93	141-170	Mostly moist soil with a large bog in the middle. Large Red Pine on south end with Paper Birch islands dispersed throughout. Certain areas will be too wet to harvest.		
61	4130 - Aspen	Sapling Well	6.0	5	Immature	e Harvested in 2012: TS# 105-10-01. Moderate regeneration. A few low bogs in the stand. Evaluate in two years when in adjacent stand for sale prep.		
64	4130 - Aspen	Sapling Medium	18.5	5	Immature	Harvested in 2012: TS# 105-10-01. We clearcut this stand leaving some birch where aspen is lacking in stocking. Retained any oak, cut all spruce, balsam fir and red maple regardless of merchantability. Retain 3% by acreage through transition zone protection on the south side and east end of this stand. Western edge has had trouble regenerating.		
66	6112 - Lowland Aspen	Sapling Well	33.9	16	1-50	Cut in 2002. Regenerating well. Low terrain with various rocky higher areas.		
67	6122 - Black Spruce	Poletimber Well	8.5	70	141-170	This is a semi-upland lowland spruce stand that is long and narrow in nature. The south end of the stand contains a small patch of A6/F6. It is providing a north-south corridor for wildlife travel. North and south areas of stand contain smaller diameter and lower basal areas as opposed to central area that has been prepared for sale under the name Camp Hope Combo.		
68	4130 - Aspen	Sapling Well	29.4	18	1-50	Young 2 stick aspen with variable upland and lowland terrain.		
69	4319 - Mixed Upland Forest	Poletimber Well	8.3	83	81-110	Stand is a buffer along the Wild West Creek. Includes some remnant Jack, White, and Red Pine. Poor quality red maple along with stressed old paper birch. Balsam fir at risk with SBW. Understory becoming very dense with Balsam Fir regeneration.		

S t a n d	Gwini		Report 7	– Forested	Stands	Compartment: 237 Year of Entry: 2020	DNR	
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range		General Comments:	Michigan
71	6122 - Black Spruce	Poletimber Well	4.8	60	111-140	Bear Aspen. This s worm the treatmer	adjacent timber sale, 32-119-1 ale was harvested early due to it was approved though chapter e and White Pine on the edges	spruce bud r 7. Relict
75	4130 - Aspen	Poletimber Medium	16.5	40	81-110		tick Aspen. Significant mortality f cankers and girdling. Stand is clusters of trees.	
76	4130 - Aspen	Poletimber Well	9.6	40	81-110	girdling and cankers	45 fire. Poor health and form vs. 4-5 stick aspen. Southeaste more mature with 5-6 stick tree	rn portion of



Cover Type	Acres	Managed Site	General Comments:
330 - Low-Density Trees	45.0		Stand was harvested by J. Carey Logging Inc. under 32-119-16-01 Brad's Bear Aspen. This sale was harvested early due to spruce bud worm. The treatment was approved though chapter 7 process.
122 - Road/Parking Lot	5.9	No	Flat Rock Road, Co. Rd. CAA
622 - Lowland Shrub	28.1	No	Wild West Creek riparian area.
3301 - Low Density Deciduous Tree	14.5		Harvested in 2012: TS# 32-106-10-01. Stand trenched in 2017. Most remaining birch is dead or dying.
622 - Lowland Shrub	15.2	No	Flat Rock Creek Corridor
500 - Water	0.6	No	
622 - Lowland Shrub	18.9	No	Flat Rock Creek corridor. Multiple meanders within the stream.
622 - Lowland Shrub	15.8	No	
622 - Lowland Shrub	10.2	No	Buffer along Flat Rock Creek corridor.
6224 - Treed Bog	3.0	No	
330 - Low-Density Trees	47.3		Site of a past fire. Excessive mortality and blowdown of Aspen that originated in 1985. Numerous scattered islands of aspen. Northern area retained more aspen and may be feasible for salvage.
6224 - Treed Bog	36.7	No	
622 - Lowland Shrub	5.1	No	Opening with small creek that flows to Wild West Creek.
3303 - Mixed Low Density Trees	8.2	No	Part of old sharptail grouse opening. AREA KGD AND ROLLER CHOPPED FALL OF 1978. PREVIOUSLY BURNED IN 1965 AND 1972.
3303 - Mixed Low Density Trees	9.4	No	
310 - Herbaceous Openland	2.3	No	Old ELF ROW.
790 - Other Bare/Sparsely Vegetate	3.2	No	Old ELF ROW.
	330 - Low-Density Trees 122 - Road/Parking Lot 622 - Lowland Shrub 3301 - Low Density Deciduous Tree 622 - Lowland Shrub 6224 - Treed Bog 330 - Low-Density Trees 6224 - Treed Bog 3303 - Mixed Low Density Trees 3303 - Mixed Low Density Trees	330 - Low-Density Trees 45.0 122 - Road/Parking Lot 5.9 622 - Lowland Shrub 28.1 3301 - Low Density Deciduous Tree 14.5 622 - Lowland Shrub 15.2 500 - Water 0.6 622 - Lowland Shrub 15.8 622 - Lowland Shrub 10.2 622 - Lowland Shrub 10.2 6224 - Treed Bog 3.0 330 - Low-Density Trees 47.3 6224 - Treed Bog 36.7 622 - Lowland Shrub 5.1 3303 - Mixed Low Density Trees 8.2 3303 - Mixed Low Density Trees 9.4 310 - Herbaceous Openland 2.3	Cover Type Acres Site 330 - Low-Density Trees 45.0 122 - Road/Parking Lot 5.9 No 622 - Lowland Shrub 28.1 No 3301 - Low Density Deciduous Tree 14.5 622 - Lowland Shrub 15.2 No 500 - Water 0.6 No 622 - Lowland Shrub 18.9 No 622 - Lowland Shrub 15.8 No 622 - Lowland Shrub 10.2 No 6224 - Treed Bog 3.0 No 330 - Low-Density Trees 47.3 No 6224 - Treed Bog 36.7 No 622 - Lowland Shrub 5.1 No 622 - Lowland Shrub 5.1 No 3303 - Mixed Low Density Trees 8.2 No 3303 - Mixed Low Density Trees 9.4 No 310 - Herbaceous Openland 2.3 No



Stand	Cover Type	Acres	Managed Site	General Comments:
405	310 - Herbaceous Openland	2.3	No	
406	3102 - Grass	1.3	No	
407	3102 - Grass	1.6	No	OPIC - FMD: OI Stand Year Origin was
408	3102 - Grass	2.9	No	
409	3102 - Grass	3.0	No	
410	310 - Herbaceous Openland	2.0	No	
411	3102 - Grass	3.0	No	
412	3102 - Grass	4.4	No	
413	3102 - Grass	4.4	No	
416	3102 - Grass	3.7	No	Opening was acquired as part of land exchange in 1999.