



Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 253

Entry Year 2016

Acreage: 1,340

County Marquette

Management Area: Voelker Plains

Revision Date: 08/08/2014

Stand Examiner: Dean Wilson

Legal Description:

T46N-R27W, Sections 18, 19, 29 & 30.

Identified Planning Goals:

Maintain or increase the component of oak, birch and aspen within the compartment. Harvest older stands to encourage regeneration of both deciduous and coniferous species. Regenerate pine types to adequate stocking to encourage good growth. Consult with the timber management specialist in future treatments to see if converting jack pine cover types to red pine would be an option.

Soil and topography:

Soils consist of glacial outwash plains consisting primarily of well drained sands. Soils are dominated by Rubicon sands supporting pine type tree species. This compartment's topography is mostly level with some areas of moderate slopes.

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

This compartment is in an area of larger blocks of State ownership, however, it's perimeter is almost entirely adjacent to small non-industrial private ownership. Land use is primarily for forest product production and recreation.

Unique Natural Features:

The middle branch of the Escanaba river flows across the northern portion of this compartment.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

None.

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 50 and 100 feet. The Precambrian Archean Granite/Gneiss subcrop below the glacial drift. This rock could be used as a building or dimension stone. Gravel pits are not located in the area, but there could be some potential. The Tilden iron mine is located five miles to the northeast. Section 34 was previously leased for metallic exploration. There is no economic oil and gas production in the UP.

Vehicle Access:

The Hemmings Lake Road runs Northwest/Southeast through the majority of this compartment. Smaller county roads and two tracks provide access to other areas of the compartment as well.

Survey Needs:

No survey needs for this year of entry.

Recreational Facilities and Opportunities:

No developed recreation exists within this compartment. Hunting, trapping, berry picking and bike riding make up the majority of the recreation within this compartment.

Fire Protection:

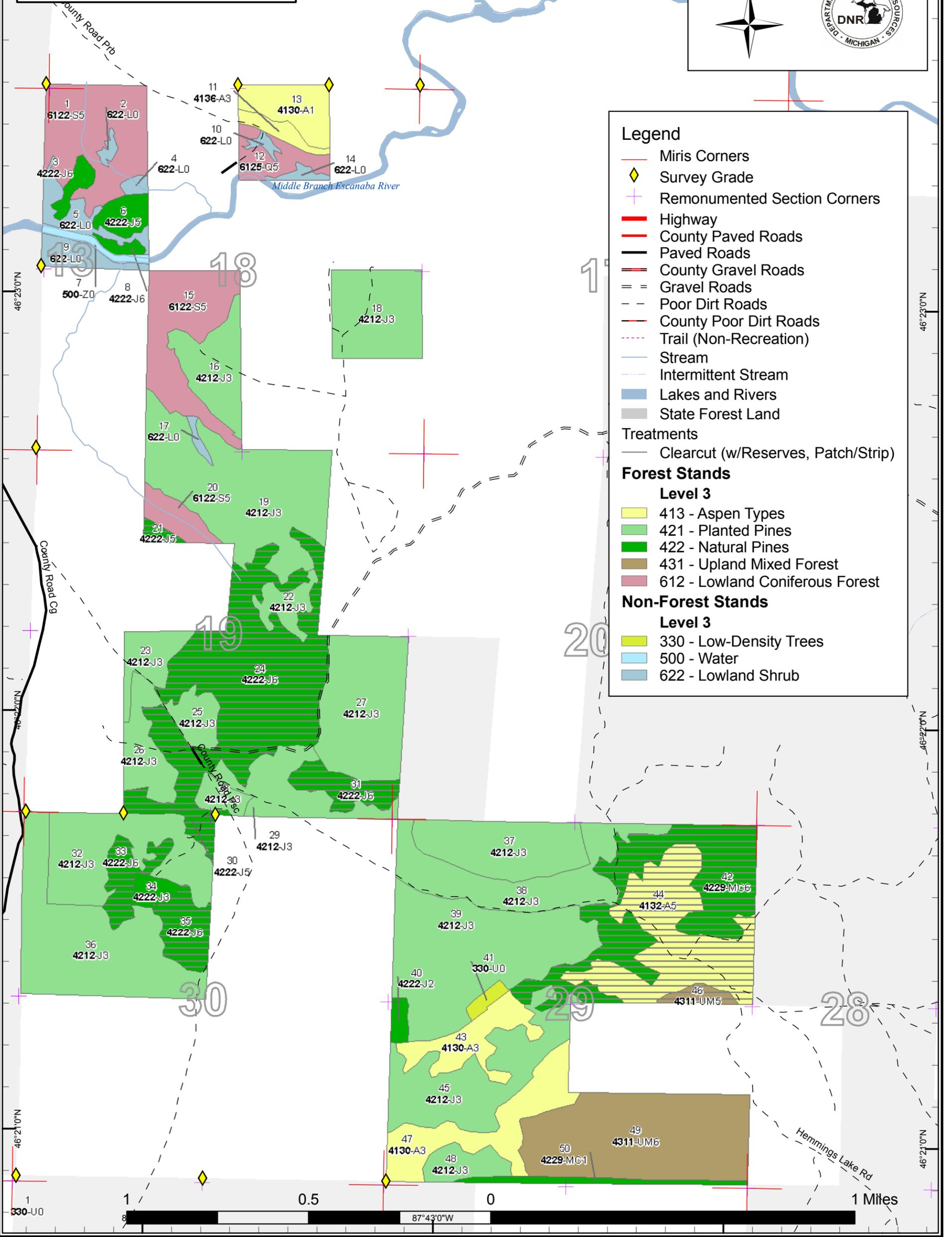
This compartment is included within the "581 Zone Dispatch" area which provides for a pre-planned dispatch of specified

Cover Type & Treatment Map

Compartment: 253
 T46N R27W Sec. 18, 19, 29, 30
 County: Marquette
 Unit: Gwinn
 Management Area: Voelker Plains
 YOE: 2016
 Acres: 1,340 GIS Calculated
 Examiner: Dean Wilson
 Map Revised: 06/23/2014
 Map Phase: Pre-Review

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

18
 19
 30 29
 N
 DEPARTMENT OF NATURAL RESOURCES
 DNR
 MICHIGAN



Legend

- Miris Corners
- Survey Grade
- Remonumented Section Corners
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Stream
- Intermittent Stream
- Lakes and Rivers
- State Forest Land

Treatments

- Clearcut (w/Reserves, Patch/Strip)

Forest Stands

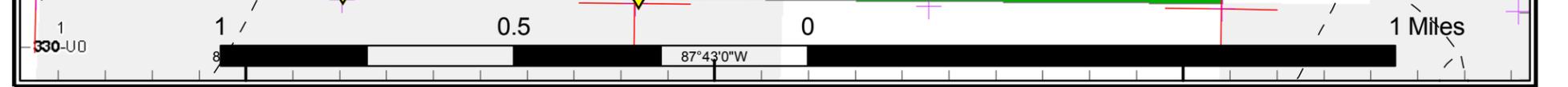
Level 3

- 413 - Aspen Types
- 421 - Planted Pines
- 422 - Natural Pines
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands

Level 3

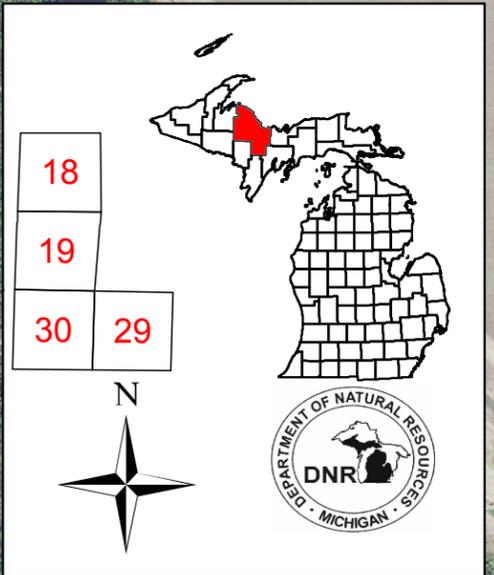
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub



Stand Boundary Map

Compartment: 253
 T46N R27W Sec. 18, 19, 29, 30
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Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



Legend

- ⊕ Remonumented Section Corners
- ◆ Survey Grade
- Miris Corners
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- == Gravel Roads
- - Poor Dirt Roads
- County Poor Dirt Roads
- ⋯ Trail (Non-Recreation)
- Stream
- Intermittent Stream
- Stand Boundaries

Forest Stands

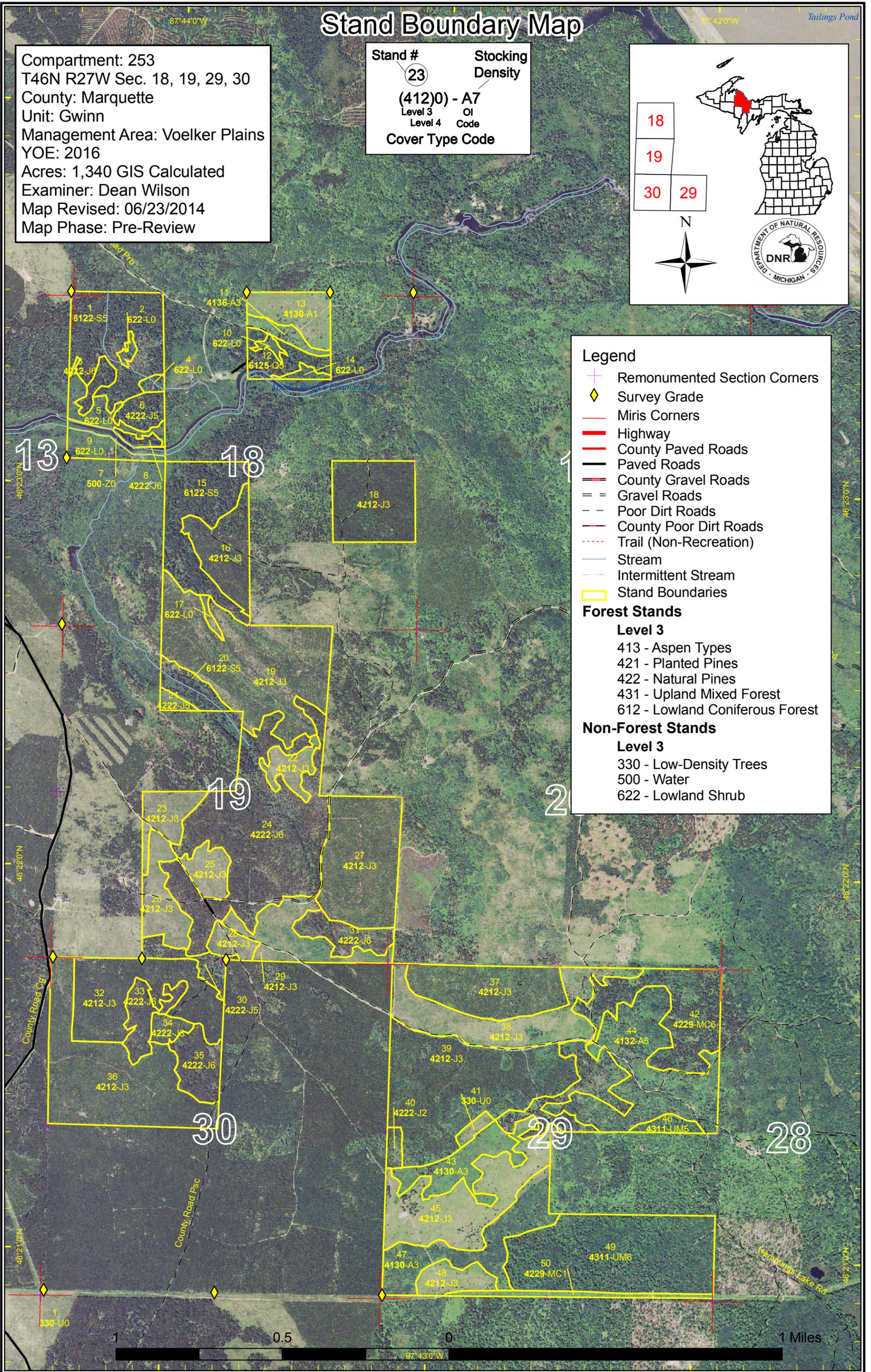
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- 413 - Aspen Types
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Non-Forest Stands

Level 3

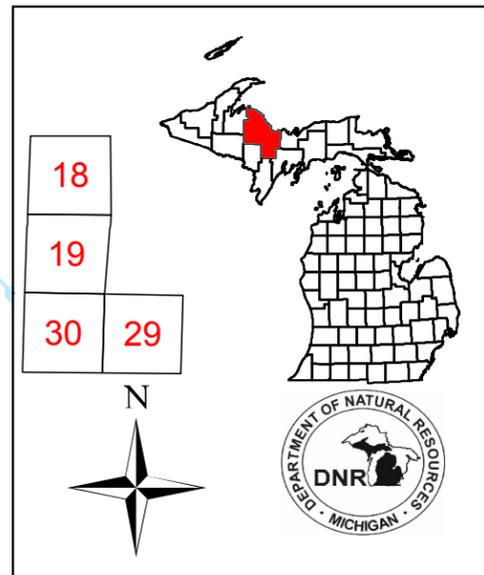
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub



Special Conservation Areas & Site Conditions Map

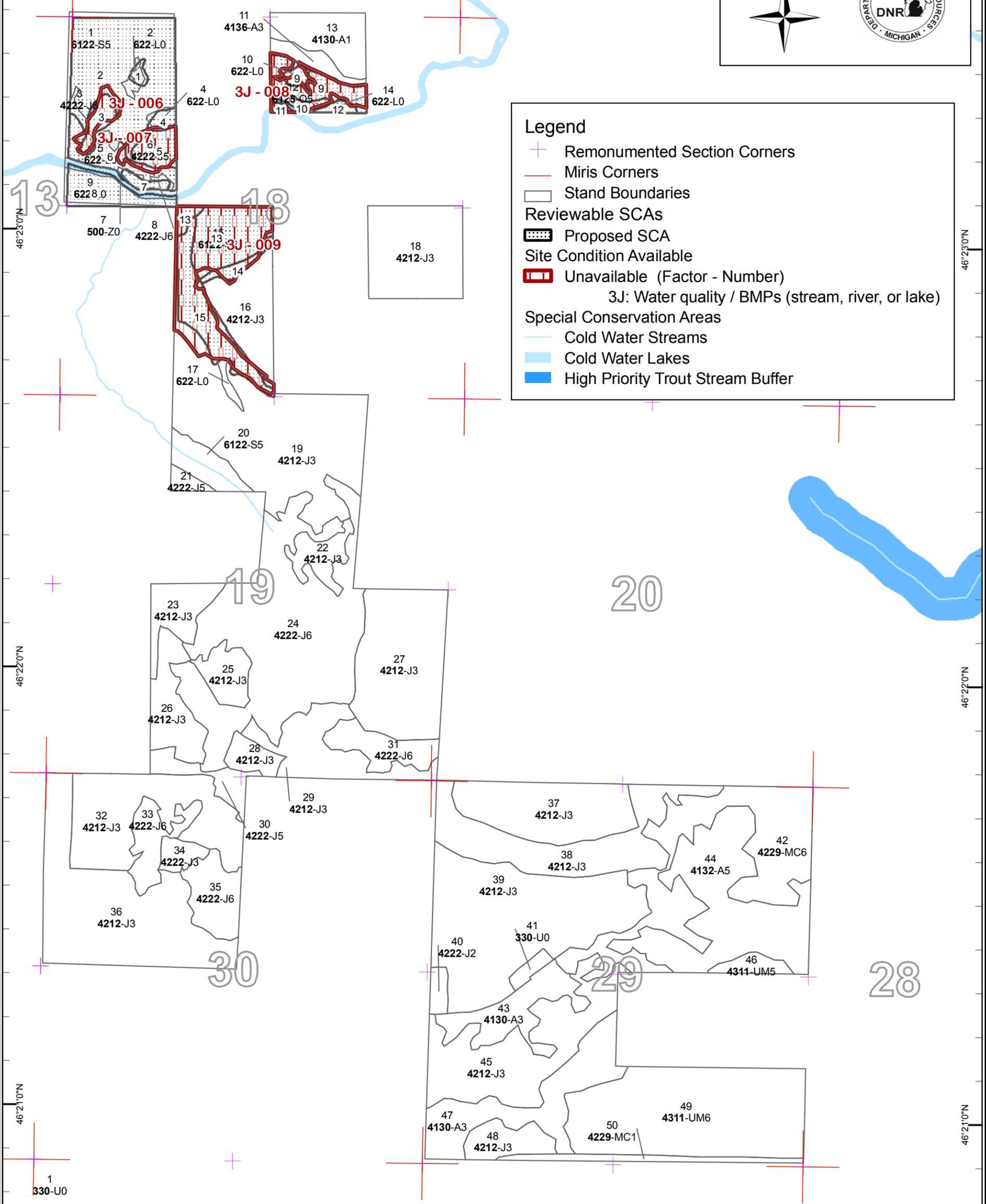
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Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



Legend

- Remonumented Section Corners
- Miris Corners
- Stand Boundaries
- Reviewable SCAs**
- Proposed SCA
- Site Condition Available**
- Unavailable (Factor - Number)
3J: Water quality / BMPs (stream, river, or lake)
- Special Conservation Areas**
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer



fire equipment from within the Gwinn and Crystal Falls Management Units. This dispatch is dependent on the severity of forecast burning conditions for the specified day. Areas of jack pine and red pine cover types with the encroachment of recreational seasonal dwellings have warranted this pre-planning. Mutual aide agreements with local township volunteer fire departments also provide critical fire suppression response, especially in the area of structure fire and/or protection, and evacuations.

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



	Age Class													Total	
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +		Uneven Age
Aspen	47	38	0	0	66	0	0	0	0	0	0	0	0	0	150
Jack Pine	181	289	210	0	0	159	10	0	19	0	0	0	0	0	868
Low-Density Trees	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Lowland Conifers	0	0	0	0	0	0	0	0	13	0	0	0	0	0	13
Lowland Shrub	30	0	0	0	0	0	0	0	0	0	0	0	0	0	30
Lowland Spruce/Fir	0	0	0	0	0	0	11	47	42	0	0	0	0	0	100
Natural Mixed Pines	0	8	0	0	0	0	0	70	0	0	0	0	0	0	78
Upland Mixed Forest	0	0	0	88	0	0	0	5	0	0	0	0	0	0	93
Water	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	265	335	210	88	66	159	20	122	74	0	0	0	0	0	1340



Report 2 – Proposed Treatment Summaries

Gwinn Mgt. Unit
Year of Entry 2016

Compartment 253
Total Compartment Acres: 1,340

Acres by Treatment Type

Commercial Harvest - 310 Tree Planting - 310 Other - 0
 Habitat Cut - 0 Opening Maintenance - 0

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen Types	66	0	0	0	0	0	66
Natural Pines	239	0	0	0	0	0	239
Upland Mixed Forest	5	0	0	0	0	0	5
Total	310	0	0	0	0	0	310



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
24	32253024-Cut	115.3	42220 - Natural Jack Pine	High Density Pole	52	81-110	Harvest	Clearcut	4212 - Planted Jack Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut followed by disk trenching and direct seeding to jack pine. Herbicide as necessary. Retention will be 3% and located in 'fingers' of stand. All snags are to be harvested, except those within retention areas..</p> <p><u>Specs:</u></p> <p><u>Other</u> This stand was hit hard by budworms in the mid 2000s. Stand age ranges up to 80 years old.</p> <p><u>Comments:</u></p> <p><u>Next Steps:</u> Check regeneration per work instructions.</p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2015</p>										
30	32253030-Cut	9.9	42220 - Natural Jack Pine	Medium Density Pole	61	51-80	Harvest	Clearcut	4212 - Planted Jack Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Clear cut followed by disk trenching and direct seeding to jack pine-no retention. Herbicide as necessary. All snags are to be harvested.</p> <p><u>Specs:</u></p> <p><u>Other</u> Tree mortality is high.</p> <p><u>Comments:</u></p> <p><u>Next Steps:</u> Check regeneration per work instructions.</p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2015</p>										
31	32253031-Cut	14.4	42220 - Natural Jack Pine	High Density Pole	52	51-80	Harvest	Clearcut	4212 - Planted Jack Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Clear cut followed by disk trenching and direct seeding to jack pine-no retention. Herbicide as necessary. All snags are to be harvested.</p> <p><u>Specs:</u></p> <p><u>Other</u> Light to moderate wind throw.</p> <p><u>Comments:</u></p> <p><u>Next Steps:</u> Check regeneration per work instructions.</p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2015</p>										
33	32253033-Cut	13.2	42220 - Natural Jack Pine	High Density Pole	51	81-110	Harvest	Clearcut	4212 - Planted Jack Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Clear cut followed by disk trenching and direct seeding to jack pine-no retention. Herbicide as necessary. All snags are to be harvested.</p> <p><u>Specs:</u></p> <p><u>Other</u> Stand age ranges from 51 to 80 years old.</p> <p><u>Comments:</u></p> <p><u>Next Steps:</u> Check regeneration per work instructions.</p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2015</p>										

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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
35 32253035-Cut	16.4	42220 - Natural Jack Pine	High Density Pole	51	81-110	Harvest	Clearcut	4212 - Planted Jack Pine	Cmpt. Review Proposal

Prescription Clear cut followed by disk trenching and direct seeding to jack pine-no retention. Herbicide as necessary. All snags are to be harvested.

Specs:

Other Light to moderate wind throw.

Comments:

Next Check regeneration per work instructions.

Steps:

Proposed

Start Date: 10/01/2015

42 32253042-Cut	69.9	42290 - Natural Mixed Pine	High Density Pole	72	51-80	Harvest	Clearcut with Reserves	4212 - Planted Jack Pine	Cmpt. Review Proposal
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Prescription Clearcut, followed by anchor chaining. Retention will be in patches. All trees outside of retention patches will be harvested. Within patches, strive to incorporate white birch and red pine.

Specs:

Other Stand age ranges from 51 to 80.

Comments:

Next Check regeneration per work instructions.

Steps:

Proposed

Start Date: 10/01/2015

44 32253044-Cut	65.7	4132 - Aspen, Jack Pine	Medium Density Pole	41	1-50	Harvest	Clearcut with Reserves	4212 - Planted Jack Pine	Cmpt. Review Proposal
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Prescription Clear cut followed by disk trenching and direct seeding to jack pine. Retain 4 1/4 acre patches of aspen, and all oak and white pine. Herbicide as necessary.

Specs:

Other Try to pick aspen areas that are healthy and contain white birch for retention. Stand suffered severe wind throw in 2005.

Comments:

Next Check regeneration per work instructions.

Steps:

Proposed

Start Date: 10/01/2015

46 32253046-Cut	5.2	4311 - Pine, Aspen Mix	Medium Density Pole	72	1-50	Harvest	Clearcut with Reserves	4212 - Planted Jack Pine	Cmpt. Review Proposal
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Prescription Clear cut followed by anchor chaining. Retain all oak and 1-3 white pine per acre. Herbicide as necessary.

Specs:

Other Any red pine encountered could be considered for retention.

Comments:

Next Check regeneration per work instructions.

Steps:

Proposed

Start Date: 10/01/2015

**Total Treatment
Acreage Proposed: 309.9**



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

Prescription
Specs:

Other
Comment:

Next
Steps:

Proposed
Start Date: #Type!

Limiting Factor

**Total Treatment
Acreage Proposed: 0.0**

Report 5 – Site Conditions

Gwinn Mgt. Unit
Dean Wilson : Examiner

Compartment 253
Year of Entry 2016

Availability for Management

Availability for Management			Dominant Site Conditions			
Total Acres	Acres Available	Acres Not Available	Dominant Site Condition	No	3J	3G
150	150		Aspen	150		
868	852	16	Jack Pine	852	14	3
13		13	Lowland Conifers		13	
100	58	42	Lowland Spruce/Fir	58	42	
78	78		Natural Mixed Pines	78		
93	93		Upland Mixed Forest	93		
1,302	1,231	71	Total Forested Acres	1,231	68	3
	95%	5%	Relative Percent			

**Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.*

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
006	Not Available	3J: Water quality / BMPs (stream, river, or lake)	5				
Comments:							
007	Not Available	3J: Water quality / BMPs (stream, river, or lake)	9				
Comments:							
008	Not Available	3J: Water quality / BMPs (stream, river, or lake)	13				
Comments:							
009	Not Available	3J: Water quality / BMPs (stream, river, or lake)	42				
Comments:							

Report 5 – Site Conditions

Gwinn Mgt. Unit
Dean Wilson : Examiner

Compartment 253
Year of Entry 2016

010	Not Available	3G: Other Influence zones - See comments	3
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Comments:

Due to small acreage it was decided to factor limit this stand.



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
1	Spring-Seeps, Riparian Areas	Riparian Area	SCA	
Comments Riparian zone protection for the Escanaba River.				
10	Spring-Seeps, Riparian Areas	Riparian Area	SCA	
Comments Riparian zone protection for the Escanaba River.				
11	Spring-Seeps, Riparian Areas	Riparian Area	SCA	
Comments Riparian zone protection for the Escanaba River.				
12	Spring-Seeps, Riparian Areas	Riparian Area	SCA	
Comments Riparian zone protection for the Escanaba River.				
13	Spring-Seeps, Riparian Areas	Riparian Area	SCA	
Comments Riparian zone protection for the Escanaba River				
13	Spring-Seeps, Riparian Areas	Riparian Area	SCA	
Comments Riparian zone protection for the Escanaba River.				
14	Spring-Seeps, Riparian Areas	Riparian Area	SCA	
Comments Riparian zone protection for the Escanaba River.				
15	Spring-Seeps, Riparian Areas	Riparian Area	SCA	
Comments Riparian zone protection for the Escanaba River.				
2	Spring-Seeps, Riparian Areas	Riparian Area	SCA	
Comments Riparian zone protection for the Escanaba River				
3	Spring-Seeps, Riparian Areas	Riparian Area	SCA	
Comments Riparian zone protection for the Escanaba River.				
4	Spring-Seeps, Riparian Areas	Riparian Area	SCA	
Comments Riparian zone protection for the Escanaba River.				



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
5	Spring-Seeps, Riparian Areas	Riparian Area	SCA	
Comments Riparian zone protection for the Escanaba River.				
6	Spring-Seeps, Riparian Areas	Riparian Area	SCA	
Comments Riparian zone protection for the Escanaba River.				
7	Spring-Seeps, Riparian Areas	Riparian Area	SCA	
Comments Riparian zone protection for the Escanaba River.				
8	Spring-Seeps, Riparian Areas	Riparian Area	SCA	
Comments Riparian zone protection for The Escanaba River.				
9	Spring-Seeps, Riparian Areas	Riparian Area	SCA	
Comments Riparian zone protection for the Escanaba River.				



Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS

* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

ERA = Ecological Reference Area
 HCVA = High Conservation Value Area
 SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6122 - Black Spruce	Medium Density Pole	47.4	71	51-80	SCA = MNFI designated rich conifer swamp. Riparian zone on the Escanabe River
3	42220 - Natural Jack Pine	High Density Pole	4.9	85	81-110	SCA = Part of MNFI designated rich conifer swamp.
6	42220 - Natural Jack Pine	Medium Density Pole	8.6	85	51-80	SCA = Part of a rich conifer swamp complex.
8	42220 - Natural Jack Pine	High Density Pole	2.7	85	81-110	SCA = Part of a rich conifer swamp complex.
11	4136 - Aspen, Mixed Conifer	High Density Sapling	6.1	4		Harvested in 2010: TS# 110-06-01.
12	6125 - Lowland Black Spruce, Jack Pine	Medium Density Pole	13.0	85	51-80	SCA= Riparian zone on the Escanaba River. Upland ridge along river supports very old jack, red, and white pine.
13	4130 - Aspen	Low Density Sapling	18.4	4		Harvested in 2010: TS# 110-06-01. Trenched and seeded in 2011. When the planted jack pine reach 3 feet tall, the stand will be fully stocked.
15	6122 - Black Spruce	Medium Density Pole	41.8	85	1-50	SCA = MNFI designated rich conifer swamp. Meets type 2 old growth criteria. Very wet with seeps and drains that feed the Escanaba River.
16	42120 - Planted Jack Pine	High Density Sapling	25.9	24	1-50	Harvested in 1988: TS# 15-86. Planted in 1990.
18	42120 - Planted Jack Pine	High Density Sapling	38.8	24		Harvested in 1988: TS# 15-86. Planted in 1990.
19	42120 - Planted Jack Pine	High Density Sapling	88.6	16		Harvested in 1998: TS# 9-96. Trenched and direct seeded in 1998.
20	6122 - Black Spruce	Medium Density Pole	10.5	60	1-50	Stand contains seeps and drains that form a tributary to the Escanaba River.
21	42220 - Natural Jack Pine	Medium Density Pole	2.9	82	51-80	Clear cut followed by disk trenching and direct seeding-no revention. Will have to cross a swamp and bridge a small stream to harvest this unless permission to access across private land is procured.
22	42120 - Planted Jack Pine	High Density Sapling	10.0	6		Harvested in 2007: TS# 111-06-01. Trenched and direct seeded in 2008.
23	42120 - Planted Jack Pine	High Density Sapling	14.3	11		Harvested in 2002: TS# 130-02-01. Trenched and direct seeded in 2003.
24	42220 - Natural Jack Pine	High Density Pole	115.3	52	81-110	Clear cut followed by disk trenching and direct seeding-no retention. Tree ages range up to 75 years old. Stand was hit by budworm from 2005 to 2008.

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Gwinn Mgt. Unit

Report 8 – Forested Stands

Compartment: 253
Year of Entry: 2016

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
25	42120 - Planted Jack Pine	High Density Sapling	10.8	7		Harvested in 2007: TS# 111-06-01. Trenched and direct seeded in 2007.
26	42120 - Planted Jack Pine	High Density Sapling	19.4	7		Harvested in 2007: TS# 111-06-01. Trenched and direct seeded in 2007.
27	42120 - Planted Jack Pine	High Density Sapling	55.5	15		Harvested in 1998: TS# 7-96. Trenched and direct seeded in 1999.
28	42120 - Planted Jack Pine	High Density Sapling	6.9	11		Harvested in 2002: TS# 130-02-01. Trenched and direct seeded in 2002.
29	42121 - Planted Jack Pine, Mixed Deciduous	High Density Sapling	26.9	6		Harvested in 2007: TS# 111-06-01. Trenched and direct seeded in 2008.
30	42220 - Natural Jack Pine	Medium Density Pole	9.9	61	51-80	Clear cut followed by disk trenching and direct seeding-no retention. Tree ages range. Tree Mortality is moderate to high.
31	42220 - Natural Jack Pine	High Density Pole	14.4	52	51-80	Clear cut followed by trenching and direct seeding-no retention. Tree ages range up to 75 years. Stand suffered light to moderate wind throw in July 2005.
32	42120 - Planted Jack Pine	High Density Sapling	50.3	24	1-50	Harvested in 1989: TS# 16-86. Trenched and planted in 1990.
33	42220 - Natural Jack Pine	High Density Pole	13.2	51	81-110	Clear cut followed by disk trenching followed by direct seeding-no retention. Tree ages range for the most part from 49 to 75 years.
34	42220 - Natural Jack Pine	High Density Sapling	5.2	14		This artificial opening naturally regenerated to jack pine.
35	42220 - Natural Jack Pine	High Density Pole	16.4	51	81-110	Clear cut followed by disk trenching and direct seeding-no retention. Light to moderate windthrow from the storm of July, 2005. Tree ages range up to 75+ years.
36	42120 - Planted Jack Pine	High Density Sapling	77.9	19		Harvested in 1994: TS# 6-94. Trenched and planted in 1995.
37	42120 - Planted Jack Pine	High Density Sapling	40.6	17		Harvested in 1998: TS# 6-96. Trenched and direct seeded in 1997.
38	42120 - Planted Jack Pine	High Density Sapling	46.8	7		Harvested in 2006: TS# 112-06-01. Trenched and direct seeded in 2007.
39	42120 - Planted Jack Pine	High Density Sapling	91.4	25		Harvested in 1989: TS# 112-06-01. Trenched and direct seeded in 1989..
40	42220 - Natural Jack Pine	Medium Density	3.6	21		This opening was created by Wildlife and regenerated to jack pine naturally.

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Gwinn Mgt. Unit

Report 8 – Forested Stands

Compartment: 253
Year of Entry: 2016

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
42	42290 - Natural Mixed Pine	High Density Pole	69.9	72	51-80	Machine interplanted with red pine in 1960-mostly failed. Clear cut followed by trenching and direct seeding to jack pine. Light to moderate wind throw in 2002 and 2005.
43	4130 - Aspen	High Density Sapling	22.1	6		Harvested in 2008: TS# 113-06-01.
44	4132 - Aspen, Jack Pine	Medium Density Pole	65.7	41	1-50	Clear cut and convert to jack pine. Retain oak and up to four 1/4 acre patches of aspen. Stand subject to aspen decline and moderate to heavy wind throw in 2005.
45	42120 - Planted Jack Pine	High Density Sapling	55.0	6		Harvested in 2008: TS# 113-06-01. Trenched and direct seeded in 2008.
46	4311 - Pine, Aspen Mix	Medium Density Pole	5.2	72	1-50	Clear cut followed by trenching and direct seeding to jack pine-retain the oak. Stand suffered moderate to heavy wind throw in 2005.
47	4130 - Aspen	High Density Sapling	37.9	15		Harvested in 1999: TS# 13-96-01.
48	42120 - Planted Jack Pine	High Density Sapling	11.9	6		Harvested in 2008: TS# 113-06-01. Trenched and direct seeded in 2006.
49	4311 - Pine, Aspen Mix	High Density Pole	88.0	36	51-80	Harvested in 1978: TS# 7/74. Red and white pine retained.
50	42290 - Natural Mixed Pine	Low Density Sapling	7.8	10		Abandoned ELF line regenerated naturally.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
2	6220 - Alder/willow	1.8	No	Unspecified	
4	6220 - Alder/willow	2.1	No	Unspecified	
5	6220 - Alder/willow	10.8	No	Unspecified	
7	50 - Water	4.4	No	Unspecified	
9	6220 - Alder/willow	9.6	No	Unspecified	
10	6220 - Alder/willow	1.8	No	Unspecified	
14	6220 - Alder/willow	2.5	No	Unspecified	
17	6220 - Alder/willow	1.7	No	Unspecified	
41	3302 - Low Density Conifer Trees	3.1	Yes	Low	