



**Gwinn Forest Management Unit  
Compartment Review Presentation  
Compartment 219      Entry Year: 2013  
Compartment Acreage: 1, 104      County: Marquette**

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**Revision Date:** 08/18/2011

**Stand Examiner:** Dean Wilson

**Legal Description:** T46N-R28W, sections 4 and 9.

**RMU (if applicable):** Voelker Plains Management Area

**Management Goals:** Mixed use.

**Soil and Topography:** Primarily level outwash plains with well to excessively drained sands.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** Mostly surrounded by State land and smaller non-industrial private ownerships with some corporate lands along the northwest edge. Land use is primarily forest production and passive recreation.

**Unique, Natural Features:** The Black River and some small streams occur in this compartment.

**Archeological, Historical, and Cultural Features:** None.

**Special Management Designations or Considerations:** Maintenance and perpetuation of the pine and aspen forest type.

**Watershed and Fisheries Considerations:** This compartment is part of the Black River and Escanaba River watershed. Management activities will be designed to protect these watersheds.

**Wildlife Habitat Considerations:** Dry light soils influence a significant portion of the cover-types and wildlife communities in this area. Historic fire disturbance maintained the dry pine, soft mast producing plants and barrens communities found here. Significant soft mast in the form of choke cherry, blueberry, and serviceberry offer the public berry picking opportunities and attract many wildlife species in summer and fall especially black bear. Hunting is popular in this area for deer, bear, and woodcock. The diversity in upland cover-types and hydrology with tributaries to the Escanaba River offer a variety of trapping opportunities.

**Mineral Resource and Development Concerns and/or Restrictions:** Surface sediments consist of thin glacial sand and gravel and postglacial alluvium over bedrock. There is insufficient data to determine the glacial drift thickness. The Precambrian Archean Granite/Gneiss subcrops below the glacial drift. There is not a current economic use for the Granite/Gneiss. Gravel pits are located within one mile of the compartment, and potential is uncertain. The abandoned Republic iron mine is located eight miles to the west. This compartment has never been leased. There is no economic oil and gas production in the UP.

**Vehicle Access:** Is good to and around this compartment.

**Survey Needs:** None.

**Recreational Facilities and Opportunities:** This area is heavily used for passive recreation. There are no developed recreational facilities.

**Fire Protection:** Fire risk is high due to the dry nature of this landscape.

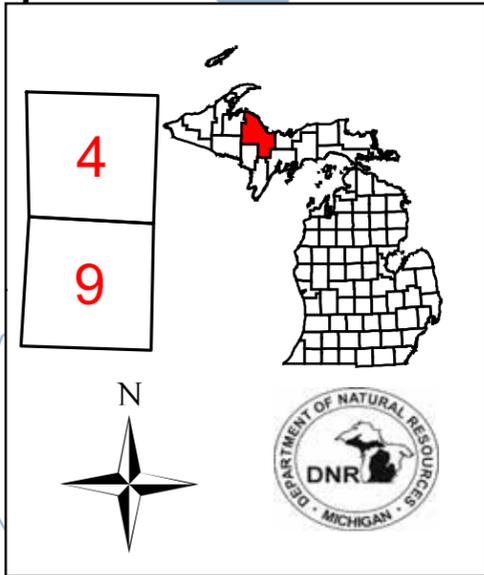
**Additional Compartment Information:** A rustic campground on the Black River and a cross country skiing pathway in this compartment were both abandoned in the 1980s.

- **The following reports from the Inventory are attached:**
  - ◆ **Total Acres by Cover Type and Age Class**
  - ◆ **Proposed Treatment Summary**
  - ◆ **Proposed Treatments – No Limiting Factors**
  - ◆ **Proposed Treatments – With Limiting Factors**
  - ◆ **Stand Details (Forested and Nonforested)**
  - ◆ **Dedicated and Proposed Special Conservation Areas**
  
- **The following information is displayed, where pertinent, on the attached compartment maps:**
  - ◆ **Base feature information, stand boundaries, cover types, and numbers**
  - ◆ **Proposed treatments**
  - ◆ **Details on the road access system**
  
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# Cover Type & Treatment Map

Compartment 219  
 T46N, R28W, Sec. 04, 09  
 County: Marquette  
 Unit: Gwinn  
 YOE: 2013  
 Acres: 1,104 GIS Calculated  
 Stand Examiner: Dean Wilson  
 Map Revised: 8/23/2011  
 Map Phase: Pre-Review

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



**Legend**

- Miris Corners
- Remonumented Section Corners
- Paved Roads
- County Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Power
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers

**Treatments**

- Clearcut (w/Reserves, Patch/Strip)
- Seed Tree (w/Reserves)

**Forest Stands**

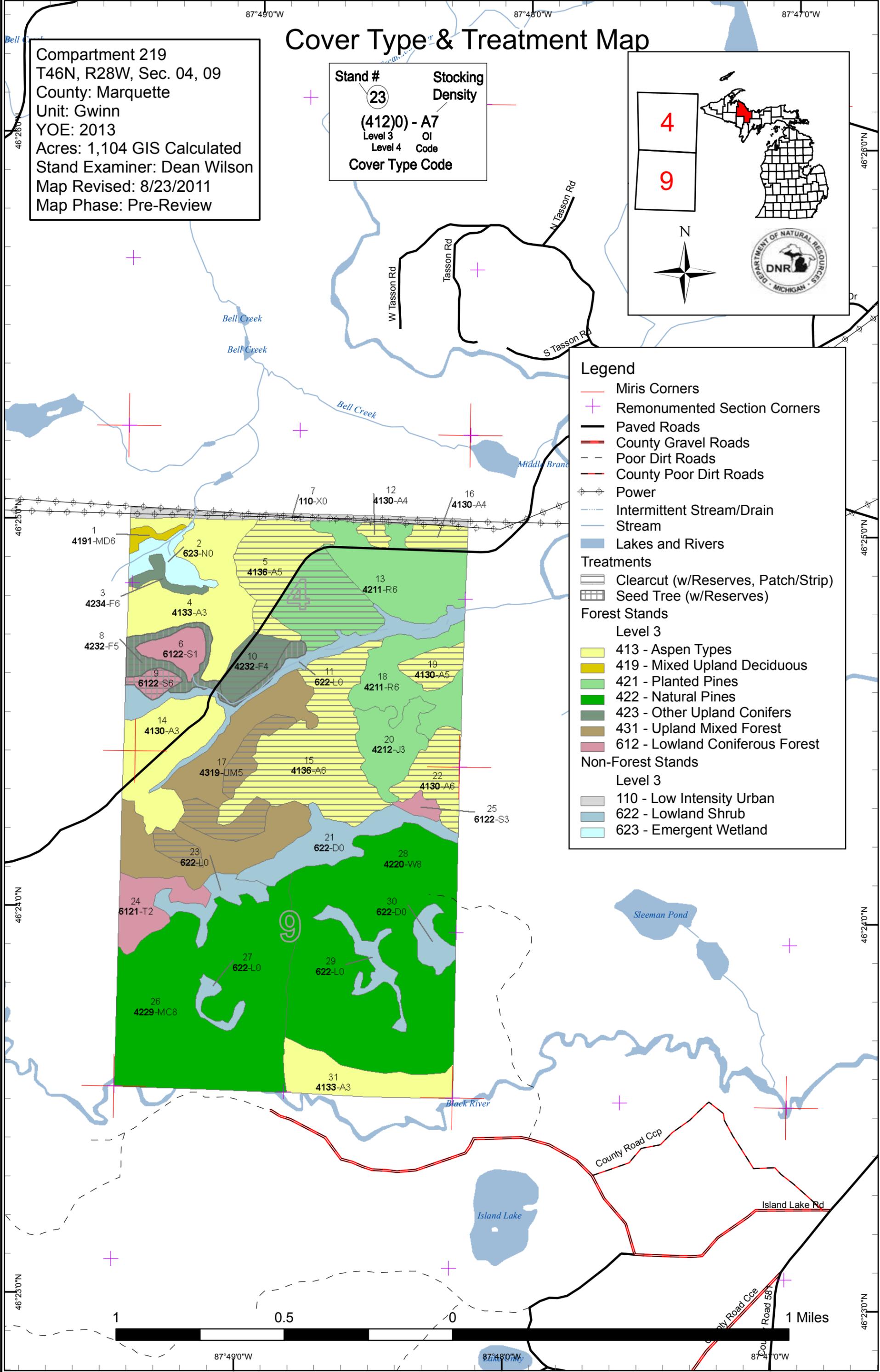
**Level 3**

- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest

**Non-Forest Stands**

**Level 3**

- 110 - Low Intensity Urban
- 622 - Lowland Shrub
- 623 - Emergent Wetland



# Stand Boundary Map

Compartment 219  
 T46N, R28W, Sec. 04, 09  
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 (412)0 - A7  
 Level 3 OI  
 Level 4 Code  
**Cover Type Code**

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 DEPARTMENT OF NATURAL RESOURCES  
 MICHIGAN

**Legend**

- Miris Corners
- Remonumented Section Corners
- Paved Roads
- County Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Power
- Intermittent Stream/Drain
- Stream
- Stand Boundaries

**Forest Stands**

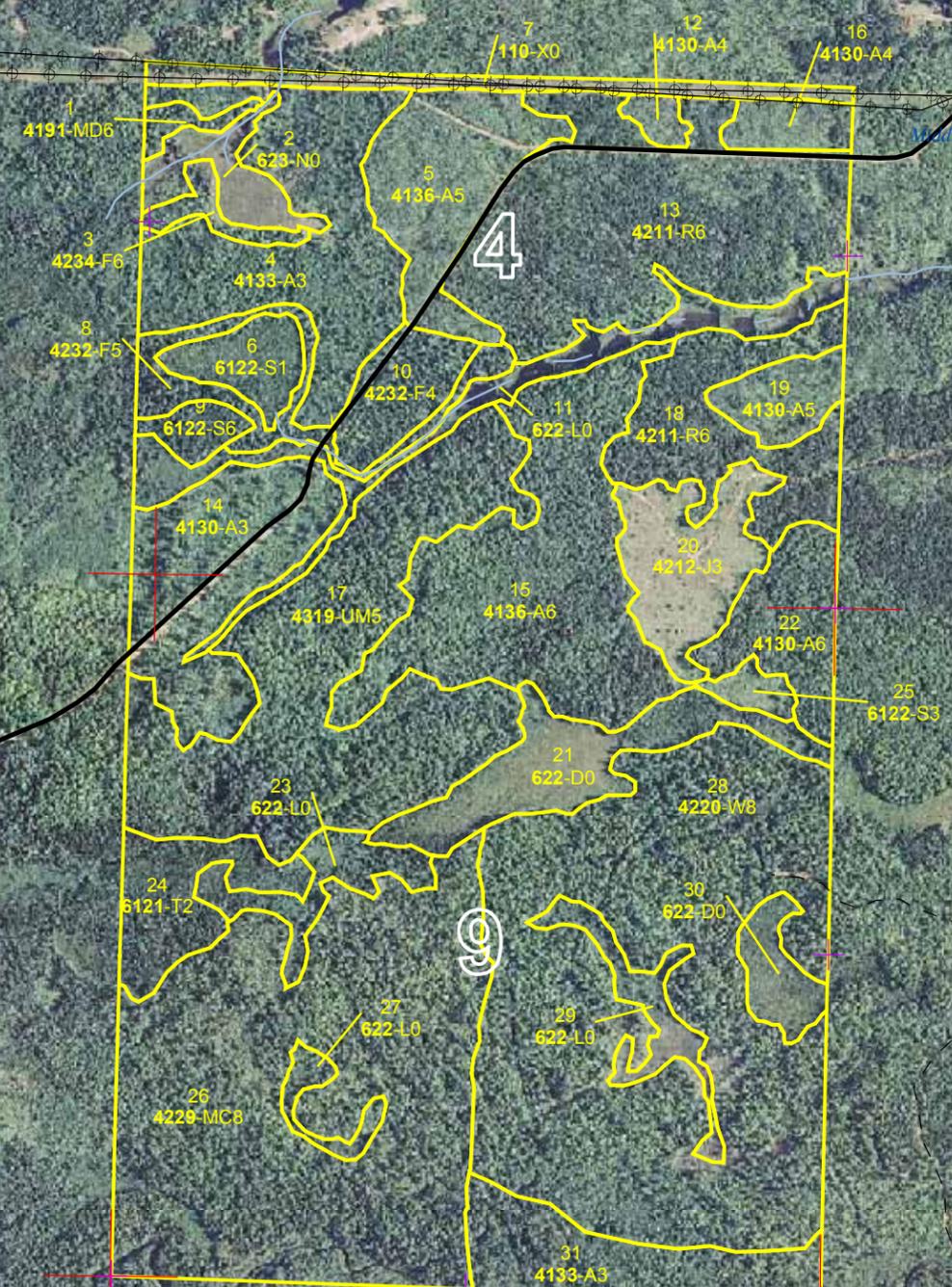
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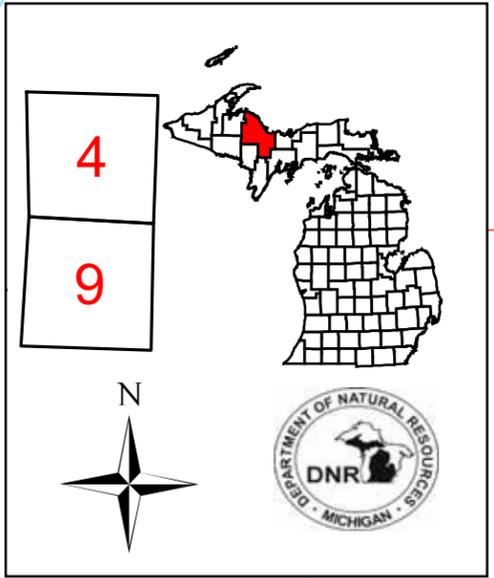
87°50'0"W

87°47'0"W

# Dedicated & Proposed Special Conservation Area Map

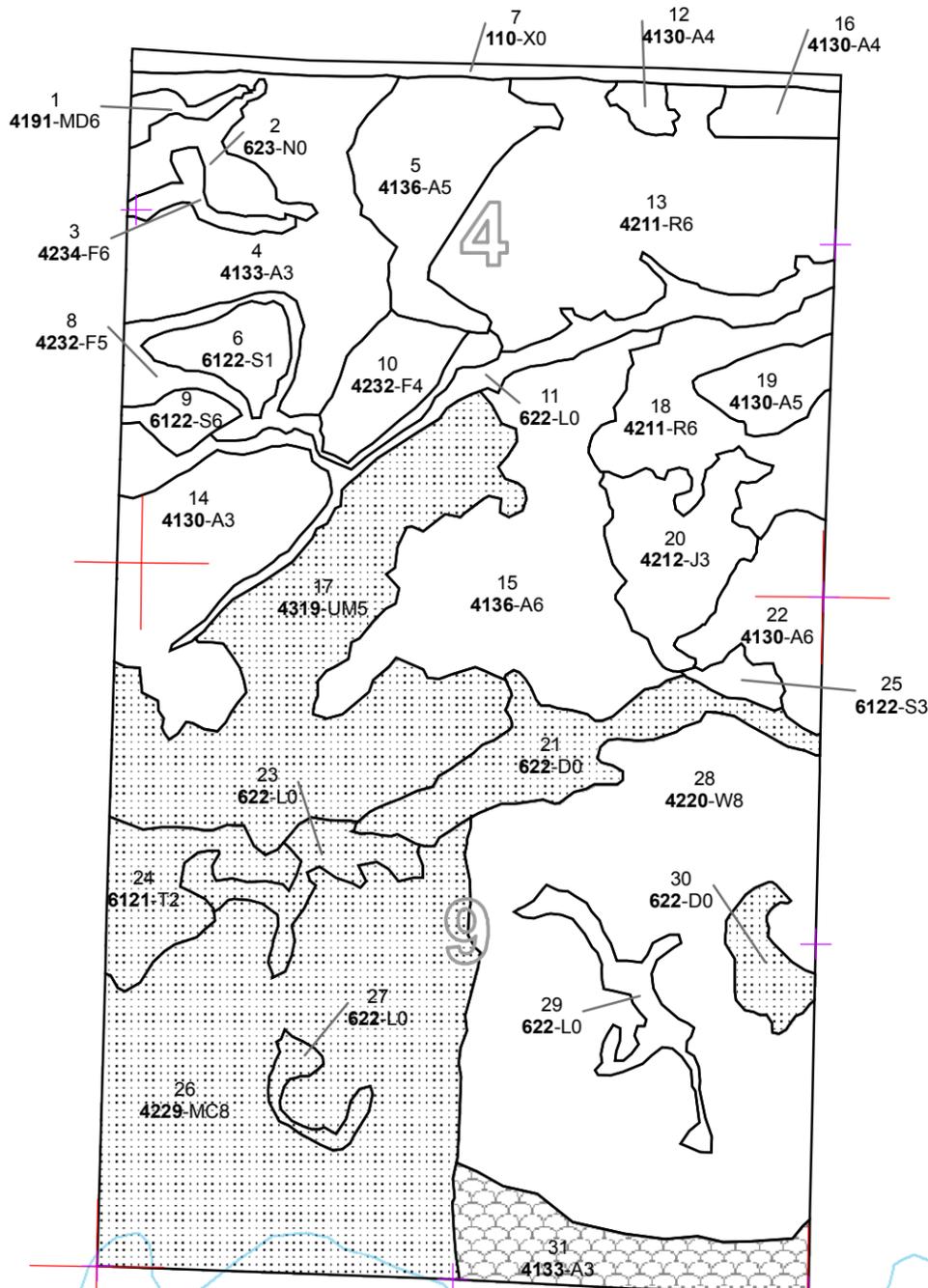
Compartment 219  
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Stand # **23**  
 Stocking Density  
**(412)0 - A7**  
 Level 3 OI  
 Level 4 Code  
 Cover Type Code



## Legend

- Miris Corners
- Stand Boundaries
- Proposed Special Conservation Areas
  - ▨ SCA - Special Conservation Area
  - ▩ SCA Removal
- Dedicated Special Conservation Areas
- Cold Water Streams
- Forest Stands
  - Level 3
  - 413 - Aspen Types
  - 419 - Mixed Upland Deciduous
  - 421 - Planted Pines
  - 422 - Natural Pines
  - 423 - Other Upland Conifers
  - 431 - Upland Mixed Forest
  - 612 - Lowland Coniferous Forest
- Non-Forest Stands
  - Level 3
  - 110 - Low Intensity Urban
  - 622 - Lowland Shrub
  - 623 - Emergent Wetland



87°50'0"W 87°49'0"W 87°48'0"W 87°47'0"W

46°23'0"N 46°24'0"N 46°25'0"N 46°26'0"N

**Table 1 – Total Acres by Cover Type and Age Class**



	Age Class														Total	
	Non-Forested	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +		Unre/en Age
Aspen	0	45	60	30	57	0	101	0	0	0	0	0	0	0	0	293
Jack Pine	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	27
Lowland Shrub	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
Lowland Spruce/Fir	0	4	0	0	0	0	12	0	0	6	0	0	0	0	0	21
Marsh	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	0	164	0	0	0	0	164
Red Pine	0	0	0	0	0	89	36	0	0	0	0	0	0	0	0	124
Tamarack	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	21
Treed Bog	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	0	105	0	0	0	0	105
Upland Spruce/Fir	0	0	0	0	0	0	0	15	5	16	0	0	0	0	0	36
Urban	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
White Pine	0	0	0	0	0	0	0	0	0	0	185	0	0	0	0	185
<b>Total</b>	<b>125</b>	<b>76</b>	<b>60</b>	<b>30</b>	<b>57</b>	<b>110</b>	<b>148</b>	<b>15</b>	<b>9</b>	<b>22</b>	<b>453</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1104</b>



## Table 2 – Proposed Treatment Summaries

**Gwinn Mgt. Unit**  
**Year of Entry 2013**

**Compartment 219**  
**Total Compartment Acres: 1104**

### Acres by Treatment Type

Commercial Harvest - 230	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 0	

### Cover Type by Harvest Method

		Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
<b>Aspen</b>	157	0	0	0	0	0		157
<b>Lowland Spruce/Fir</b>	0	0	6	0	0	0		6
<b>Red Pine</b>	36	0	0	0	0	0		36
<b>Upland Mixed Forest</b>	30	0	0	0	0	0		30
<b>Upland Spruce/Fir</b>	15	0	16	0	0	0		31
<b>Total</b>	<b>238</b>	<b>0</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>		<b>260</b>



Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
5	32219005-Cut	34.4	4136 - Aspen, Mixed Conifer	Medium Density Pole	35	Harvest	Clearcut with Reserves	42120 - Planted Jack Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut.</p> <p><u>Specs:</u></p> <p><u>Other</u> Retain any existing spruce, red and white pine that occur.</p> <p><u>Comments:</u></p> <p><u>Next Steps:</u> Herbicide then disk trench and direct seed to jack pine. Check regeneration per work guidelines.</p>									
8	32219008-Cut	16.0	42320 - Upland Spruce	Medium Density Pole	89	Harvest	Seed Tree with Reserves	42340 - Upland Spruce/Fir	Cmpt. Review Proposal
<p><u>Prescription</u> Harvest all trees except marked spruce-fir seed trees and red and white pine.</p> <p><u>Specs:</u></p> <p><u>Other</u> Retain any cherry if it occurs. When marking seed trees also consider marking wildlife trees.</p> <p><u>Comments:</u></p> <p><u>Next Steps:</u> Check for regeneration per work guidelines.</p>									
9	32219009-Cut	5.7	6122 - Black Spruce	High Density Pole	89	Harvest	Seed Tree	6122 - Black Spruce	Cmpt. Review Proposal
<p><u>Prescription</u> Patch and strip cut 70% of this stand leaving residual to provide seed.</p> <p><u>Specs:</u></p> <p><u>Other</u> Avoid the wetter areas in the stand.</p> <p><u>Comments:</u></p> <p><u>Next Steps:</u> Check for regeneration per work guidelines.</p>									
10	32219010-Cut	15.0	42320 - Upland Spruce	Low Density Pole	60	Harvest	Clearcut with Reserves	42340 - Upland Spruce/Fir	Cmpt. Review Proposal
<p><u>Prescription</u> Harvest all merchantable trees that are not red or white pine, and cherry. Selectively mark the defective white pine to be included in the cut.</p> <p><u>Specs:</u></p> <p><u>Other</u> This stand was partially cut in 1996 leaving all the softwoods. This harvest will be an overstory removal releasing what has regenerated.</p> <p><u>Comments:</u></p> <p><u>Next Steps:</u> Check regeneration per work guidelines.</p>									
12	32219012-Cut	3.3	4130 - Aspen	Low Density Pole	35	Harvest	Clearcut with Reserves	42120 - Planted Jack Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut all trees excepting red and white pine if they occur.</p> <p><u>Specs:</u></p> <p><u>Other</u> Herbiciding will be necessary.</p> <p><u>Comments:</u></p> <p><u>Next Steps:</u> Herbicide, disk trench and direct seed to jack pine. Check regeneration per work guidelines.</p>									



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
13	32219013-Cut	36.1	42111 - Planted Red Pine, Mixed Deciduous	High Density Pole	45	Harvest	Clearcut with Reserves	42110 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Clearcut all tree species excepting natural red and white pine, and any cherry that may occur. Disk trench and plant red pine post harvest. <u>Specs:</u> Include the planted red pine in this harvest. <u>Other</u> This stand was machine planted in 1965 and suffered significant seedling mortality. <u>Comments:</u> <u>Next</u> Check regeneration per work guidelines. <u>Steps:</u>									
15	32219015-Cut	79.0	4136 - Aspen, Mixed Conifer	High Density Pole	50	Harvest	Clearcut with Reserves	4136 - Aspen, Mixed Conifer	Cmpt. Review Proposal
<u>Prescription</u> Clearcut all tree species excepting red and white pine, spruce less than 6 inches on the stump, and any cherry that may occur. <u>Specs:</u> <u>Other</u> Consider marking miscellaneous wildlife trees. <u>Comments:</u> <u>Next</u> Check regeneration per work guidelines. <u>Steps:</u>									
16	32219016-Cut	7.9	4130 - Aspen	Low Density Pole	35	Harvest	Clearcut with Reserves	42120 - Planted Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> Clearcut all trees excepting red and white pine. <u>Specs:</u> <u>Other</u> Herbiciding will be necessary. <u>Comments:</u> <u>Next</u> Herbicide, disk trench and direct seed to jack pine. Check regeneration per work guidelines. <u>Steps:</u>									
17	32219017-Cut	29.9	4319 - Mixed Upland Forest	Medium Density Pole	98	Harvest	Patch or Strip Clearcut	4113 - R.Maple, Conifer	Cmpt. Review Proposal
<u>Prescription</u> Patch and strip cut of intolerant species to induce their regeneration. <u>Specs:</u> <u>Other</u> Design sale to avoid areas that are heavy to red/white pine and oak. <u>Comments:</u> <u>Next</u> Check regeneration per work instructions. <u>Steps:</u>									
19	32219019-Cut	11.0	4130 - Aspen	Medium Density Pole	33	Harvest	Clearcut with Reserves	42120 - Planted Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> Clearcut all trees excepting red and white pine. <u>Specs:</u> <u>Other</u> Herbiciding will be necessary. <u>Comments:</u> <u>Next</u> Herbicide, disk trench and direct seed to jack pine, Check regeneration per work guidelines. <u>Steps:</u>									

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	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
22	32219022-Cut	21.7	4130 - Aspen	High Density Pole	50	Harvest	Clearcut with Reserves	4136 - Aspen, Mixed Conifer	Cmpt. Review Proposal

Prescription. Clearcut all trees excepting red and white pine, spruce less than 6 inches on the stump, and any cherry that may occur.

Specs:

Other Consider marking a fes wildlife trees.

Comments:

Next Check regeneration per work guidelines.

Steps:

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**Total Treatment  
Acreage Proposed: 260.1**

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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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Prescription  
Specs:

Other  
Comment:

Next  
Steps:

Limiting Factor and No  
Treatment Reason

**Total Treatment**  
**Acreage Proposed: 0**

Out of YOE -- Treatments  
Prescribed with No Limiting Factor

Year of Entry: 2013



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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Prescription  
Specs:

Other  
Comments:

Next  
Steps:

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**Total Treatment  
Acreage Proposed: 0**

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## Gwinn Mgt. Unit

## 5 – Forested Stands

Compartment: 219  
Year of Entry: 2013

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	3.5	70	81-110	Stand was retained as a buffer for a large beaver pond/meadow complex.
3	42340 - Upland Spruce/Fir	High Density Pole	5.4	70	51-80	Stand was retained as a buffer to a large beaver pond/meadow complex.
4	4133 - Aspen, Mixed Pine	High Density Sapling	59.6	14	1-50	Harvested in 1996. Oak, cherry, red and white pine and white birch seed trees retained.
5	4136 - Aspen, Mixed Conifer	Medium Density Pole	34.4	35	1-50	Severe aspen decline.
6	6122 - Black Spruce	Low Density Sapling	11.5	50	1-50	Fairly non-productive treed bog.
8	42320 - Upland Spruce	Medium Density Pole	16.0	89	51-80	
9	6122 - Black Spruce	High Density Pole	5.7	89	51-80	Some upland areas occur.
10	42320 - Upland Spruce	Low Density Pole	15.0	60	1-50	Harvested in 1996: TS#11-96. All softwood was retained.
12	4130 - Aspen	Low Density Pole	3.3	35	1-50	Severe aspen mortality-50 percent plus mortality.
13	42111 - Planted Red Pine, Mixed Deciduous	High Density Pole	88.6	45	81-110	Machine planted to red pine in 1965. Significant failed areas especially on the west side.
14	4130 - Aspen	High Density Sapling	45.5	6	1-50	Harvested in 2004: TS#310-04-01. White and red pine, some large cull maple, and seed trees of spruce-fir and white birch retained.,
15	4136 - Aspen, Mixed Conifer	High Density Pole	79.0	50	51-80	Significant aspen decline. Stand contains red pine that was planted in 1965.
16	4130 - Aspen	Low Density Pole	7.9	35	1-50	Severe aspen decline-50 percent plus mortality.
17	4319 - Mixed Upland Forest	Medium Density Pole	104.5	98	81-110	Majority of stand was partially harvested in 1965. Good manageable general forest in need of regeneration.
18	42110 - Planted Red Pine	High Density Pole	35.6	50	81-110	Machine planted in 1960. Seedling survival rate was 50 to 60 percent. Severe aspen decline. Portions of this stand will be able to be thinned next entry.
19	4130 - Aspen	Medium Density Pole	11.0	33	1-50	Severe aspen decline. 50% or higher mortality.
20	42120 - Planted Jack Pine	High Density Sapling	26.6	4		Harvested in 2004: TS#109-03-01. Trenched and direct seeded to jack pine in 2006.

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Gwinn Mgt. Unit

## 5 – Forested Stands

Compartment: 219  
Year of Entry: 2013

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
22	4130 - Aspen	High Density Pole	21.7	50	81-110	Significant aspen decline.
24	6121 - Tamarack	Medium Density	20.9	45	1-50	
25	6122 - Black Spruce	High Density Sapling	4.2	6		Harvested in 2004: TS#109-03-01.
26	42290 - Natural Mixed Pine	Medium Density Log	164.2	98	51-80	Last cut in 1965. Large canopy gaps resulting from extensive blow down caused by the storm of 7/21/02.
28	42200 - Natural White Pine	Medium Density Log	184.7	98	81-110	Harvested in 1987: TS#28-82A.
31	4133 - Aspen, Mixed Pine	High Density Sapling	30.4	23	1-50	Harvested in 1987: TS#28-82A. Predominately an A3 stand that contains red and white pine. The pines are heaviest on the west and east sides of the stand.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
2	6233 - Wet Meadow	12.3	No	Unspecified	New and old beaver ponds and meadows.
7	11 - Low Intensity Urban	14.1	No	Unspecified	Major powerline right of way.
11	6223 - Inundated Shrub Swamp	27.5	No	Unspecified	String of many beaver ponds and meadows along Bell's Creek bottom land.
21	6224 - Treed Bog	30.7	No	Unspecified	
23	6220 - Alder/willow	13.8	No	Unspecified	
27	6220 - Alder/willow	4.9	No	Unspecified	
29	6220 - Alder/willow	11.8	No	Unspecified	
30	6224 - Treed Bog	9.6	No	Unspecified	



## 7 – 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.

Stand	SCA Type	SCA Name	Acres	Comments
17	Unique Site - SCA	32219017	104.5	Majority of this stand was partially cut in 1965.
24	Unique Site - SCA	32219024	20.9	Wetland protection of a drain that feeds Sleeman Pond and eventually the Escanabe River.
26	Unique Site - SCA	32219026	164.2	SCA = Dry mesic forest protection.
31	SCA Removal	32219031	30.4	Mostly as A3 stand resulting from a commercial harvest in 1987.
21	Unique Site - SCA	NF_32219021	30.7	Wetland protection of drain that feeds Sleeman pond and eventually the Escanabe River.
23	Unique Site - SCA	NF_32219023	13.8	Wetland protection of a drain that feeds Sleeman Pond and eventually the Escanabe River.
27	Unique Site - SCA	NF_32219027	4.9	Part of a larger SCA complex.
30	Unique Site - SCA	NF_32219030	9.6	Wetland protection of a drain that feeds Sleeman Pond and eventually the Escanaba River.



**8 – DEDICATED CONSERVATION AREA DETAILS**

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

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

Conservation Area	Type	Description
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.