



**Gwinn Forest Management Unit  
Compartment Review Presentation  
Compartment 239      Entry Year: 2013  
Compartment Acreage: 1, 104      County: Marquette**

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**Revision Date:** August 18, 2011

**Stand Examiner:** Tom Seablom

**Legal Description:** T45N R28W Sec. 28 except SESW and SWSE; Sec 33 except NWNW and W1/2NW

**RMU (if applicable):** Chain Lakes Moraine Management Area

**Management Goals:** Goals within this compartment are timber production, wildlife habitat management and protection of water quality. Timber management is primarily for fiber production, with some sawlog management where appropriate, and is managed using even age techniques. Managing the timber in this manner continues to provide for early successional wildlife habitat. Applying proper Best Management Practices (BMP's) during timber harvests and road work ensures water quality protection.

**Soil and Topography:** Soils belong to the Rubicon-Keweenaw (RK) and Sagola-Rubicon (SR) Associations. The Rubicon-Keweenaw soils are very deep, well drained to excessively drained, sandy soils. Sagola-Rubicon soils are very deep, well to excessively drained, loamy and sandy soils. Minor soil types within these associations such as the Carbondale, Greenwood, and Deford types are present within depressions and drainages. Topography is fairly level with some gently rolling hills.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** Ownership within and surrounding the compartment is primarily state land. Scattered small private in holdings do exist as does the Michigan Northwoods Club which is a large private land holding approximately 2 miles to the northeast. Development on these private parcels is hunting camps. Land use is timber production and recreation.

**Unique, Natural Features:**

Potential for osprey, eagle, and great blue heron rookery. Potential for moose, wolf and wood turtle. Potential for auricled tway-blade and linear-leaved gentian along riparian areas. Potential for Farwell's water-milfoil and alternate-leaved water-milfoil in shallow lakes. Potential for purple clematis in dry-mesic conifer stands.

**Archeological, Historical, and Cultural Features:** An old logging railroad grade does exist which transported logs to Kate's Grade from the Flat Rock area.

**Special Management Designations or Considerations:** Special Conservation Area's (SCA's) exist within this compartment along the water ways.

**Watershed and Fisheries Considerations:** Follow proper BMP's along with a 300 foot buffer along designated trout streams and a 100 foot buffer along all other streams and any lakes. The Flat Rock Creek and a tributary to the Wild West Creek flow within this compartment and are both cold water trout streams.

**Wildlife Habitat Considerations:** Maintain or increase potential of hard mast production by utilizing management strategies that encourage oak. Manage for within-stand diversity by protecting and/or enhancing white and red pine, and strive to increase diversity for wildlife. Maintain the best age class diversity in aspen. Strive to increase within-stand diversity in aspen by utilizing retention guidelines to

provide the best combination of food and cover. Within Special Conservation Areas along creeks and tributaries maintain large closed canopy conifer to provide snow intercept and cover, mature forest structure and protection for wildlife corridors and riparian areas. Diversity in habitat types in this compartment offers a variety of hunting, trapping, and wildlife viewing opportunities.

**Mineral Resource and Development Concerns and/or Restrictions:** Surface sediments consist of peat and muck and medium-textured and coarse-textured glacial till. 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. A rock (?) quarry is indicated on the topo one-half mile to the north. Gravel pits are located four miles away, and potential may be good to the south. The abandoned Republic iron mine is located ten miles to the northwest. Sections 28, 29 and 34 were previously leased for metallic exploration. There is no economic oil and gas production in the UP.

**Vehicle Access:** Access within the compartment is fair. The Camp Hope Road provides access from the north and secondary woods roads provide access from the south off of Co. Rd. COO. An easement does exist through the Camp Hope Inc. property which allows a through route. Portions of these roads are very rough.

**Survey Needs:** None

**Recreational Facilities and Opportunities:** At this time there are no developed recreational facilities. Potential does exist for a rustic campground along the Flat Rock Creek.

**Fire Protection:** This area is within the Ishpeming Field Office protection area and is approximately two miles south of the 581 Zone Dispatch area. Timber types within this compartment are not very fire prone. Roads exist throughout the compartment providing decent access in the event of a fire.

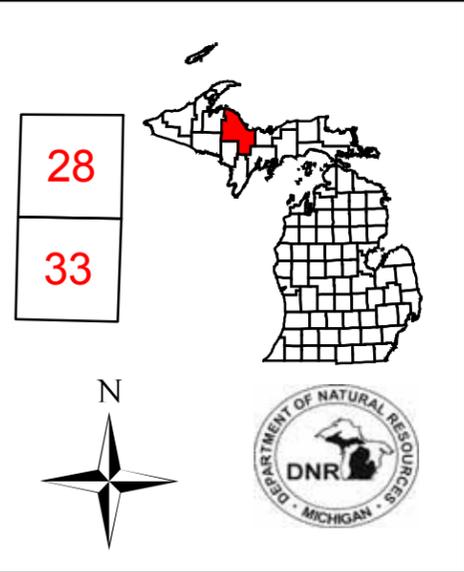
**Additional Compartment Information:** None

- **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 239  
 T45N, R28W, Sec. 28, 33  
 County: Marquette  
 Unit: Gwinn  
 YOE: 2013  
 Acres: 1,104 GIS Calculated  
 Stand Examiner: Thomas Seablom  
 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
- Poor Dirt Roads
- Closed Roads
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers

**Treatments**

- Clearcut (w/Reserves, Patch/Strip)
- Seed Tree (w/Reserves)
- Other Treatment - See Comments

**Forest Stands**

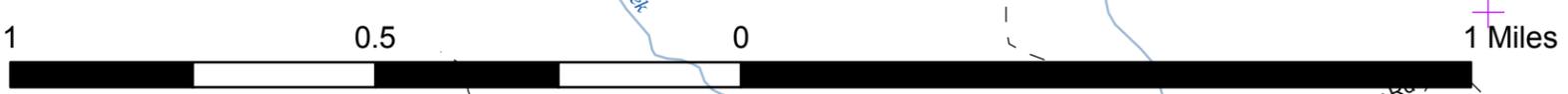
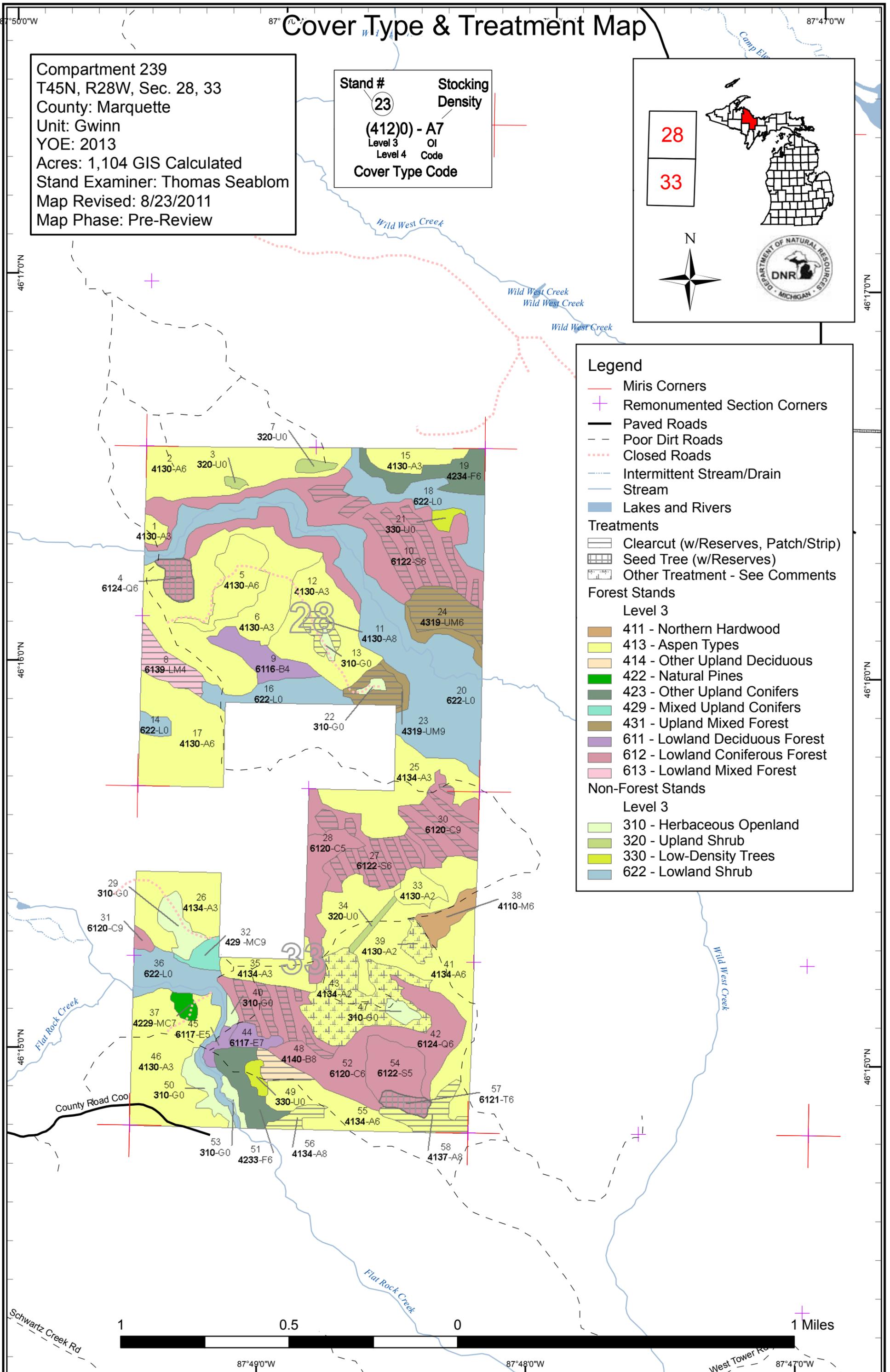
**Level 3**

- 411 - Northern Hardwood
- 413 - Aspen Types
- 414 - Other Upland Deciduous
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

**Non-Forest Stands**

**Level 3**

- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low-Density Trees
- 622 - Lowland Shrub



87°49'0"W 87°48'0"W 87°47'0"W

# Stand Boundary Map

Compartment 239  
 T45N, R28W, Sec. 28, 33  
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## Legend

- Miris Corners
- Remonumented Section Corners
- Paved Roads
- Poor Dirt Roads
- Closed Roads
- Stand Boundaries

## Forest Stands

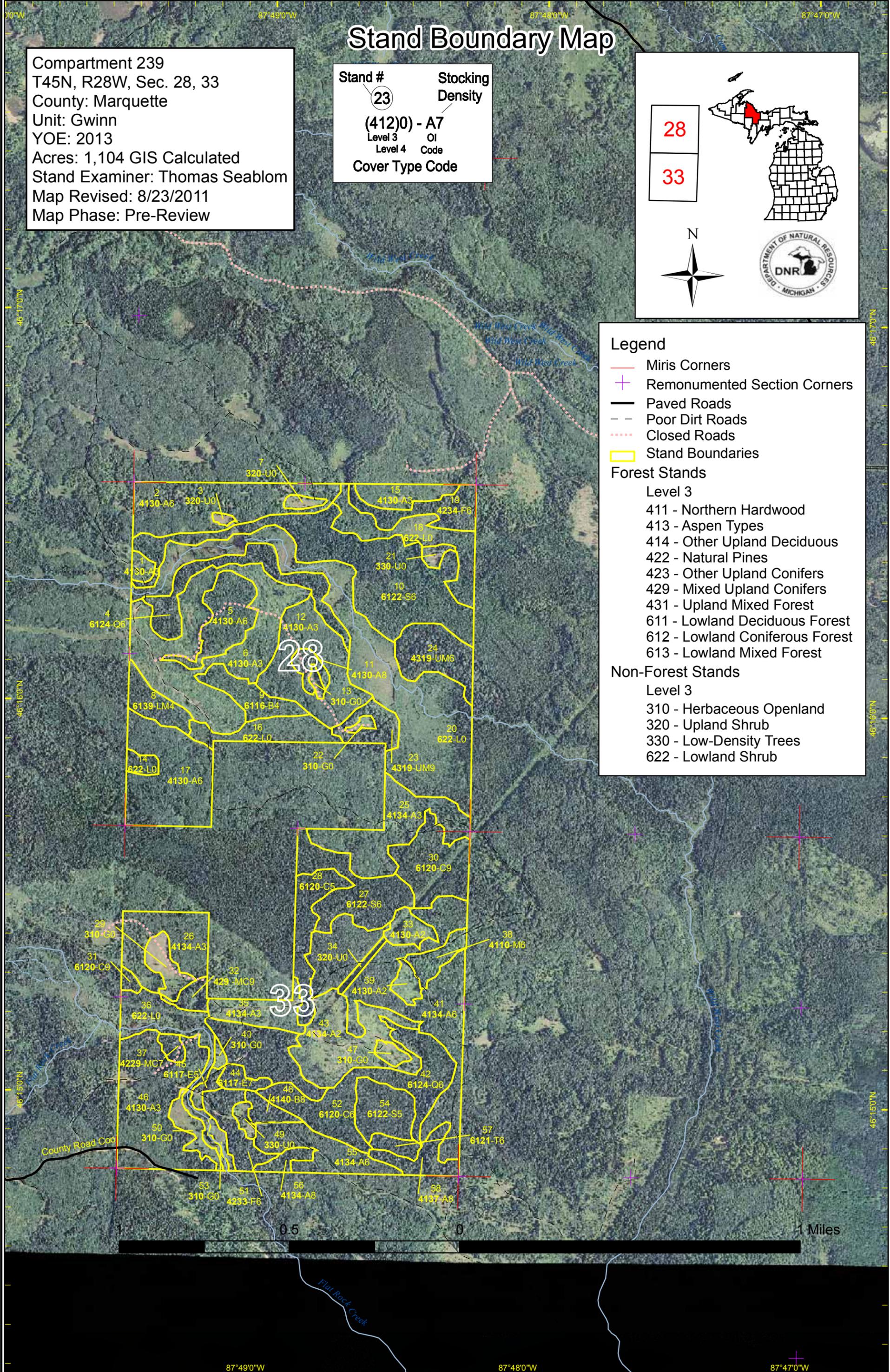
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## Non-Forest Stands

### Level 3

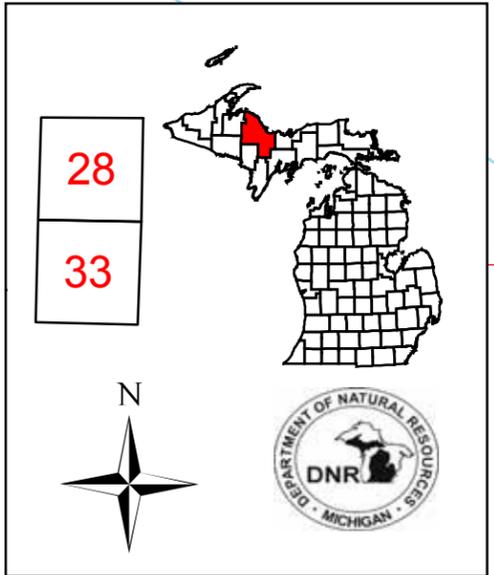
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# Dedicated & Proposed Special Conservation Area Map

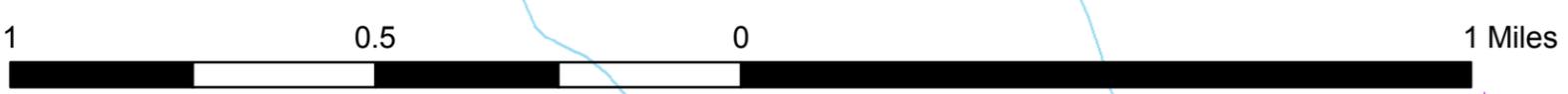
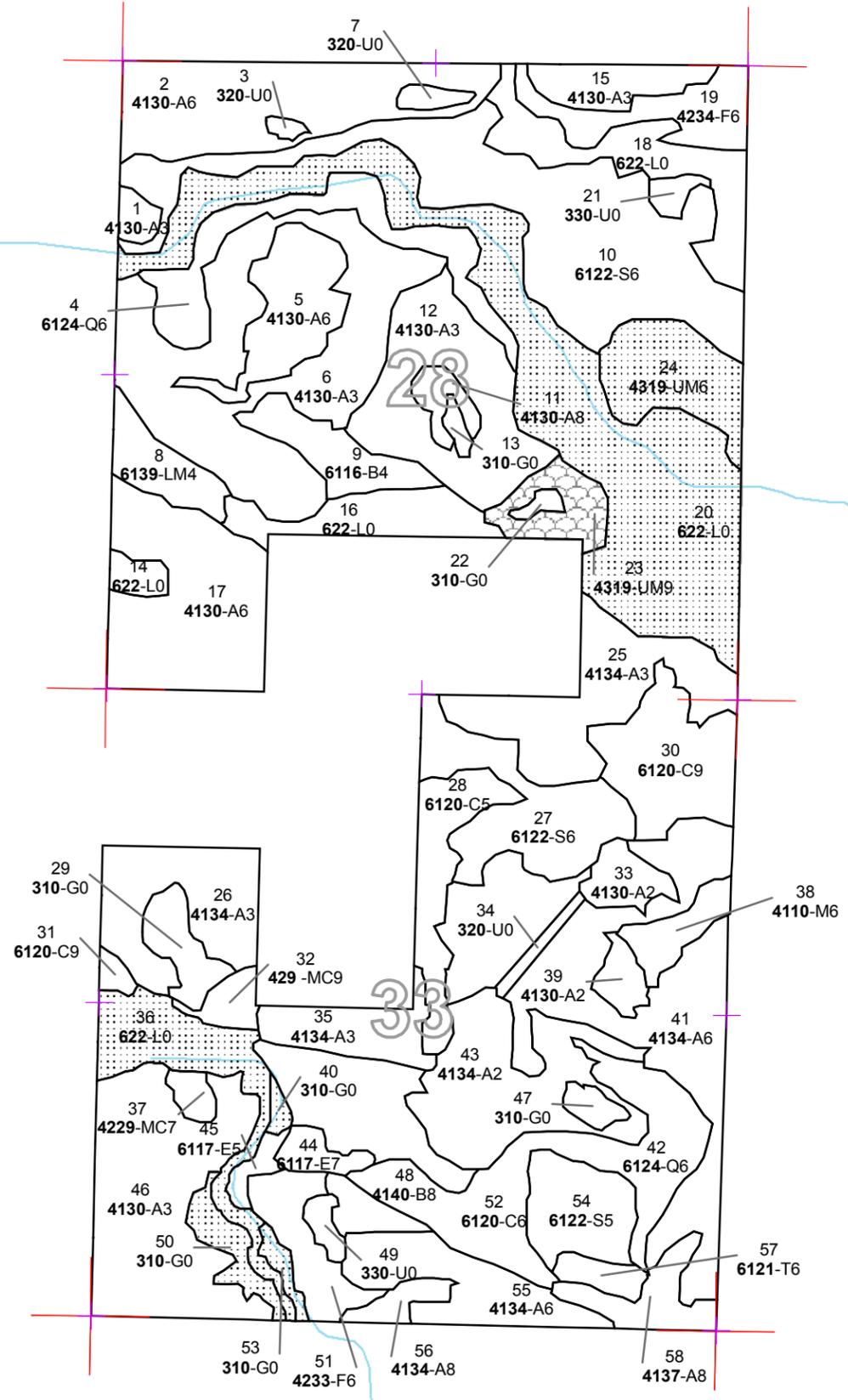
Compartment 239  
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 Acres: 1,104 GIS Calculated  
 Stand Examiner: Thomas Seablom  
 Map Revised: 8/23/2011  
 Map Phase: Pre-Review

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



## Legend

- Miris Corners
- Stand Boundaries
- Proposed Special Conservation Areas
  - ▨ SCA - Special Conservation Area
  - ▩ SCA Removal
- Dedicated Special Conservation Areas
- Cold Water Streams
- Forest Stands
  - Level 3
  - 411 - Northern Hardwood
  - 413 - Aspen Types
  - 414 - Other Upland Deciduous
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87°50'0"W 87°49'0"W 87°48'0"W 87°47'0"W

46°17'0"N

46°16'0"N

46°15'0"N

46°17'0"N

46°16'0"N

46°15'0"N



	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 +		Unrepen Age
Aspen	0	132	112	138	100	21	0	0	0	20	0	0	0	0	0	523
Cedar	0	0	0	0	0	0	0	0	0	43	18	2	0	26	0	89
Herbaceous Openland	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
Low-Density Trees	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Lowland Conifers	0	0	0	0	0	0	0	0	0	48	0	0	0	0	0	48
Lowland Deciduous	0	0	0	0	3	0	0	0	5	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	11
Lowland Shrub	166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	166
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	29	94	0	0	0	0	0	123
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3
Northern Hardwood	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8
Paper Birch	0	0	0	0	0	0	0	0	13	5	0	0	0	0	0	18
Tamarack	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
Upland Conifers	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	31	0	0	0	0	0	31
Upland Shrub	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Upland Spruce/Fir	0	0	0	0	13	0	0	16	0	0	0	0	0	0	0	29
<b>Total</b>	<b>203</b>	<b>132</b>	<b>112</b>	<b>138</b>	<b>117</b>	<b>21</b>	<b>0</b>	<b>16</b>	<b>58</b>	<b>259</b>	<b>18</b>	<b>5</b>	<b>0</b>	<b>26</b>	<b>0</b>	<b>1104</b>



## Table 2 – Proposed Treatment Summaries

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

**Compartment 239**  
**Total Compartment Acres: 1104**

### Acres by Treatment Type

Commercial Harvest - 126	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 42
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>	20	0	0	0	0	0	0	20
<b>Cedar</b>	9	0	0	0	0	0	0	9
<b>Lowland Conifers</b>	10	0	7	0	0	0	0	17
<b>Lowland Mixed Forest</b>	11	0	0	0	0	0	0	11
<b>Lowland Spruce/Fir</b>	35	0	0	0	0	0	0	35
<b>Paper Birch</b>	5	0	0	0	0	0	0	5
<b>Tamarack</b>	0	0	4	0	0	0	0	4
<b>Upland Mixed Forest</b>	24	0	0	0	0	0	0	24
<b>Total</b>	<b>114</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>126</b>



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
4	32239004W- Cut	6.8	6124 - Lowland Spruce-Fir	High Density Pole	82	Harvest	Seed Tree with Reserves	6124 - Lowland Spruce-Fir	Cmpt. Review Proposal
<p><u>Prescription</u> Seed tree harvest leaving approx. 5% of the canopy in mixed species. Do not cut cedar as this is a minor component in the stand.</p> <p><u>Specs:</u></p> <p><u>Other</u> Leave an appropriate width buffer along Scarffe's Creek.</p> <p><u>Comments:</u></p> <p><u>Next</u> Acceptable regeneration species includes, spruce, fir, tamarack, aspen, birch, maple and cedar.</p> <p><u>Steps:</u></p>									
8	32239008-Cut	11.0	6139 - Mixed Lowland Forest	Low Density Pole	76	Harvest	Clearcut with Reserves	6139 - Mixed Lowland Forest	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut this stand retaining 3-10% of the canopy. Trees retained should include a mix of the species present and are to be scattered throughout the stand.</p> <p><u>Specs:</u></p> <p><u>Other</u> This is a lower site and should be harvested during the winter months.</p> <p><u>Comments:</u></p> <p><u>Next</u> Acceptable regeneration species include birch, aspen, fir, spruce, cedar and balm.</p> <p><u>Steps:</u></p>									
10	32239010trt- Cut	21.5	6122 - Black Spruce	High Density Pole	82	Harvest	Patch or Strip Clearcut	6122 - Black Spruce	Cmpt. Review Proposal
<p><u>Prescription</u> It is being prescribed to utilize either strip cuts or large (4-5 acre) patch cuts to harvest this stand. Strips should be laid out running north-south approx. 75-100 ft. wide leaving 150 ft. between strips. If patches are utilized they should be laid out</p> <p><u>Specs:</u></p> <p><u>Other</u> Access to this stand is very limited. A new road will need to be constructed to enter this stand. Depending on the route taken, a stream crossing may be involved. Slash needs to either be scattered or removed from the site and not left in a mat as this w</p> <p><u>Comments:</u></p> <p><u>Next</u> Harvest the remainder of the stand over the course of the next two entry periods harvesting 1/2 of the width of the strips that are left at the next entry and the remaining at the subsequent YOY. Acceptable regeneration species includes, spruce, fir, tam</p> <p><u>Steps:</u></p>									
11	32239011-Cut	4.8	4130 - Aspen	Medium Density Log	81	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut this stand reserving scattered mature aspen and some pole size spruce-fir.</p> <p><u>Specs:</u></p> <p><u>Other</u> Retain aspen and spruce-fir to meet 3% retention. Strive to create clumps when selecting retention trees.</p> <p><u>Comments:</u></p> <p><u>Next</u></p> <p><u>Steps:</u></p>									
23	32239023trt- Cut	7.9	4319 - Mixed Upland Forest	High Density Log	81	Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut this stand harvesting all trees greater than 2-inches dbh. Retain scattered mature aspen and pole size spruce around the edge of the opening.</p> <p><u>Specs:</u></p> <p><u>Other</u> Leave a corridor varying in width from 50-100 ft. along the east edge of the stand to provide a wildlife corridor.</p> <p><u>Comments:</u></p> <p><u>Next</u> Acceptable regeneration includes aspen, balm, spruce and fir.</p> <p><u>Steps:</u></p>									



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
24	32239024trt-Cut	16.1	4319 - Mixed Upland Forest	High Density Pole	83	Harvest	Clearcut with Reserves	42340 - Upland Spruce/Fir	Cmpt. Review Proposal
<p><u>Prescription:</u> Clearcut this stand cutting all trees greater than 2-inches dbh. Leave scattered trees along the western and southern edge of the stand.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> If this stand is harvested, the adjacent stand (48) in Compartment 238 should be harvested as well. Access to this stand is extremely difficult from a logging perspective. Stream crossings will be needed in just about every scenario.</p> <p><u>Next Steps:</u> Acceptable regeneration species include aspen, birch, spruce and fir.</p>									
27	32239027-Cut	13.1	6122 - Black Spruce	High Density Pole	75	Harvest	Patch or Strip Clearcut	6124 - Lowland Spruce-Fir	Cmpt. Review Proposal
<p><u>Prescription:</u> It is being prescribed to patch or strip cut this stand. A small island of upland exists on the southern edge of this stand that should be clearcut.</p> <p><u>Specs:</u> Strips should be orientated north-south and be approximately 75-100 feet in width with 150 ft between str</p> <p><u>Other Comments:</u> Slash needs to either be scattered or removed from the site and not left in a mat as this will impede the regeneration of the site.</p> <p><u>Next Steps:</u> Residual strips should be cut over the next one to two entry periods. Acceptable regeneration species includes, spruce, fir, tamarack, aspen, birch, and cedar.</p>									
30	32239030-Cut	9.4	6120 - Lowland Cedar	High Density Log	180	Harvest	Patch or Strip Clearcut	6120 - Lowland Cedar	Cmpt. Review Proposal
<p><u>Prescription:</u> Strip cutting is being prescribed for this stand. Strips should be orientated in a north-south direction, approximately 75-100 feet in width leaving approximately 150 ft of uncut timber between the strips. This is a lowland site and should be harvested dur</p> <p><u>Other Comments:</u> Slash needs to either be scattered or removed from the site and not left in a mat as this will impede the regeneration of the site.</p> <p><u>Next Steps:</u> Monitor regeneration here on a yearly basis to determine if this will work. Acceptable regeneration species includes, spruce, fir, tamarack, aspen, birch, and cedar.</p>									
42	32239042-Cut	10.2	6124 - Lowland Spruce-Fir	High Density Pole	89	Harvest	Patch or Strip Clearcut	6124 - Lowland Spruce-Fir	Cmpt. Review Proposal
<p><u>Prescription:</u> It is being prescribed to cut this stand using either strips or patch clearcuts. Strips should be orientated in a north-south direction being 75-100 feet wide with approximately 150 feet inbetween the strips. If patches are utilized they should be orient</p> <p><u>Other Comments:</u> Slash needs to be scattered or removed from the site and not left in a mat as this will impede the regeneration of this stand.</p> <p><u>Next Steps:</u> Residual strips should be harvested over the next one to two entry periods. Acceptable regeneration species includes, spruce, fir, tamarack, aspen, birch, and cedar.</p>									
48	32239048-Cut	5.3	4140 - Other Upland Deciduous	Medium Density Log	88	Harvest	Clearcut	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal
<p><u>Prescription:</u> Clearcut this stand cutting all trees regardless of merchantability except any white pine that are present within the stand.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> Zero retention is being recommended due to the small size of this stand.</p> <p><u>Next Steps:</u> Accpetable regeneration species include birch, aspen, maple, spruce, fir, and pine.</p>									



Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
56	32239056-Cut	4.4	4134 - Aspen, Spruce/Fir	Medium Density Log	88	Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal
<p><u>Prescription</u> Cut all aspen, spruce, balsam fir, and maple regardless of merchantability. Thin through the pocket of white pine, favoring those with good growth form.</p> <p><u>Specs:</u></p> <p><u>Other</u> Zero retention of species other than white pine is being recommended in this stand due to the small stand size.</p> <p><u>Comments:</u></p> <p><u>Next Steps:</u> Acceptable regeneration species include aspen, spruce, fir, maple, and pine.</p>									
57	32239057-Cut	4.4	6121 - Tamarack	High Density Pole	83	Harvest	Seed Tree with Reserves	6121 - Tamarack	Cmpt. Review Proposal
<p><u>Prescription</u> A seed tree harvest is being prescribed for this stand. Mark out individual tamarack, spruce, and balsam amounting to 10 seed trees/acre. Cut the remaining tamarack, spruce and balsam. No other trees are to be cut. This is a lowland site and should be ha</p> <p><u>Specs:</u></p> <p><u>Other</u> Slash should be scattered or removed from the site. It is desired to not have a slash mat as this will impede regeneration of the stand.</p> <p><u>Comments:</u></p> <p><u>Next Steps:</u> Acceptable regeneration species includes, spruce, fir, tamarack, aspen, birch, and cedar.</p>									
58	32239058-Cut	10.7	4137 - Aspen, Birch	Medium Density Log	88	Harvest	Clearcut with Reserves	4137 - Aspen, Birch	Cmpt. Review Proposal
<p><u>Prescription</u> Cut all trees except red and white pine and mark out approximately 10 aspen and birch trees (combined) selecting those that are culls.</p> <p><u>Specs:</u></p> <p><u>Other</u> Retention should be a maximum of 3% for this stand.</p> <p><u>Comments:</u></p> <p><u>Next Steps:</u> Acceptable regeneration species include aspen, birch, spruce, fir, maple and pine.</p>									
39	32239039-Other	4.7	4130 - Aspen	Medium Density Saplin	6	Other	Unspecified	4130 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Regeneration is quite patchy in this stand. A formal survey should be done.</p> <p><u>Specs:</u></p> <p><u>Other</u></p> <p><u>Comments:</u></p> <p><u>Next Steps:</u> Possible white pine planting if stand is understocked.</p>									
43	32239043-Other	36.8	4134 - Aspen, Spruce/Fir	Medium Density Saplin	6	Other	Unspecified	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal
<p><u>Prescription</u> Formal regeneration survey</p> <p><u>Specs:</u></p> <p><u>Other</u> Stand is the result of a birch seed tree harvest. Upon completion of stage 1 inventory, it appears that adequate regen is lacking in various parts of this stand.</p> <p><u>Comments:</u></p> <p><u>Next Steps:</u> Upon completion of the survey, areas lacking in regen should either be planted or scarified and seeded with either red or white pine. Stumps from these species are present throughout the surrounding landscape and within this stand itself.</p>									
<b>Total Treatment Acreage Proposed:</b>		<b>167.3</b>							

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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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#Error

Prescription  
Specs:

Other  
Comment:

Next  
Steps:

Limiting Factor and No  
Treatment Reason

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**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**



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4130 - Aspen	High Density Sapling	3.1	5		A few white birch stump sprouts have survived browsing. Stand was harvested in August/September 2004 by St. John Forest Products, Inc., TS#32-115-03-01 Camp Hope Rd. Sale. 44 birch seed trees were left.
2	4130 - Aspen	High Density Pole	42.9	24	51-80	Stand is an aspen stand with a patch of red oak on the west end. Aspen regen is very sparse where the oak were left, leatherwood is more present in these areas. Spruce and fir poles occur in pockets. Stand was harvested in 1986 by Minerick Logging, permit #10-83 Dodge Road Block. Residual oak trees were marked before the sale was cut, approx. 5/acre.
4	6124 - Lowland Spruce- Fir	High Density Pole	24.4	82	81-110	SCA-Potential Old Growth. Buffer along Scarffe's Creek. A portion of this stand has been recommended in previous inventory for POG to provide a buffer along Scarffe's Creek, primarily the east half. The stand is predominantly lowland, some of it is upland along the aspen edge but this is a very small portion.
5	4130 - Aspen	High Density Pole	20.8	41	111-140	Stand was harvested commercially in 1969 by Roy Delongchamp, permit #11-69A.
6	4130 - Aspen	High Density Sapling	69.6	5		Stand had been cut by St. John Forest Products, Inc., August-September 2004, TS#32-115-03-01, Camp Hope Rd. Sale.
8	6139 - Mixed Lowland Forest	Low Density Pole	11.0	76	1-50	Stand is primarily composed of scattered white birch, balm, quaking aspen and balsam fir. Some black spruce and cedar exist at the northern edge of the stand. The stand must have been hit with spruce budworm in the past based on the characteristics of the overstory and the evidence of rotten stumps.
9	6116 - Lowland Birch	Low Density Pole	13.2	76	1-50	Stand is composed of white birch, aspen and balm, some black ash, and scattered balsam and black spruce. Very low volume as trees are only 2-3 sticks tall. Some of the balm are 4 sticks near the edge of the stand.
10	6122 - Black Spruce	High Density Pole	77.0	82	81-110	Stand is a mix of tamarack, black spruce, and pockets of cedar. There are a few high spots in this stand as well that are decadent white birch and balsam fir. Several rock outcrops or very large boulders rising 5-10 feet are also in this stand.
11	4130 - Aspen	Medium Density Log	4.8	81	51-80	This stand was left as a buffer around the grass opening when the larger surrounding aspen stand was cut. It's intent was to provide wildlife habitat (winter food source for budding grouse) and to prevent the opening from being overtaken by aspen sprouts. Aspen is 5-6 sticks, spruce are 4-5 and balsam are 3-5 sticks.
12	4130 - Aspen	High Density Sapling	37.2	15		Stand was harvested in August of 1994 by Charlie Dillion, permit #4-93. All cherry, oak, and cedar were left as well as those spruce having less than 4 sticks.
15	4130 - Aspen	High Density Sapling	10.5	7		Stand was harvested in 2002 by Oro Logging Inc., TS#32-112-001-01 Camp Dodge Sale. A few scattered white pine, red oak and yellow birch present in stand as well.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
17	4130 - Aspen	High Density Pole	43.2	22	51-80	Stand is just coming into the pole category. Some areas still have a BA of 20-30. Trees are 2-3 sticks. Stand had been harvested in January-February 1988 by Jim Carey, permit #4-86, as a spruce budworm salvage scale sale. Advanced regen was left during the sale operation. Currently spruce and balsam fir are minor components of this stand. The exist as scattered poles in the canopy and scattered saplings in the understory.
19	42340 - Upland Spruce/Fir	High Density Pole	15.7	60	81-110	Stand was left as a buffer for beaver control from previous harvest. Cedar are present along the south edge of the stand before it becomes a lowland marsh. White birch and aspen are falling apart, stand is succeeding to spruce/fir.
23	4319 - Mixed Upland Forest	High Density Log	10.3	81	81-110	SCA=>Potential Old Growth. Stand is currently listed as Potential Old Growth. Recommend removal. Stand has a heavy fir understory. Aspen is 6-12 inches, averaging about 5 sticks. Balm is the same. White spruce 6-14 inches and 3-5 sticks, balsam 6-10 inches and 3-4 sticks.
24	4319 - Mixed Upland Forest	High Density Pole	20.8	83	81-110	Stand is currently listed as Potential Old Growth (POG). Stand is a knob of high ground that is surrounded by lowland on all sides. Difficult access for logging. Stand isn't really unique. It's decadent white birch with spruce and fir coming up in the understory and mid-canopy. Within 20 years, this will be a pure spruce-fir stand.
25	4134 - Aspen, Spruce/Fir	High Density Sapling	34.2	17		Was commercially cut in 1993 by Charlie Dillon, permit #4-93, "Wild West Road" sale. Spruce were not cut in this stand. Also, all oak, cherry, and cedar were left uncut.
26	4134 - Aspen, Spruce/Fir	High Density Sapling	26.5	16		The spruce and fir in this stand are predominantly in patches with some occurring in the undertory. There are a few sparse areas as well on the southwest edge. Original stand was harvested in the fall of 1993 by Charlie Dillion, permit #4-93. All red and white pine were left as well as spruce less than 4-sticks tall.
27	6122 - Black Spruce	High Density Pole	29.1	75	81-110	There is evidence within the stand of past cutting. An old winter road is present as are some stumps. Cedar is lacking in this stand when compared to the surrounding two stands, it is only scattered here. Portions of this stand have a lower density which could be the result of an old budworm outbreak or past harvesting. There is an area of semi-upland in the southern portion of this stand.
28	6120 - Lowland Cedar	Medium Density Pole	17.9	98	51-80	Stand is predominantly cedar, especially in the north. As you venture south it becomes more mixed.
30	6120 - Lowland Cedar	High Density Log	25.7	180	171-200	Very large cedar, almost pure. Balsam fir, black spruce, and white birch are present in the stand (birch mainly along the edge). Some aspen and red maple mixed in, in the north.
31	6120 - Lowland Cedar	High Density Log	1.9	100	111-140	This stand is a transition zone between the upland aspen and the lowland brush. Cedar is in good shape, but the balm and aspen are falling apart.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
32	429 - Mixed Upland Conifers	High Density Log	4.8	82		Stand is predominantly red pine with some large white pine sawlog trees scattered throughout. There are also a fair amount of red and white pine poles/small sawlogs in the stand as well creating a two age stand. Some white birch and aspen are present as well.
33	4130 - Aspen	Medium Density	7.0	5		Stand harvested in July 2004 by St. John Forest Products, Inc. TS#32-116-03-01, Flat Rock Bridge Sale. There is quite a bit of raspberry in this stand along with some scattered cherry and balsam. Some bare patches exist as well, presumably where white birch was present before. Old inventory had it listed as an A4 stand. There is a small patch of cedar in the middle of the stand as well. It appears that this was part of the lowland conifer stand that is across the old ELF ROW and now is an isolated island.
35	4134 - Aspen, Spruce/Fir	High Density Sapling	14.0	10		Pockets of spruce and balsam. A few red and white pine. Stand had been cut in July of 2004 by St. John Forest Products, Inc. TS#32-116-03-01, Flat Rock Bridge Sale. Oak, cherry, cedar, red and white pine were not to be cut.
37	42290 - Natural Mixed Pine	Low Density Log	3.1	100	51-80	Part of this stand was cut under permit #4-86 by Jim Carey. Only pine with a 20-inch dbh or larger were cut. The stand is now a mix of large red and white pine sawlogs, red and white pine poles, and heavy to black and white spruce in the understory. Red pine are regenerating near the edges along the road, white pine are mixed in the stand as are the spruce.
38	4110 - Sugar Maple Association	High Density Pole	7.9	85	51-80	Medium quality hardwood stand. Aspen is dying out, some pole aspen present from previous harvest (circa early 1970's).
39	4130 - Aspen	Medium Density	4.7	6		Was commercially cut in July 2004 by St. John Forest Products, Inc, permit #116-03-01, "Flat Rock Bridge Sale". Stand is patchy in nature where white birch had been present. Seed trees that were left are now dead and represent snags and downed debris.
41	4134 - Aspen, Spruce/Fir	High Density Pole	78.2	36	81-110	Stand was commercially cut 1972 thru 1976 by Holli Forest Products under permit #19-70A, "Wild West Block". Spruce and fir density is variable throughout the stand. Some areas are very high others it's sparse.
42	6124 - Lowland Spruce-Fir	High Density Pole	23.9	89	81-110	Stand is a mix of black spruce, aspen, balsam fir and scattered cedar (mainly along stand edge). The stand is a mix of upland and lowland, as lowland plants are only present on a portion of the stand. It rises between 1.5-2 feet above the surrounding lowland types. The extreme northwest corner of this stand is upland.
43	4134 - Aspen, Spruce/Fir	Medium Density	36.8	6		Was commercially cut in July 2004 by St. John Forest Products, Inc, permit #116-03-01, "Flat Rock Bridge Sale". All oak, cherry, cedar, red & white pine as well as 168 birch seed trees marked with green paint in Unit 2 (primarily this stand) were left. Also, 1 & 2 stick spruce were left. The majority of the birch seed trees have died and fallen over. Some snags are still standing. There appears to be some birch regeneration in the southwestern portion of this stand. This is also where most of the seed trees are still living.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
44	6117 - Lowland Deciduous, Mixed Coniferous	Low Density Log	4.7	72	1-50	Small stand that is semi open. White birch, balm, scattered cedar, and spruce. A small creek that feeds into the Flat Rock Creek flows through this stand.
45	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	3.2	37	51-80	SCA=>Potential Old Growth. Stand acts as a buffer along the Flat Rock Creek. Portions of this stand were harvested in 1973 by Dave Holli as part of the Wild West Block, permit #19-70A, It was part of a larger stand at the time. It has now been broken out as an SCA-POG along the Flat Rock Creek.
46	4130 - Aspen	High Density Sapling	52.1	22	1-50	Stand was harvested during March-April 1988 by Jim Carey, permit #4-86, a spruce budworm salvage scale sale. Existing conifer regen present during the harvest was left. Note: Spoils from digging a sand trap were dumped in this stand, south of the road where a small opening exists on the western edge of the stand.
48	4140 - Other Upland Deciduous	Medium Density Log	5.3	88	51-80	Small stand that is essentially a hillside between the upland and lowland.
51	42330 - Upland Fir	High Density Pole	13.3	37	51-80	Stand was commercially cut 1972 thru 1976 by Holli Forest Products under permit #19-70A, "Wild West Block".
52	6120 - Lowland Cedar	High Density Pole	43.2	85	111-140	The stand is predominantly a cedar stand. Some patches along the edge have a heavier component of white birch and aspen. This stand appears to be a staging area for deer as they migrate south.
54	6122 - Black Spruce	Medium Density Pole	16.7	80	1-50	Semi-open stand that is black spruce and cedar with balsam and black spruce saplings/seedlings coming in.
55	4134 - Aspen, Spruce/Fir	High Density Pole	21.8	37	81-110	Stand was commercially cut 1972 thru 1976 by Holli Forest Products under permit #19-70A, "Wild West Block".
56	4134 - Aspen, Spruce/Fir	Medium Density Log	4.4	88	51-80	This is a small pocket of overmature aspen, spruce/fir and a patch of white pine.
57	6121 - Tamarack	High Density Pole	4.4	83	81-110	This is a small patch of tamarack on the edge of a swamp where it meets the upland. Tamarack are 6-7 sticks tall with dbh of 8-10 inches.
58	4137 - Aspen, Birch	Medium Density Log	10.7	88	111-140	Stand is primarily on a hillside between the upland and lowland. Lots of red maple and fir seedlings and saplings, especially where the canopy is opened up. Scattered red and white pine exist in this stand.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
3	3205 - Mixed Upland Shrub	1.1	Yes	Low (NonForested)	
7	3205 - Mixed Upland Shrub	2.4	Yes	Low (NonForested)	
13	3102 - Grass	1.6	Yes	Low (NonForested)	
14	6229 - Mixed lowland shrub	3.5	No	Unspecified	
16	6229 - Mixed lowland shrub	15.8	No	Unspecified	
18	6229 - Mixed lowland shrub	23.8	No	Unspecified	
20	6229 - Mixed lowland shrub	99.6	No	Unspecified	
21	330 - Low-Density Trees	2.6	No	Unspecified	OI notes indicated that this was an old logging camp site. I checked it out and there is evidence of old building sites here.
22	3102 - Grass	1.5	Yes	Low (NonForested)	
29	3102 - Grass	8.7	Yes	Low (NonForested)	
34	3205 - Mixed Upland Shrub	2.4	No	Unspecified	Old ELF ROW.
36	6229 - Mixed lowland shrub	23.4	No	Unspecified	Flat Rock Creek runs through this stand.
40	3102 - Grass	1.5	No	Unspecified	
47	3102 - Grass	3.1	N/A	Unspecified	
49	3302 - Low Density Conifer Trees	2.8	No	Unspecified	
50	3102 - Grass	6.9	Yes	Low (NonForested)	
53	3102 - Grass	2.6	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
23	SCA Removal	32239023	10.3	Recommend removal from SCA=>Potential Old Growth. A portion of this stand could be left as a riparian corridor.
23	SCA Removal	32239023_1	10.3	
24	Unique Site - SCA	32239024	20.8	SCA=>Riparian corridor. Stand is providing connected habitat for wildlife movement.
20	Unique Site - SCA	NF_32239020	99.6	SCA=>Riparian corridor along Scarffe's Creek.
36	Unique Site - SCA	NF_32239036	23.4	SCA=>Riparian corridor along the Flat Rock Creek.
40	Unique Site - SCA	NF_32239040	1.5	SCA=>Riparian corridor along the Flat Rock Creek.
50	Unique Site - SCA	NF_32239050	6.9	SCA=>Riparian corridor along the Flat Rock Creek.
53	Unique Site - SCA	NF_32239053	2.6	SCA=>Riparian corridor along the Flat Rock Creek.

**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

<b>Conservation Area</b>	<b>Type</b>	<b>Description</b>
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.