



GRAYLING FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 24 ENTRY YEAR: 2012

GIS Compartment Acreage: 1823 County: Oscoda

Revision Date: 9/7/2010

Stand Examiner: Craig Farrer, Forest Technician

Legal Description: T28N, R2E, Sections 4,5,8 and 9, Elmer Township.

Management Goals: Our goal is to manage and maintain a healthy, productive, and diverse ecosystem beneficial to the Prairie Warbler, Kirtland Warbler, Rough Fescue, and other prairie species. We also need to consider species diversity, visual management and multiple-use in management of this compartment. As a note, this compartment is not a designated Kirtland Warbler Management Unit.

Soils and Topography: Soil types, within this compartment consist mostly of Grayling sands, Graycalm sands and Roselawn sands. Topography of the compartment is mostly gently rolling terrain with flat areas on the west side of compartment.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The compartment is comprised of one large contiguous block of state ownership and two large blocks of private ownership. The largest block of private ownership (440 acres) is found in section 8 and is well developed with private homes and seasonal cabins. The smaller block of private ownership (240 acres) is located in the south east quarter of section 9 and is the least developed. Other development and land use ongoing within this compartment consists of several gas wells, pumping station, and cycle trail.

Unique, Natural Features (include only non-site specific and non-sensitive information): The Prairie Warbler (*Dendrocia, discolor.*), Kirtland Warbler (*Dendrocia, kirtlandii.*), Rough Fescue (*Festuca scabrella*), Hill's Thistle and Allegheny Plum.

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): None at this time.

Special Management Designations or Considerations:

Watershed and Fisheries Considerations: None.

Wildlife Habitat Considerations: To maintain existing Jack Pine forest cover types as habitat for the Prairie Warbler and the Kirtland Warbler. Secondly, to provide and manage habitat for deer, bear, grouse and turkey in the surrounding stands.

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 600 and 800 feet. Beneath the glacial drift is the Coldwater Shale. There is not an economic use for the Coldwater Shale. The nearest gravel pit is three miles to the southeast, and gravel potential is thought to be limited. All of the

State land in the compartment has been leased and developed for oil and gas. The Antrim Shale is the producing formation in the area. Most of the compartment has been leased for oil and gas development and has been developed for Antrim gas. The compartment contains part of the Elmer Fudd Antrim Project that was formerly managed by Terra. Breitburn also has drilled a well in compartment.

Vehicle Access: The compartment is accessed from the County Roads of Eastwood Road, Hill Road and Granholm Road. Several, two tracks branch off from these roads and wind through portions of the compartment. Many of these two tracks are being used by oil and gas companies to access well sites and facilities. A cycle trail runs through section 4, 8 and 9.

Survey Needs: NE corner for section 9 is unconfirmed, a survey may be needed.

Recreational Facilities and Opportunities: The compartment receives heavy recreational use. These include hunting, bird watching, motorized cycling and mushroom hunting. The compartment contains the Hunt Creek ORV Loop.

Fire Protection: Fire protection is the responsibility of the Michigan DNRE and the Elmer Township Volunteer Fire Department. The current road system is adequate to provide access for fire suppression equipment and the closest, accessible water sources are Eleventh Lake, Oak Lake, Perry Lake and La Belle Lake.

Additional Compartment Information: Most of the northeast portion of this compartment under went salvage harvest operations in the past. This was due to windstorm damage to the area in June/July 1999.

LOTS Compartment Acreage: 1,813 acres

- **The following reports are available:**
 - ◆ **Cover Type by Age Class**
 - ◆ **Proposed Treatment Summaries**
 - ◆ **Dedicated Conservation Area Details**
 - ◆ **Listing of Forested Stands**
 - ◆ **Listing of Non-Forested Stands**
 - ◆ **Proposed Treatments – No Limiting Factors**
 - ◆ **Proposed Treatments – With Limiting Factors**

- **The following information is displayed, where pertinent, on the attached compartment maps:**
 - ◆ **Base feature information, stand numbers, cover types, recreation trails and facilities**
 - ◆ **Proposed treatments**
 - ◆ **Proposed road access system**
 - ◆ **Special Conservation areas**

Cover Type & Treatment Map

84°14'0"W

84°12'0"W

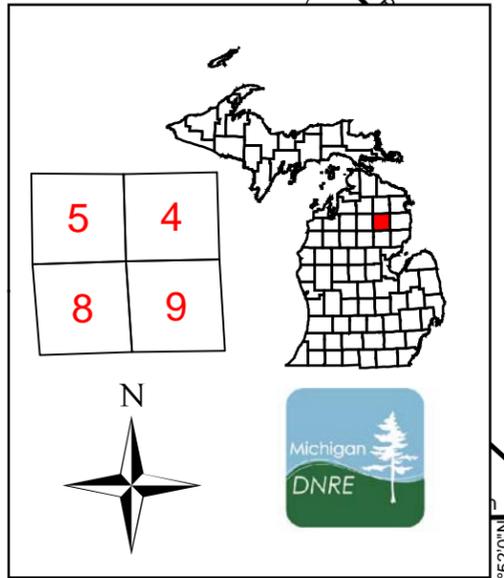
Bigger Ln

Hogback Ln

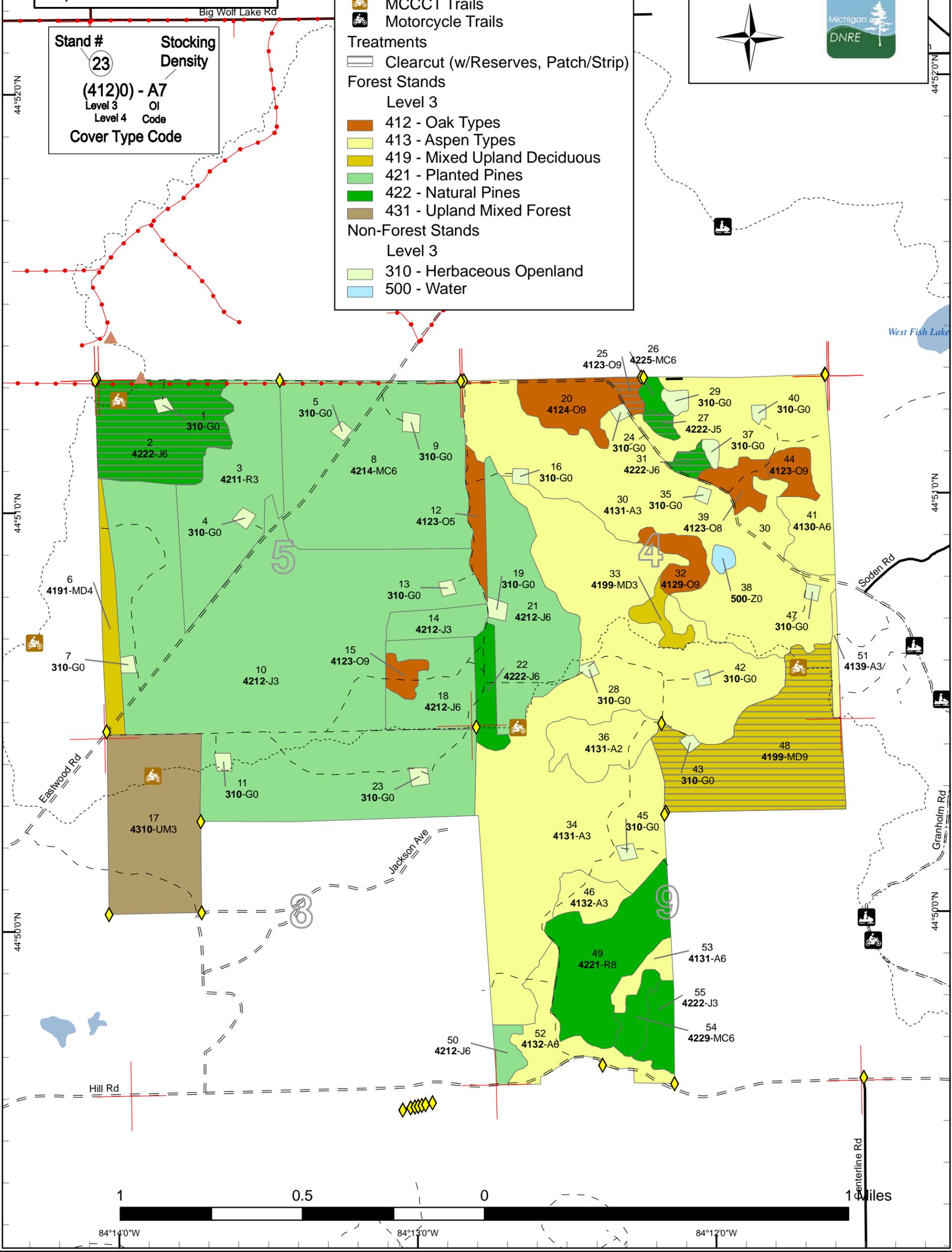
Compartment 24
 T28N, R02E, Sec. 4, 5, 8, 9
 County: Oscoda
 Unit: Grayling
 YOE: 2012
 Acres: 1,823 GIS Calculated
 Stand Examiner: Craig Farrer
 Map Revised: 9/09/2010
 Map Phase: Pre-Review

Legend

- RIs Corners
 - Miris Corners
 - Paved Roads
 - Gravel Roads
 - Poor Dirt Roads
 - Pipe
 - Trails
 - Berm
 - MCCCT Trails
 - Motorcycle Trails
- Treatments
- Clearcut (w/Reserves, Patch/Strip)
- Forest Stands
- Level 3
- 412 - Oak Types
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 431 - Upland Mixed Forest
- Non-Forest Stands
- Level 3
- 310 - Herbaceous Openland
 - 500 - Water



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



84°14'0"W

84°13'0"W

84°12'0"W

1

0.5

0

1 Miles

44°52'0"N

44°51'0"N

44°50'0"N

44°52'0"N

44°51'0"N

44°50'0"N

Stand Boundary Map

Compartment 24
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Legend

- RIs Corners
- Miris Corners
- Paved Roads
- Gravel Roads
- Poor Dirt Roads
- Pipe
- Trails
- Berm
- MCCCT Trails
- Snowmobile Trails
- Stand Boundaries

Forest Stands

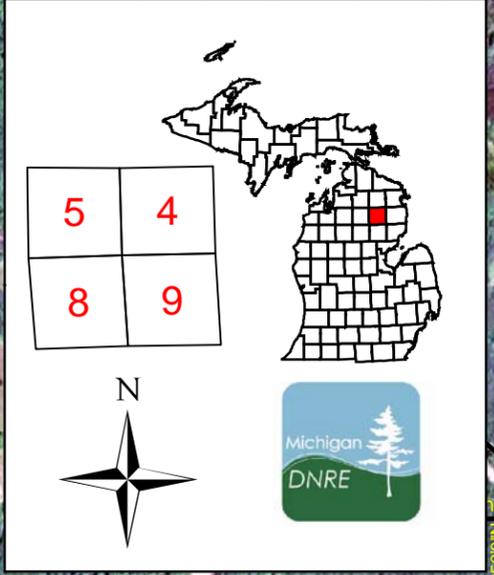
Level 3

- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 431 - Upland Mixed Forest

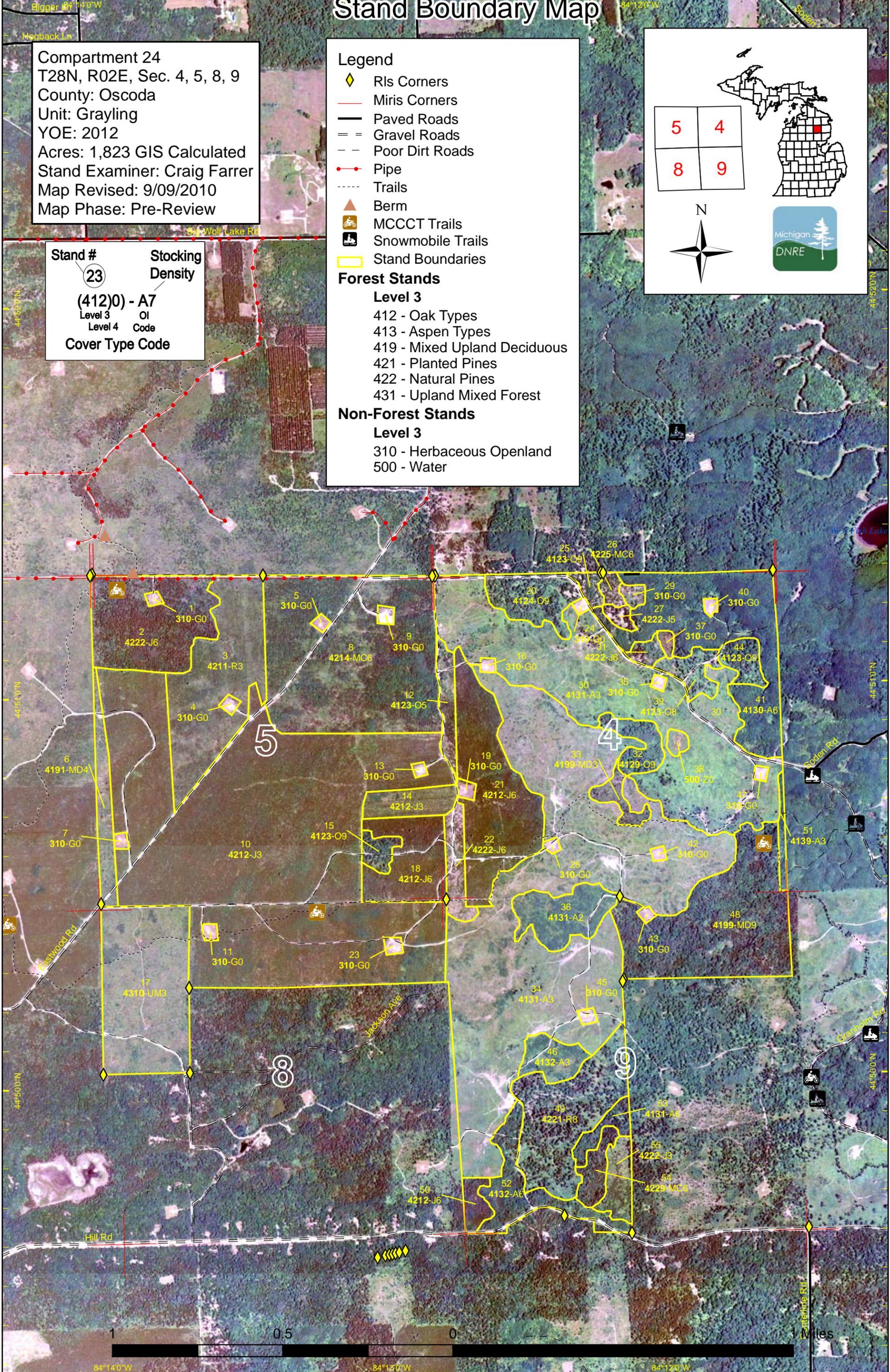
Non-Forest Stands

Level 3

- 310 - Herbaceous Openland
- 500 - Water



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



84°14'0" W 84°12'0" W 84°12'0" W

Table 1 – Total Acres by Cover Type and Age Class

Data updated before 2:00 PM



	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 +		Uneven Age
Aspen	0	301	208	84	28	8	0	0	0	0	0	0	0	0	0	629
Herbaceous Openland	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
Jack Pine	0	0	0	529	0	11	3	60	0	0	0	0	0	0	0	602
Mixed Upland Deciduous	0	0	7	17	0	0	0	0	0	0	94	0	0	0	0	118
Natural Mixed Pines	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	13
Oak	0	0	0	11	0	0	0	23	0	23	0	19	0	0	0	75
Planted Mixed Pines	0	0	0	147	0	0	0	0	0	0	0	0	0	0	0	147
Red Pine	0	0	0	73	0	0	0	57	0	0	0	0	0	0	0	130
Upland Mixed Forest	0	0	81	0	0	0	0	0	0	0	0	0	0	0	0	81
Water	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	28	301	296	860	41	19	3	139	0	23	94	19	0	0	0	1823



Table 2 – Proposed Treatment Summaries

Data updated before 2:00 PM

Grayling Mgt. Unit
Year of Entry 2012

Compartment 024
Total Compartment Acres: 1823

Acres by Treatment Type

Commercial Harvest - 165	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
Jack Pine	67	0	0	0	0	0	67
Mixed Upland Deciduous	94	0	0	0	0	0	94
Oak	4	0	0	0	0	0	4
Total	165	0	0	0	0	0	165

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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
2 72024002-Cut	59.6	42220 - Natural Jack Pine	High Density Pole	68	Harvest	Clearcut with Reserves	Natural Jack Pine, Mixed Deciduous	Cmpt. Review Proposal

Prescription Final harvest stand, but leave retention in the form of patches or scattered single trees.

Specs:

Other

Comments:

Next Steps: Trench and replant to Jack pine.

25 72024025-Cut	4.2	4123 - Red Oak	High Density Log	86	Harvest	Clearcut	Oak, Pine	Cmpt. Review Proposal
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Prescription Final harvest stand, but leave a few scattered trees along road for visual (this is not retention, but may or may not meet retention any way). Try

Specs: to pick good quality trees that will last. North side of stand needs private line.

Other

Comments:

Next Steps: Hope to get Oak regeneration mixed with other species such as Jack pine and Aspen.

27 72024027-Cut	3.1	42220 - Natural Jack Pine	Medium Density Pole	54	Harvest	Clearcut	Natural Jack Pine, Mixed Deciduous	Cmpt. Review Proposal
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Prescription Final harvest, but leave no retention due to size of the stand.

Specs:

Other

Comments:

Next Steps: Trench and replant to Jack Pine.

31 72024031-Cut	4.2	42220 - Natural Jack Pine	High Density Pole	48	Harvest	Clearcut	Natural Jack Pine, Mixed Deciduous	Cmpt. Review Proposal
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Prescription Final harvest, but leave no retention due to the size of the stand. Protect as much of the Oak regeneration in the east portion of the stand.

Specs:

Other

Comments:

Next Steps: Trench and replant to Jack Pine.

48 72024048-Cut	93.8	4199 - Other Mixed Upland Deciduous	High Density Log	90	Harvest	Clearcut with Reserves	Mixed Oak	Cmpt. Review Proposal
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Prescription Final harvest stand. Leave 4 to 5 2 acre patches scattered throughout the stand. Leave one of these patches in the northeast corner of the stand

Specs: to protect cycle trail.

Other

Comments:

Next Steps: Should get a mix of Aspen and Oak along with other species naturally.

**Total Treatment
Acreage Proposed: 164.8**



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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

Data updated before 2:00 PM

**Out of YOE -- Treatments
Prescribed with No Limiting Factor**

Year of Entry: 2012



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:

**Total Treatment
Acreage Proposed: 0**

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Grayling Mgt. Unit

5 – Forested Stands

Compartment: 024

Data updated before 2:00 PM

Year of Entry: 2012



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	42220 - Natural Jack Pine	High Density Pole	59.6	68		Mature Jack pine stand. Some scattered Oak in overstory. Could final harvest with retention.
3	42110 - Planted Red Pine	High Density Sapling	73.2	22		Red pine plantation.
6	4191 - Mixed Upland Deciduous with Conifer	Low Density Pole	17.0	25	1-50	Designated fuel break
8	42141 - Planted Mixed Pine, Mixed Deciduous	High Density Pole	146.8	28		Red pine plantation mixed with Jack pine and other deciduous species. Wildlife Division want the long term management for this stand to be Jack Pine.
10	42120 - Planted Jack Pine	High Density Sapling	389.0	22		
12	4123 - Red Oak	Medium Density Pole	10.5	23	1-50	Stand was part of some of the tornado damage. Oak and Jack pine with cherry.
14	42121 - Planted Jack Pine, Mixed Deciduous	High Density Sapling	14.0	22		Planted Jack Pine
15	4123 - Red Oak	High Density Log	6.2	88	51-80	Small Mature Oak stand with Aspen and Jack Pine mixed. Leave alone for diversity.
17	4310 - Pine, Oak Mix	High Density Sapling	80.6	18		Natural Jack pine mixed with deciduous species. Possibly planted with Jack pine. Jack pine / Oak.
18	42120 - Planted Jack Pine	High Density Pole	33.2	28		Planted Jack pine with deciduous species mix.
20	4124 - Red with White Oak	High Density Log	22.5	68	1-50	Red and White Oak stand with a mixed understory. Stand borders Granholm rd. Treated last entry year.
21	42121 - Planted Jack Pine, Mixed Deciduous	High Density Pole	68.2	21		Immature Jack pine stand.
22	42220 - Natural Jack Pine	High Density Pole	12.6	21		Immature Jack Pine with scattered open areas.
25	4123 - Red Oak	High Density Log	4.2	86	51-80	Stand borders Granholm Road and private to the north. Mature Oak stand with a mix of Aspen and Jack Pine.
26	42250 - Pine, Oak	High Density Pole	3.5	35	1-50	Small pocket of mature Jack Pine.
27	42220 - Natural Jack Pine	Medium Density Pole	3.1	54	1-50	New stand added. Mature jack pine with an opening within it.

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Grayling Mgt. Unit

5 – Forested Stands

Compartment: 024

Data updated before 2:00 PM

Year of Entry: 2012



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
30	4131 - Aspen, Oak	High Density Sapling	170.7	10		Aspen mixed deciduous stand. Stand was salvaged just before last entry year. Stand does have some scattered and patches of mature timber within it that was not salvaged. ORV trail runs through a portion of the stand.
31	42220 - Natural Jack Pine	High Density Pole	4.2	48	1-50	Mature Jack pine stand. The north east side of the stand has tornado damage that was not salvaged. Oak regen coming in.
32	4129 - Mixed Oak	High Density Log	12.3	86		Part of Oak stand that tornado did not destroy and was not salvaged. Red maple and Aspen may also be associated wwith the stand. Access to the stand would have to be built across young regeneration to get to it.
33	4199 - Other Mixed Upland Deciduous	High Density Sapling	7.1	12	1-50	Stand of poor quality Aspen Oak Red Maple and Upland brush left and not salvaged following wind storm damage.
34	4131 - Aspen, Oak	High Density Sapling	300.9	8		Stand was final harvested last entry year. Everything 6" and above was cut. ORV trail traverses through a portion of the north part of the stand.
36	4131 - Aspen, Oak	Medium Density	25.0	16		Immature Aspen stand mixed with other deciduous species.
39	4123 - Red Oak	Medium Density Log	10.4	100	1-50	Treated last entry year as a salvage cut following wind storm damage.
41	4130 - Aspen	High Density Pole	79.7	25		Aspen pole stand mixed with other deciduous species. Some of the areas are younger along Granholm Rd due to tornado damage.
44	4123 - Red Oak	High Density Log	8.7	100	81-110	Stand was salvaged after the tornado. Blow down was salvaged only. Regeneration scattered throughout the stand.
46	4132 - Aspen, Jack Pine	High Density Sapling	12.7	16		Immature Aspen, Jack pine and other deciduous species
48	4199 - Other Mixed Upland Deciduous	High Density Log	93.8	90	51-80	Oak/Aspen stand with other deciduous and pine spieces. Rolling terrain.
49	42210 - Natural Red Pine	Medium Density Log	56.8	67		Red pine and Oak with some White pine. Oak/Red maple/Aspen under story. Treated last entry year.
50	42121 - Planted Jack Pine, Mixed Deciduous	High Density Pole	6.7	42	111-140	Natural Jack pine mixed with pockets of Aspen. Similar to stand 19, but with Aspen with pockets of Jack pine. Stand borders Hill rd.
51	4139 - Aspen, Mixed Deciduous	High Density Sapling	4.0	21		Immature Aspen stand that is narrow and small in acerage. Stand was actually part of stand from compartment next door, to the east, last entry year.
52	4132 - Aspen, Jack Pine	High Density Pole	28.3	36	51-80	Aspen stand with mixed deciduous spieces and Jack pine.

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Grayling Mgt. Unit

5 – Forested Stands

Compartment: 024

Year of Entry: 2012



Data updated before 2:00 PM

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
53	4131 - Aspen, Oak	High Density Pole	7.7	41	51-80	Aspen mixed with other deciduous species. Some scattered pine throughout the stand. Stand is mostly kettle holes and ridges.
54	42290 - Natural Mixed Pine	High Density Pole	9.5	31	81-110	Older Red pine and some Oak mixed with younger Jack pine. Other deciduous species mixed. Rolling terrain and kettle holes.
55	42220 - Natural Jack Pine	High Density Sapling	11.7	25		Natural Jack pine stand (immature). Rolling terrain. May have been planted, but didn't see any furrows or rows.



Stand	Cover Type	Acres	Gen Cmts:
1	3105 - Mixed Upland Herbaceous	1.0	Antrim Oil/ Gas Well St Elmer 4-5
4	3105 - Mixed Upland Herbaceous	1.3	Antrim Oil/gas well St Elmer 6-5
5	3105 - Mixed Upland Herbaceous	1.1	Antrim Oil/Gas Well St Elmer 2-5
7	3105 - Mixed Upland Herbaceous	1.2	Antrim Oil/Gas Well St Elmer13-5
9	3105 - Mixed Upland Herbaceous	1.6	Antrim Oil/Gas Well St Elmer Injection Well and CPF for Elmer Field IA Project.
11	3105 - Mixed Upland Herbaceous	1.3	Antrim Oil/Gas Well St Elmer 3-8
13	3105 - Mixed Upland Herbaceous	1.0	Antrim Oil/Gas Well St Elmer 9-5
16	3105 - Mixed Upland Herbaceous	1.2	Antrim Oil/Gas well St Elmer 5-4
19	3105 - Mixed Upland Herbaceous	1.8	Antrim Oil/Gas Well St Elmer 12-4
23	3105 - Mixed Upland Herbaceous	1.6	Antrim Oil/Gas Well St Elmer 1-8
24	3105 - Mixed Upland Herbaceous	1.1	Antrim Oil/Gas Well St Elmer 3-4
28	3105 - Mixed Upland Herbaceous	1.1	Antrim Oil/Gas Well St Elmer 14-4
29	310 - Herbaceous Openland	2.7	Upland brush/grassy open.
35	3105 - Mixed Upland Herbaceous	1.0	Antrim Oil/Gas Well St Elmer 7-4
37	310 - Herbaceous Openland	1.8	Bog
38	50 - Water	2.5	Bog
40	3105 - Mixed Upland Herbaceous	1.1	Antrim Oil/Gas Well St 1-4
42	3105 - Mixed Upland Herbaceous	1.0	Antrim Oil/gas well St Elmer 15-4



Stand	Cover Type	Acres	Gen Cmts:
43	3105 - Mixed Upland Herbaceous	1.0	Antrim Oil/Gas Well St Elmer 6-9
45	3105 - Mixed Upland Herbaceous	1.3	Antrim Oil/Gas Well St Elmer 12-9. Contains noisy pump station.
47	3105 - Mixed Upland Herbaceous	1.0	Antrim Oil/Gas well St Elmer 9-4



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.

Data updated before 2:00 PM

Stand	SCA Type	SCA Name	Acres	Comments
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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.

Data updated before 2:00 PM

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

Conservation Area	Type	Description
SCA	Research and Military Areas	These areas provide facilities and lands specifically dedicated for research, or other purposes. They include the 5,847 acre Forest Fire Experiment Station, the 12,000 acre Houghton Lake Wildlife Research Area, the Beaver Islands Archipelago Wildlife Research Area (that includes most of Garden Island, all of High and Hog Islands, all state owned land on Beaver, South Fox and North Fox Islands), the Cusino Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Research Station, the 125 acre Wyman Nursery, and over 144,000 acres of Military Lands.