



**Gladwin Forest Management Unit
Compartment Review Presentation
Compartment # 73 - Entry Year: 2013
Compartment Acreage: 1109 GIS Calculated - County: Gladwin**

Revision Date: November 7, 2011.

Stand Examiner: Tim Gallagher, Forest Technician.

Legal Description: T18N R2E Sections 31 and 32.

Identified Planning Goals: None.

Management Goals: Manage the aspen stands to maintain a variety of age classes to support forest sustainability and to enhance wildlife habitat. Protect the non-forested wetland types.

Soil and Topography: The area varies from very poorly drained to medium drained soils and is mostly level with sandy sub soils. The major soil types are Croswell - AuGres associations. The area has a high water table with a few dry ridges. Most forested stands are seasonally wet and/or have wet access.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The state land that makes up this compartment is one contiguous block that is mostly surrounded by state forest land. There are two private parcels adjacent to the compartment; one 40 acre parcel that has been divided into four ten acre parcels. And one 160 acre parcel that has been divided into two separate parcels. The private land within the compartment is non-developed forest land used mostly for hunting. Very little forest management occurs on the private lands.

Unique, Natural Features: MNFI records indicate the following; records for slippershell and ellipse mussels found to N in association with Molasses River. Bald eagle to S. Grasshopper sparrow to SW. Potential for red-shouldered hawk. Potential for eagle, osprey, and great blue heron rookery. Potential for Blanding's turtle and massasauga. Potential for secretive locust in bogs. Potential for loon in lakes.

Archeological, Historical, and Cultural Features: There is one documented site within the compartment.

Special Management Designations or Considerations: None.

Watershed and Fisheries Considerations: Approximately 30% of this compartment is made up of non-forested wetland types (lowland brush, cattails, marsh and bog types). These wetland types support populations of waterfowl and many non-game species.

Wildlife Habitat Considerations: This compartment contains a variety of vegetative types. Both upland and lowland systems are present, making it suitable for a number of wildlife species. Game species likely to be present in this compartment include black bear, bobcat, raccoon, coyote, wild turkey, ruffed grouse, and white-tailed deer. Many bird species stand to benefit from the juxtaposition of lowland and upland habitats present in the compartment. These include common yellowthroat, yellow-rumped warbler, gray catbird, redbellied vireo, white-throated sparrow, hermit thrush, red-breasted nuthatch, ruffed grouse, and American woodcock. The compartment is easily accessible to hunters via Eastman Road and Highwood Road.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of lacustrine (lake) sand and gravel. The glacial drift thickness varies between 100 and 200 feet. Beneath the glacial drift are the Pennsylvanian Grand River and Saginaw Formations. The Saginaw Formation is used for clay/shale in other areas of the State. This area is predominantly sand, and gravel potential in the compartment is considered limited. Very little oil and gas exploration has occurred in this area, but a line of productive fields lies one mile to the southwest. South Billings Field, discovered in 1957, has produced 248,401 BO from the Dundee. Billings Field, 1950, has produced 946,334 BO primarily from the Detroit River Formation. All state lands are currently leased for oil and gas development or already in production in the compartment.

Vehicle Access: Access to most of the compartment is good via the county road system and state two tracks that are in place. Most of the state forest roads within the compartment are seasonally flooded and impassable during spring and/or raining wet periods.

Survey Needs: None.

Recreational Facilities and Opportunities: The Midland to Mackinac hiking trail runs through the compartment. The area receives moderate to heavy hunting pressure most of which is for deer, grouse and turkey.

Fire Protection: Low fire occurrence due to the forest cover type.

Additional Compartment Information: The Smith Siding Railroad Grade bi-sects the compartment. This is an abandoned railroad grade that is used to access most of this compartment from Eastman Road, a Seasonal County Road. Attempts have been made to improve the Smith Siding Grade in the past with little success; much of this grade road is seasonally very wet.

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 and details on the road access system**

Table 1 – Total Acres by Cover Type and Age Class

Gladwin Mgt. Unit

Compartment 073 Year of Entry 2013

Timothy Gallagher : Examiner



	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	65	278	120	0	0	0	27	0	0	0	0	0	0	0	490
Bog	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Herbaceous Openland	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Lowland Deciduous	0	0	0	0	17	0	7	147	46	62	0	0	0	0	0	278
Lowland Shrub	189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	189
Marsh	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
Mixed Upland Deciduous	0	0	0	0	0	0	0	33	0	0	0	0	0	0	0	33
Treed Bog	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
Total	308	65	278	120	17	0	7	206	46	62	0	0	0	0	0	1109



Table 2 – Proposed Treatment Summaries

Gladwin Mgt. Unit
Year of Entry 2013

Compartment 073
Total Compartment Acres: 1109

Acres by Treatment Type

Commercial Harvest - 27	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
Aspen		27	0	0	0	0	0	27
	Total	27	0	0	0	0	0	27

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	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
36	73073036-Cut	26.7	4139 - Aspen, Mixed Deciduous	High Density Pole	63	Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal

Prescription: Clear cut 2" spec. Mark scattered mature oak to leave for retention and mast. Also buffer small grass stand (stand 30) to meet retention guidelines. A mix of natural regeneration is expected. Would be a good option to speed up this harvest due to the age and condition of the aspen.

Other Comments: Part of sold timber sale last year of entry that was never cut. Timber sale "Off The Grade. Aspen is on the decline. For the most part the stand is upland however, parts are wet. Due to the age of the aspen and the soil conditions harvest on dry and/or frozen ground and during the dormant season to protect the soil and ensure the best possible regeneration.

Next Steps:

**Total Treatment
Acreage Proposed: 26.7**

**Table 4 -- Treatments Prescribed with
a Limiting Factor**



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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



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**



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4130 - Aspen	High Density Pole	26.2	25		Clear cut 1986. Overall decent regeneration.
2	6119 - Mixed Lowland Deciduous Forest	Low Density Pole	92.1	63	51-80	Selection harvest in 2007, all aspen, birch and marked maple & ash were cut. Cruised residual from 2007 sale was 60 sq. ft. This is a fairly wet lowland hardwood stand. Nice looking managed lowland hardwoods, 2007 partial harvest has resulted in aspen and red maple regeneration.
7	4130 - Aspen	Low Density Sapling	11.1	4		Aspen stand that was clearcut in 2007. Elevation of stand is slightly higher than surrounding stands. Stand is a ridge that is a couple feet higher than the surrounding stands. Fair aspen regeneration.
8	6119 - Mixed Lowland Deciduous Forest	Medium Density Pole	7.0	50	1-50	To wet for commercial harvest. Tag alder understory through out entire stand. Very wet (flooded 1/28/110) Swamp grass as ground cover.
12	6113 - Lowland Maple	High Density Pole	19.9	63	51-80	Wet stand with scattered small upland areas. Stand is heavy to red maple saps - poles. Stand is wetter at north end. Aspen component is falling apart. Inclusion of upland oak nob at south end of stand along old railroad grade.
13	4131 - Aspen, Oak	Medium Density	51.1	15		Clearcut 1996, all oak 6" DBH and less were left. Patchy regeneration starting to come along.
15	4131 - Aspen, Oak	Medium Density	122.5	16		Clearcut in 1995, all oak 6" DBH and less was left. Scattered patches of low wet ground did not regenerate well. A fair amount of this stand is low pockets of lowland brush (20% low ground)
16	4130 - Aspen	High Density Sapling	104.8	16		Clearcut 1995, all oak 6" DBH and less was left. Overall this stand has regenerated very well. There are some scattered low wet pockets (lowland brush) at the north end of the stand along the old railroad grade.
17	4139 - Aspen, Mixed Deciduous	Low Density Sapling	17.0	4		Clearcut 2007, all oak and white pine 6" DBH and less was left.
20	4130 - Aspen	Low Density Sapling	23.1	3		Clearcut 2008, all oak and white pine 6" DBH and less was left.
23	6119 - Mixed Lowland Deciduous Forest	High Density Pole	61.5	85	51-80	Wet stand, to wet for commercial harvest. Tag alder / willow understory through out entire stand. Poor quality hardwood. A few small pockets of slightly higher ground within stand.
28	4139 - Aspen, Mixed Deciduous	Low Density Sapling	14.2	3		Clearcut 2008. Decent aspen regeneration.
33	6115 - Lowland Ash	High Density Pole	45.6	70	51-80	Wet lowland hardwood stand. To wet for commercial harvest, tag alder in the understory. Trace of over mature aspen, stand is very brushy in spots with tag alder.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
35	4199 - Other Mixed Upland Deciduous	Medium Density Log	32.5	60	51-80	Part of sold timber sale last year of entry that was never cut. Timber sale, Off The Grade. This is a two aged stand. Overstory is over mature mixed oak that is of poor quality and vaule (40 BA overstory). The understory is a regenerating stand of mixed oak, red maple and aspen that varies in size from saps to poles. No treatment at this time, manage for the understory that is in place. The overstory is spares and poor quality. Stand is not all upland, has up and down topography. Fair amount of oak regeneration that ranges from saps - poles. Lots of wildlife activity within stand. Wildlife is digging/scrapping for acorn mast under the O7.
36	4139 - Aspen, Mixed Deciduous	High Density Pole	26.7	63	81-110	Part of sold timber sale last year of entry that was never cut. Timber sale "Off The Grade. Aspen is on the decline. For the most part the stand is upland however, parts are wet. Due to the age of the aspen and the soil conditions harvest on dry and/or fozen ground and during the dormant season to protect the soil and ensure the best possible regeneration.
37	4139 - Aspen, Mixed Deciduous	Medium Density	25.6	25		Clear cut 1986. Pretty wet site, mix of aspen, ash red maple and tag alder. Overall regen is fair to sparse.
40	4131 - Aspen, Oak	Medium Density Pole	8.6	25	1-50	Low stocking, sparse aspen, birch and northern pin oak. Scattered open areas and wet areas. Parts of stand appear to have been cut in the past, possible habittat cuts (no records). Sweet fern makes up a good portion of the ground cover. Aspen is poor quality.
42	6113 - Lowland Maple	High Density Pole	16.7	35	51-80	Low wet stand. Aspen is way over mature and falling apart (aspen is all but gone). Well stocked with red maple poles (saps/poles). Stand would not regenerate to aspen if clearcut. Stand has converted to red maple from aspen/red maple.
43	4130 - Aspen	High Density Sapling	59.6	25		Clear cut 1986. A3/L Mix of upland and low wet ground. Scattered pockets of pure tag alder. Inclusion of lowland hardwood type at west end/tip of stand 3 to 4 acres.
44	6119 - Mixed Lowland Deciduous Forest	Medium Density Pole	34.7	69	51-80	Overall this stand is pretty wet. Has pockets of upland. Soils appear to be mucky with drains and areas of marsh grass. What aspen remains is overmature and falling apart.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
3	6229 - Mixed lowland shrub	8.6	No	Unspecified	Mixed bog and tag alder.
4	3102 - Grass	1.3	No	Unspecified	Open grass stand.
5	6229 - Mixed lowland shrub	10.9	No	Unspecified	Mixed lowland brush stand. Areas of water, marsh grass, cattails, tag alder and dog wood.
6	6224 - Treed Bog	23.2	No	Unspecified	Tag alder and high bush blueberry/leather leaf. Scattered aspen, birch, and pin oak. Trees are scattered and of poor form and small diameter.
9	6220 - Alder/willow	14.1	No	Unspecified	
10	6224 - Treed Bog	6.6	No	Unspecified	
11	6220 - Alder/willow	17.3	No	Unspecified	
14	6225 - Bog	3.3	No	Unspecified	
18	6225 - Bog	5.8	No	Unspecified	
19	6230 - Cattail	17.7	No	Unspecified	
21	6230 - Cattail	6.8	No	Unspecified	
22	6229 - Mixed lowland shrub	9.5	No	Unspecified	
24	6229 - Mixed lowland shrub	6.1	No	Unspecified	
25	6220 - Alder/willow	9.2	No	Unspecified	
26	6225 - Bog	6.4	No	Unspecified	
27	6230 - Cattail	21.0	No	Unspecified	
29	6229 - Mixed lowland shrub	45.4	No	Unspecified	
30	3102 - Grass	1.0	No	Unspecified	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
31	6225 - Bog	4.6	No	Unspecified	
32	6239 - Mixed Emergent Wetland	4.4	No	Unspecified	
34	6229 - Mixed lowland shrub	9.3	No	Unspecified	
38	6229 - Mixed lowland shrub	5.2	No	Unspecified	
39	6229 - Mixed lowland shrub	36.4	No	Unspecified	
41	3102 - Grass	2.6	No	Unspecified	
45	6229 - Mixed lowland shrub	17.1	No	Unspecified	
46	3102 - Grass	14.6	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



8 – DEDICATED CONSERVATION AREA DETAILS

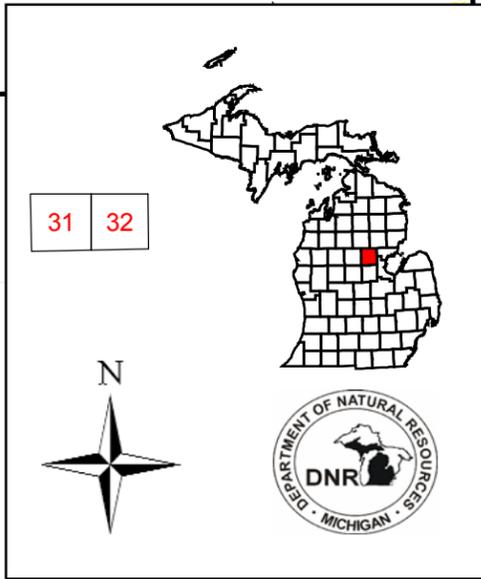
* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

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

Conservation Area	Type	Description
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Cover Type & Treatment Map

Compartment 73
 T18N, R02E, Sec. 31, 32
 County: Gladwin
 Unit: Gladwin
 YOE: 2013
 Acres: 1,109 GIS Calculated
 Stand Examiner: Tim Gallagher
 Map Revised: 10/26/2011
 Map Phase: Pre-Review



Stand #
 23
Stocking Density
 (4120) - A7
 Level 3 OI
 Level 4 Code
Cover Type Code

Legend

- Miris Corners
- Remonumented Section Corners
- ◇ Survey Corner
- Paved Roads
- County Gravel Roads
- - - Poor Dirt Roads
- - - Trail (Non-Recreation)
- - - Closed Roads
- Hiking Trails
- - - Hiking Trail
- State Forest Land
- - - Intermittent Stream
- Perennial Stream or River
- Lakes and Rivers

Treatments

- Clearcut (w/Reserves, Patch/Strip)

Forest Stands

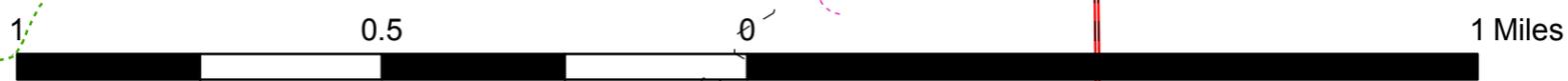
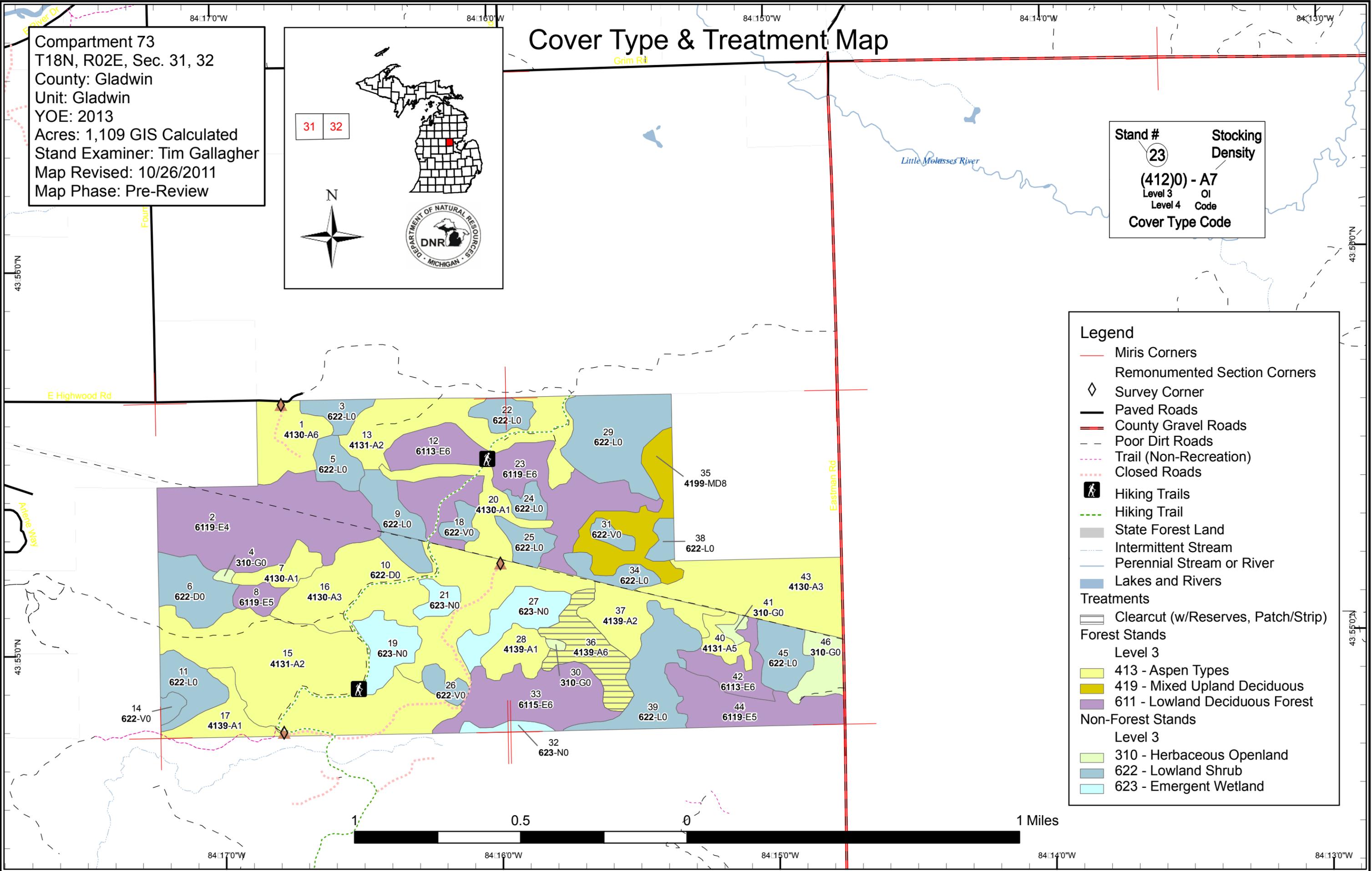
Level 3

- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 611 - Lowland Deciduous Forest

Non-Forest Stands

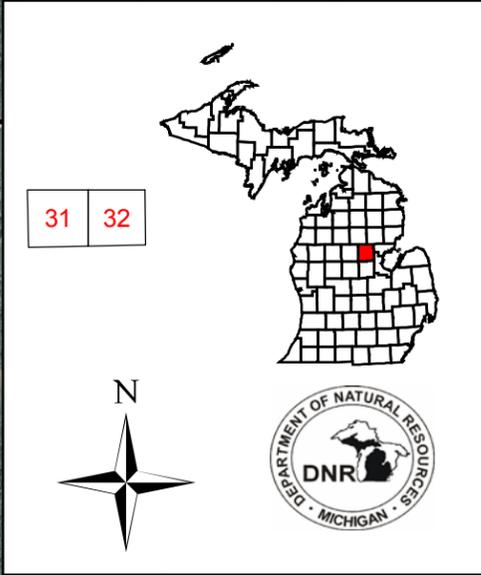
Level 3

- 310 - Herbaceous Openland
- 622 - Lowland Shrub
- 623 - Emergent Wetland



Stand Boundary Map

Compartment 73
 T18N, R02E, Sec. 31, 32
 County: Gladwin
 Unit: Gladwin
 YOE: 2013
 Acres: 1,109 GIS Calculated
 Stand Examiner: Tim Gallagher
 Map Revised: 10/26/2011
 Map Phase: Pre-Review



Stand #
 23
Stocking Density
 (4120) - A7
 Level 3 OI
 Level 4 Code
Cover Type Code

Legend

- Miris Corners
- + Remonumented Section Corners
- ◇ Survey Corner
- Paved Roads
- County Gravel Roads
- - - Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- 🚶 Hiking Trails
- Hiking Trail
- ▭ Stand Boundaries

Forest Stands

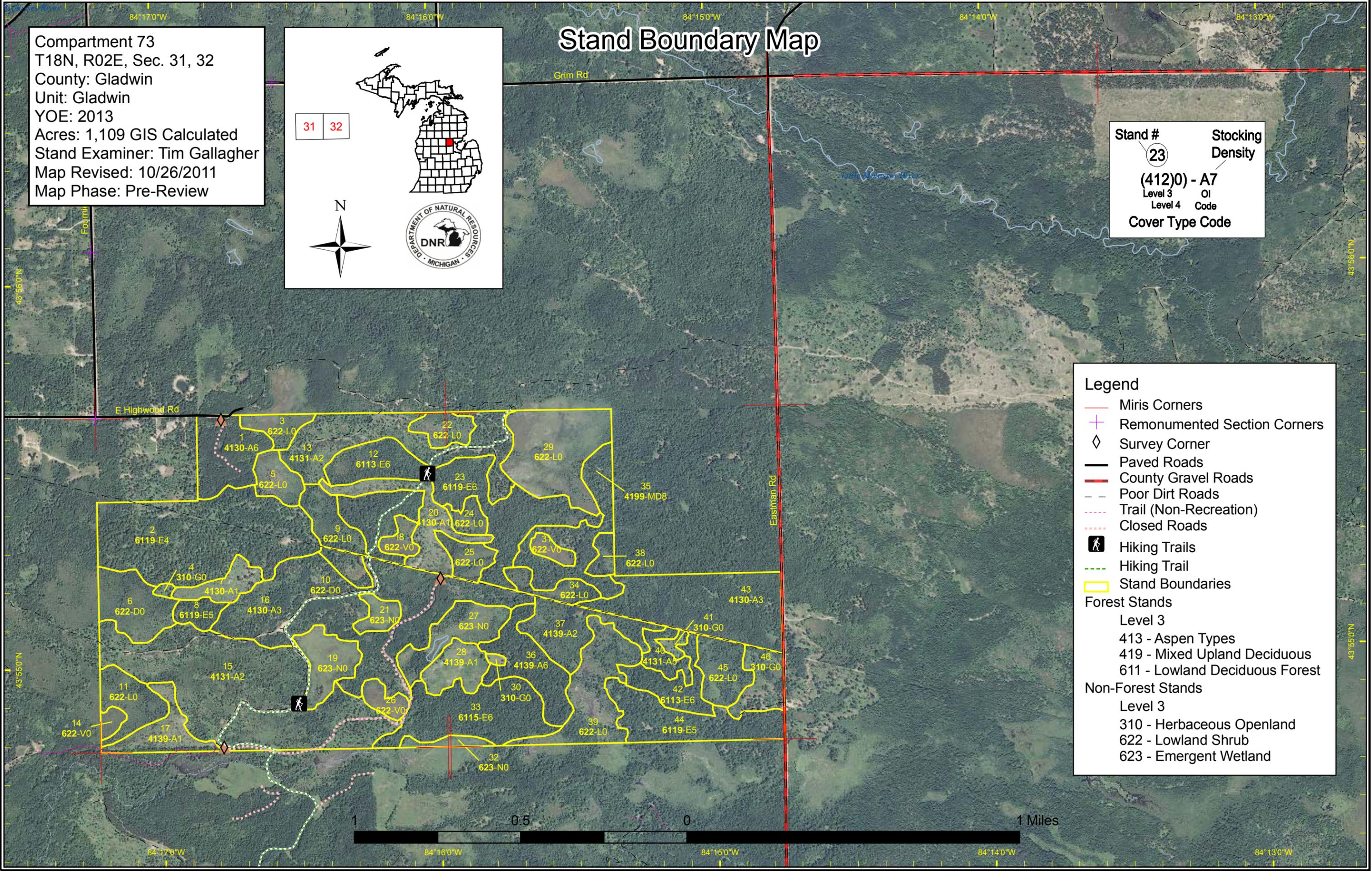
Level 3

- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 611 - Lowland Deciduous Forest

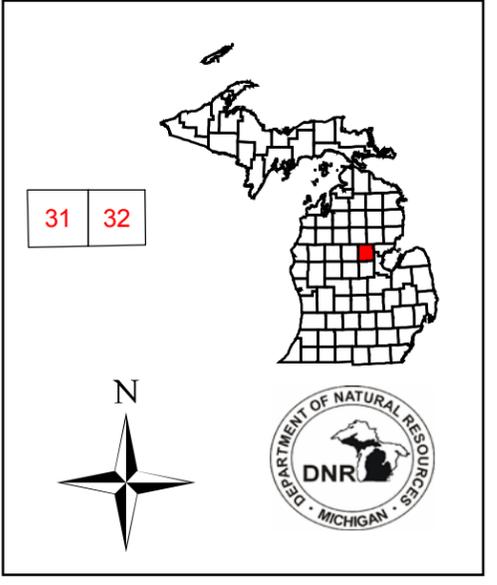
Non-Forest Stands

Level 3

- 310 - Herbaceous Openland
- 622 - Lowland Shrub
- 623 - Emergent Wetland



Compartment 73
 T18N, R02E, Sec. 31, 32
 County: Gladwin
 Unit: Gladwin
 YOY: 2013
 Acres: 1,109 GIS Calculated
 Stand Examiner: Tim Gallagher
 Map Revised: 10/26/2011
 Map Phase: Pre-Review

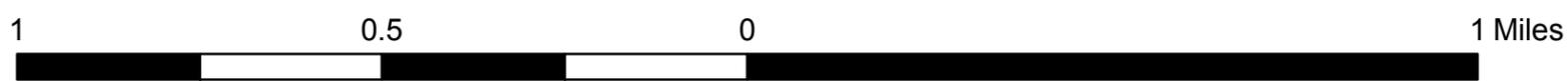
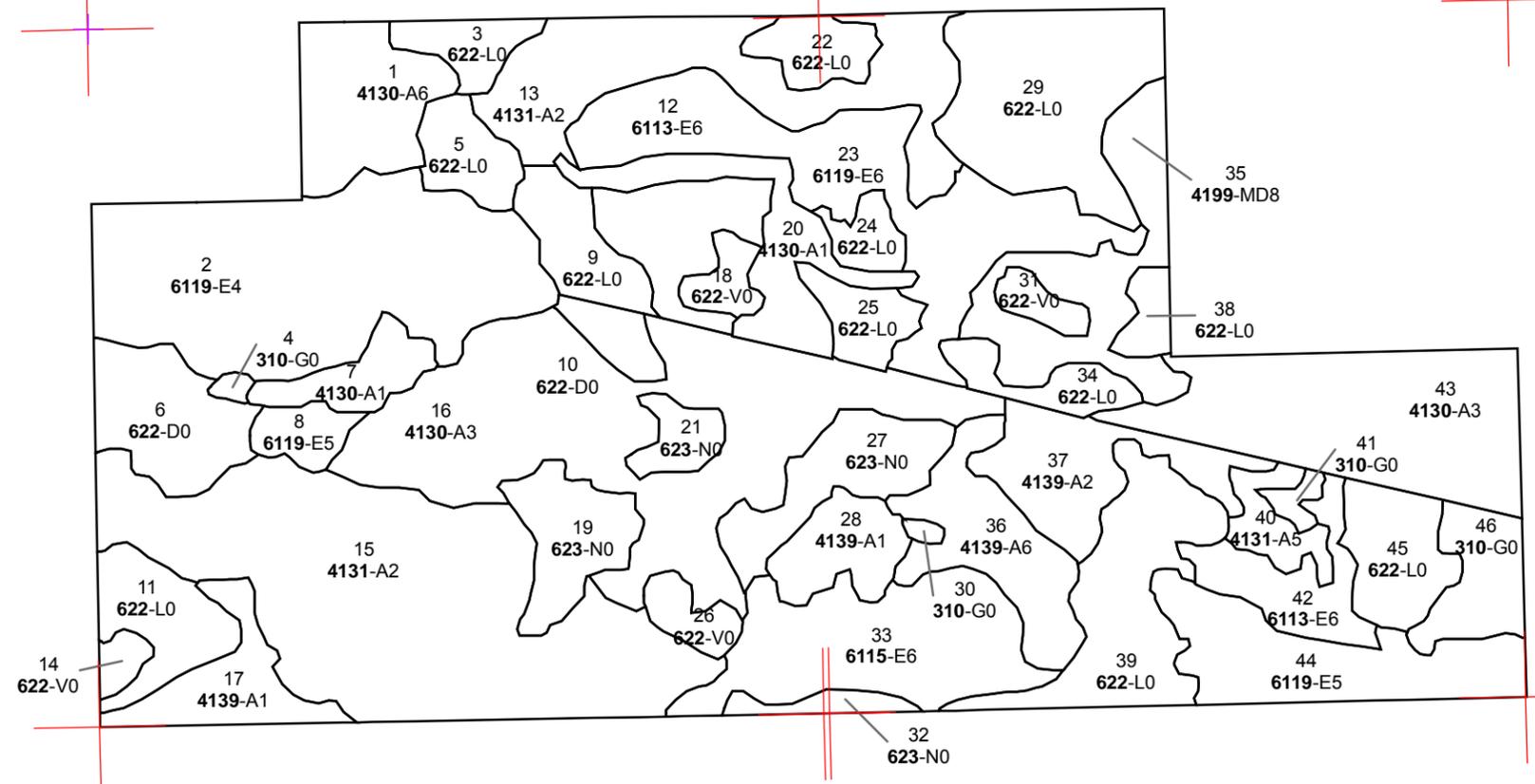


Dedicated & Proposed Special Conservation Area Map

Stand #
 23
Stocking Density
 (4120) - A7
 Level 3 OI
 Level 4 Code
Cover Type Code

Legend

- Miris Corners
- + Remonumented Section Corners
- Proposed Special Conservation Areas
- ▨ SCA - Special Conservation Area
- ▩ SCA Removal
- ▭ Stand Boundaries
- Forest Stands
- Level 3
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 611 - Lowland Deciduous Forest
- Non-Forest Stands
- Level 3
- 310 - Herbaceous Openland
- 622 - Lowland Shrub
- 623 - Emergent Wetland



43°56'0"N

43°56'0"N

43°55'0"N

43°55'0"N

84°17'0"W

84°16'0"W

84°15'0"W

84°14'0"W

84°13'0"W

84°17'0"W

84°16'0"W

84°15'0"W

84°14'0"W

84°13'0"W