



**Shingleton Forest Management Unit
Compartment Review Presentation
Compartment #189 Entry Year: 2002
Compartment Acreage: 1938 County: Alger**

Revision Date: 9-23-2010

Stand Examiner: Jesse Bramer

Legal Description: 46N 17W Sections: 23, 24, 25, 26

Identified Planning Goals ('Management Area' or 'RMU', if applicable): Cusino Complex

Management Goals: To manage for Wildlife habitat (Petrel deeryard) and timber production while providing recreational opportunities to the public.

Soil and Topography: Most of the compartment consists of relatively flat ground between Star and Commencement creeks on the Cusino Swamp Land Type Association (LTA); some areas in the southern part lie on the Shingleton Fen LTA. The majority of this compartment is low and relatively wet, allowing winter-only logging.

Ownership Patterns, Development, and Land Use in and Around the Compartment: There are a number of homes and other structures on the private lands along Star Siding Rd.

Unique, Natural Features: Dwarf billbery (*Vaccinium cespitosum*, state threatened plant), and Northern blue butterfly (*Lycaeides idas nabokovi*, state threatened) could occur in this compartment. Wood turtle (*Clemmys insculpta*, state special concern) could occur in and along Star Creek and Commencement Creek. There is also potential for nesting red-shouldered hawk (*Buteo lineatus*, state threatened) and Northern goshawks (*Accipiter gentilis*, state special concern) to occur throughout this compartment in stands of northern hardwoods, mature aspen, mixed swamp conifer, and swamp hardwoods.

Archeological, Historical, and Cultural Features:

Special Management Designations or Considerations: This compartment is designated for deeryard management.

Watershed and Fisheries Considerations: Fisheries Values - Good. All of the waters of the Star Creek system are classified Second Quality Cold Water, capable of supporting native brook trout. Commencement Creek, however, is classified Second Quality Warm Water, and there is no need to protect it from encroachment by beaver. Protection from increased sand bedload, however, is still a high priority.

Wildlife Habitat Considerations: This compartment is located within the Grand Marais Sandy End Moraine and Outwash sub-subsection. The average growing season is approximately 120 days. The extreme minimum winter temperature generally reaches approximately -35 degrees F. Snowfall in this compartment averages 170 to 180 inches annually. A review of the General Land Office survey notes shows the presettlement vegetation was dominated by sugar maple, hemlock, yellow birch, and beech in the uplands. White pine was also mentioned. Lowlands contained predominantly cedar with a mixture of tamarack, and black spruce. The compartment is bounded on the west by Star creek and on the east by Commencement creek. As such windthrow and beaver ponding were likely the primary forms of natural disturbance. Although the structure is most likely different, the species composition of the forest appears to be quite

similar to that of presettlement times. This compartment constitutes the eastern portion of the Petrel deeryard. As such, habitat management goals are centered on providing food and shelter for deer while at the same time considering other forest interior species as well. With the exception of gray wolves that prey on deer, there are no known endangered, threatened, or special concern species in this compartment. Other wildlife species of interest within this compartment include Blackburnian warbler, gray jay, fisher, marten, black bear, and bobcat.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of medium-textured glacial till and peat and muck. There is insufficient data to determine the glacial drift thickness. The Ordovician Prairie du Chien (PdC) and Black River Formation subcrop below the glacial drift. The PdC and Black River are used for stone/dolomite. The nearest gravel pit is in the SW NW of Section 25. There appears to be gravel potential on State lands along the north compartment boundary.

Vehicle Access: Access to this compartment is from M-28 via Star Siding Rd., which is a county road. Access can also be from the North along the Petrel Road.

Survey Needs: This compartment may need survey work in SWSE in Section 26 and in the North half of SW corner in Section 24.

Recreational Facilities and Opportunities: This compartment has comparatively good hunting for deer and grouse.

Fire Protection: Due to the wetness and timber type, fire is not a major concern within this compartment, but the wet ground may limit access to many areas in the event of a fire.

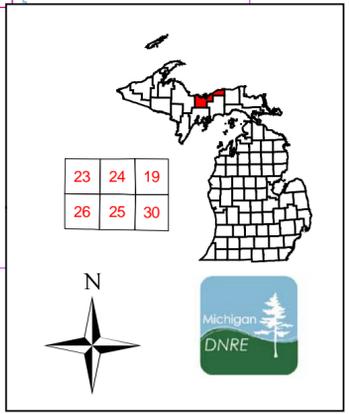
Additional Compartment Information:

- **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**

Cover Type & Treatment Map

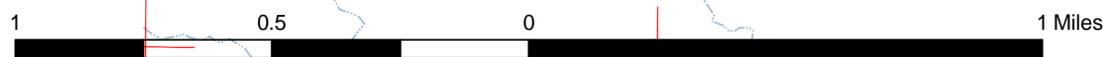
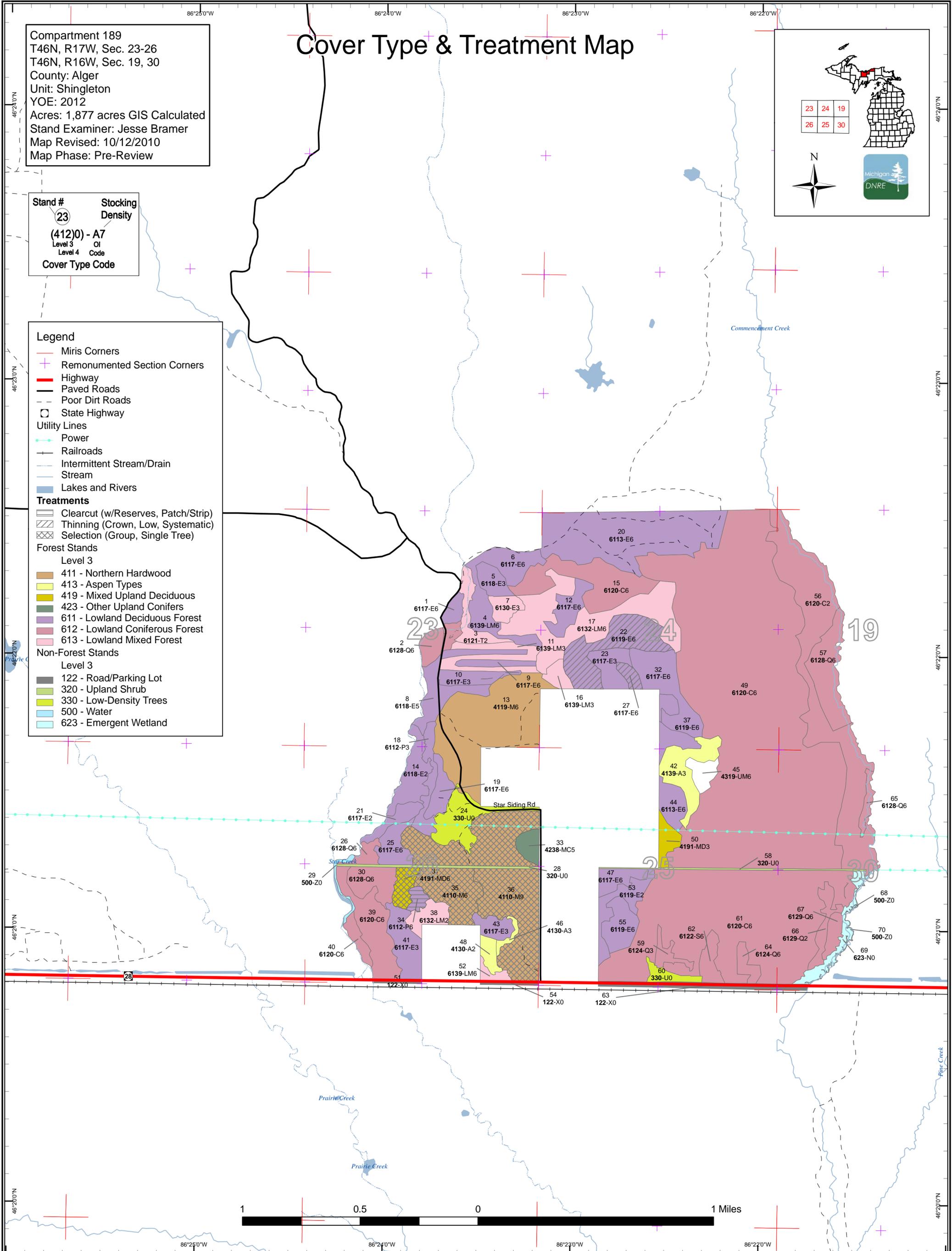
Compartment 189
 T46N, R17W, Sec. 23-26
 T46N, R16W, Sec. 19, 30
 County: Alger
 Unit: Shingleton
 YOE: 2012
 Acres: 1,877 acres GIS Calculated
 Stand Examiner: Jesse Bramer
 Map Revised: 10/12/2010
 Map Phase: Pre-Review



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

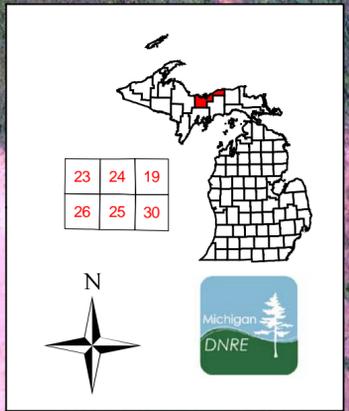
Legend

- Miris Corners
- Remonumented Section Corners
- Highway
- Paved Roads
- Poor Dirt Roads
- State Highway
- Utility Lines
 - Power
 - Railroads
 - Intermittent Stream/Drain
 - Stream
 - Lakes and Rivers
- Treatments**
 - Clearcut (w/Reserves, Patch/Strip)
 - Thinning (Crown, Low, Systematic)
 - Selection (Group, Single Tree)
- Forest Stands**
 - Level 3
 - 411 - Northern Hardwood
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 423 - Other Upland Conifers
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest
 - 613 - Lowland Mixed Forest
- Non-Forest Stands**
 - Level 3
 - 122 - Road/Parking Lot
 - 320 - Upland Shrub
 - 330 - Low-Density Trees
 - 500 - Water
 - 623 - Emergent Wetland



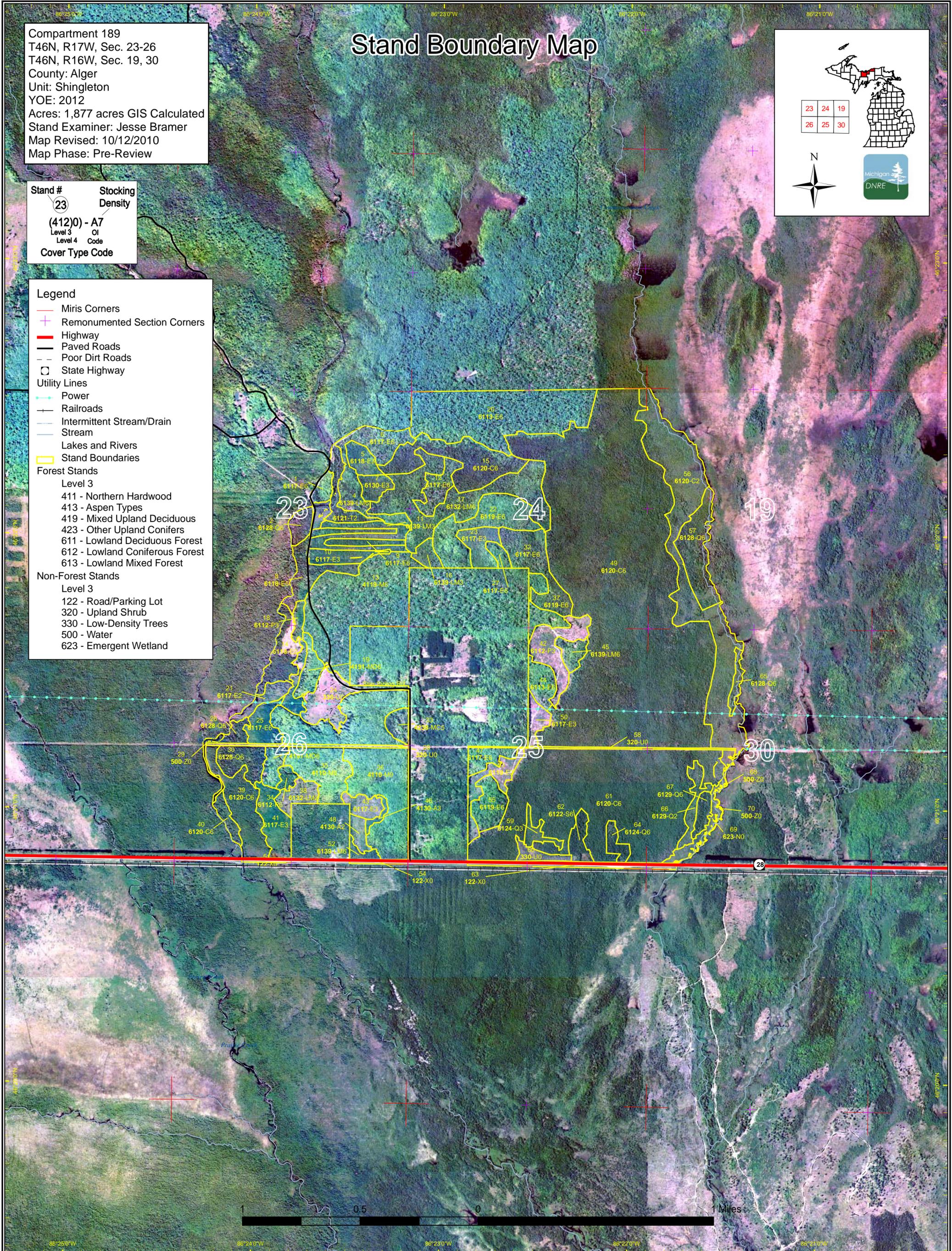
Stand Boundary Map

Compartment 189
 T46N, R17W, Sec. 23-26
 T46N, R16W, Sec. 19, 30
 County: Alger
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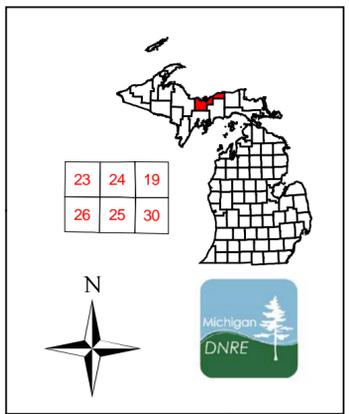
Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code

- Legend**
- Miris Corners
 - ⊕ Remonumented Section Corners
 - Highway
 - Paved Roads
 - - - Poor Dirt Roads
 - State Highway
 - Utility Lines
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Dedicated & Proposed Special Conservation Area Map

Compartment 189
 T46N, R17W, Sec. 23-26
 T46N, R16W, Sec. 19, 30
 County: Alger
 Unit: Shingleton
 YOE: 2012
 Acres: 1,877 acres GIS Calculated
 Stand Examiner: Jesse Bramer
 Map Revised: 10/12/2010
 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
 - Stand Boundaries
 - Proposed Special Conservation Areas
 - ▨ SCA - Special Conservation Area
 - ▩ SCA Removal
 - Dedicated Special conservation Areas
 - Cold Water Streams
 - Deer Wintering Areas
 - Forest Stands
 - Level 3
 - 411 - Northern Hardwood
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 423 - Other Upland Conifers
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest
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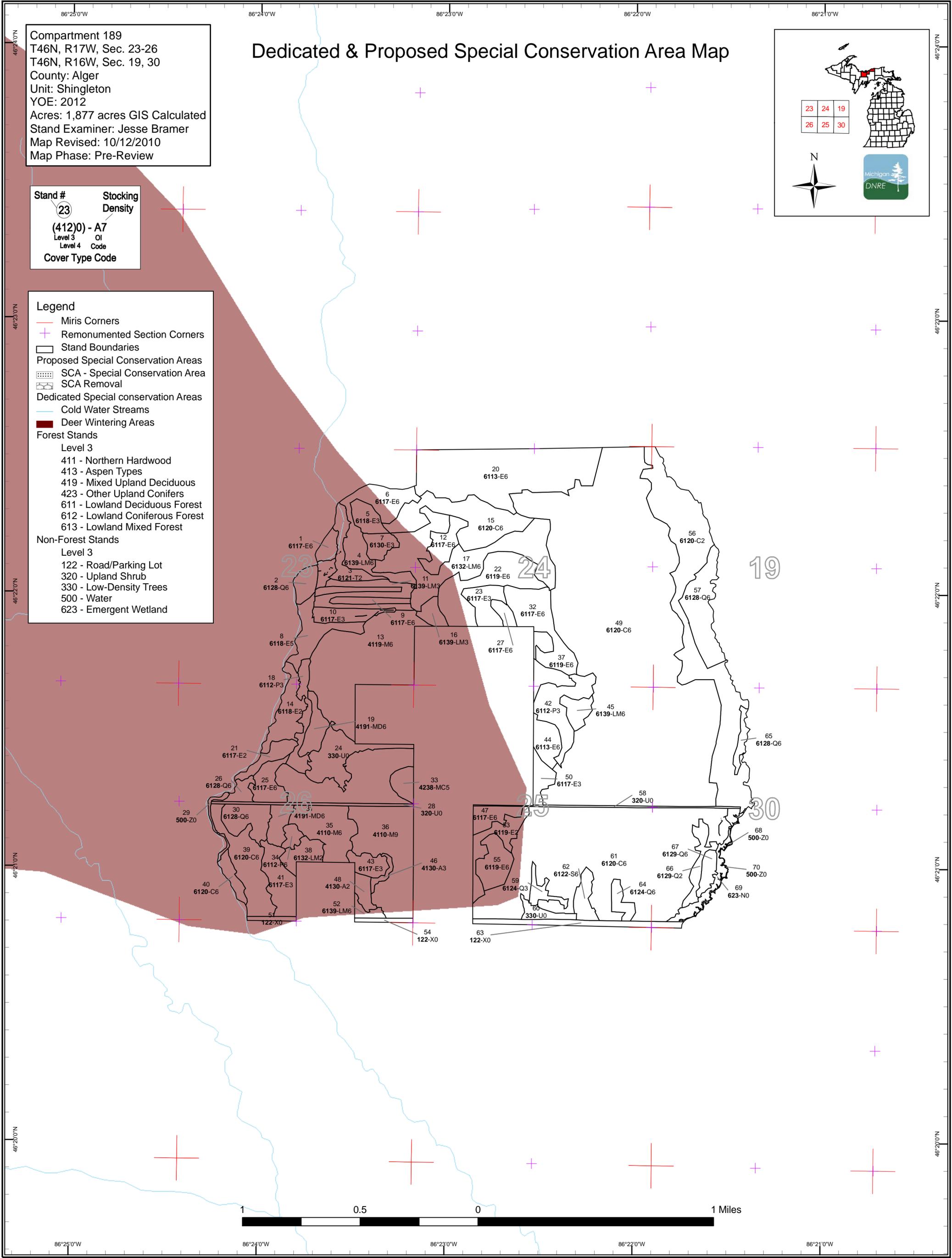


Table 1 – Total Acres by Cover Type and Age Class

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	24	6	3	0	0	0	0	0	0	0	0	0	0	0	33
Cedar	0	0	0	0	0	0	0	0	0	0	0	855	44	6	0	906
Low-Density Trees	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
Lowland Aspen/Balsam Poplar	0	0	13	0	0	4	0	0	0	0	0	0	0	0	0	17
Lowland Conifers	0	0	0	0	0	12	0	45	6	16	0	6	8	0	0	93
Lowland Deciduous	0	34	17	79	31	0	75	155	0	0	6	31	0	0	0	428
Lowland Mixed Forest	0	11	0	0	26	0	10	0	0	0	0	0	70	13	0	130
Lowland Spruce/Fir	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	9
Marsh	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Mixed Upland Deciduous	0	8	0	0	0	9	0	0	0	0	0	0	0	0	0	17
Northern Hardwood	0	0	0	0	0	0	138	92	0	0	0	0	0	0	0	230
Tamarack	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
Upland Conifers	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	7
Upland Mixed Forest	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8
Upland Shrub	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Urban	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Water	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	76	77	36	82	69	34	223	300	6	16	6	892	122	19	0	1957



Table 2 – Proposed Treatment Summaries

Data updated before 2:00 PM

Shingleton Mgt. Unit
Year of Entry 2012

Compartment 189
Total Compartment Acres: 1957

Acres by Treatment Type

Commercial Harvest - 193	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
Lowland Aspen/Balsam Poplar	4	0	0	0	0	0	4
Lowland Deciduous	0	0	0	0	43	0	43
Mixed Upland Deciduous	0	9	0	0	0	0	9
Northern Hardwood	0	138	0	0	0	0	138
Total	4	146	0	0	43	0	193



Data updated before 2:00 PM

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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
22 41189022-Cut	38.2	6119 - Mixed Lowland Deciduous Forest	High Density Pole	54	Harvest	Systematic Thinning	Mixed Lowland Deciduous Forest	Cmpt. Review Proposal

Prescription: Treatment= Thin this stand to around 80 BA. Maintain the species diversity. Creat regeneration openings throughout.

Specs: Long term MO= Create opportunities for and enhance existing stand regeneration.
Retention= Retain wildlife trees, seed trees, and species diversity. Reserve hemlock, cedar, and oak.

Other: Lowland area that may be wet in portions.

Comments:

Next Steps:

27 41189027-Cut	4.4	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	65	Harvest	Systematic Thinning	Lowland Deciduous, Mixed Coniferous	Cmpt. Review Proposal
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Prescription: Treatment= Thin this stand to around 80 BA where possible. Maintain the species diversity. Creat regeneration openings throughout.

Specs: Long term MO= Create opportunities for and enhance existing stand regeneration.
Retention= Retain wildlife trees, seed trees, and species diversity. Reserve hemlock and cedar.

Other: Lowland are that may have wet portions seasonally.

Comments:

Next Steps:

31 41189031-Cut	8.7	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	48	Harvest	Single Tree Selection	Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal
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Prescription: Treatment= Single tree harvest this stand retaining 80 BA. Maintain the species diversity. Creat regeneration openings throughout.

Specs: Long term MO= Create opportunities for and enhance existing stand regeneration.
Retention= Retain wildlife trees, seed trees, and species diversity. Reserve hemlock, cedar, and any oak.

Other:

Comments:

Next Steps:

34 41189034-Cut	4.2	6112 - Lowland Aspen	High Density Pole	42	Harvest	Clearcut with Reserves	Lowland Aspen	Cmpt. Review Proposal
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Prescription: Treatment= Harvest all species except any hemlock and cedar.

Specs: Long term MO= Stand regeneration of aspen, other mixed upland species and conifer.
Retention= Leave all hemlock, submerchantable trees, and cedar.

Other: Stand adjacent to 2004 clearcut in stand 38.

Comments:

Next Steps:

35 41189035-Cut	28.9	4110 - Sugar Maple Association	High Density Pole	58	Harvest	Single Tree Selection	Sugar Maple Association	Cmpt. Review Proposal
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Prescription: Treatment= Single tree harvest this stand retaining 80 BA. Maintain the species diversity. Creat regeneration openings throughout.

Specs: Long term MO= Create opportunities for and enhance existing stand regeneration.
Retention= Retain wildlife trees, seed trees, and species diversity. Reserve any cedar, hemlock, and oak.

Other:

Comments:

Next Steps:

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Data updated before 2:00 PM

	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
36	41189036-Cut	108.8	4110 - Sugar Maple Association	High Density Log	58	Harvest	Single Tree Selection	Sugar Maple Association	Cmpt. Review Proposal

Prescription: Treatment= Single tree harvest this stand retaining 80 BA. Maintain the species diversity. Create regeneration openings throughout.

Specs: Long term MO= Create opportunities for and enhance existing stand regeneration.
Retention= Retain wildlife trees, seed trees, and species diversity. Reserve hemlock, cedar, and oak.

Other

Comments:

Next

Steps:

**Total Treatment
Acreage Proposed: 193.2**



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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

Total Treatment
Acreage Proposed: 0



Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
41039_OutOfY OE-Cut	14.6				Harvest	Clearcut with Reserves	Natural Pine, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription:</u> Cut all trees except hemlock and oak. Leave a few red pine and white pine for seed.								
<u>Specs:</u>								
<u>Other Comments:</u> Access to this stand will involve the installation of a temporary bridge. This could be built and placed by the logger west of this stand. Winter havest may be needed. Survey work may be needed. There is a creek / drainage located in southern part of stand, it runs east/west. Buffer 50 feet. Buffer Smith creek 100 feet. These will be the retention areas. East edge of stand has some cedar. Cedar can be cut, but sale boundary should exclude the very dense patches.								
<u>Next Steps:</u> Plant red pine on ridges to maintain component. Low ground should regenerate to mixed species. Acceptable management objectives includes any species mixture currently found onsite.								
41049_OutOfY OE-Cut	15.3				Harvest	Single Tree Selection	Natural Red Pine	Cmpt. Review Proposal
<u>Prescription:</u> Cut all species except red pine ,oak, white pine, and hemlock. Red pine and white pine should be marked. Create regeneration holes where available and thin thicker areas of poles.								
<u>Specs:</u>								
<u>Other Comments:</u> See MNFI comments. Winter harvest will be needed due to road conditions into treatment area. Buffer on Walsh Ditch should be placed at the bottom of spoils. Protect existing red pine and white pine regeneration.								
<u>Next Steps:</u> Natural regeneration of red pine, jack pine, and white pine is acceptable. Plant red pine if regeneration fails.								
41088_OutOfY OE-Cut	2.3				Harvest	Shelterwood	Natural Red Pine	Cmpt. Review Proposal
<u>Prescription:</u> Mark red pine and white pine to 50 sq. ft. basal area to thicken crowns and prepare for regeneration harvest next year of entry. Cut all other species except hemlock and oak.								
<u>Specs:</u>								
<u>Other Comments:</u> Set up treatment as soon as it is approved at compartment review in order to combine it into one timbersale with Comparment 88, stand 43. No additional retention, small stand.								
<u>Next Steps:</u> Evaluate stand next year of entry for possible regeneration havest. Try to maintain management objective of natural red pine.								
41118_OutOfY OE_1-Cut	8.6				Harvest	Crown Thinning	Natural Red Pine	Cmpt. Review Proposal
<u>Prescription:</u> Cut all Jack Pine and mark Red and White Pine to 90 BA								
<u>Specs:</u>								
<u>Other Comments:</u> Cut with stand 34 comp 117								
<u>Next Steps:</u>								
41179_OutOfY OE-Cut	4.2				Harvest	Single Tree Selection	Sugar Maple Association	Cmpt. Review Proposal
<u>Prescription:</u> Cut to 80 SF using selection system. Release crop trees using the complete marker as a guide, mark for best tree in place. This stand has some species variation across it, thin to improve diversity favor retention of mesic confers. In areas of beech use beach bark marking guidelines. Place gaps in areas of less shade tolerant species. Cut aspen clones for aspen regeneration. Leave some single aspen trees where possible for soft snags.								
<u>Specs:</u>								
<u>Other Comments:</u> Acceptable regeneration is a mix of hardwood species including Sugar maple, Red maple, Basswood, Black Cherry, Yellow Birch, Aspen, White Birch, Hemlock and White Pine								
<u>Next Steps:</u>								
Total Treatment Acreage Proposed:		45.1						



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	5.5	90	81-110	Mostly pole sized maple stand in the northern portion with a transition to birch/aspens in the southern part. There are pockets of cedar present.
2	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	7.6	110	81-110	Stand contains limiting factors : INFLUENCE ZONES , DEER YARDS , WATER/BMPS.
3	6121 - Tamarack	Medium Density	4.5	37	1-50	This stand contains treatment limiting factors: Deer yard and water quality/bmps. The stand is very wet with a lot of young tamarack. Star Creek flows through a portion of it.
4	6139 - Mixed Lowland Forest	High Density Pole	12.6	130	51-80	Stand contains treatment limiting factors: Deer yard and water quality. Star Creek flows through this stand.
5	6118 - Lowland Deciduous with Cedar	High Density Sapling	9.1	34	1-50	Stand contains mostly sapling size aspen with cedar.
6	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	33.4	29	81-110	This stand contains a mix of conifer and maple. The stand transitions from a conifer component to a deciduous one. It was selective harvested in 2003-2005 TS # 028-02.
7	6130 - Fir, Aspen, Maple	High Density Sapling	7.8	34	1-50	This stand contains small diameter trees, mixture of deciduous trees and conifer trees. Aspen is also present with paper birch.
8	6118 - Lowland Deciduous with Cedar	Medium Density Pole	18.3	63	81-110	A LOT OF WATER . MOSTLY SAPLING SIZE BLACK ASH WITH CEDAR/MAPLE . Primarily balsam fir in understory. Limiting Factors: Influence zones, deer yards, water quality/bmps.
9	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	11.2	37	1-50	Stand has been cut in the past with the neighboring stands. Stand contains a fairly equal mix of aspen, birch, and red maple. Fir, white pine, and spruce are present also.
10	6117 - Lowland Deciduous, Mixed Coniferous	High Density Sapling	10.6	37	1-50	Stand contains a mix of red maple, aspen, birch, fir, white pine, and spruce. Deciduous species seem to be the majority.
11	6139 - Mixed Lowland Forest	High Density Sapling	18.6	37	1-50	This stand is a mix of birch, aspen and red maple over conifer regeneration, which appears to be primarily balsam fir.
12	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	13.1	54	81-110	Stand was thinned in 2003-2005. It contains mostly hemlock, large over mature yellow birch, and red maple.
13	4119 - Mixed Northern Hardwoods	High Density Pole	91.9	65	51-80	A hardwood stand on higher ground. A lot of sugar maple was taken out in the last harvest in 2003-2005. TS#028-02. Understory mainly balsam fir with stunted hardwood regeneration.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
14	6118 - Lowland Deciduous with Cedar	Medium Density	19.2	3	51-80	Harvested in 2005-2008. Everything was cut except hemlock, white pine, and aspen. 50-100 ft. bufferstrip was left along Star Creek. Stand is prescribed to be handplanted with cedar seedlings, and aspen regeneration is discouraged, but acceptable. Single clumps of cedar were left with some birch, spruce, and red maple scattered about. Conifer regeneration is flourishing.
15	6120 - Lowland Cedar	High Density Pole	43.8	110	171-200	Stand contains medium to large diameter cedar with a mix of lowland deciduous trees.
16	6139 - Mixed Lowland Forest	High Density Sapling	6.2	55	1-50	Stand contains a mix of sapling sized deciduous species, with some conifer species mixed in.
17	6132 - Mixed Lowland Forest with Cedar	High Density Pole	70.3	110	81-110	VARIOUS DENSITIES/SIZES OF CEDAR WITH A MIX OF SPRUCE/FIR AND MAPLE/ASH/YB.
18	6112 - Lowland Aspen	High Density Sapling	12.6	19	1-50	Stand contains sapling sized aspen with mix of fir, spruce, red maple, and cherry regeneration.
19	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	10.3	63	81-110	Variable densities and composition in this stand; located on a downslope between upland hardwoods (stand 13) to the east and lowland types along Star Creek to the west. Understory is heavy with fir.
20	6113 - Lowland Maple	High Density Pole	96.3	63	51-80	Stand was selective harvested in 2003-2005. Composition is variable between lowland hardwoods and conifers with hardwoods being more dominant. Conifer regeneration is prevalent with balsam fir being the majority.
21	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density	8.6	12		Stand contains mostly sapling sized aspen with scattered mature conifer species.
22	6119 - Mixed Lowland Deciduous Forest	High Density Pole	38.2	54	141-170	A lowland deciduous stand with mixed conifer species in it, which also contains hemlock. Regeneration majority seems to be conifer.
23	6117 - Lowland Deciduous, Mixed Coniferous	High Density Sapling	13.3	22	1-50	Stand contains sapling sized deciduous trees, the majority being aspen with conifer component.
25	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	12.6	28	1-50	Similar in species composition as stand 26, but age class is different. It contains larger trees.
26	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	5.5	109	81-110	Stand contains treatment limiting factors; influence zones, deer yard, water quality/bmps. Contains a mix of spruce, cedar, tamarack, red maple, birch, and fir.
27	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	4.4	65	111-140	Stand contains a mixture of over mature maple and yellow birch with hemlock trees. There are high densities of sapling sized maple.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
30	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	16.1	87	141-170	This stand contains a mixture of spruce, fir, and aspen. Some trace amounts of red maple and birch are present. The east side of the stand has slightly higher ground with more hardwoods than the west side. The west side is lower and more saturated.
31	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	8.7	48	51-80	Transition stand from a conifer to hardwood component that contains mostly pole sized red maple with a lot of conifer regen.
32	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	30.8	105	1-50	A lot of the balsam component has died out. The understory is extremely variable. Transitional area between slightly elevated hardwood stand to the west and cedar stand to the east.
33	42380 - Non Pine Upland Conifer, Mixed Deciduous	Medium Density Pole	7.3	34	51-80	This is a small upland mixed deciduous and conifer stand. It has large openings with thick vegetation around it.
34	6112 - Lowland Aspen	High Density Pole	4.2	42	81-110	Wet stand with over mature aspen dieing out. Fir and red maple saplings are present with some merchantable trees.
35	4110 - Sugar Maple Association	High Density Pole	28.9	58	81-110	This stand is a hardwood stand occurring inbetween lowlands and higher ground. A skid trail occurs within this stand, running north-south. Leatherwood and fir in are in the understory. A slight rise in topography occurs from west to east.
36	4110 - Sugar Maple Association	High Density Log	108.8	58	81-110	Hardwood stand occurring on slightly higher ground than its west counterpart. The understory is open with little regeneration. It also contains cedar patches.
37	6119 - Mixed Lowland Deciduous Forest	High Density Pole	12.0	54	81-110	A mixed hardwood stand containing maple with a conifer component mixed in. Balsam fir makes up the majority within the conifers. This area was thinned in the winter of 2002-2003. TS#047-98-01.
38	6132 - Mixed Lowland Forest with Cedar	Medium Density	10.5	5		This stand contains aspen regeneration in a wet, lowland area with various amounts of cedar/spruce. The stand was harvested in the recent past.
39	6120 - Lowland Cedar	High Density Pole	30.9	108	51-80	Thick cedar stand with some spruce and other tree species.
40	6120 - Lowland Cedar	High Density Pole	6.3	120	81-110	Stand contains limiting factors; Water/BMP's, Deer yards, Influence Zones. It is located on the east bank of Star Creek.
41	6117 - Lowland Deciduous, Mixed Coniferous	High Density Sapling	19.7	29		Sapling sized aspen/deciduous stand with some conifer trees mixed in.
42	4139 - Aspen, Mixed Deciduous	High Density Sapling	24.1	7		Sapling sized aspen with other deciduous and conifer trees mixed in.
43	6117 - Lowland Deciduous, Mixed Coniferous	High Density Sapling	8.5	19	1-50	A mixed stand with conifers in lowland areas with hardwoods on the slightly higher ground. Stand was harvested in the recent past with stand 38.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
44	6113 - Lowland Maple	High Density Pole	11.8	54	81-110	Pole sized hardwood stand with some conifer mixed in the understory. The stand was thinned in the winter of 2002-2003. TS# 047-98-01.
45	4319 - Mixed Upland Forest	High Density Pole	8.0	61	81-110	Contains mixed hardwoods with a conifer component mixed in. Red maple and fir make up the majority regeneration. Stand was thinned in the winter of 2002-2003. TS#047-98-01.
46	4130 - Aspen	High Density Sapling	2.7	29		Narrow stand, containing mostly aspen with a lot of maple in the understory. Balsam fir is present along the edge.
47	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	9.9	62	51-80	Stand was thinned in the winter of 2002-2003. TS#047-98-01.
48	4130 - Aspen	Medium Density	6.0	13		Stand contains lot of aspen regeneration in the southern portion of the stand. The northern portion has more balsam fir regeneration. The aspen was recently cut.
49	6120 - Lowland Cedar	High Density Pole	493.2	109	171-200	Cedar complex with larger trees in the northern portion of the stand with smaller closing spaced trees towards the east. Natural processes are creating a mosaic of age classes/densities.
50	4191 - Mixed Upland Deciduous with Conifer	High Density Sapling	8.3	7		Sapling sized aspen with mixed hardwoods and a few conifer trees. Stand was harvested in the winter of 2002-2003 TS# 047-98-01.
52	6139 - Mixed Lowland Forest	High Density Pole	3.8	50		Mixed stand of deciduous and coniferous trees. Northern portion consists mainly of hardwoods. Southern portion is low and wet with lowland conifers.
53	6119 - Mixed Lowland Deciduous Forest	Medium Density	14.9	7		Stand was harvested in the winter of 2002-2003. TS#047-98-01.
55	6119 - Mixed Lowland Deciduous Forest	High Density Pole	15.8	65	81-110	Stand was thinned in the winter of 2002-2003. TS#047-98-01.
56	6120 - Lowland Cedar	Medium Density	108.5	109		Similar to stand 49, but trees are smaller and less dense. Area is much more saturated with Commencement Creek running along its eastern border.
57	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	29.9	61	1-50	Mixed conifer stand on the west bank of Commencement Creek. Factor Limited Stand; Deer yards, Water Quality/BMP.
59	6124 - Lowland Spruce-Fir	High Density Sapling	5.9	44	1-50	Small diameter stand spruce stand with varying densities.
61	6120 - Lowland Cedar	High Density Pole	222.9	109	51-80	Dense cedar stand with varying densities. Mix of other conifers and deciduous trees are present. Natural processes are creating a mosaic of age classes/densities within this stand.

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Shingleton Mgt. Unit

5 – Forested Stands

Compartment: 189

Data updated before 2:00 PM

Year of Entry: 2012



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
62	6122 - Black Spruce	High Density Pole	9.1	44	1-50	Small diameter spruce stand with varying densities.
64	6124 - Lowland Spruce- Fir	High Density Pole	6.3	44	81-110	Stand contains mostly spruce, tamarack, and cedar. Basal area varies within this stand.
65	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	5.1	61		This is a mixed conifer stand on the west bank of Commencement Creek. Factor Limited; Deer Yard, Water Quality/BMP.
66	6129 - Mixed Coniferous Lowland Forest	Medium Density	9.9	61		A mixed coniferous stand. The overstory is dying out, maybe due to wet conditions.
67	6129 - Mixed Coniferous Lowland Forest	High Density Pole	6.5	71		This is a spruce stand containing low basal area and tree size. It is located on the west bank of Commencement Creek. Factor Limited: Deer Yard, Water Quality/BMP.



Stand	Cover Type	Acres	Gen Cmts:
24	330 - Low-Density Trees	24.4	
28	320 - Upland Shrub	6.0	
29	50 - Water	2.6	
51	122 - Road/Parking Lot	2.4	
54	122 - Road/Parking Lot	2.8	
58	320 - Upland Shrub	4.5	
60	330 - Low-Density Trees	6.2	
63	122 - Road/Parking Lot	13.7	
68	50 - Water	0.1	
69	623 - Emergent Wetland	11.5	
70	50 - Water	1.7	



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



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	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.
SCA	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.