



Shingleton Forest Management Unit
Compartment Review Presentation
Compartment # 27 **Entry Year: 2012**
Compartment Acreage: 1659 **County: Schoolcraft**

Revision Date: 07/25/2012

Stand Examiner: Sheila Clark

Legal Description: T44N R16W Sections 19, 20 & 21

RMU (if applicable): Compartment 27 lies within Seney Manistique Swamp Management Area.

Management Goals: The Management Unit goals in this compartment include ensuring forest regeneration within the recently harvested and immature stands. Maintaining forest health is also a top priority in this compartment due to the amount of old mature jack pine stands while maintaining age class diversity. It is also a top priority to ensure that drainages remain free of debris and fill.

Soil and Topography: The soils within the compartment vary from well drained sands on the upland ridges to poorly drained sands on the lower ground. The topography within the area is flat with very little elevation difference. The upland ground is situated between lower drainages in a predominate northwest-southeast fashion. This compartment lies within two Land Type Associations (LTA's). The western 2/3 of this compartment lies within the Channel Fens South LTA and the eastern 1/3 lies in the Shingleton Fen LTA.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The compartment is mainly a contiguous block of state land. However, there are two isolated blocks of private land that are mainly used for hunting. The main roads in this unit are used extensively by the public to recreate. There are very few land use issues in the area.

Unique, Natural Features: None known.

Archeological, Historical, and Cultural Features: None known.

Special Management Designations or Considerations: None.

Watershed and Fisheries Considerations: Fisheries Values Poor. The Stutts system downstream from confluence of the branches is classified as SQWW. Because of the existing sand bedload in the Manistique River Watershed, however, protection from increased sand bedload is still a high priority.

Wildlife Habitat Considerations: This compartment lies within the Seney Sand Lake Plain ecological sub-subsection. The growing season in this area is less than 100 days with extreme minimum winter temperatures of -46° F. Annual snowfall in this area averages approximately 140 inches. The compartment falls within the Seney Manistique Swamp Management Area which highlights the following Featured Species: Moose, sharp-tailed grouse, snowshoe hare and white-tailed deer. The landscape within this compartment consists of low ridges separated by fingers of wetlands on a NW to SE orientation. General Land Office (GLO) Surveyor notes show the ridges were historically dominated by jack and red pine. White pine occurred at substantially lower densities. Deciduous species found on the ridges included aspen, white birch, and red maple. The lowlands within the compartment varied in vegetative cover. The wettest areas displayed an open marsh characteristic. Moderate water levels resulted in alder/willow habitat while conifers

such as tamarack, spruce and jack pine grew in the wetland with the least amount of water. Windthrow, fire, and beaver ponding all likely played major roles in the natural disturbance regime. Current upland forests appear to have shifted from a jack pine/red pine codominant system to a jack pine dominated system. Stand structure has been significantly altered with a higher representation of smaller younger trees. Lowland conifer stands are likely quite similar in species composition to those found during the 1850s. Wildlife habitat objectives include maintaining age and structural diversity between upland conifer stands and protecting the integrity of stream corridors. Moose (Michigan special concern) likely utilize the compartment but no other rare species have actually been recorded. Other wildlife species of interest that may utilize this compartment include garter snake, American toad, chipping sparrow, mourning warbler and little brown bat.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of lacustrine (lake) sand and gravel and minor peat and muck. There is insufficient data to determine the glacial drift thickness. The Ordovician Utica and Collingwood Shales and Trenton Limestone subcrop below the glacial drift. The Trenton is used for stone/dolomite. The nearest gravel pit is located in Section 29 and potential appears to be limited. A clay pit is located 5 miles to the southeast. There is no commercial oil and gas production in the UP.

Vehicle Access: Access to the eastern portion of the compartment is good with a main road running either side of Stutts Creek. The western portion of the compartment is very limited there are numerous old closed logging roads that are growing in with trees; access in these areas is limited to foot travel.

Survey Needs: None.

Recreational Facilities and Opportunities: There are no recreational facilities in this area. The recreational opportunities are mainly hunting and blueberry picking, the Stutts does offer some fishing possibilities, see the fisheries comments above.

Fire Protection: This resource was once dominated by large catastrophic fires before large scale suppression efforts came into play. Today the areas with poor access are mainly young healthy stands with minimal fuel loading. Response time to the eastern portion of the compartment will be fairly quick with adequate detection efforts.

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**

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Table 1 – Total Acres by Cover Type and Age Class



	Age Class													Total	
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +		Uneren Age
Aspen	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5
Jack Pine	0	242	558	0	91	0	7	0	7	0	0	0	0	0	904
Low-Density Trees	94	0	0	0	0	0	0	0	0	0	0	0	0	0	94
Lowland Conifers	0	9	0	0	0	0	0	0	38	0	0	0	0	0	48
Lowland Deciduous	0	0	0	0	0	0	0	29	0	0	0	0	0	0	29
Lowland Mixed Forest	0	0	0	0	0	0	0	42	46	0	0	0	0	0	89
Lowland Shrub	393	0	0	0	0	0	0	0	0	0	0	0	0	0	393
Lowland Spruce/Fir	0	0	0	1	9	0	3	20	6	0	0	0	0	0	39
Natural Mixed Pines	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
Red Pine	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
Upland Conifers	0	0	0	0	0	0	0	0	10	0	0	0	0	0	10
Upland Mixed Forest	0	8	0	0	0	0	0	0	0	0	0	0	0	0	8
Upland Spruce/Fir	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9
Water	24	0	0	0	0	0	0	0	0	0	0	0	0	0	24
Total	511	259	558	6	100	0	10	34	97	85	0	0	0	0	1659



Table 2 – Proposed Treatment Summaries

Shingleton Mgt. Unit
Year of Entry 2014

Compartment 027
Total Compartment Acres: 1659

Acres by Treatment Type

Commercial Harvest - 97	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

	<i>Clearcut</i>	<i>Selection</i>	<i>Seed Tree</i>	<i>Shelterwood</i>	<i>Thinning</i>	<i>Other - Specify</i>	<i>Total Acres</i>
Jack Pine	97	0	0	0	0	0	97
Total	97	0	0	0	0	0	97



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
28	41027028-Cut	22.0	42220 - Natural Jack Pine	High Density Pole	46	111-140	Harvest	Clearcut with Reserves	42221 - Natural Jack Pine, Mixed Deciduous	Cmpt. Review Proposal

Prescription Harvest all merchantable trees. 100 foot buffer along Stutts Creek - that will serve as retention.

Specs:

Other Stand will be scarified for natural regeneration. If that fails then trench and plant to jack pine.

Comments:

Next
Steps:

Proposed
Start Date: 10/01/2013

30	41027030-Cut	68.4	42220 - Natural Jack Pine	High Density Pole	48	111-140	Harvest	Clearcut with Reserves	42221 - Natural Jack Pine, Mixed Deciduous	Cmpt. Review Proposal
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Prescription Harvest all merchantable trees. Leave retention along edge.

Specs:

Other This stand is variable and consists of jack pine, black spruce and mixed deciduous trees.

Comments:

Next
Steps: Site should be either scarified. If natural regeneration fails trench and plant to jack pine.

Proposed
Start Date: 10/01/2013

**Total Treatment
Acreage Proposed: 90.4**

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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
56 41027056-Cut	6.8	42220 - Natural Jack Pine	High Density Pole	63	81-110	Harvest	Clearcut	42221 - Natural Jack Pine, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: Stand is very small - would have to be combined with another compartment harvest. Harvest all trees - so small no retention. Could be an optional unit with stands 28 & 30.

Other Comment: This stand is mostly jack pine with some black spruce, and red and white pine.

Next Steps: Monitor stand after harvest to see if needs scarification.

Proposed Start Date: 10/01/2013

Limiting Factor and No Treatment Reason 3G: Other Influence zones - See comments
Small acreage. Not convenient to combine with other stands in compartment. Possibly harvest with harvest in another compartment.

**Total Treatment
Acreage Proposed: 6.8**

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

Year of Entry: 2014



Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
41009014-Cut1	5.2	6120 - Lowland Cedar	High Density Pole	141		Harvest	Patch or Strip Clearcut	6120 - Lowland Cedar	Cmpt. Review Proposal - Incomplete

Prescription patch cut app. 5 acres, determined at time of prep
Specs:

Other
Comments:

Next Monitor according to work instructions.
Steps:

Proposed
Start Date: 10/01/2011

41044_OutOfY OE-Cut	0.9					Harvest	Crown Thinning	42210 - Natural Red Pine	Cmpt. Review Proposal - Incomplete
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Prescription Mark red pine and white pine to 80 sq.ft. where densities are high enough. Cut all other species except hemlock, oak, and cedar.
Specs:

Other Retention will be a portion of the red pine and white pine trees remaining.
Comments:

Next Possible regeneration harvest next year of entry.
Steps:

Proposed
Start Date: 10/01/2013

41172002-Cut	4.4	4112 - Maple, Beech, Cherry Association	High Density Pole	49		Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
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Prescription Treatment=Thin stand down to 80 BA on average while putting in regen gaps to promote species diversity and Sugar Maple. Put stand up with adjacent hardwood in comp 169 in 2014.
Specs: MO=Un-even aged hardwoods with quality Sugar Maple stems
Retention=Residual BA

Other
Comments:

Next Natural regen survey to follow harvest during the next inventory cycle.
Steps:

Proposed
Start Date: 10/01/2014

**Total Treatment
Acreage Proposed: 10.5**

Shingleton Mgt. Unit

5 – Forested Stands

Compartment: 027
Year of Entry: 2014

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42220 - Natural Jack Pine	High Density Pole	1.7	28		
2	42220 - Natural Jack Pine	High Density Pole	3.7	28		
3	42220 - Natural Jack Pine	High Density Pole	1.3	28		
4	42220 - Natural Jack Pine	High Density Pole	26.4	28		
5	42220 - Natural Jack Pine	High Density Pole	3.9	28		
6	42220 - Natural Jack Pine	High Density Pole	7.4	28		
9	42220 - Natural Jack Pine	High Density Pole	116.8	28		
10	42220 - Natural Jack Pine	Medium Density Pole	16.3	28		
11	42220 - Natural Jack Pine	High Density Pole	54.7	28		
12	42220 - Natural Jack Pine	High Density Pole	20.0	28		Young, regenerating timber
14	42220 - Natural Jack Pine	High Density Pole	20.5	28		
15	42220 - Natural Jack Pine	High Density Pole	29.6	28		
16	42220 - Natural Jack Pine	High Density Pole	2.0	28		
17	42220 - Natural Jack Pine	High Density Pole	2.1	28		
19	42220 - Natural Jack Pine	High Density Pole	3.1	28		
20	42220 - Natural Jack Pine	High Density Pole	4.6	24		
21	42220 - Natural Jack Pine	High Density Pole	35.9	24		
22	42220 - Natural Jack Pine	High Density Pole	32.4	24		

S t a n d	Shingleton Mgt. Unit		5 – Forested Stands			Compartment: 027	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2014	
24	42220 - Natural Jack Pine	High Density Pole	10.9	24			
25	42220 - Natural Jack Pine	Medium Density	125.4	15			First Martin sale, 410569401
26	6126 - Lowland Jack Pine	High Density Sapling	54.8	24			mixed upland lowland
27	6126 - Lowland Jack Pine	High Density Sapling	57.1	24			mixed upland and lowland
28	42220 - Natural Jack Pine	High Density Pole	23.0	46	111-140		This is a healthy, mature jack pine stand. There is a small pocket of red pine near the creek.
29	6139 - Mixed Lowland Forest	Medium Density Pole	12.6	87	1-50		
30	42220 - Natural Jack Pine	High Density Pole	68.4	48	111-140		This stand is a mixture of upland and lowland. Some of the jack pine are starting to die.
32	6122 - Black Spruce	Low Density Pole	8.7	48	1-50		
33	4311 - Pine, Aspen Mix	Low Density Sapling	8.1	18			
34	6124 - Lowland Spruce-Fir	Medium Density Pole	38.5	96			
35	429 - Mixed Upland Conifers	Medium Density Log	9.6	80	51-80		
36	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	29.0	80			
37	6125 - Lowland Black Spruce, Jack Pine	Low Density Sapling	9.3	16			Stand was cut, lower ground - didn't regenerate as well.
38	42220 - Natural Jack Pine	High Density Sapling	53.3	16			Jack pine with supercanopy of red and white pine a vein of aspen regeneration through the middle of the stand. Stand was scarified.
39	42210 - Natural Red Pine	Medium Density Log	3.4	80	51-80		
41	42260 - Natural Pine, Mixed Deciduous	High Density Log	4.0	77	81-110		
42	42120 - Planted Jack Pine	High Density Sapling	51.3	18			Stand was cut in 1993, regeneration was poor and planted in 1994. A slough runs through the middle of the stand from north to south.



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Shingleton Mgt. Unit

5 – Forested Stands

Compartment: 027
Year of Entry: 2014

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
43	6139 - Mixed Lowland Forest	Medium Density Pole	46.2	92	51-80	
44	6122 - Black Spruce	Low Density Pole	6.2	80	51-80	
45	42120 - Planted Jack Pine	Medium Density	42.2	28		Slough runs through northern portion.
46	42320 - Upland Spruce	Medium Density Pole	9.4	75	111-140	This is higher ground than adjacent spruce stand.
50	6122 - Black Spruce	Low Density Pole	13.6	72	1-50	
51	6122 - Black Spruce	Medium Density Pole	2.9	61	51-80	
53	6126 - Lowland Jack Pine	Low Density Sapling	10.3	28		Regeneration looks good for lowland.
54	6122 - Black Spruce	Low Density Pole	6.8	72		
55	42220 - Natural Jack Pine	Medium Density Pole	6.6	82	1-50	Buffer along Stuttts Creek.
56	42220 - Natural Jack Pine	High Density Pole	6.8	63	81-110	
57	42220 - Natural Jack Pine	Medium Density	11.7	16		
58	6122 - Black Spruce	Low Density Sapling	1.1	38		Small jack pine and black spruce coming up.
59	6132 - Mixed Lowland Forest with Cedar	Low Density Pole	29.8	87	1-50	
60	4134 - Aspen, Spruce/Fir	High Density Pole	5.0	38		



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
7	629 - Mixed non-forested wetland	193.2	No	Unspecified	
8	6229 - Mixed lowland shrub	29.6	No	Low (NonForested)	
13	629 - Mixed non-forested wetland	12.2	No	Unspecified	
18	6222 - Shrub-Carr	0.7	No	Unspecified	
23	629 - Mixed non-forested wetland	141.6	No	Unspecified	
31	6222 - Shrub-Carr	6.3	No	Unspecified	
40	50 - Water	23.7	No	Unspecified	
47	3302 - Low Density Conifer Trees	26.6	Planted	Jack Pine	Passed regen count.
48	3302 - Low Density Conifer Trees	44.3	Planted	Jack Pine	Stand passed regeneration count.
49	6220 - Alder/willow	6.0	No	Unspecified	
52	6220 - Alder/willow	3.3	No	Unspecified	
61	3302 - Low Density Conifer Trees	10.5	Planted	Jack Pine	
62	3303 - Mixed Low Density Trees	8.2	No	Unspecified	
63	3302 - Low Density Conifer Trees	4.5	Yes	Jack Pine	FTP C41-1163 Tsale 41-012-04-01



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
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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.

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

Conservation Area	Type	Description
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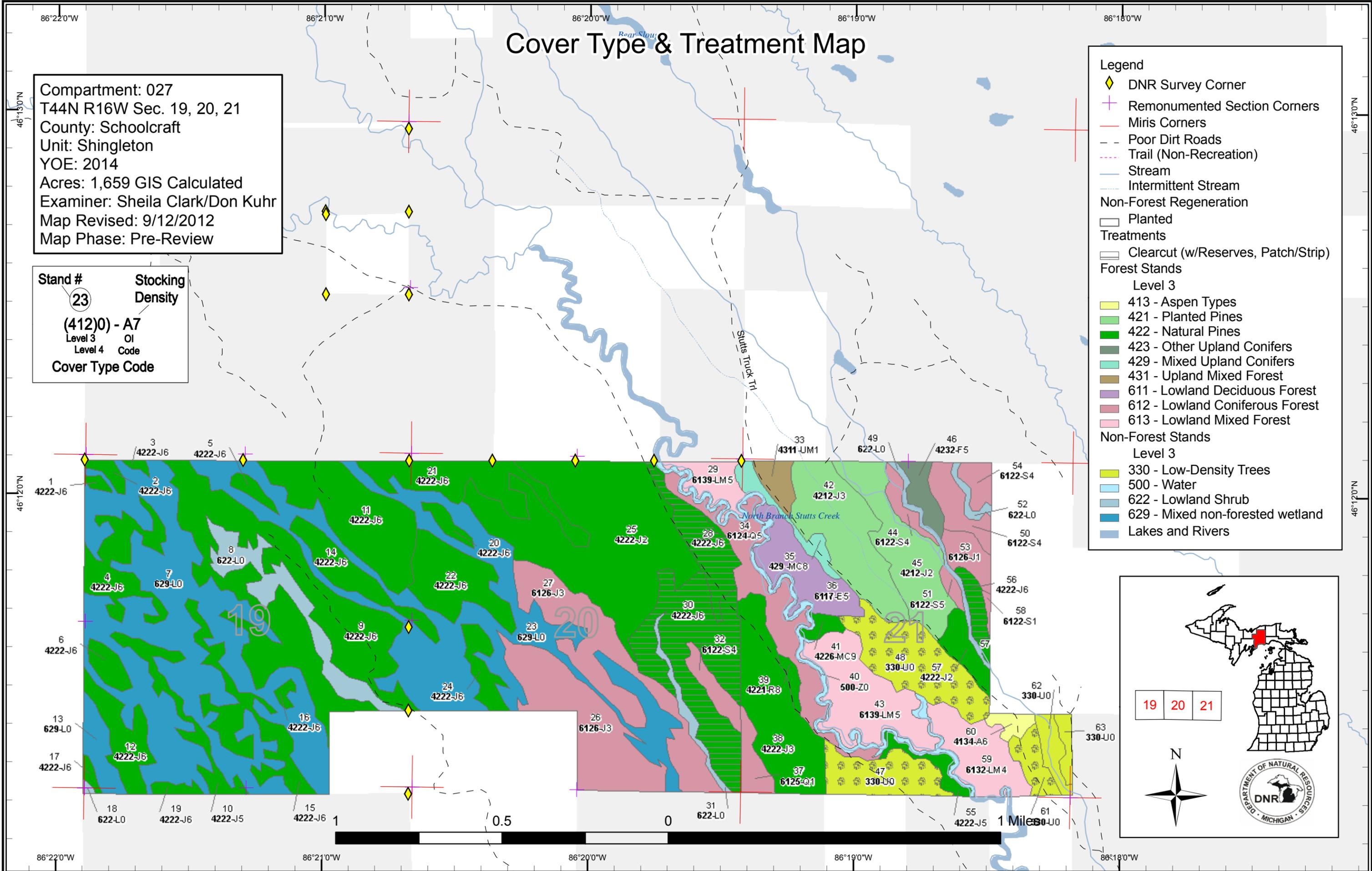
Cover Type & Treatment Map

Compartment: 027
 T44N R16W Sec. 19, 20, 21
 County: Schoolcraft
 Unit: Shingleton
 YOE: 2014
 Acres: 1,659 GIS Calculated
 Examiner: Sheila Clark/Don Kuhr
 Map Revised: 9/12/2012
 Map Phase: Pre-Review

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

Legend

- DNR Survey Corner
- Remonumented Section Corners
- Miris Corners
- Poor Dirt Roads
- Trail (Non-Recreation)
- Stream
- Intermittent Stream
- Non-Forest Regeneration
- Planted
- Clearcut (w/Reserves, Patch/Strip)
- Treatments**
- Clearcut (w/Reserves, Patch/Strip)
- Forest Stands**
- Level 3**
- 413 - Aspen Types
- 421 - Planted Pines
- 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**
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 629 - Mixed non-forested wetland
- Lakes and Rivers



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 DNR
 DEPARTMENT OF NATURAL RESOURCES
 MICHIGAN



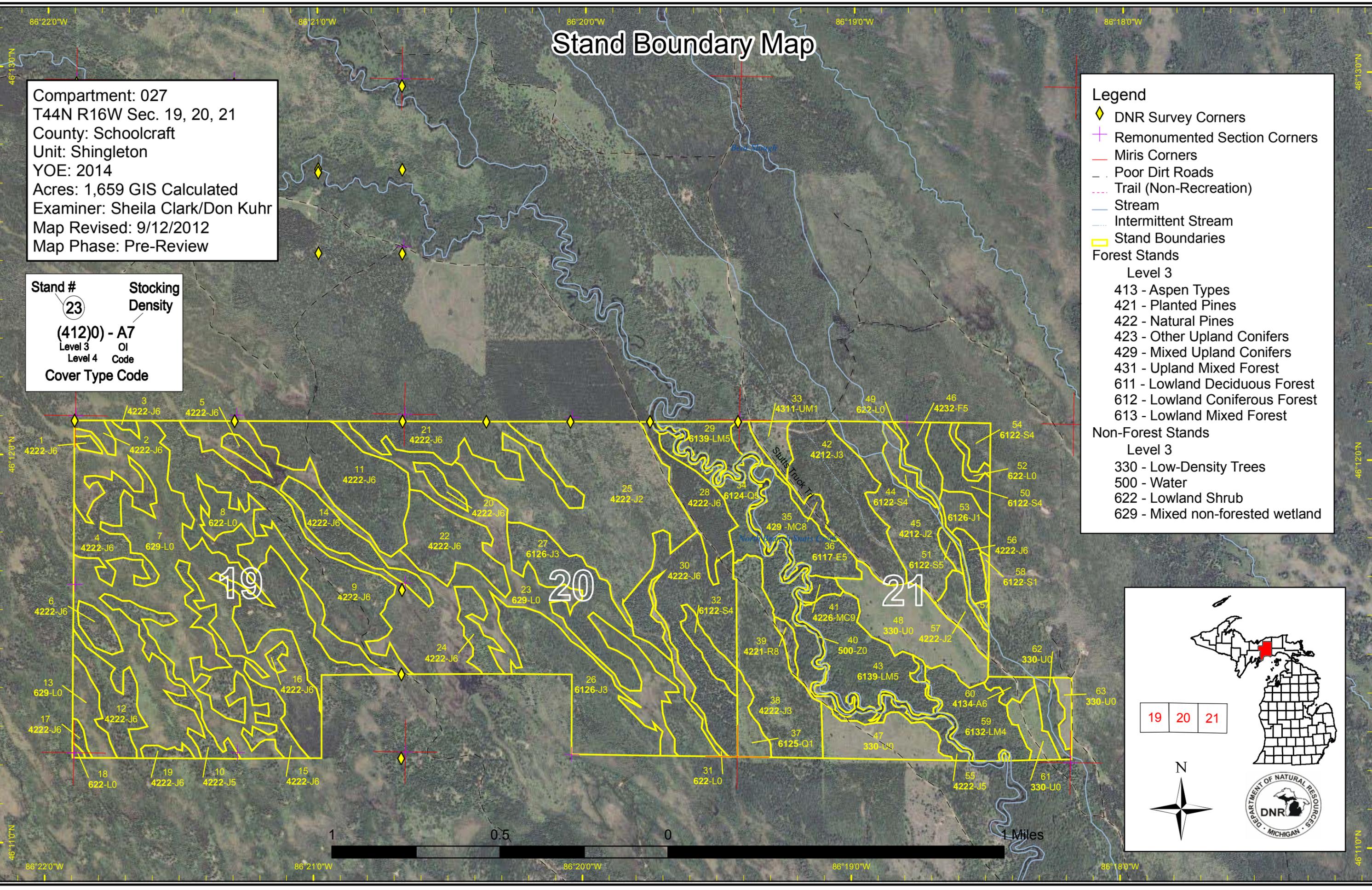
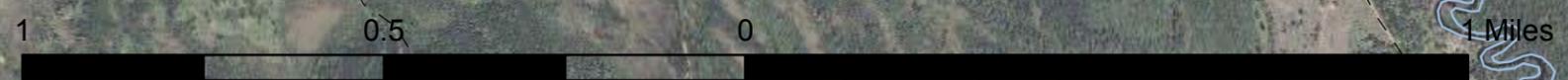
Stand Boundary Map

Compartment: 027
 T44N R16W Sec. 19, 20, 21
 County: Schoolcraft
 Unit: Shingleton
 YOE: 2014
 Acres: 1,659 GIS Calculated
 Examiner: Sheila Clark/Don Kuhr
 Map Revised: 9/12/2012
 Map Phase: Pre-Review

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

Legend

- ◆ DNR Survey Corners
 - ✚ Remonumented Section Corners
 - Miris Corners
 - - - Poor Dirt Roads
 - ⋯ Trail (Non-Recreation)
 - Stream
 - ⋯ Intermittent Stream
 - ▭ Stand Boundaries
- Forest Stands**
- Level 3**
- 413 - Aspen Types
 - 421 - Planted Pines
 - 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**
- 330 - Low-Density Trees
 - 500 - Water
 - 622 - Lowland Shrub
 - 629 - Mixed non-forested wetland

Dedicated & Proposed Special Conservation Area Map

Compartment: 027
 T44N R16W Sec. 19, 20, 21
 County: Schoolcraft
 Unit: Shingleton
 YOE: 2014
 Acres: 1,659 GIS Calculated
 Examiner: Sheila Clark/Don Kuhr
 Map Revised: 09/12/2012
 Map Phase: Pre-Review

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

Legend

- ✚ Remonumented Section Corners
- Miris Corners
- Proposed Special Conservation Areas
- ⋯ SCA - Special Conservation Area
- Dedicated Special Conservation Areas
- Cold Water Streams
- ▭ Stand Boundaries
- Forest Stands
- Level 3
- 413 - Aspen Types
- 421 - Planted Pines
- 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
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 629 - Mixed non-forested wetland

