Shingleton Forest Management Unit
Compartment Review Presentation
Compartment #123 Entry Year: 2013
Compartment Acreage: 2723 County: Schoolcraft

Revision Date: 8-18-11

Stand Examiner: Robert Tylka

Legal Description: T46N R13W Section 18 and T46N R14W Sections 3 & 10 - 15

RMU (if applicable):

Management Goals: To provide users with a variety of benefits commonly associated with publicly-owned forest lands.

Soil and Topography: Sandy soils on generally flat to very gently rolling terrain. Much of section 15 is poorly drained and inaccessible.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Most of section 13 and 120 acres in section 14 are privately owned. There are numerous camps to the southeast along the Fox River Rd., but only one within the compartment area in section 13. Overall, this area is popular for a wide variety of recreational pursuits, and state-owned lands have been managed intensively for timber production.

Unique, Natural Features: The Fox River is listed as a Michigan Natural River.

Archeological, Historical, and Cultural Features:

Special Management Designations or Considerations: The Fox River corridor is defined as a High Conservation Value Area (HCVA), with an approved management plan. The Fox River Plan defines allowable forest management activities along the river corridor and its tributaries. Aesthetics are also an important consideration along the Fox River Rd. and in this compartment. Both the Fox River Pathway (hiking trail) and a groomed snowmobile trail pass through this area.

Watershed and Fisheries Considerations: Fishery values in this compartment are excellent. The Fox River is classified First Quality Cold Water (FQCW), and the small tributaries to the north and east, including Hudson Creek, are classified as Second Quality Cold Water (SQCW). The Fox River system attracts anglers from other states, Europe and even Australia! (Blame the number of anglers on Ernest Hemmingway…) Our stream enhancement work ten years ago is now starting to pay off, with somewhat less sand throughout the system, more exposed gravel, and deeper scour holes now present in the river. We have recently cut back our stocking, to allow for and to verify increased natural trout production.

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 between 120 and 140 inches. General Land Office (GLO) Surveyor notes indicate that the lowlands in this compartment were historically dominated by spruce and tamarack with red pine and white pine mixed in. Uplands held a mix of hemlock, yellow birch, beech, white pine, red pine, and red maple. Wild fire and windthrow likely were the major forms of natural

disturbance. The current forest has little resemblance to that found by the original surveyors circa 1850. Jack pine now dominates the forest cover within the compartment. Rather unsuccessful attempts have been made to establish red pine plantations in sections 10 and 11. However, tamarack and black spruce do occur as dominant species in portions of section 15. Wildlife habitat objectives include maintaining age and structural diversity within the conifer forest and promoting super-canopy trees by maintaining red and white pine within clearcuts. Gray wolves (Federal and Michigan Endangered) and sharp-tailed grouse are known to utilize the habitat within this compartment. The regenerating jack pines within this compartment are good examples of an area that has served as temporary sharptail habitat without being removed from forest production. Other species of interest include blue bird, spruce grouse, least chipmunk, and coyote.

Mineral Resource and Development Concerns and/or Restrictions:
Surface sediments consist of lacustrine (lake) sand and gravel. 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. Gravel pits at not found in the general area and potential appears to be limited. There is no commercial oil and gas production in the UP.

Vehicle Access: Access is generally excellent in the north half of the compartment, but considerably more difficult in the south half where wet ground makes vehicle access questionable in any season except winter.

Survey Needs: None identified at this time.

Recreational Facilities and Opportunities: The Fox River State Forest Campground lies on the south bank of the river in section 11. Both the Fox River Pathway and a snowmobile trail run through this compartment. The area is also very popular for a variety of other forms of dispersed recreation such as hunting, fishing and berry picking.

Fire Protection: Access problems (see Vehicle Access above) could make fire suppression very difficult in the south part of this compartment.

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**

Table 1 – Total Acres by Cover Type and Age Class

Shingleton Mgt. Unit **Compartment 123 Year of Entry 2013**

Robert Tylka : Examiner

Age Class

	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	Total
Cedar	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	**6**
Herbaceous Openland	297	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**297**
Jack Pine	0	50	376	502	93	71	4	151	0	44	0	0	0	0	30	**1322**
Low-Density Trees	76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**76**
Lowland Aspen/Balsam Poplar	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Lowland Conifers	0	0	0	6	0	0	0	0	0	0	17	7	0	0	0	**30**
Lowland Deciduous	0	0	0	0	0	0	18	8	0	0	0	15	0	0	0	**41**
Lowland Shrub	413	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**413**
Lowland Spruce/Fir	0	0	127	2	0	0	0	0	0	0	28	3	0	0	0	**161**
Natural Mixed Pines	0	0	0	0	0	0	0	15	0	0	21	90	0	0	20	**147**
Red Pine	0	0	0	0	0	0	0	0	0	22	33	7	0	11	110	**184**
Tamarack	0	0	0	0	0	0	0	17	0	2	0	0	0	0	0	**18**
Urban	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**26**
Total	**813**	**52**	**503**	**511**	**93**	**71**	**21**	**191**	**0**	**67**	**99**	**129**	**0**	**11**	**161**	**2723**

Table 2 – Proposed Treatment Summaries

Shingleton Mgt. Unit
Year of Entry 2013

Compartment 123
Total Compartment Acres: 2723

Acres by Treatment Type

Commercial Harvest - 372	Site Prep - 0	Tree Planting - 31	Prescribed Burn - 0	Other - 0
Habitat Cut - 20	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	243	0	0	0	0	0	**243**
Lowland Spruce/Fir	27	0	0	0	0	0	**27**
Natural Mixed Pines	18	0	61	45	0	0	**123**
Total	**287**	**0**	**61**	**45**	**0**	**0**	**393**

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
2	41123002-Cut	7.7	42220 - Natural Jack Pine	Low Density Pole	66	Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal - Incomplete

Prescription Specs: Reserve red & white pine, oak and paper birch.

Other Comments:

Next Steps: Scarify for natural regeneration - jack, red & white pines, oak and birch are acceptable. Plant oak to enhance wildlife habitat values.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
17	41123017-Cut	21.0	42290 - Natural Mixed Pine	Low Density Log	93	Harvest	Seed Tree with Reserves	42210 - Natural Red Pine	Cmpt. Review Proposal - Incomplete

Prescription Specs: Reserve 20-40 sq.ft./acre BA of red & white pine, plus all oak & paper birch.

Other Comments:

Next Steps: Scarify for natural regeneration - jack, red & white pines, oak and birch are acceptable. Plant oak to enhance wildlife habitat values.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
18	41123018-Cut	30.4	42220 - Natural Jack Pine	Low Density Pole	66	Harvest	Clearcut with Reserves	42120 - Planted Jack Pine	Cmpt. Review Proposal - Incomplete

Prescription Specs: Reserve red pine plus any white pine, oak and birch present.

Other Comments: This stand is adjacent to the snowmobile trail. Consider retaining a few extra trees near the trail for aesthetics.

Next Steps: Plant jack pine and oak to enhance wildlife habitat values. Any natural pine/oak/birch regeneration is also acceptable.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
21	41123021-Cut	15.3	42290 - Natural Mixed Pine	Medium Density Pole	66	Harvest	Clearcut with Reserves	42290 - Natural Mixed Pine	Cmpt. Review Proposal - Incomplete

Prescription Specs: Reserve the red & white pine, plus any oak and birch encountered in the stand.

Other Comments: This stand is on a transitional site that gets somewhat wetter as you head southwest.

Next Steps: Scarify for natural regeneration where possible - all conifers plus oak and birch are acceptable.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
23	41123023-Cut	3.4	42220 - Natural Jack Pine	Medium Density Pole	66	Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal - Incomplete

Prescription Specs: Reserve the red pine, and any white pine, oak and birch encountered.

Other Comments: This stand is adjacent to the snowmobile trail. Consider retaining a few extra trees along the trail for aesthetics.

Next Steps: Scarify for natural regeneration - jack, red & white pines, oak and birch are acceptable. Plant oak to enhance wildlife habitat values.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
29	41123029-Cut	11.2	42220 - Natural Jack Pine	Low Density Pole	86	Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal - Incomplete

Prescription Specs: Reserve the red & white pine, plus any oak & birch encountered.

Other Comments: This stand is adjacent to the snowmobile trail. Consider retaining a few extra trees along the trail for aesthetics.

Next Steps: Scarify for natural regeneration - jack, red & white pines, oak and birch are acceptable. Plant oak to enhance wildlife habitat values.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
34	41123034-Cut	83.2	6126 - Lowland Jack Pine	Medium Density Pole	67	Harvest	Clearcut with Reserves	6126 - Lowland Jack Pine	Cmpt. Review Proposal - Incomplete

Prescription Specs: Reserve the red pine plus any white pine, oak and birch encountered.

Other Comments:

Next Steps: Scarify for natural regeneration if possible - all conifers plus oak and birch are acceptable.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
35	41123035-Cut	39.5	42290 - Natural Mixed Pine	Low Density Pole	101	Harvest	Seed Tree with Reserves	42290 - Natural Mixed Pine	Cmpt. Review Proposal - Incomplete

Prescription Specs: Reserve 20-40 sq.ft./acre of the larger red & white pine, plus the birch and any oak encountered in the stand.

Other Comments: This stand is located on the Fox River Road, and The Fox River Pathway runs through it. Consider aesthetics along both when preparing the sale.

Next Steps: Scarify for natural regeneration - jack, red & white pines, oak and birch are acceptable. Plant oak to enhance wildlife habitat values.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
37	41123037-Cut	8.2	6126 - Lowland Jack Pine	Medium Density Pole	67	Harvest	Clearcut with Reserves	6126 - Lowland Jack Pine	Cmpt. Review Proposal - Incomplete

Prescription Specs: Reserve any red & white pine, hemlock, cedar and birch encountered in the stand.

Other Comments: Wet area - may be limited to winter ops only.

Next Steps: Natural regeneration - all conifer spp. are acceptable.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
38	41123038-Cut	5.4	42220 - Natural Jack Pine	Medium Density Pole	86	Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal - Incomplete

Prescription Specs: Reserve the red pine plus any birch and oak encountered in the stand.

Other Comments:

Next Steps: Scarify for natural regeneration - jack, red & white pines, oak and birch are acceptable. Plant oak to enhance wildlife habitat values.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
41	41123041-Cut	4.1	6126 - Lowland Jack Pine	Medium Density Pole	67	Harvest	Clearcut with Reserves	6126 - Lowland Jack Pine	Cmpt. Review Proposal - Incomplete

Prescription Specs: Reserve any red & white pine, hemlock, cedar and birch encountered in the stand.

Other Comments:

Next Steps: Natural regeneration - all conifers and birch are acceptable.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
43	41123043-Cut	18.1	6126 - Lowland Jack Pine	Medium Density Pole	67	Harvest	Clearcut with Reserves	6126 - Lowland Jack Pine	Cmpt. Review Proposal - Incomplete

Prescription Specs: Reserve any red & white pine, hemlock, cedar and birch encountered in the stand.

Other Comments:

Next Steps: Natural regeneration - all conifers and birch are acceptable.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
50	41123050-Cut	44.9	42290 - Natural Mixed Pine	High Density Log	101	Harvest	Shelter Wood with Reserves	42290 - Natural Mixed Pine	Cmpt. Review Proposal - Incomplete

Prescription Specs: Harvest all trees with one or more merchantable sticks of pulpwood except for the red & white pine. Mark individual red & white pine for cutting as needed to leave an average of approximately 40-50 sq.ft./acre of BA of these as seed sources. Exclude from the sale any areas of the stand that fall within 200' of the river and cannot be cut with at least 50 sq.ft. of residual red/white pine BA remaining after the harvest is complete.

Other Comments: Areas that feature excessive slopes toward the river should be excluded from the sale.

Next Steps: Scarify for natural regeneration - jack, red & white pines, oak and birch are acceptable. Plant oak to enhance wildlife habitat values. Do not scarify any areas within 200' of the river.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
55	41123055-Cut	3.5	6122 - Black Spruce	High Density Pole	101	Harvest	Clearcut with Reserves	6122 - Black Spruce	Cmpt. Review Proposal - Incomplete

Prescription Specs: Reserve the red & white pine, plus any birch, oak, hemlock and cedar encountered in the stand.

Other Comments: Maintain a 200' buffer between the sale area and the river.

Next Steps: Natural regeneration - all conifers plus oak, red maple, aspen and birch are acceptable.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
59	41123059-Cut	13.6	42120 - Planted Jack Pine	High Density Pole	35	Harvest	Clearcut with Reserves	42110 - Planted Red Pine	Cmpt. Review Proposal - Incomplete

Prescription Specs: Reserve any red & white pine, oak and birch encountered in the stand. Cut all other trees regardless of merchantability.

Other Comments: The ultimate goal here is to eradicate scotch pine from the area.

Next Steps: Plant red pine and oak to add diversity and enhance the wildlife habitat values.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
63	41123063-Cut	5.3	6122 - Black Spruce	High Density Pole	90	Harvest	Clearcut with Reserves	6122 - Black Spruce	Cmpt. Review Proposal - Incomplete

Prescription Specs: Reserve any hemlock, cedar, red & white pine and birch encountered in the stand.

Other Comments:

Next Steps: Natural regeneration - all conifers, birch and aspen are acceptable.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
70	41123070-Cut	2.3	42290 - Natural Mixed Pine	Low Density Pole	101	Harvest	Clearcut with Reserves	42290 - Natural Mixed Pine	Cmpt. Review Proposal - Incomplete

Prescription Specs: Reserve the red & white pine, birch and any oak encountered in the stand.

Other Comments:

Next Steps: Scarify for natural regeneration - jack, red & white pines, oak and birch are acceptable. Plant oak to enhance wildlife habitat values.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
71	41123071-Cut	3.6	42220 - Natural Jack Pine	Medium Density Log	53	Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal - Incomplete

Prescription Specs: Reserve the red & white pine plus any oak and birch encountered in the stand.

Other Comments: This stand is located along the Fox River Road - consider retaining a few extra trees near the road for aesthetics.

Next Steps: Scarify for natural regeneration - jack, red & white pines, oak and birch are acceptable. Plant oak to enhance wildlife habitat values, and also planting a few rows of red pine near the road to enhance the aesthetic values.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
73	41123073-Cut	17.9	6122 - Black Spruce	Medium Density Pole	90	Harvest	Clearcut with Reserves	6122 - Black Spruce	Cmpt. Review Proposal - Incomplete

Prescription Specs: Reserve any hemlock, cedar, birch and red & white pine encountered in the stand.

Other Comments:

Next Steps: Natural regeneration - all conifers, aspen and birch are acceptable.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
89	41123089-Cut	26.8	6126 - Lowland Jack Pine	High Density Pole	62	Harvest	Clearcut with Reserves	6126 - Lowland Jack Pine	Cmpt. Review Proposal - Incomplete

Prescription Specs: Reserve the white pine and birch, plus any cedar, hemlock and red pine encountered in the stand.

Other Comments:

Next Steps: Natural regeneration - all conifers, aspen and birch are acceptable.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
98	41123098-Cut	23.2	42220 - Natural Jack Pine	High Density Log	86	Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal - Incomplete

Prescription Specs: reserve all red & white pine and any birch and oak encountered in the stand.

Other Comments: Maintain the 200' buffer along the river per the Fox River plan

Next Steps: Scarify for natural regeneration - jack, red & white pines, oak and birch are acceptable. Plant oak to enhance wildlife habitat values.

106	41123106-Cut	4.0	42220 - Natural Jack Pine	Medium Density Log	86	Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal - Incomplete

Prescription Specs: Reserve any red & white pine plus any birch, hemlock and cedar encountered in the stand.

Other Comments: Consider retaining a few extra trees near the road for aesthetics.

Next Steps: Scarify for natural regeneration - jack, red & white pines, oak and birch are acceptable. Plant oak to enhance wildlife habitat values.

9	41123009-Plant	30.7	42210 - Natural Red Pine	Low Density Log	93	Tree Planting	Hand Plant	42250 - Pine, Oak	Cmpt. Review Proposal - Incomplete

Prescription Specs: Plant oak to enhance biodiversity, wildlife habitat values and aesthetics.

Other Comments:

Next Steps:

Total Treatment Acreage Proposed: 423.2

Table 4 -- Treatments Prescribed with a Limiting Factor

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
			#Error						

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
41022_OutOfYOE-Cut	35.6				Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: 3rd row thinning. Cut all trees in designated rows. Rows can be spaced wider apart in areas with lower basal area. Do not cut hemlock and oak.

Other Comments: Do not cut any trees within 50 feet of the West Branch Manistique River.

Next Steps: Thin next year of entry.

41049_OutOfYOE_1-Cut	4.7				Harvest	Single Tree Selection	42290 - Natural Mixed Pine	Cmpt. Review Proposal

Prescription Specs: Mark red pine and white pine to 30 sq. ft. Create gaps in canopy for regeneration where pine exists. Areas that have thicker young poles can be marked to 80. Cut all other species except hemlock and oak if present.

Other Comments: Access to stand is too difficult for continuous thinning.

Next Steps: Regeneration walkthrough during next inventory cycle. Acceptable regeneration includes any species mixture currently found onsite.

41053_OutOfYOE-Cut	10.2				Harvest	Single Tree Selection	42290 - Natural Mixed Pine	Cmpt. Review Proposal

Prescription Specs: Mark red pine and white pine to 30 sq. ft. Create gaps in canopy for regeneration where pine exists. Areas that have thicker young poles can be marked to 80. Cut all other species except hemlock and oak if present.

Other Comments: Access to stand is too difficult for continuous thinning.

Next Steps: Regen walkthrough during next inventory cycle. Acceptable regeneration includes any species mixture currently found onsite.

Total Treatment Acreage Proposed: **50.5**

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6117 - Lowland Deciduous, Mixed Coniferous	Low Density Pole	1.7	62	1-50	HCVA - Fox River. Mix of balsam fir, red maple & lowland brush along the Fox River.
2	42220 - Natural Jack Pine	Low Density Pole	7.7	66	51-80	HCVA - Fox River. Semi-open jack pine stand - cut now, reserving the red pine and any scattered white pine, oak and paper birch.
3	42210 - Natural Red Pine	Medium Density Log	7.4	101	51-80	HCVA - Fox River. Red pine mix on the transitional sites between the dry uplands and the river bottom. Maintain for aesthetics/wildlife habitat per the Fox River Plan, as this stand falls almost entirely within the buffer zone. The upper edge includes a few jack pine.
5	6117 - Lowland Deciduous, Mixed Coniferous	Low Density Pole	3.9	61	1-50	HCVA - Fox River. Mix of balsam fir, red maple & lowland brush along the Fox River.
6	42120 - Planted Jack Pine	Medium Density	8.0	15		Young jack pine with a few residual red pine etc. from the previous stand.
7	42120 - Planted Jack Pine	Medium Density Pole	25.5	34	1-50	Young jack pine just becoming merchantable.
8	42120 - Planted Jack Pine	Medium Density	39.5	15	1-50	Young jack pine with a few residual red pine, birch etc.
9	42210 - Natural Red Pine	Low Density Log	30.7	93	1-50	HCVA - Fox River. Semi-open red pine stand with scattered jack & white pines and a few red maple. Age class diversity is developing as the open areas are slowly filling in.
10	6117 - Lowland Deciduous, Mixed Coniferous	Low Density Pole	2.3	64	51-80	HCVA - Fox River. Strip of lowland timber & brush along the Fox River.
11	42210 - Natural Red Pine	Medium Density Log	2.6	93	51-80	Pocket of larger pine left for aesthetics along the Fox River Rd. - maintain at least until the large cut adjacent to the south is fully regenerated. 2-storied stand characteristics are developing.
12	42120 - Planted Jack Pine	Low Density Sapling	8.8	18		Young jack pine with a few scattered residuals from the previous stand, especially near the road.
13	6128 - Lowland Coniferous, Mixed Deciduous	High Density Log	11.9	94	111-140	HCVA - Fox River. This stand occupies the transitional slopes between the dry uplands and the Fox River. The Fox River Pathway runs through this stand.
15	6122 - Black Spruce	Medium Density Log	4.6	94	81-110	HCVA - Fox River. Black spruce with large white pine throughout - maintain in accordance with the Fox River Plan.
16	42110 - Planted Red Pine	Medium Density Log	11.3	121	81-110	Retention area from when the surrounding stand was recently harvested.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
17	42290 - Natural Mixed Pine	Low Density Log	21.0	93	51-80	Semi-open red pine with jack pine and other spp. mixed in - stand was cut in the early 1990's (sale closed in 1993.) Harvest now and regenerate red pine. Basal area varies from over 100 sq.ft./acre down to zero. Cut now - reserve approx. 20-40 sq.ft./acre of larger pine plus any paper birch and oak. Scarify to promote natural regeneration.
18	42220 - Natural Jack Pine	Low Density Pole	30.4	Uneven Age	1-50	Maintain for for both wildlife cover and aesthetics along the snowmobile trail.
20	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	10.7	101	51-80	HCVA - Fox River. The Fox River Pathway also runs through this stand. Maintain for aesthetics and as a buffer along the river.
21	42290 - Natural Mixed Pine	Medium Density Pole	15.3	66	51-80	Stand transitions from upland pine mix (jack pine dominant) down into lowland jack pine with scattered spruce & red maple. Cut now - reserve the red pine plus any paper birch and oak. Scarify where possible to promote natural regeneration.
22	42290 - Natural Mixed Pine	High Density Log	3.5	101	111-140	HCVA - Fox River. White pine and spruce on a transitional zone between the dry uplands and the lowlands adjacent to the river.
23	42220 - Natural Jack Pine	Medium Density Pole	3.4	66	51-80	Jack pine/red pine mix.
25	6126 - Lowland Jack Pine	Low Density Sapling	60.3	21		Mix of upland and lowland habitats featuring jack pine regeneration with a few black spruce mixed in. The upland habitat displays ground cover spp. such as blueberruy and reindeer moss, while labrador tea dominates the lowlands.
26	6128 - Lowland Coniferous, Mixed Deciduous	High Density Log	4.7	94	111-140	HCVA - Fox River. Mixed stand along the Fox River flood plain - maintain in accordance with the Fox River Plan. Age class diversity is developing.
27	42290 - Natural Mixed Pine	Medium Density Log	17.7	Uneven Age	81-110	HCVA - Fox River. Recreation site - Fox River State Forest Campground
28	42290 - Natural Mixed Pine	High Density Log	2.3	Uneven Age	171-200	HCVA - Fox River. Large white & red pine on a transitional site just above the fox River flood plain. Maintain in accordance w/the Fox River Plan.
29	42220 - Natural Jack Pine	Low Density Pole	11.2	86	1-50	The snowmobile trail runs through this stand. Cut now to stop losses due to budworm mortality - before the stand to north reaches green-up, or the stand may become unsalvageable. Reserve the red pine plus any paper birch and oak present. Scarify to promote natural regeneration.
30	42210 - Natural Red Pine	Low Density Log	110.4	Uneven Age	51-80	Semi-open red pine. Cut next entry, when the adjacent stand to the west meets green-up specs. Very little understory present.
31	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	4.5	101	1-50	HCVA - Fox River. Primarily red maple on a wet site along the flood plain - maintain per the Fox River Plan. Crown closure is highly variable.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
32	6126 - Lowland Jack Pine	Medium Density	219.8	21	1-50	Young, fully stocked jack pine with some areas that are about a 50/50 mix of jack pine/black spruce. Scattered tamarack are also present throughout the stand.
33	42120 - Planted Jack Pine	Low Density Sapling	40.7	21		
34	6126 - Lowland Jack Pine	Medium Density Pole	83.2	67	51-80	Cut now - stand is showing signs of breaking up such as patches of blowdown, etc.
35	42290 - Natural Mixed Pine	Low Density Pole	39.5	101	1-50	HCVA - Fox River The Fox River pathway also crosses through this stand. Semi-open pine w/litte to no understory. Cut now - Reserve approximately 20-40 sq.ft./acre of larger red & white pine plus any paper birch and oak. Scarify to promote natural regeneration.
36	42120 - Planted Jack Pine	High Density Pole	39.2	46	81-110	Cut next entry.
37	6126 - Lowland Jack Pine	Medium Density Pole	8.2	67	51-80	Lowland jack pine mix - ready to cut. Reserve any scattered red & white pine.
38	42220 - Natural Jack Pine	Medium Density Pole	5.4	86	51-80	Mature jack pine - cut now as mortality is becoming evident. Crown closure/stand density varies widely. Reserve the red pine plus any paper birch and oak present. Scarify to promote natural regeneration.
39	42220 - Natural Jack Pine	Medium Density Pole	3.1	46	51-80	Cut next entry
40	6126 - Lowland Jack Pine	Low Density Sapling	66.8	13		Primarily lowland jack pine regeneration. The habitat consists of intermittent strips of sandy uplands featuring ground cover spp. such as blueberry and grasses, and wetter lowlands where labrador tea is the dominant ground cover species.
41	6126 - Lowland Jack Pine	Medium Density Pole	4.1	67	51-80	Lowland jack pine mix - ready to cut. reserve any scatttered red & white pine.
43	6126 - Lowland Jack Pine	Medium Density Pole	18.1	67	51-80	Lowland jack pine mix - ready to cut. Reserve any scattered red & white pine.
44	6125 - Lowland Black Spruce, Jack Pine	Low Density Sapling	3.4	21		Semi-open pocket of regeneration - still filling in, with a lot of spruce seedlings present. Ground flora (reindeer moss, grass & blueberry) indicate that this is a somewhat dryer site than the adjacent jack pine stand.
45	6122 - Black Spruce	Low Density Sapling	122.5	13		Generally a 50/50 mix of jack pine & black spruce regeneration, but in many areas one species or the other is dominant. Labrador Tea is the dominant ground cover species.
46	42120 - Planted Jack Pine	Low Density Sapling	44.7	15		

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
47	6126 - Lowland Jack Pine	Medium Density	68.6	15	1-50	
49	42220 - Natural Jack Pine	Low Density Sapling	24.3	15	1-50	Jack pine regeneration 6-12' tall and 1-2" DBH. A few residual red & white pine are also present.
50	42290 - Natural Mixed Pine	High Density Log	44.9	101	81-110	HCVA - Fox River. Consider shelterwood harvest to remove the jack pine and the scattered aspen, fir etc. Thin the red and white pine down to approximately 40 sq.ft. of basal area per acre. To promote natural pine regeneration, scarify after cutting.
52	42210 - Natural Red Pine	Medium Density Log	10.8	84	81-110	Island of upland pine out in the marsh - retain for wildlife habitat. Some age class diversity is developing.
53	6121 - Tamarack	Medium Density Pole	6.1	67	51-80	Lowland tamarack mix.
54	6126 - Lowland Jack Pine	Low Density Sapling	18.2	21		Mix of jack pine & black spruce regeneration, with a few tamarack also present. The Basal area shown consists of a few residual spruce from the previous stand.
55	6122 - Black Spruce	High Density Pole	3.5	101	81-110	Cut and regenerate black spruce and scattered jack pine, tamarack and birch. Reserve the red & white pine, and any cedar & hemlock encountered in the stand.
56	6120 - Lowland Cedar	High Density Log	1.3	101	141-170	HCVA - Fox River. Small cedar stand just above the Fox River floodplain. Age class diversiy is developing.
57	6126 - Lowland Jack Pine	Low Density Sapling	32.5	11		Fully-stocked jack pine regen on a transitional site between true upland and wetter lowlands.
58	6122 - Black Spruce	Low Density Sapling	4.6	13		Approximately a 50/50 mix of jack pine/black spruce regeneration.
59	42120 - Planted Jack Pine	High Density Pole	13.6	35	51-80	Planted in 1976 with a mix of scotch and jack pine. The scotch pine is outgrowing the jack pine by a noticeable margin. The average BA of merch. scotch pine is approximately 60+ sq.ft./acre; average BA of merch. jack pine is only about 10 sq.ft./acre. Harvest now and specify chipping to ensure that all scotch pine is removed. Reserve any red & white pine, paper birch and oak present.
60	6121 - Tamarack	Low Density Pole	8.8	67	1-50	Lowland tamarack mix - semi-open in many places. Very wet site - may be inoperable.
61	42220 - Natural Jack Pine	Medium Density	1.6	15		Jack pine regeneration. Crown closure is still somewhat variable, but the stand is fully stocked.
62	6121 - Tamarack	Medium Density Pole	1.6	67	51-80	Small island of tamarack/jack pine out in the marsh.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
63	6122 - Black Spruce	High Density Pole	5.3	90	81-110	3-5 stick black spruce and jack pine; stand is beginning to break up. Harvest now.
65	42120 - Planted Jack Pine	Medium Density Pole	53.1	28	1-50	Young jack pine - many stems still 3-4" DBH. The basal area shown consists of 1-2 stick jack pine.
66	42210 - Natural Red Pine	Medium Density Log	10.8	84	81-110	Larger island of upland red pine, but access across the marsh would be extremely difficult.
67	6121 - Tamarack	Medium Density Log	1.9	84	81-110	Island of conifers including tamarack, red & jack pines and spruce.
68	6126 - Lowland Jack Pine	Medium Density	2.1	15		
69	42120 - Planted Jack Pine	High Density Pole	49.3	35	1-50	Fully-stocked young jack pine now reaching merchantable size, but many stems are still 4" dbh or less. Basal area was zero last inventory, now averages 40 sq.ft./acre; expect another significant increase by next entry.
70	42290 - Natural Mixed Pine	Low Density Pole	2.3	101	1-50	HCVA - Fox River. Semi-open pine and grass. Underplant red pine to enhance the diversity of the area. which is heavily dominated by young jack pine.
71	42220 - Natural Jack Pine	Medium Density Log	3.6	53	81-110	Harvest the jack pine, scattered red maple, etc. and scarify afterward to promote natural pine regeneration. For access, a few red and/or white pine may have to be marked, but these species should generally be maintained for seed sources and aesthetic value. Consider underplanting red pine to diversify the area, as this stand is located in an area heavily dominated by jack pine.
72	42120 - Planted Jack Pine	Medium Density Pole	9.1	28	1-50	Young jack pine
73	6122 - Black Spruce	Medium Density Pole	17.9	90	81-110	Black spruce stand ready to cut - stand break-up is underway, and the mature jack pine is rapidly falling out of the stand.
74	42120 - Planted Jack Pine	Medium Density Pole	5.2	28	1-50	Young jack pine
76	6126 - Lowland Jack Pine	Low Density Sapling	7.5	24	1-50	Semi-open jack pine/black spruce mix.
78	6125 - Lowland Black Spruce, Jack Pine	Medium Density	2.6	28	1-50	Lowland spruce/jack pine mix, starting to reach merchantable size. A few trees are big enough to have a merchantable stick or two.
79	42120 - Planted Jack Pine	Medium Density	7.4	15	1-50	Jack pine planted on a transitional site. The snowmobile trail runs north-south through this stand.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
80	6129 - Mixed Coniferous Lowland Forest	Medium Density Log	2.8	101	81-110	HCVA - Fox River. Slow-growing mixed timber along the Fox River floodplain - semi-open in areas.
81	6126 - Lowland Jack Pine	Medium Density Pole	7.9	28	1-50	Somewhat wetter than the other young jack pine stands nearby - habitat is more transitional between uplands & lowlands.
82	42220 - Natural Jack Pine	Medium Density Pole	5.8	28	1-50	Jack pine mix on a transitional site - trees beginning to reach merchantable size.
83	42220 - Natural Jack Pine	Medium Density	17.9	15	1-50	
84	6122 - Black Spruce	Medium Density	2.5	28	1-50	Lowland spruce/jack pine mix on a transitional site. The basal area shown represents the few trees that have reached merchantable size.
85	6126 - Lowland Jack Pine	Medium Density	53.6	23		Fully-stocked jack pine regeneration.
86	42220 - Natural Jack Pine	Medium Density	2.7	28		Young jack pine on a transitional site.
88	42220 - Natural Jack Pine	High Density Pole	23.6	43	81-110	Healthy 3-4 stick jack pine and just a few white pine - cut next entry. The understory is generally sparse, but consists of scattered white pine & black spruce saplings.
89	6126 - Lowland Jack Pine	High Density Pole	26.8	62	111-140	Mature jack pine/black spruce mix now showing evidence of stand break-up. Time to harvest.
90	6126 - Lowland Jack Pine	Low Density Sapling	14.1	24	1-50	Stand density and site indices are highly variable in this lowland jack pine/black spruce stand. In the dryer areas trees are denser and reaching merchantable size, while the wetter areas feature smaller diameters, fewer trees overall and more lowland brush.
91	6126 - Lowland Jack Pine	Low Density Sapling	3.2	24	1-50	Young jack pine just beginning to reach merchantable size. Stand density varies significantly. Some areas appear to be considerably wetter, resulting in variable site indices.
92	42220 - Natural Jack Pine	High Density Pole	5.2	45	81-110	
93	6126 - Lowland Jack Pine	Low Density Sapling	1.2	28	1-50	Not as dense as the other jack pine stands nearby, but still filling in with more jack pine & spruce. Appears to be somewhat slower growing, too.
94	6126 - Lowland Jack Pine	Medium Density Pole	4.6	35	51-80	Jack pine - last cut in 1976
95	6120 - Lowland Cedar	High Density Pole	4.3	103	200+	HCVA - Fox River. Bottomland cedar stand just above the Fox River floodplain.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
97	42120 - Planted Jack Pine	Medium Density	26.5	11		Jack pine regeneration 6-12' tall and 1-2" DBH. Planted in 2000.
98	42220 - Natural Jack Pine	High Density Log	23.2	86	51-80	HCVA - Fox River. Overmature jack pine - ready to cut. Reserve the red pine plus any white pine, paper birch and oak present. Scarify to promote natural regeneration.
99	6117 - Lowland Deciduous, Mixed Coniferous	Low Density Pole	17.7	50	1-50	HCVA - Fox River. Mixed lowland stand located along the banks/floodplain of the Fox River.
100	42220 - Natural Jack Pine	Low Density Sapling	16.0	5		Natural jack pine with planted red pine mixed in, and a few aspen/red maple stems as well.
101	42220 - Natural Jack Pine	Low Density Sapling	15.0	4		Cut & scarified in 2007 - now passes regen check. Seedlings generally less than 4.5' tall.
102	6126 - Lowland Jack Pine	Low Density Sapling	19.2	4		Cut and scarified wherever possible (not too wet) in 2007. Now passes natural regen check. - saplings are generally under 4.5' tall.
103	42220 - Natural Jack Pine	High Density Sapling	10.1	15		Fully-stocked healthy jack pine regeneration 6-12' tall, and 1-3" DBH. A few residual red & white pine are also present from the last stand.
104	6128 - Lowland Coniferous, Mixed Deciduous	High Density Log	4.4	103	111-140	HCVA - Fox River. Mix of conifers along with red maple and a few paper birch along the slopes just above the Fox River floodplain. Some age class diversity due to natural disturbances is evident.
105	6112 - Lowland Aspen	Low Density Sapling	2.0	4	1-50	Cut in 2006-07. A few residual pine & cedar were left.
106	42220 - Natural Jack Pine	Medium Density Log	4.0	86	81-110	Mature jack pine now breaking up. Harvest and regenerate to jack pine. Reserve the scattered red & white pine plus any paper birch and oak present. Scarify to promote natural regeneration.
107	42220 - Natural Jack Pine	High Density Sapling	17.0	15		Healthy jack pine regeneration - fully stocked, 6-12' tall

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
4	3302 - Low Density Conifer Trees	1.9	Natural Regen	Jack Pine	
14	3102 - Grass	297.2	Planted	Red Pine	
19	3302 - Low Density Conifer Trees	2.1	No	Unspecified	
24	3302 - Low Density Conifer Trees	8.6	No	Unspecified	
42	11 - Low Intensity Urban	26.5	No	Unspecified	Fox River Road
48	6229 - Mixed lowland shrub	99.1	No	Unspecified	Drainage channels out to the marsh complex - ground cover varies between patches of scattered trees, open wet grasses and low-to-medium density shrubs of various sizes. Labrador tea is a common species throughout the stand; some areas feature dense pockets of tag alder/willow.
51	3301 - Low Density Deciduous Tree	15.7	No	Unspecified	Low-density red maple & balsam fir along with some tag alder on the banks of the Fox River.
64	6220 - Alder/willow	312.4	No	Unspecified	Semi-open lowland brush/marsh complex. Also includes numerous pockets of both upland & lowland timber too small to be mapped as individual stands.
75	3302 - Low Density Conifer Trees	8.4	No	Unspecified	Semi-open wet area with scattered spruce and aspen, most of which are submerchantable. The stand also features low-density pockets of willow & tag alder, and labrador tea is present over significant portions of the area.
77	3302 - Low Density Conifer Trees	2.1	No	Unspecified	Wetter area/possible seasonal drainage between stands of conifers featuring scattered submerchantable spruce and relatively light lowland brush.
87	6229 - Mixed lowland shrub	1.2	No	Unspecified	
96	3302 - Low Density Conifer Trees	37.3	Natural Regen	Jack Pine	Spruce and all other lowland conifers are acceptable regeneration, in addition to jack pine.

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.

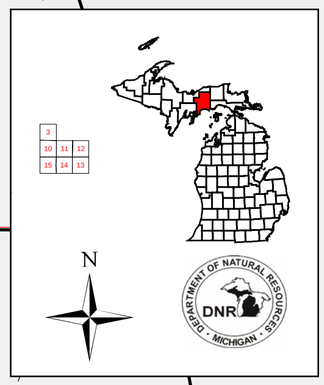
ERA = Ecological Reference Area
HCVA = High Conservation Value Area
SCA = Special Conservation Area

Conservation Area	Type	Description
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	Concentrated Recreation Area	Facilities that are designed and maintained for routine or heavy recreational use, including State Parks, State Forest campgrounds, motorized and non-motorized trails, trailheads, staging areas and public access sites.
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.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.

Cover Type & Treatment Map

Compartment 123
T46N, R14W, Sec. 3, 10-15
County: Schoolcraft
Unit: Shingleton
YOE: 2013
Acres: 2,722 GIS Calculated
Stand Examiner: Bob Tylka
Map Revised: 9/15/2011
Map Phase: Pre-Review

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



Legend
- Miris Corners
- Remonumented Section Corners
- Paved Roads
- Poor Dirt Roads
- Hiking Trails
- Snowmobile Trails
- Hiking Trail
- Snowmobile Trail
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers
- State Forest Land

Non-Forest Regeneration
Planned Regeneration
- Natural
- Planted

Treatments
- Clearcut (w/Reserves, Patch/Strip)
- Seed Tree (w/Reserves)
- Shelter Wood (w/Reserves)
- Planting (tree species)

Forest Stands
Level 3
- 421 - Planted Pines
- 422 - Natural Pines
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands
Level 3
- 110 - Low Intensity Urban
- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 622 - Lowland Shrub

1 6117-E4 2 4222-J4 3 4221-R8 4 330-U0 5 6117-E4 6 4212-J2 7 4212-J5 8 4212-J2 9 4221-R7 10 6117-E4 11 4221-R8 12 4212-J1 13 6128-Q9 14 310-G0 15 6122-S8 16 4211-R8 17 4229-MC7 20 6117-E6 21 4229-MC5 22 4229-MC9 23 4222-J5 24 330-U0 25 6126-J1 26 6128-Q9 27 4229-MC8 28 4229-MC9 29 4222-J4 30 4221-R7 31 6117-E5 32 6126-J2 33 4212-J1 34 6126-J5 35 4229-MC4 36 4212-J6 37 6126-J5 38 4222-J5 39 4222-J5 40 6126-J1 41 6126-J5 42 110-X0 43 6126-J5 44 6125-Q1 45 6122-S1 46 4212-J1 47 6126-J2 48 622-L0 49 4222-J1 50 4229-MC9 51 330-U0 52 4221-R3 53 6121-T5 54 6126-J1 55 6122-S6 56 6120-C9 57 6126-J1 58 6122-S1 59 4212-J6 60 6121-T4 61 4222-J2 62 6121-T5 63 6122-S6 64 622-L0 65 4212-J5 66 4221-R8 67 6121-T8 68 6126-J2 69 4212-J6 70 4229-MC4 71 4222-J3 72 4212-J5 73 6122-S5 74 4212-J5 75 330-U0 76 6126-J1 77 330-U0 78 6125-Q2 79 4212-J2 80 6129-Q8 81 6126-J5 82 4222-J5 83 4222-J2 84 6122-S2 85 6126-J2 86 4222-J2 87 622-L0 88 4222-J6 89 6126-J6 90 6126-J1 91 6126-J1 92 4222-J6 93 6126-J1 94 6126-J5 95 6120-C6 96 330-U0 97 4212-J2 98 4222-J9 99 6117-E4 100 4222-J1 101 4222-J1 102 6126-J1 103 4222-J3 104 6128-Q9 105 6112-P1 106 4222-J8 107 4222-J3

Sunken Lake Rd
Fox River Rd
Fox River Bnd
Fox River
Hudson Creek
Hudson Creek
Hudson Creek
Little
Clarks Ditch
Two Mile Ditch
Gronden Creek

1 0.5 0 1 Miles

86°4'0"W 86°3'0"W 86°2'0"W 86°1'0"W 86°0'0"W 85°59'0"W 85°58'0"W
46°25'0"N 46°24'0"N 46°23'0"N 46°22'0"N

Stand Boundary Map

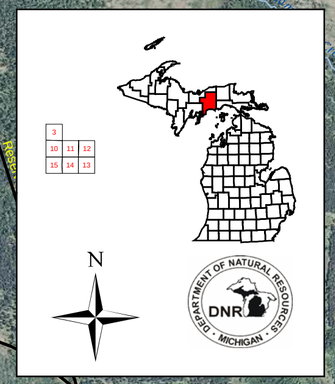
Compartment 123
T46N, R14W, Sec. 3, 10-15
County: Schoolcraft
Unit: Shingleton
YOE: 2013
Acres: 2,722 GIS Calculated
Stand Examiner: Bob Tylka
Map Revised: 9/15/2011
Map Phase: Pre-Review

Stand # 23

Stocking Density

(412)0) - A7
Level 3 Level 4 OI Code

Cover Type Code



Legend

- Miris Corners
- Remonumented Section Corners
- Paved Roads
- Poor Dirt Roads
- Hiking Trails
- Snowmobile Trails
- Hiking Trail
- Snowmobile Trail
- Intermittent Stream/Drain
- Stream
- Stand Boundaries

Forest Stands

Level 3
- 421 - Planted Pines
- 422 - Natural Pines
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands

Level 3
- 110 - Low Intensity Urban
- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 622 - Lowland Shrub

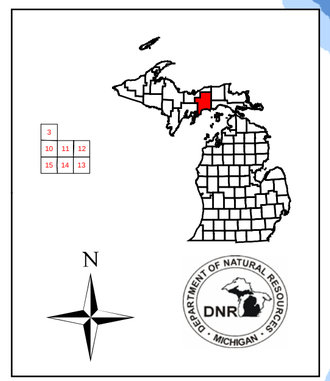
1 0.5 0 1 Miles

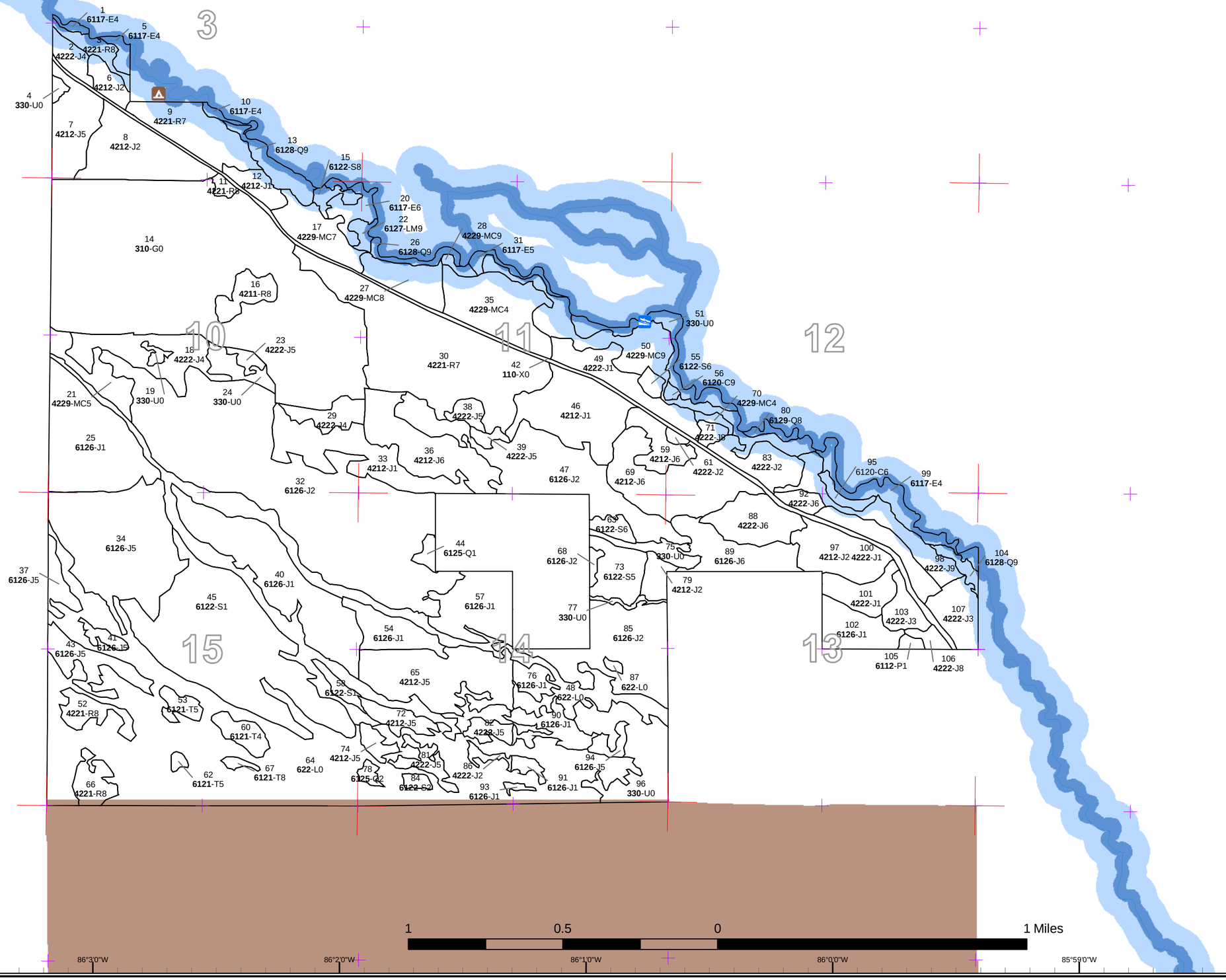
86°3'0"W 86°2'0"W 86°1'0"W 86°0'0"W 85°59'0"W 85°58'0"W
46°12'0"N 46°11'0"N

Dedicated & Proposed Special Conservation Area Map

Compartment 123
T46N, R14W, Sec. 3, 10-15
County: Schoolcraft
Unit: Shingleton
YOE: 2013
Acres: 2,722 GIS Calculated
Stand Examiner: Bob Tylka
Map Revised: 9/15/2011
Map Phase: Pre-Review

Stand # 23 — Stocking Density
(412)0) - A7
Level 3 Level 4 OI 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

- Boat Access Sites
- Campgrounds
- Natural Rivers Zoning District
- Natural Rivers Vegetative Buffer
- Wildlife Management Areas

Forest Stands

Level 3

- 421 - Planted Pines
- 422 - Natural Pines
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands

Level 3

- 110 - Low Intensity Urban
- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 622 - Lowland Shrub

86°3'0"W 86°2'0"W 86°1'0"W 86°0'0"W 85°59'0"W 85°58'0"W 85°57'0"W
46°25'0"N 46°24'0"N 46°23'0"N 46°22'0"N