

**Revision Date:** 08/15/2011

Stand Examiner: Jesse Bramer

Legal Description: T47N R17W Sections 1-3, 11 & 12

RMU (if applicable): Pictured Rocks Buffer

**Management Goals:** Provide for the protection, integrated management, and responsible use of a healthy, productive, forest and mineral resource base for the social, recreational, environmental, and economic benefit of the people of the State of Michigan.

**Soil and Topography:** The compartment has rolling to hilly terrain. There are areas where access will be seasonable do to a high water table. The majority of the soil types will support fair to good quality hardwoods.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** Sections 2 and 3 fall within the Pictured Rocks National Lake Shore buffer area. Sections 11 and 12 are not within the buffer area. There is some private ownership near the Shoe Lakes and some Shelter Bay land in and around the compartment. The compartments SE boundary is H-58 which is a heavily traveled road during all four seasons.

**Unique, Natural Features:** Upper Shoe Lake and Lower Shoe Lake is located in the Northeast portion of this compartment. Lake Abby resides within section 2 and Section 34 Creek flows into a pond in section 3 of this compartment.

Archeological, Historical, and Cultural Features: The original soil survey (1928) indicates that the present Adams Trail/H-58 was originally a CCI logging railroad.

## Special Management Designations or Considerations: None

**Watershed and Fisheries Considerations:** Fisheries Values are good. Section 34 Creek is classified Second Quality Cold Water (SQCW) for natural brook trout. Upper Shoe Lake currently receives an annual yearling splake plant. Our last netting survey documented a large population of stunted perch, which always out-compete the splake. The result is no splake to catch, and thousands of small perch with very few of keeper size. We are negotiating for a dedicated raceway at the Marquette Hatchery that will raise splake to "advanced yearling" size. Once splake become about 12 inches long, they become purely piscivorous. At that time, they will no longer compete with perch for the same food sources, but will actually target the small perch. If we can get permissions to raise those advanced yearlings, we will again have a good fishery in this lake.

**Wildlife Habitat Considerations:** This compartment is located within the Grand Marais Sandy End Moraine Outwash sub-subsection. The average growing season is approximately 120 days. The extreme winter temperature generally reaches approximately –35 F. Snowfall in this compartment averages 200

inches or more annually. General Land Office (GLO) Surveyor notes indicate that the upland forest contained a mixture of softwood and hardwoods. Principle species included sugar maple, hemlock, yellow birch, beech, balsam fir, with lesser amounts of red maple, and elm. Cedar, tamarack, and tag alder dominated the lowlands. Wind throw was likely the primary source of natural disturbance. The current forest cover is quite similar to that found by the GLO surveyors. However, there as been a substantial reduction in species diversity with the northern hardwood areas. Specifically, the yellow birch and conifer (hemlock and fir) component appears to have been significantly reduced or eliminated in some stands. Wildlife habitat objectives include maintaining some closed canopy deciduous forest, reestablishing conifers as important components within the hardwood stands, providing soft mast by favoring the retention and enhancement of black cherry and yellow birch. Lowland conifer stands will also be protected. There are no known occurrences of endangered, threatened, or special concern species within this compartment. However, other species of interest include Blackburnian warbler, saw-whet owl, fisher, and marten.

**Mineral Resource and Development Concerns and/or Restrictions:** Surface sediments consist of end moraine of medium-textured till and glacial outwash sand and gravel and postglacial alluvium to the east. There is approximately 100 feet of local relief in the compartment. There is insufficient data to determine the glacial drift thickness. The Ordovician Prairie du Chien (PdC) and the Cambrian Trempealeau Formation subcrop below the glacial drift. The PdC and Trempealeau could be used for stone. The nearest gravel pit is 8 miles to the south. There should be gravel potential on the upland areas. There is no commercial oil and gas production in the UP.

**Vehicle Access:** There is a good two-track system in place from past logging activities on State and Forest Land Group property.

Survey Needs: Some treatments border private land and survey work may be needed.

Recreational Facilities and Opportunities: Deer, grouse, and rabbit hunting.

**Fire Protection:** The timber types are mainly hardwood and lowland conifers reducing the chances of any large wildland fire occurances.

# 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

 $\triangleright$ 

## Table 1 – Total Acres by Cover Type and Age Class

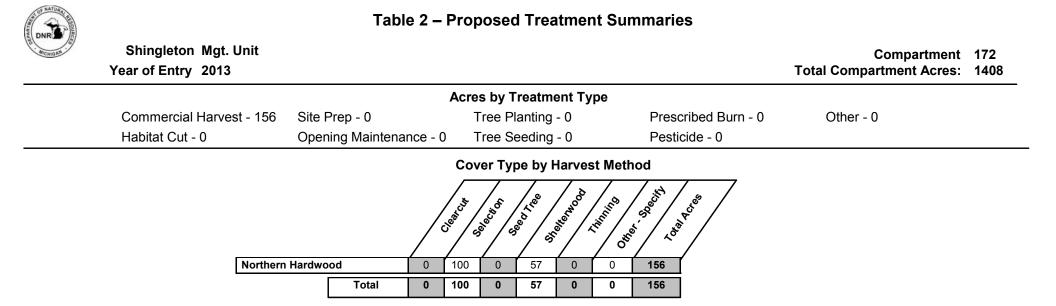
Shingleton Mgt. Unit

Jesse Bramer : Examiner

### Compartment 172 Year of Entry 2013



							Age (	Class									
	Hor	Desiges of the state of the sta	6.z	6 <sup>,0</sup>	62. 62		10 <sup>-49</sup>	195 195	69.00 199	10	69. 59.	86.a	601.001	611.01.	200 Jul	A AS	100,000
Bare/Sparsely Vegetated	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
Bog	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	
Cedar	0	0	0	0	0	0	0	0	0	35	0	0	0	0	0	35	
Herbaceous Openland	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Lowland Conifers	0	0	0	19	25	0	0	0	0	26	0	0	0	0	0	70	
Lowland Deciduous	0	0	0	0	0	25	7	0	121	0	0	0	0	0	0	153	
Lowland Mixed Forest	0	0	0	0	0	4	0	0	32	0	0	0	0	0	0	36	
Lowland Shrub	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
Marsh	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
Mixed Upland Deciduous	0	0	0	116	0	8	0	0	0	0	0	0	0	0	0	124	
Northern Hardwood	0	0	0	0	18	163	606	82	0	0	0	0	0	0	0	869	
Treed Bog	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	
Upland Conifers	0	0	0	0	0	15	0	17	0	0	0	0	0	0	0	32	
Water	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	
Total	91	0	0	135	43	216	613	98	153	61	0	0	0	0	0	1408	



Shingleton Mgt. Unit

S

#### Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 172 Year of Entry 2013



						Imiting Fac		-	DNR DNR
a n T d	reatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
20 41 <sup>.</sup>	172020-Cut		4119 - Mixed orthern Hardwoods	High Density Log	53	Harvest	Single Tree Selection	4119 - Mixed Northern Hardwoods	Cmpt. Review Proposal
Prescripti Specs:	basal are Long terr	ea where p m MO => (	oossible, but lower b Create opportunities	asal areas will be a for and enhance e	cceptable	e where large a and regeneratio	sease) infected beech tree mounts of infected beech on. n, maple wildlife trees, pos	trees are.	
<u>)ther</u> commen							left. Mark to cut trees for as where beech is not a la		
			es diversity, and lea ut if needed, but tre				that may be resisitant to ent enough.	the BBD. Create rege	eneration
<u>lext</u> steps:									
33 41 <sup>.</sup>	172033-Cut	56.5	4112 - Maple, Beech, Cherry Association	High Density Pole	52	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<u>rescripti</u> pecs:	througho Long terr Retentio	ut. n MO => ( n => Retai	Create opportunities	for and enhance e sity and leave any d	xisting statisease re	and regeneratic	ain the species diversity. on. rees, and large supercand	-	
<u>ther</u> ommen	its:								
teps:	172036-Cut	9.2	4112 - Maple, Beech, Cherry Association	High Density Pole	46	Harvest	Shelter Wood with Reserves	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<u>steps:</u> 36 41 <sup>.</sup> Prescripti	ion Treatme througho Long terr Retention	nt => Shel ut to prom n MO => ( n => Retai	Beech, Cherry Association terwood harvest this tote black cherry rec Create opportunities	s stand retaining ap generation. for and enhance e sity and leave any d	proximate xisting statisease re	ely 50 BA. Main and regeneration sistant beech t	Reserves ntain the species diversity	Beech, Cherry Association /. Create many regen	Proposal eration openings
iteps: 36 41 <sup>-</sup> Prescripti pecs: Other	ion Treatmen througho Long terr Retention birch tree This is a species, compone hopefully	nt => Shel ut to prom m MO => 0 n => Retai es that ma poor qual and brack ent in stan	Beech, Cherry Association terwood harvest this note black cherry reg Create opportunities in the species divers y be present. Also ity hardwood stand ten fern. The black ds and lowering wild	s stand retaining ap generation. for and enhance e sity and leave any d leave some red ma with a large black cl cherry trees presen llife mast, keeping a neration, and will al	proximate xisting sta isease re ple wildlif nerry con t are of p and reger	ely 50 BA. Main and regeneration sistant beech to sistant	Reserves ntain the species diversity on.	Beech, Cherry Association y. Create many regen opy white pine, spruce sent such as starflowe ark disease decimatin ucial. This type of ha	Proposal eration openings e, and yellow er, lycopodium g the beech rvest will
iteps: 36 41 Prescripti pecs: Other Commen	ion Treatment througho Long tern Retention birch tree This is a species, compone hopefully supplem After the	nt => Shel ut to prom m MO => 0 n => Retai es that ma poor qual and brack ent in stan o encourage ent natura	Beech, Cherry Association terwood harvest this tote black cherry reg Create opportunities in the species divers by be present. Also ity hardwood stand ten fern. The black ds and lowering wild black cherry rege lly occurring regene rvest generate an F	s stand retaining ap generation. for and enhance e sity and leave any d leave some red ma with a large black cl cherry trees presen llife mast, keeping a neration, and will al ration.	proximate xisting st isease re ple wildlif nerry con t are of p and reger low wildli	ely 50 BA. Main and regeneration sisistant beech tr e trees. apponent as indire oor quality and arerating other w fe cultivation wo	Reserves ntain the species diversity on. rees, and large supercand cated by ground flora pres condition. With beech ba vildlife life mast trees is cr	Beech, Cherry Association . Create many regen opy white pine, spruce sent such as starflowe ark disease decimatin ucial. This type of ha oak under plantings to	eration openings e, and yellow er, lycopodium g the beech rvest will o occur to
teps: 6 41 <sup>-</sup> rescripti pecs: ther ommen ext teps:	ion Treatmen througho Long terr Retention birch tree This is a species, compone hopefully supplem After the the area	nt => Shel ut to prom m MO => ( n => Retai es that ma poor qual and brack ent in stan o encourag ent natura timber ha Wildlife Bi	Beech, Cherry Association terwood harvest this tote black cherry reg Create opportunities in the species divers by be present. Also ity hardwood stand ten fern. The black ds and lowering wild black cherry rege lly occurring regene rvest generate an F	s stand retaining ap generation. for and enhance e sity and leave any d leave some red ma with a large black cl cherry trees presen llife mast, keeping a neration, and will al ration.	proximate xisting st isease re ple wildlif nerry con t are of p and reger low wildli	ely 50 BA. Main and regeneration sisistant beech tr e trees. apponent as indire oor quality and arerating other w fe cultivation wo	Reserves ntain the species diversity on. rees, and large supercand cated by ground flora pres condition. With beech ba vildlife life mast trees is cr ork such as hemlock and	Beech, Cherry Association 7. Create many regen opy white pine, spruce sent such as starflowe ark disease decimatin ucial. This type of ha oak under plantings to ithin the treated area a	Proposal eration openings e, and yellow er, lycopodium g the beech rvest will o occur to as directed by
iteps: 36 411 Prescripti Specs: Other Commen lext iteps: 48 411 Prescripti	ion Treatmen througho Long terr Retention birch tree This is a species, compone hopefully supplem After the the area <b>172048-Cut</b> ion Treatmen througho Long terr Retention	nt => Shel ut to prom m MO => ( n => Retai es that ma poor qual and brack ent in stan r encourag ent natura timber ha Wildlife Bi 11.7 4 nt => Sing ut. m MO => ( n => Retai	Beech, Cherry Association terwood harvest this tote black cherry reg Create opportunities by be present. Also ity hardwood stand ten fern. The black ds and lowering wild black cherry rege illy occurring regene rvest generate an F iologist. 110 - Sugar Maple Association le tree harvest this s Create opportunities	s stand retaining ap generation. for and enhance e sity and leave any d leave some red ma with a large black cl cherry trees presen llife mast, keeping a neration, and will al ration. TP (Forest Treatme High Density Log stand retaining appr s for and enhance e sity and leave any d	proximate xisting sta isease re ple wildlif herry con t are of p and reger low wildlif ent Propo 64 oximately xisting sta isease re	ely 50 BA. Main and regeneration isistant beech tri e trees. hponent as indivi- oor quality and herating other w fe cultivation wo sal) to underpla Harvest y 70 BA. Maint and regeneration	Reserves ntain the species diversity on. rees, and large supercand cated by ground flora pres condition. With beech ba vildlife life mast trees is cr ork such as hemlock and ant hemlock and/or oak with Single Tree Selection rain the species diversity.	Beech, Cherry Association 7. Create many regen opy white pine, spruce sent such as starflowe ark disease decimatin ucial. This type of ha oak under plantings to ithin the treated area a 4110 - Sugar Maple Association Create regeneration of	Proposal eration openings e, and yellow er, lycopodium g the beech rvest will o occur to as directed by Cmpt. Review Proposal openings
Prescripti Specs: Dther Commen Jext Steps: 48 41	ion Treatmen througho Long terr Retention birch tree This is a tts: species, compone hopefully supplem After the the area <b>172048-Cut</b> ion Treatmen througho Long terr Retention birch tree	nt => Shel ut to prom m MO => ( n => Retai es that ma poor qual and brack ent in stan r encourag ent natura timber ha Wildlife Bi 11.7 4 nt => Sing ut. m MO => ( n => Retai	Beech, Cherry Association terwood harvest this tote black cherry reg Create opportunities be present. Also ity hardwood stand ten fern. The black ds and lowering wild be black cherry rege lly occurring regene rvest generate an F iologist. 110 - Sugar Maple Association le tree harvest this s Create opportunities in the species divers	s stand retaining ap generation. for and enhance e sity and leave any d leave some red ma with a large black cl cherry trees presen llife mast, keeping a neration, and will al ration. TP (Forest Treatme High Density Log stand retaining appr s for and enhance e sity and leave any d	proximate xisting sta isease re ple wildlif herry con t are of p and reger low wildlif ent Propo 64 oximately xisting sta isease re	ely 50 BA. Main and regeneration isistant beech tri e trees. hponent as indivi- oor quality and herating other w fe cultivation wo sal) to underpla Harvest y 70 BA. Maint and regeneration	Reserves ntain the species diversity on. rees, and large supercand condition. With beech ba vildlife life mast trees is or ork such as hemlock and ant hemlock and/or oak wi Single Tree Selection cain the species diversity.	Beech, Cherry Association 7. Create many regen opy white pine, spruce sent such as starflowe ark disease decimatin ucial. This type of ha oak under plantings to ithin the treated area a 4110 - Sugar Maple Association Create regeneration of	Proposal eration openings e, and yellow er, lycopodium g the beech rvest will o occur to as directed by Cmpt. Review Proposal openings

S t	Shingleton Mgt. Unit Treatment Acres Stage1					atments Pre _imiting Fac		Compartment: 172 Year of Entry 2013	AND
a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
50	41172050-Cut	11.9	4112 - Maple, Beech, Cherry Association	High Density Pole	64	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
	Prescription   Treatment => Single tree harvest this stand retaining approximately 70 BA. Maintain the species diversity. Create regeneration openings     Specs:   throughout.     Long term MO => Create opportunities for and enhance existing stand regeneration.     Retention => Retain the species diversity and leave any disease resistant beech trees, and large supercanopy white pine, spruce, and yellow birch trees that may be present. Also leave some red maple wildlife trees.								
<u>Other</u> Comn	-								
<u>Next</u> <u>Steps</u>	<u>:</u>								
51	41172051-Cut	47.4	4112 - Maple, Beech, Cherry Association	High Density Pole	56	Harvest	Shelter Wood with Reserves	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
Presc Specs	througho	out to pror m MO => n => Reta	mote black cherry re Create opportunitie ain the species diver	egeneration. s for and enhance e	xisting statisease re	and regeneration	ntain the species diversity on. rees, and large supercand		
<u>Other</u> <u>Comn</u>	n <u>ents:</u> species, compone hopefully	This is a poor quality hardwood stand with a large black cherry component as indicated by ground flora present such as starflower, lycopodium							
<u>Next</u> <u>Steps</u>		timber h Wildlife E		FTP (Forest Treatme	ent Propo	sal) to underpla	ant hemlock and/or oak w	ithin the treated area a	s directed by
	Total Treatmer creage Propose		6.5						

S t a		Shingle	eton Mgt. Unit	Table 4		ents Prescrib ng Factor	Compartment: 172 Year of Entry 2013	DI NATURA	
n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
			#Error						
Presc Specs	ription S:								
<u>Other</u> Comn									
<u>Next</u> <u>Steps</u>	<u>:</u>								
	ng Factor and No ment Reason	0_							
Ac	Total Treatmer reage Propose		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_OutO OE-Cut	<b>fY</b> 35.6				Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
Prescription 3 Specs:	rd row thinni	ng. Cut all trees in de	esignated rows. R	lows can be	e spaced wider	apart in areas with lower	basal area. Do not cut	hemlock and oak.
<u>Dther</u> D Comments:	o not cut an	y trees within 50 feet	of the West Bran	ich Manistio	que River.			
<u>Next</u> T Steps:	hin next yea	r of entry.						
41049_OutO OE_1-Cut					Harvest	Single Tree Selection	42290 - Natural Mixed Pine	Cmpt. Review Proposal
Prescription N	lark red pine	and white pine to 30	sg. ft. Create ga	os in canor	v for regenera	tion where nine exists. An	eas that have thicker v	oung poles can be
<u>Specs:</u> n	narked to 80.	Cut all other species						
<u>Other</u> A		. Cut all other species nd is too difficult for c	s except hemlock	and oak if				
<u>Other</u> A <u>Comments:</u>	ccess to sta	nd is too difficult for c	s except hemlock	and oak if	present.	on includes any species r		
<u>Dther</u> A <u>Domments:</u> <u>Next</u> F	access to sta	nd is too difficult for c	s except hemlock	and oak if	present.	·		
Dther A Comments: <u>Vext</u> F Steps: 41053_OutO OE-Cut Prescription N	Access to sta Regeneration <b>fY</b> 10.2 fark red pine	nd is too difficult for c walkthrough during r	s except hemlock continuous thinnir next inventory cyc	and oak if ng. de. Accepta	present. able regeneration Harvest by for regenera	on includes any species r	nixture currently found 42290 - Natural Mixed Pine	onsite. Cmpt. Review Proposal
Other A   Omments: A   Next F   Steps: A   41053_OutO   OE-Cut   Prescription N   Specs: n	fY 10.2 fr in the test of	nd is too difficult for c walkthrough during r	s except hemlock continuous thinnir next inventory cyc sq. ft. Create ga s except hemlock	and oak if ng. cle. Accepta ps in canop and oak if	present. able regeneration Harvest by for regenera	on includes any species r Single Tree Selection	nixture currently found 42290 - Natural Mixed Pine	onsite. Cmpt. Review Proposal

S t	Shingleton Mgt. Unit			5 – Fo	prested Sta	nds Compartment: 172 Year of Entry: 2013
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	25.1	47	81-110	This stand was thinned in 1984. Topography varies a lot within this stand and so does species composition.
2	4112 - Maple, Beech, Cherry Association	High Density Pole	4.4	48	81-110	This stand was thinned in 1984. Recommend harvesting this stand with adjacent stand directly north in compartment 169.
3	6132 - Mixed Lowland Forest with Cedar	High Density Pole	18.1	75	111-140	This stand was thinned in 1975 and now has a treatment limiting factor for wildlife habitat consideration. Wildlife Division did not want this stand to be cut to maintain structural diversity.
4	6131 - Hemlock, White Pine, Maple, Birch	High Density Pole	13.8	78	51-80	This stand occurs between an upland site dominated by hardwoods and a lowland depression in the middle of Secion 3.
5	6118 - Lowland Deciduous with Cedar	High Density Pole	120.8	70	81-110	The southern portion of this stand has a creek that runs through it. The area is low with standing water in many places . Tree densities and composition vary throughout the stand.
9	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	26.0	80	111-140	This area is mostly cedar with other lowland conifer and deciduous tree species with it.
10	4112 - Maple, Beech, Cherry Association	High Density Log	183.6	50	51-80	Terrain is very hilly. The timber is poor quality around the lower topography and slightly better on higher ground. A road system exists from earlier TSI work. The sale was thinned around 2005 under TS #031-03 TCR dtd 5-10-05. Under FTP W41-1139 hemlock was underplanted around 2007.
15	6120 - Lowland Cedar	High Density Pole	35.1	80	141-170	
16	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	7.9	47	51-80	This is a transitional area between high ground with hardwood species and low ground with mostly lowland tree species.
17	4115 - Y.Birch, Hemlock NH	High Density Pole	2.3	44	51-80	This area is difficult to access and contains a small volume of timber.
18	4111 - S.Maple, Hard Mast Association	High Density Log	33.3	55	81-110	This stand was thinned in 2008 under TS # 41-001-08-1 TCR dtd 6-29-10. This area contains mostly sugar maple, but in the northeast corner of this stand there is red maple and ash present. There are low areas scattered throughout this stand, along with possibly an intermittant creek in the northeast portion.
20	4119 - Mixed Northern Hardwoods	High Density Log	19.8	53	81-110	Access is difficult to this stand. It can only be reached by crossing adjacent private land or by crossing the stream/creek to the west. There are many large infested beech trees here with a lot of beech regen. Possibly treat this stand with traditional thinning.
21	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	6.8	51	81-110	Similar to the nearby hardwood stand to the south, but on lower ground and contains more lowland species. The timber quality is much poorer too. There are areas of standing water.

S t	Shingleto	n Mgt. Unit		5 – Fo	prested Sta	nds Compartment: 172 Year of Entry: 2013
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
22	6128 - Lowland Coniferous, Mixed Deciduous	High Density Sapling	18.9	20	81-110	A mixed conifer stand with a lot of hemlock ranging from sapling to log sized trees. A depression occurs approximately in the middle of the stand.
23	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	25.0	35	51-80	
27	4112 - Maple, Beech, Cherry Association	High Density Pole	14.2	50	81-110	This stand has hilly terrain and was thinned in 2007-2008 under TS # 41-001-08-01 TCR dtd 6-29-10.
28	6131 - Hemlock, White Pine, Maple, Birch	High Density Pole	4.3	47	81-110	This is a stand mixed with deciduous and conifer trees with an understory full of hemlock.
29	4119 - Mixed Northern Hardwoods	High Density Pole	21.2	45	51-80	The right side off this stand contains a lot of submerchantable sugar maple and the pole sized merchantable trees are of poor form. There a lot of infected beech trees in this stand. A few are already dead but most are still merchantable.
30	4112 - Maple, Beech, Cherry Association	High Density Log	10.0	56	81-110	This stand contained an old research fertilization plot that is no longer active. [01-07-05] The stand was thinned under contract TS #038-04 Badger Hole Hardwood.
32	4112 - Maple, Beech, Cherry Association	High Density Pole	21.8	45	51-80	The stand is similar to the adjacent hardwood stand to the south. The basal area is lower and the tree dbh's are slightly higher.
33	4112 - Maple, Beech, Cherry Association	High Density Pole	56.5	52	111-140	This stand was originally part of IFMAP stand 31, but was separated due to its differences in timber quality and density. The timber quality is poorer and smaller, but densities are higher. There are indicator species such as star flower, bracken fern, and lycopodium species suggesting this isn't a high fertile hardwood site.
34	4112 - Maple, Beech, Cherry Association	High Density Pole	150.8	55	111-140	This stand contains hilly to rolling terrain with poor quality hardwoods. This stand had TSI work done approximately around 1978. There is a Treatment Limiting Factor for delayed treatment for age/class diversity and inferior quality. The northern portion of this stand contains Beech Bark Disease (BBD) plots.
35	4199 - Other Mixed Upland Deciduous	Medium Density	115.8	27		This stand is mainly aspen with paper birch and other various hardwood species mixed in. Balsam fir and a few other conifer individuals can be found here too. Tree density varies throughout the stand and there are some small openings scattered about.
36	4112 - Maple, Beech, Cherry Association	High Density Pole	9.2	46	111-140	This stand contains many pole sized cherry trees
38	4111 - S.Maple, Hard Mast Association	High Density Log	25.4	60	51-80	This stand had TSI work done in '76 and was thinned under TS# 031-03 back in 2005. This stand contains a lot of forked trees.

#### 5 – Forested Stands



S t	Shingleton Mgt. Unit			5 – Fo	prested Sta	nds Compartment: 172 Year of Entry: 2013
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
39	429 - Mixed Upland Conifers	High Density Pole	16.7	67	51-80	This is a dominantly white pine stand with various other conifer and hardwood species mixed in. It surrounds Lake Abby.
40	4112 - Maple, Beech, Cherry Association	High Density Pole	44.3	46	81-110	This stand contains a lot of pole sized red maple and black cherry. Timber quality is poor and regeneration is somewhat thick in a few places.
43	4112 - Maple, Beech, Cherry Association	High Density Pole	35.2	49	51-80	This stand was cut heavily in 1982 -1983. It has a very thick underbrush with poor quality log trees.
45	429 - Mixed Upland Conifers	High Density Pole	15.0	44	51-80	This stand is mainly white pine with balsam fir mixed in. There are also a few sapling/pole sized deciduous trees present too. Tree density and size varies in this stand.
46	4112 - Maple, Beech, Cherry Association	High Density Pole	13.2	48	81-110	This stand consists of mainly pole sized sugar maple trees. The southern portion contains higher numbers of red maple trees with more understory regeneration. There are also over mature, aspen trees in the northern portion.
47	4112 - Maple, Beech, Cherry Association	Medium Density Pole	18.0	35	1-50	This stand is located along H-58 and consists of poor quality red maple and white pine trees.
48	4110 - Sugar Maple Association	High Density Log	11.7	64	111-140	This stand had TSI work done in 1983. It has a Limiting Factor for delayed treatment due to inferior quality. This stand is dominantly sugar maple with red maple and black cherry within the canopy. The DBH is higher than the neighboring stands, and the understory is scarce of regeneration.
49	4112 - Maple, Beech, Cherry Association	High Density Pole	11.7	47	1-50	This stand was cut heavily in 1982-1983. It contains a very heavy under brush. Red and white oak were planted in '90. TS# 019-03-02 The stand was cut 2002-2003 for overstory removal.
50	4112 - Maple, Beech, Cherry Association	High Density Pole	11.9	64	111-140	This stand had TSI work done in 1989. It's a sugar maple stand with a black cherry component mixed in.
51	4112 - Maple, Beech, Cherry Association	High Density Pole	47.4	56	111-140	The southern portion of this stand contains more black cherry, balsam fir, and red maple. This stand appears to be a transition zone between a slightly better site containing sugar maple and a poorer site containing red maple.
52	4112 - Maple, Beech, Cherry Association	High Density Pole	14.4	56	81-110	The stand contains a mix of black cherry, red maple, balsam fir, and mature yellow birch scattered about.
55	4112 - Maple, Beech, Cherry Association	High Density Pole	32.5	62	81-110	This stand is located off of H-58. It contains hilly to rolling terrain. The stand was thinned in 2005 under T.S. # 031-03. There is some scattered white pine and hemlock throughout the stand.
57	4112 - Maple, Beech, Cherry Association	High Density Pole	43.1	59	51-80	This stand is located off of H-58 and is composed of a mix of maple, beech, cherry, and fir. There are scattered white pine in the super canopy. Records indicate that this stand had TSI work done in the 1980's.

S t	Shingleto	Shingleton Mgt. Unit			prested Sta	nds Compartment: 172 Year of Entry: 2013	DNR DNR
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	MICHIGAN .
58	4112 - Maple, Beech, Cherry Association	High Density Pole	32.6	59	51-80	Records indicate that this stand was thinned in 1996 ar work was done in the late 1960's. This stand is anothe maple dominated stand with a mix of sugar maple, beec balsam fir. There are also scattered conifers in the ove with a flush of beech regeneration underneath.	er red ch, and

Shingleton Mgt. Unit

### 6 – Nonforested Stands

Compartment: 172

Year of Entry: 2013



						MICHIGAN
Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:	
6	6224 - Treed Bog	12.6	N\A	Unspecified		
7	6225 - Bog	5.5	N\A	Unspecified		
8	50 - Water	2.2	N\A	Unspecified		
11	623 - Emergent Wetland	2.1	N\A	Unspecified		
12	623 - Emergent Wetland	8.6	N\A	Unspecified		
13	622 - Lowland Shrub	3.2	N\A	Unspecified		
14	6220 - Alder/willow	2.0	N\A	Unspecified		
19	50 - Water	13.9	N\A	Unspecified		
24	790 - Other Bare/Sparsely Vegetate	5.5	N\A	Unspecified		
25	622 - Lowland Shrub	2.0	N\A	Unspecified		
26	6224 - Treed Bog	3.7	N\A	Unspecified		
31	623 - Emergent Wetland	1.5	N\A	Unspecified		
37	6224 - Treed Bog	1.3	N\A	Unspecified		
41	50 - Water	5.3	N\A	Unspecified		
42	6225 - Bog	5.7	N\A	Unspecified		
44	50 - Water	1.8	N\A	Unspecified		
53	6225 - Bog	2.4	N\A	Unspecified		
54	6225 - Bog	8.1	N\A	Unspecified		
_						

Compartment: 172 Year of Entry: 2013



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:	
56	3102 - Grass	1.2	N\A	Unspecified		
59	3102 - Grass	1.9	N\A	Unspecified		



### 7 – PROPOSED SPECIAL CONSERVATION AREA\* (SCA) DETAILS

\* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

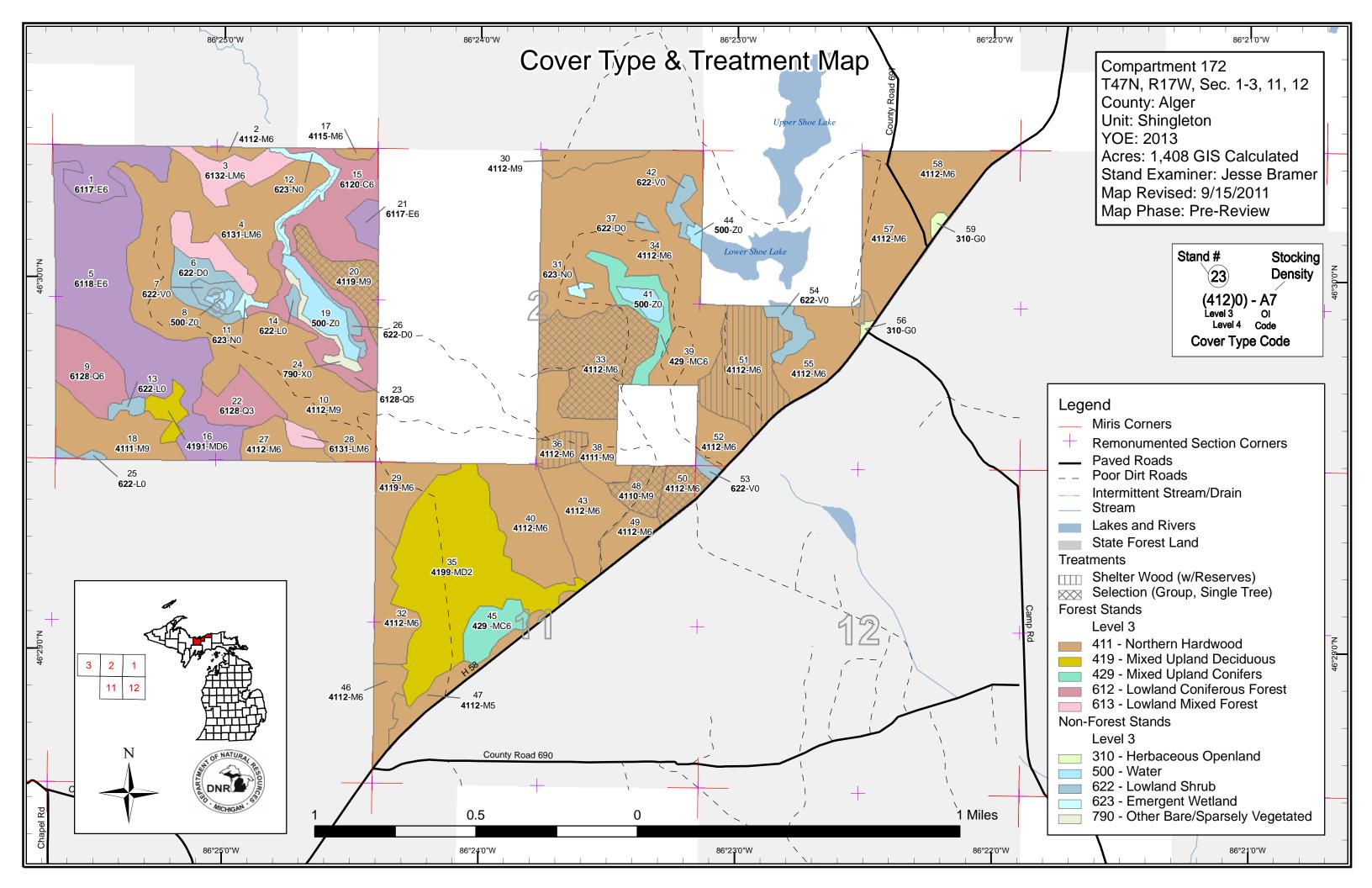
Stand	SCA Type	SCA Name	Acres	Comments

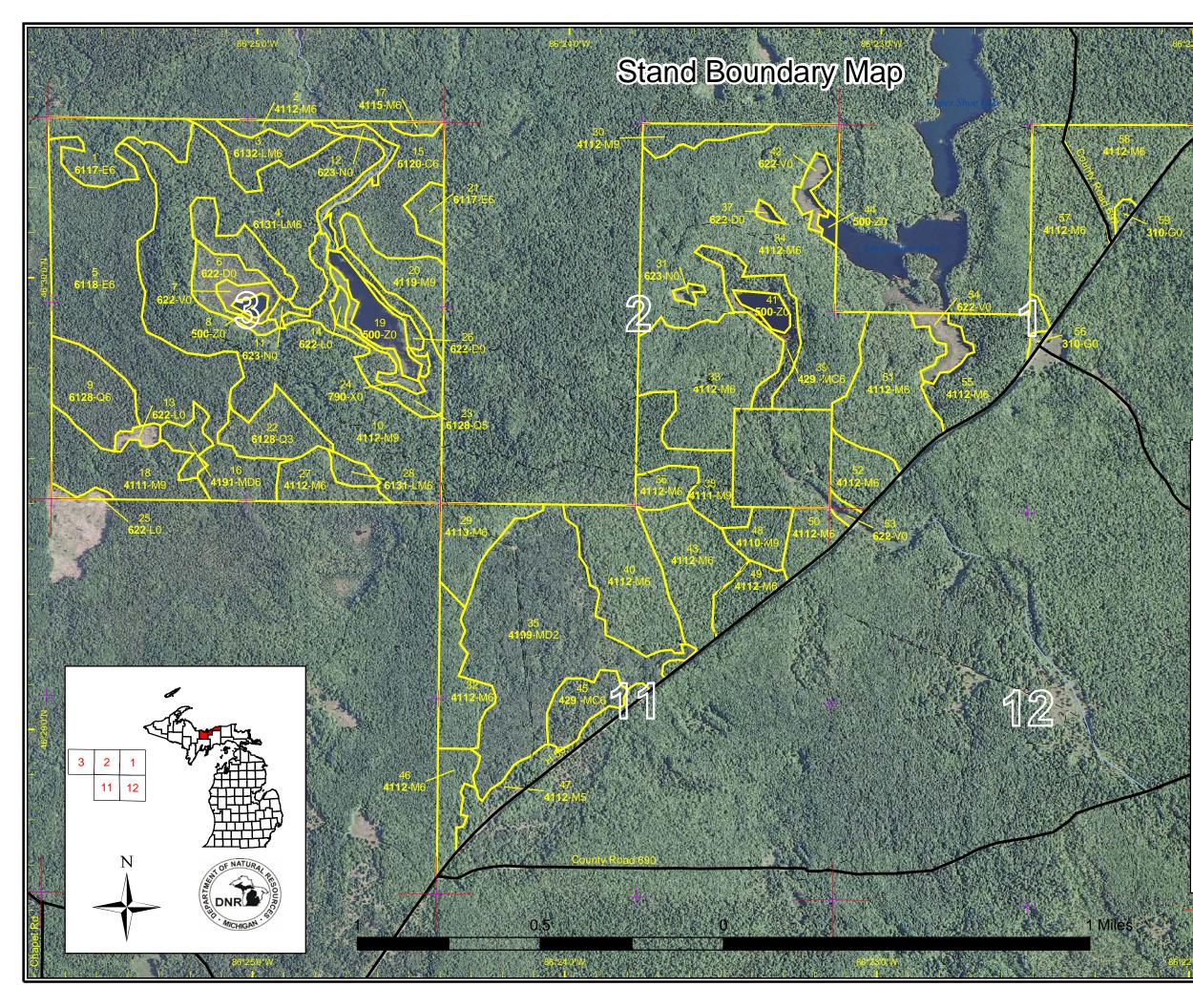


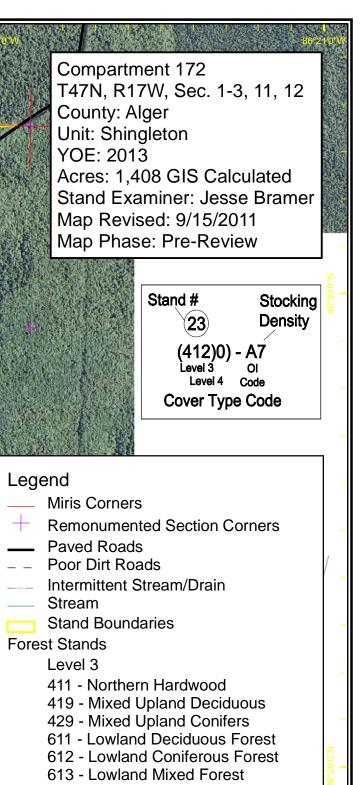
### **8 – DEDICATED CONSERVATION AREA DETAILS**

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

Conservat Area	ion Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.	
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	Contiguous Resource Area	These are DNR-owned lands that are directly contiguous to adjacent ownerships, where there is potential for coordination of landscape-level management for similar purposes. Such lands include distinct but contiguous DNR-owned lands, such as State Parks, State Forest and Wildlife Areas. Such lands also include DNR-owned lands that are adjacent to other ownerships such as Federal Parks, National Forest wilderness areas, National Wildlife Refuges, conservancy lands, and private lands such as the Huron Mountain Club.	
SCA	Visual Management Area	An area of general social appreciation that is managed to recognize and preserve a particular visual value. Examples of these areas include scenic vistas, scenic or natural beauty roads, and lakeshore areas.	







## Non-Forest Stands

## Level 3

- 310 Herbaceous Openland
- 500 Water
- 622 Lowland Shrub
- 623 Emergent Wetland
- 790 Other Bare/Sparsely Vegetated

