

# **Compartment Review Presentation**

Shingleton Forest Management Unit

41196
2017
1,260
Alger
<b>Cusino Complex</b>

Revision Date: 2015-08-04

## Stand Examiner: Steve Touvila

## Legal Description:

T46N R17W Sections 32 and 33

#### **Identified Planning Goals:**

The main goal in this compartment is to conduct multiple resource management for current and future generations.

#### Soil and topography:

The topography in this compartment is mostly flat with low wet areas; the soils are mainly Saugatuck, Wallace, Carbondale and Kinross, that are low in natural fertility. The Wallace sands will be slightly higher ground having the better drainage of the others where the Carbondale will have the slowest drainage supporting lowland conifers and non timber types. The SE part of section 32 and SW part of section 33 lie within the Shingleton Fen Land Type Association while the remainder of the compartment lies within the Munising Moraine Land Type Association.

## Ownership Patterns, Development, and Land Use in and Around the Compartment:

Ownership within the compartment is State land except for a 40 in the NW1/4 NW1/4 of Section 32, which is with the limits of the town of Shingleton. South of the compartment is USFS lands and the remainder of the surrounding land is State.

#### **Unique Natural Features:**

Currently under review by Michigan Natural Features Inventory (MNFI).

## Archeological, Historical, and Cultural Features:

None known.

## **Special Management Designations or Considerations:**

The corridor of lows and swamp conifers that are surrounding Hickey Creek are under consideration for potential old growth classification. The Department of Corrections has a water waste pipe that is in the NW1/4 of Section 32.

#### Watershed and Fisheries Considerations:

Hickey Creek is found in this compartment and is classified as cold water. This stream supports a cold-water fishery community, including brook trout, and thus should be protected from inputs of sediments which cover spawning gravels. BMP's should be followed as inputs of sediment and increases in sand bedload need to be prevented.

#### Wildlife Habitat Considerations:

This compartment lies immediately south and east of Shingleton. The compartment is a composite of open marsh and low forested ridges. The Hickey Creek runs northwest to southeast across the central portion of the compartment. General land office survey notes show that in the 1850s, lowlands were dominated by conifers including spruce, tamarack, hemlock, white pine and cedar. Balsam fir was also fairly prevalent. Deciduous species occurred in lesser amounts. Species reported in this compartment included yellow birch, red maple, beech, sugar maple, white birch and black ash., spruce, and tamarack. Current forest composition appears to have shifted toward deciduous species in the northeast and southwest edges of the compartment. The majority of the compartment appears to have similar species composition as found circa 1850. Featured species in this compartment are American marten, moose, bear, gray jay, northern goshawk, ruffed grouse, and white-tailed deer. Wildlife habitat goals in this compartment include enhancing the hemlock and white pine components in the hardwoods of the southwestern portions, maintaining the aspen component in the northeastern portion and protecting the wetland integrity through the main body of the compartment.

## Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and minor peat and muck. The glacial drift thickness varies between 10 and 50 feet. The Ordovician Black River and Prairie du Chien (PdC) Formations subcrop below the glacial drift. The Black River is quarried for stone elsewhere in the UP. There is a gravel pit in Section 19 and there should be good potential. There is no commercial oil and gas production in the UP.

## Vehicle Access:

Access to the compartment is poor to fair even though M-94 cuts through the SW part of the compartment and M-28 is the northern boundary. The type of soils does not allow for many forest roads that would not be classified as "winter" roads.

#### **Survey Needs:**

None.

## **Recreational Facilities and Opportunities:**

The Hickey Creek offers good fishing in the compartment with access off Birch Street in Shingleton. Snowmobile trail #41 goes through section 32 and offers access to town and other trails heading north and west out of town.

#### **Fire Protection:**

Fire response to the area will be fairly rapid. Shingleton station is less than a ½ mile from the compartment via M-28. The current road system would not be sufficient for fire operations; however the timber types present are not of high fire potential. The only real urban interface problem within the compartment would be in the private 40 in section 32.

## **Additional Compartment Information:**

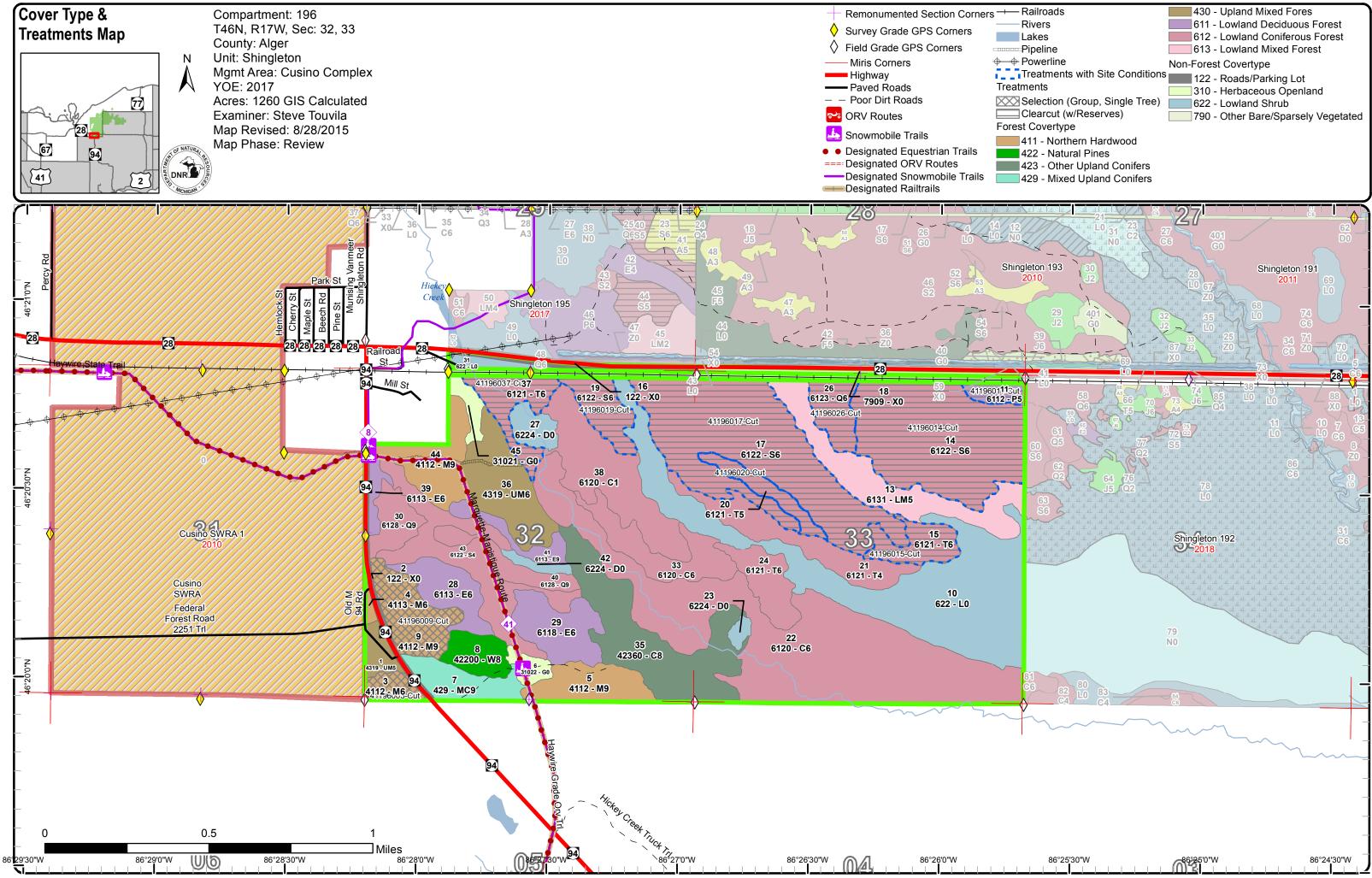
The following reports from the Inventory are attached: Total Acres by Cover Type and Age Class Cover Type by Harvest Method Proposed Treatments – No Limiting Factors Proposed Treatments – With Limiting Factors Stand Details (Forested and Nonforested) Dedicated and Proposed Special Conservation Areas Site Condition Details

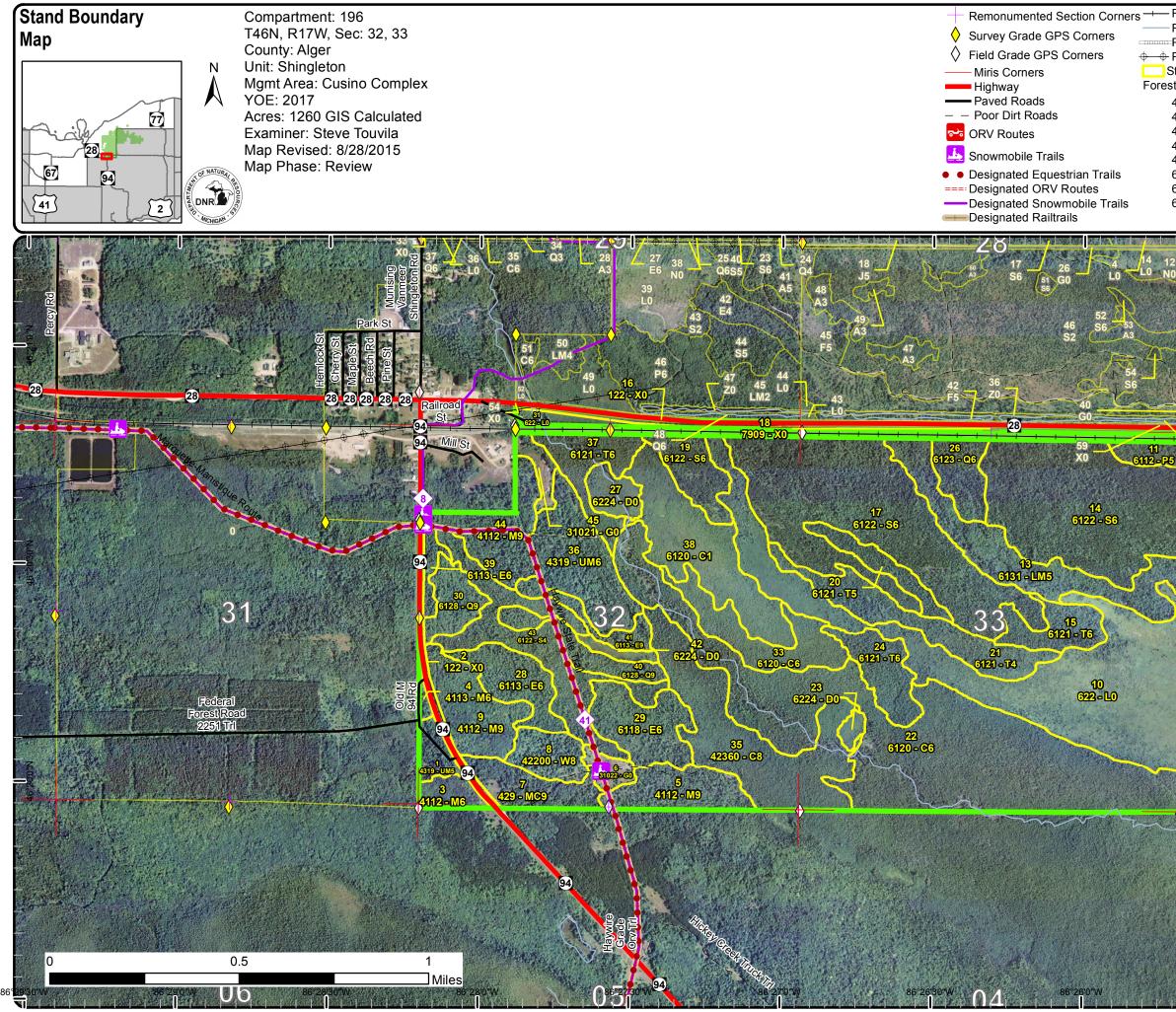
The following information is displayed, where pertinent, on the attached compartment maps:

Base feature information, stand boundaries, cover types, and numbers Proposed treatments

Site condition boundaries

Details on the road access system





– Railroads

### Rivers

- Pipeline
- $\oplus \oplus$  Powerline
  - Stand Boundaries
- Forest Covertype
  - 411 Northern Hardwood
  - 422 Natural Pines
  - 423 Other Upland Conifers

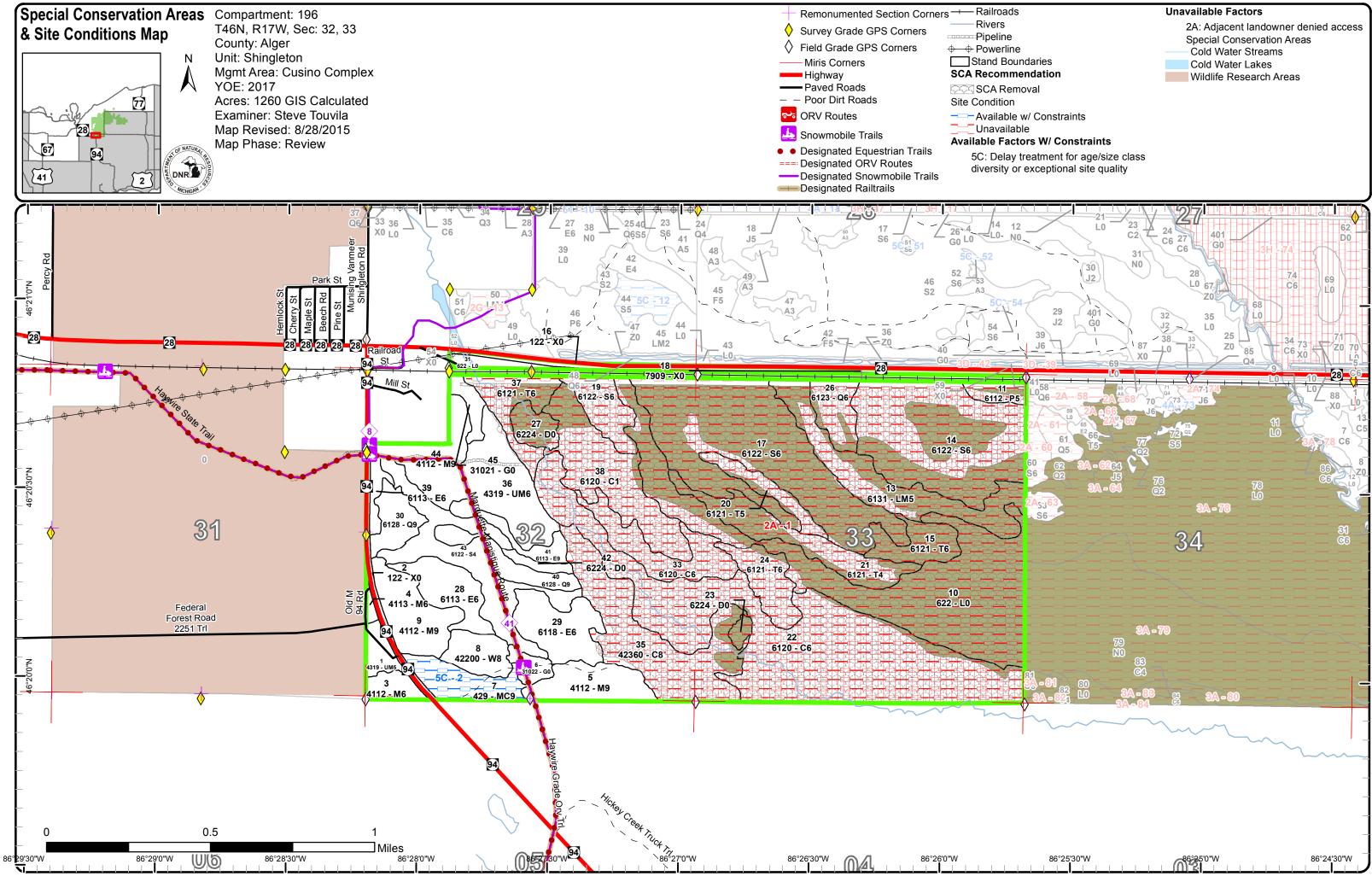
  - 429 Mixed Upland Conifers
    430 Upland Mixed Fores
    611 Lowland Deciduous Forest
  - 612 Lowland Coniferous Forest
  - 613 Lowland Mixed Forest

#### Non-Forest Covertype

- 122 Roads/Parking Lot 310 Herbaceous Openland 622 Lowland Shrub

## 790 - Other Bare/Sparsely Vegetated

62 D0 74 C6 69 L0 78 L0 31 C6 34 79 N0 86°24'30"W 86°25'0"W



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

Shingleton Mgt. Unit



Age Class

	Hor	4010 C	85 / X	61. 2	57 55 5 55	3° 4	93 - <sup>2</sup> 0	S 5	5 <sup>5</sup> (1	<sup>6</sup> , 5	89 80 80 80 80 80 80 80 80 80 80 80 80 80	87 - 10 <sup>2</sup>	70°,	61, <sup>42</sup>	67 457	67.10 12.00	00 K	DX JNO	A LOS
Bare/Sparsely Vegetated	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Cedar	0	0	0	0	0	0	0	0	0	51	0	68	0	28	0	0	0	185	332
Herbaceous Openland	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Lowland Aspen/Balsam Poplar	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	7
Lowland Conifers	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	29	45
Lowland Deciduous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	65
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49	49
Lowland Shrub	142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	142
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	18	223	0	0	0	0	0	0	0	48	289
Northern Hardwood	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	82	90
Tamarack	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	85	105
Treed Bog	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20
Upland Mixed Forest	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	39	47
Urban	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
White Pine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	15
Total	198	0	0	0	0	8	7	0	46	290	0	68	0	28	0	0	0	617	1262



 Year of Entry: 2017
 Acres of Harvest
 Total Compartment Acres: 1,260

 Commercial Harvest - 36
 Commercial Harvest - 36

 Harvests with Site Condition - 314
 Next Step Harvest - 0

 Habitat Cut - 0
 Habitat Cut - 0

## Cover Type by Harvest Method

			Constructure Constructure	Delection Delection	n Clearcur	Cond Teo	Tellon Nood	Over Ninning	(e) Police	ogligge	No. Contraction of the second	Sec. A
Lowland Aspen/Balsam Poplar		7	0	0	0	0	0	0	0	0	7	[
Lowland Conifers		16	0	0	0	0	0	0	0	0	16	
Lowland Spruce/Fir		241	0	0	0	0	0	0	0	0	241	
Northern Hardwood		0	36	0	0	0	0	0	0	0	36	
Tamarack		51	0	0	0	0	0	0	0	0	51	
	Total	314	36	0	0	0	0	0	0	0	351	

## Proposed and Next Step Treatments by Method

		/.	IS IS	Co Long	Outino	O. O.	Calification of the second sec	An Color	in on the second	Ores No	40 / 3	Actes .
Current		351	0	0	0	0	0	0	0	0	351	
Next Step		0	0	0	0	0	0	351	0	0	351	
	Total	351	0	0	0	0	0	351	0	0	702	

S t		Shing	gleton Mgt. Unit		Re	eport 4	Treatme	nts		ment: 196 Entry: 2017	DP NATURAL OF
a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
3	41196003-Cut	8.1	4112 - Maple, Beech, Cherry Association	Poletimber Well	75	141- 170	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal
		reduce re	Site Condition esidual BA to 80 sc	_	avor she	erry where	e present. Don'	't cut hemlock or o	ak.		
	<u>Step</u> tments:										
<u>Acce</u> Rege	eptable Norther	n Hardwo	ods								
<u>Othe</u> Com	e <u>r</u> Old ne ment:	ext step co	omments:								
<u>Prop</u>	osed Start Date:	. 10/1 /	/2016								
9	41196009-Cut	28.3	4112 - Maple, Beech, Cherry Association	Sawtimber Well	80	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal
		Cherry Pol	Site Condition		e on lai	rge gaps f	avoring cherry,	do not cut hemloc	k or oak, cut all ba	alsam fir.	
Next	<u>Step</u> tments:										
Acce	eptable Maple a	and cherry	,								
<u>Rege</u>		ext step co	omments:								
	osed Start Date:	10/1	/2016								
	41196011-Cut	7.0	6112 - Lowland Aspen	Poletimber Medium	53	51-80	Harvest	Clearcut with Retention	611 - Lowland Deciduous	Even-Aged	Proposal
Hab	<u>itat Cut:</u> No		Site Condition	: Denied	Acces	s			Forest		
	cription Leave a	a few scat					cept Hemlock a	and Oak. Cut trees	down to 2" DBH.		
	<u>Step</u> tments:										
	•	d deciduo	uswith some lowla	nd coniferous	S.						
<u>Acce</u> Rege Othe	en:	d deciduo		nd coniferous	6.						
<u>Acce</u> Rege Othe Com	e <u>n:</u> e <u>r</u> Old ne	ext step co	omments:	nd coniferous	5.						
Acce Rege Othe Com Prop	e <u>n:</u> e <u>r</u> Old ne ment:	ext step co	omments:	e Poletimber		81-110	Harvest	Clearcut with	6122 - Black	Even-Aged	Proposal
Acce Rege Othe Com Prop 14 Hab Pres	en: <u>ment:</u> osed Start Date: 41196014-Cut <u>itat Cut:</u> No <u>cription</u> Cut all s	ext step co 10/1 / 99.7 6	omments: /2016	e Poletimber Well <u>: <b>Denied</b></u>	80 Acces	s		Retention	6122 - Black Spruce	Even-Aged	Proposal
Acce Rege Othe Com Prop 14 Hab Pres Spec Next	en: <u>ment:</u> osed Start Date: 41196014-Cut <u>itat Cut:</u> No <u>cription</u> Cut all s	ext step co 10/1 / 99.7 6	omments: /2016 6122 - Black Spruc <u>Site Condition</u>	e Poletimber Well <u>: <b>Denied</b></u>	80 Acces	s		Retention		Even-Aged	Proposal
Accee Rege Othe Com Prop 14 Hab Pres Spec Next Treat	en: ment: osed Start Date: 41196014-Cut itat Cut: No cription Cut all s s: Step tments: eptable Any spa	ext step cc 10/1 / 99.7 6	omments: /2016 6122 - Black Spruc <u>Site Condition</u>	e Poletimber Well <mark>: Denied</mark> I Oak. Reten	80 Acces	s		Retention		Even-Aged	Proposal
Accee Rege Com Prop 14 Hab Pres Spec Next Trea Accee Rege	en: <u>ment:</u> osed Start Date: 41196014-Cut itat Cut: No cription Cut all s Step tments: aptable Any spe en:	ext step cc 10/1 / 99.7 6	omments: /2016 6122 - Black Spruc Site Condition kcept Hemlock and is currently in the s	e Poletimber Well <mark>: Denied</mark> I Oak. Reten	80 Acces	s		Retention		Even-Aged	Proposal

and         Teatment Cover Type         Stand Cover Type         Stand Density         Age Range         Treatment Type         Treatment Wethod         Cover Type Objective         Age Range Structure         Age Range Structure         Age Range Structure         Treatment Structure         Age Range Structure         Treatment Structure         Age Range Structure         Treatment Structure         Age Range Structure         Treatment Structure         Age Range Structure         Age Range Structure	S t		Shin	gleton Mgt. Unit		Re	eport 4	Treatmer	nts	•	ment: 196 Entry: 2017	DR NATURAL REBOUNCE
Well         Retention           Procession         Cut all species but leave Hemiook and oak. Leave while pine in retention pockets.           Procession         Cut all species but leave Hemiook and oak. Leave while pine in retention pockets.           Mack Stoc. Treatments:         Any species found on site.         Second State			Acres								-	
Paragetable Speces Avr gaecies found on site.   Speces   Statistic   Comment:   Comment: <td>15</td> <td>41196015-Cut</td> <td>17.4</td> <td>6121 - Tamarack</td> <td></td> <td>78</td> <td>81-110</td> <td>Harvest</td> <td></td> <td>6121 - Tamarack</td> <td>Even-Aged</td> <td>Proposal</td>	15	41196015-Cut	17.4	6121 - Tamarack		78	81-110	Harvest		6121 - Tamarack	Even-Aged	Proposal
Transmin:         Acceptable Regar:       Oth reat stop comments:         Chear Comment:       Oth reat stop comments:         Proposed Start Date:       101/2016         17       1196017-Cut:       123.3 6122. Black Spruce Poletimber 80 111- Well 80 1140       Harvest Clearcut with 6122Black Even-Aged Proposal Retention Spruce       Proposal Start Date:         Proposed Start Date:       101/2016       Start Date:       101/2016       Ferention Spruce       Proposal Start Date:         Resettion Cut:       No       Start Date:       The horidox Cane acres was in the south-asst part of the stand. There's a mix of 8' down to saping size hemicsk there. This would be a good spot for retention. Another good retention area would be on the north central edge of the stand. Here the start Date:       Start Date:       Nort Step Struce       Start Date:       Nort Step Struce       Start Date:       Start Date:       Nort Step Struce       Proposal         Reservice Struce       Threatened species check MNFI. Old next step comments: Comment:       Nort Step Condition: Denied Access       Retention       Struce       Proposal         Proposal Start Date:       101/2016       122 Black Spruce Poletimber 78       111.       Harvest Clearcut with Struce       Spruce       Proposal         Retention       Struce       101/2016       20       112.       Struce       Proposal	Pres	cription Cut all	species b				-	etention pockets	5.			
Regen:       Other with a set of the												
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Treatments:         Acceptable, Black spruce and some mixed lowland coniferous.         Regen:         Other         Treatened species, check MNFI. Old next step comments:         Vergosed Start Date:       10/1 / 2016         19       41196019-Cut       17.6 6122 - Black Spruce Poletimber 78 111. Well       Harvest       Clearcut with Retention       6122 - Black       Even-Aged       Proposal         Prescription Cut all species except hemlock and oak. Leave some white pine within retention.       Spruce       Verification       Spruce       Verification         Regen:       Other       Treatments:       Ste Condition; Denied Access       Verification       Spruce       Verification         Regen:       Other       Treatments:       Verification       Ste Condition; Denied Access       Verification       6121 - Tamarack Even-Aged       Proposal         Proposed Start Date:       10/1 / 2016       Verification       Not step comments:       Verification       Not step comments:       Verification       Not step comments:       Verification       Not step comments:         20       41196020-Cut       12.3 6121 - Tamarack Poletimber 78 61-80       Harvest       Clearcut with 6121 - Tamarack Even-Aged       Proposal         Medium       Ste Condition; Denied Access       Verification       Not step comment	Pres	cription Cut all t	mlock the	ept hemlock and oal ere. This would be a	k. The hem	ock ca or rete	me across ntion. An	other good reten				
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19       41196019-Cut       17.6 6122 - Black Spruce Poletimber       78       111- Well       Harvest       Clearcut with Retention       6122 - Black       Even-Aged       Proposal         Habitat Cut; No       Site Condition;       Denied Access       Proposal       Spruce       Spruce       Proposal         Prescription       Cut all species except hemlock and oak.       Leave some white pine within retention.       Spruce       Spruce       Next Step.         Treatments:       Acceptable       Black spruce with some balsam fir, white pine, and red maple.       Regen.       Comment:       Clearcut with a fir white pine, and red maple.       Proposed Start Date:       10/1 /2016         20       41196020-Cut       12.3 6121 - Tamarack       Poletimber       78       51-80       Harvest       Clearcut with a fir white pine, and red maple.         Habitat Cut; No       Site Condition;       Denied Access       Proposed       Proposed       Proposed         Prescription       Cut all species except Hemlock and Oak. retention areas should include large white pine.       Specs:       Next Step.       Proposed         Next Step.       Ireatments:       Acceptable       Mixed coniferous or deciduous.       Regen:       Other       Oth next step comments:       Comment:         Next Step.       Other       Other step comme			ened spec	cies, check MNFI. C	old next step	comm	ients:					
Well       140       Retention       Spruce         Habitat Cut: No       Site Condition: Denied Access         Prescription       Cut all species except hemlock and oak. Leave some white pine within retention. Species         Species:       Spruce         Next Step. Treatments:       Spruce with some balsam fir, white pine, and red maple.         Regen:       Threatened species check MNFI. Old next step comments:         Proposed Start Date:       10/1 / 2016         20       41196020-Cut       12.3 6121-Tamarack Poletimber 78 51-80       Harvest       Clearcut with 6121-Tamarack Even-Aged       Proposal Medium         Habitat Cut: No       Site Condition: Denied Access       Site Condition: Denied Access       Proposal Start Date:       10/1 / 2016         20       41196020-Cut       12.3 6121-Tamarack Poletimber 78 51-80       Harvest       Clearcut with 6121-Tamarack Even-Aged       Proposal Medium         Habitat Cut: No       Site Condition: Denied Access       Site Condition: Denied Access       Proposal Start Date:       Site Condition: Clearcut with 6121-Tamarack Even-Aged       Proposal Medium         Kaceptable:       Kixel coniferous or deciduous.       Retention       Retention       Retention       Retention         Medium       Oth next step comments:       Site Condition: Denied Access       Site Condition: Denied Acceest       Site	<u>Prop</u>	osed Start Date:	10/1	/2016								
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Treatments:         Acceptable Regen:       Black spruce with some balsam fir, white pine, and red maple.         Other Comment:       Threatened species check MNFI. Old next step comments:         Proposed Start Date:       10/1 /2016         20       41196020-Cut       12.3       6121 - Tamarack       Proposal Medium         Habitat Cut:       No       Site Condition:       Denied Access         Prescription Specs:       Cut all species except Hemlock and Oak. retention areas should include large white pine.       Specs:         Next Step Treatments:       Mixed coniferous or deciduous.       Regen:         Other       Old next step comments:       Old next step comments:	Pres	cription Cut all	species e		-			within retention				
Regen:       Other       Threatened species check MNFI. Old next step comments:         Comment:       Proposed Start Date:       10/1 /2016         20       41196020-Cut       12.3       6121 - Tamarack       Poletimber       78       51-80       Harvest       Clearcut with Clearcut wi												
Comment:       Proposed Start Date:       10/1 / 2016         20       41196020-Cut       12.3       6121 - Tamarack       Poletimber       78       51-80       Harvest       Clearcut with Retention       6121 - Tamarack       Even-Aged       Proposal         Habitat Cut: No       Site Condition:       Denied Access       Prescription       Cut all species except Hemlock and Oak. retention areas should include large white pine.       Specs:       Vert Step:			pruce wit	h some balsam fir, v	vhite pine, a	nd red	maple.					
20       41196020-Cut       12.3       6121 - Tamarack       Poletimber       78       51-80       Harvest       Clearcut with Retention       6121 - Tamarack       Even-Aged       Proposal         Habitat Cut:       No       Site Condition:       Denied Access       Prescription       Cut all species except Hemlock and Oak. retention areas should include large white pine.       Specs:       Vert Step       Treatments:       Vert Step       Vert			ened spec	cies check MNFI. O	ld next step	comm	ents:					
Medium       Retention         Habitat Cut:       No       Site Condition:       Denied Access         Prescription Specs:       Cut all species except Hemlock and O-X. retention areas should include large white pine.       Specs:         Next Step Treatments:       Verse Conditions or deciduous.       Verse Conditions or deciduous.         Acceptable Regen:       Mixed coniferous or deciduous.       Verse Conditions or deciduous.         Other Comment:       Old next step comments:       Verse Comments:	<u>Prop</u>	osed Start Date:	. 10/1	/2016								
Prescription Specs:       Cut all species except Hemlock and Oak. retention areas should include large white pine.         Next Step Treatments:       .         Acceptable Regen:       Mixed coniferous or deciduous.         Other Comment:       Old next step comments:	20	41196020-Cut	12.3	6121 - Tamarack		78	51-80	Harvest		6121 - Tamarack	Even-Aged	Proposal
Treatments:         Acceptable Regen:         Other Comment:    Old next step comments:	Pres	cription Cut all	species e		•			include large wh	nite pine.			
Regen:       Other     Old next step comments:       Comment:     Comment:												
Comment:	_		coniferous	s or deciduous.								
Proposed Start Date: 10/1 /2016			ext step c	omments:								
	<u>Prop</u>	osed Start Date:	10/1	/2016								

S t	Shingleton Mgt. Unit				Re	eport 4	Treatme	nts	Compar Year of	DNR DNR CHICAN	
a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
26	41196026-Cut	15.8	6123 - Lowland Fir	Poletimbe Well	r 80	81-110	Harvest	Clearcut with Retention	612 - Lowland Coniferous Forest	Even-Aged	Proposal
Pres Spec		species e	Site Condition	-							
<u>Acce</u> Rege	en:	•	Isam FirWhite Pine				uous				
Othe Com	e <u>r</u> Threate Iment:	ened spe	cies check MNFI. O	ld next step	comm	ents:					
Prop	osed Start Date	<u>:</u> 10/1	/2016								
37	41196037-Cut	21.2	6121 - Tamarack	Poletimber Well	r 70	81-110	Harvest	Clearcut with Retention	612 - Lowland Coniferous Forest	Even-Aged	Proposal
	itat Cut: No		Site Condition:	-							
Pres Spec		trees on	site except hemlock	and oak. Le	eave a r	etention p	oocket within sta	and.			
	<u>Step</u> tments:										
<u>Acce</u> Rege	eptable_ Any sp en:	ecies Cu	rrently on site								
<u>Othe</u> Com	er Old no Iment:	ext step c	comments:								
Prop	osed Start Date	<u>:</u> 10/1	/2016								
A	Total Treatme creage Propos		350.8								

Compartment: 196 Year of Entry: 2017

## Steve Touvila : Examiner

## Availability for Management

Total	Acres	Acres Avail	Acres		Dominai	nt Site	e Conditi
Acres	Available	With Condition	Not Available		5C	2A	ЗA
11	11	0	0	Bare/Sparsely Vegetated			
333	0	0	333	Cedar		333	0
13	13	0	0	Herbaceous Openland			
7	0	0	7	Lowland Aspen/Balsam Poplar		7	
44	29	0	16	Lowland Conifers		16	
65	65	0	0	Lowland Deciduous			
49	0	0	49	Lowland Mixed Forest		49	
142	7	0	135	Lowland Shrub		134	0
288	48	0	241	Lowland Spruce/Fir		241	
90	90	0	0	Northern Hardwood			
105	0	0	105	Tamarack		105	
17	4	0	13	Treed Bog		13	
20	0	20	0	Upland Conifers	20		
47	47	0	0	Upland Mixed Forest			
15	15	0	0	Urban			
15	15	0	0	White Pine			
1,260	343	20	897	Total Forested Acres	20	897	0
	27%	2%	71%	Relative Percent			

\*Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	2A: Adjacent landowner denied access	897	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Area between the ra	ailroad and the Hickey Creek,	no acces	S.			
2	Available	5C: Delay treatment for age/size class diversity or	20	Unspecified	Unspecified	Unspecified	Unspecified



## Report 6 – 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.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Unspecified Comments doesn't meet SCA criteria	Other SCA		SCA Removal	463
Unspecified Comments doesn't meet SCA criteria	Potential Old Growth		SCA Removal	405



# Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS

\* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

Conservati Area	on 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 conditio stocked trout populations and those of other coldwater fish speci conditions for coldwater fishes may occur in Michigan lakes if the groundwater inflows, or are located in colder (northern) areas of Director's action and designated as trout resources by Fisheries	es to persist from year to year. Suitable by are relatively deep, have substantial the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen cond stocked trout populations and those of other coldwater fish speci year to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	es (e.g., slimy sculpin) to persist from se conditions due to substantial
SCA	Research and Military Areas	These areas provide facilities and lands specifically dedicated fo include the 5,847 acre Forest Fire Experiment Station, the 12,00 Area, the Beaver Islands Archipelago Wildlife Research Area (th High and Hog Islands, all state owned land on Beaver, South Fo Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Resonant Nursery, and over 144,000 acres of Military Lands.	0 acre Houghton Lake Wildlife Research at includes most of Garden Island, all of x and North Fox Islands), the Cusino

S t	Shingleton		Report 8	– Forested	Stands Compartment: 196 Year of Entry: 2017	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4319 - Mixed Upland Forest	Poletimber Medium	8.0	42	51-80	A lot of non-merchantable trees. There's less trees in the southern part of the stand. The trees are in patches with some smaller open areas between them with thick herbaceous plants and bracken fern.
3	4112 - Maple, Beech, Cherry Association	Poletimber Well	8.1	75	141-170	Poor quality stand that is ready for thinning. Don't cut hemlock or oak.
4	4113 - R.Maple, Conifer	Poletimber Well	1.9	40	51-80	Small strip along M-94, young stand.
5	4112 - Maple, Beech, Cherry Association	Sawtimber Well	24.0	70	51-80	It was two separate stands in 2007 cut in 2010. Sawmill Hardwood (047-10) "Cut all trees marked in Orange and cut all Aspen, Spruce and Balsam". Stand is now a lower stocked Red maple stand. residuals were recorded from Error combining sheet.
7	429 - Mixed Upland Conifers	Sawtimber Well	19.9	80	111-140	Conifer stand with dense canopy.
8	42200 - Natural White Pine	Sawtimber Medium	14.6	70	1-50	Clumps of White pine and cherry with grass and lichen in between clumps.
9	4112 - Maple, Beech, Cherry Association	Sawtimber Well	28.3	80	111-140	Scattered Y. Birch. All trees within stand are between 8 and 10 inches in DBH.
11	6112 - Lowland Aspen	Poletimber Medium	7.0	53	51-80	
13	6131 - Hemlock, White Pine, Maple, Birch	Poletimber Medium	48.8	25	1-50	Lowland mix with dominant species being low quality red maple. Seems to be converting more towards low quality red maple. Tamarack is dying back. Threatened species check MNFI.
14	6122 - Black Spruce	Poletimber Well	99.7	80	81-110	
15	6121 - Tamarack	Poletimber Well	17.4	78	81-110	
17	6122 - Black Spruce	Poletimber Well	123.3	80	111-140	The only hemlock I came across was a small patch in the southeast end of the stand. Good spot for retention as there is mixed age Hemlock from 10" down to sapling size. Another possible retention area is in the center of the north end where there is a mixed diameter white pine stand.
19	6122 - Black Spruce	Poletimber Well	17.6	78	111-140	
20	6121 - Tamarack	Poletimber Medium	12.3	78	51-80	

S t	Shingleton Mgt. Unit			Report 8	– Forested	I Stands Compartment: 196 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
21	6121 - Tamarack	Poletimber Poor	34.1	78	1-50	Threatened species check MNFI. Lowland water stressed stand of poor quality and low basal area. Understory consists of moderate tag alder and cedar; and light balsam fir, black spruce, red maple, and tamarack.
22	6120 - Lowland Cedar	Poletimber Well	184.9	130	81-110	Cedar is poor form, approximately 10% of the tops are dying back. Threatened species check MNFI.
24	6121 - Tamarack	Poletimber Well	19.6	78	81-110	Threatened species check MNFI. If we can cut the other stands on the east side of the compartment this stand should be looked at again for possible cutting too. This stand is a mix of mature tamarack with cedar being the other component in the stand. The cedar is only about 6" dbh on average and gets thicker as you go west and south. It may be too thick to operate in if the cedar isn't cut.
26	6123 - Lowland Fir	Poletimber Well	15.8	80	81-110	
28	6113 - Lowland Maple	Poletimber Well	21.2	45	81-110	Low Red maple stand, wet soils very poor quality. Patches of spruce that are thicker in spots.
29	6118 - Lowland Deciduous with Cedar	Poletimber Well	27.9	40	81-110	Lowland Red maple stand, seasonal wetness. A mix of cedar and other scattered conifers.
30	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Well	14.2	80	51-80	Lowland stand with trees growing on hummocks. Very poor quality red maple and aspen.
33	6120 - Lowland Cedar	Poletimber Well	27.9	125	51-80	Threatened species check MNFI.
35	42360 - Upland Cedar	Sawtimber Medium	68.4	100	51-80	Cedar bog. Sphagnum moss cover the ground. This area is a flood zone for the Hickey creek.
36	4319 - Mixed Upland Forest	Poletimber Well	39.1	71	81-110	Mix of everything, nothing too old, some scattered opening mixed throughout, bushy trees.
37	6121 - Tamarack	Poletimber Well	21.2	70	81-110	Tamarack and Black spruce with wet soils, alder in the understory.
38	6120 - Lowland Cedar	Sapling Poor	51.5	80	1-50	Threatened species see inventory. The last inventory says the stand may have been cut in the 30's-40's based on evidence of winter roads on '53 air photos. Water stressed cedar and birch, will never be a productive stand. Some areas are even close to treed bog category.
39	6113 - Lowland Maple	Poletimber Well	5.4	35	81-110	Lowland area along highway with water in the ditch. There was a really upset turkey hen, probably because I almost stepped on one of her chicks.
40	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Well	14.4	80	81-110	Lowland mixed conifer with red maple. Transition ridge from low to high ground.

S t n d	Shingleton Mgt. Unit			Report 8	– Forested S	tands Compartment: 196 Year of Entry: 2017	OURC
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	RICHIGAN .
41	6113 - Lowland Maple	Sawtimber Well	10.1	50	81-110	Mixed lowland stand, wet soils, young maple.	
43	6122 - Black Spruce	Poletimber Poor	47.6	58	1-50	Lowland with spruce clumps, Tag Alder filling in most areas.	
44	4112 - Maple, Beech, Cherry Association	Sawtimber Well	27.6	70	81-110	Cut in 1987 and then again in 2010 part of Sawmill Hardwood (047-10) "Cut all trees marked in Orange and cut all Aspen, Balsam and Spruce". Stand is now a lower stocked red maple stand with mixed	
						cherry.	

Shingleton Mgt. Unit

Compartment: 196 Year of Entry: 2017



Stand	Cover Type	Acres	Managed Site	General Comments:
2	122 - Road/Parking Lot	8.3	No	M-94
6	31022 - Warm Season Grass	6.0	No	Grass opening with pin cherry scattered throughout.
10	622 - Lowland Shrub	134.6	No	Threatened species check MNFI. Marsh area with some scattered water stressed 10-15' tall tamarack. Overall low density tag alder.
16	122 - Road/Parking Lot	6.7	No	M-28 R-O-W
18	7909 - Nonstocked (OI)	11.3	No	OPIC - FMD: Highway M-28 R.O.W. At the 2007 Compartment Review, it was decided to remove all Scotch Pine along M-28.[6/20/06 km] FTP# W41-1296 - Scotch Pine Removal(8/20/10) FTP# W41-1296 cancelled. Suggest new FTP under new system for scotch pine removal.
23	6224 - Treed Bog	3.1	No	
27	6224 - Treed Bog	9.8	No	
31	622 - Lowland Shrub	6.9	No	Lowland brush and part of Hickey Creek between the highway R.O.W. and the privately-owned railroad tracks. Soils are classified as type 57 (Carbondale muck.)
42	6224 - Treed Bog	4.0	No	Treed bog, wet.
45	31021 - Cool Season Grass	6.7	No	SAWDUST PILES: Stand was permitted for sawdust back in the late 70's until the early 90's. Permit did not specify removal. In 2004 all other mill items that were on site were removed via trespass report to owner. Piles are now grown over with grass, making large mounds/hills.