

Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 41014 Entry Year 2020 Acreage: 1,783

County Schoolcraft

Management Area: Seney Manistique Swamp

Revision Date: 2018-07-16

Stand Examiner: Scott Kentner

Legal Description:

T45N R16W Sections 6, 7, 18

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 mainly flat with the only real elevation in the SE corner. Two main soil types found in the compartment are the Finch Spot Complex and the DefordAusable-Tawas mucks, which are frequently flooded. The LTA for this compartment is the Shingleton .

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

Ownership around the compartment is mainly State lands and to the west it is Federal ands. There is a private 40 with in section 18.

Unique Natural Features:

Michigan Natural Features Inventory (MNFI) has some listings of species that have the potential to be within the compartment.

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

The compartment contains stretches of the Commencement, Star, and Hickey creeks. A large dense stand of hemlock lies in the southwest corner of the compartment. This compartment receives a substantial amount of use by both moose and wolves. Cutting should help to contribute to travel corridors.

Watershed and Fisheries Considerations:

The northern region of this compartment contains Commencement Creek which serves as a tributary to Pine Creek. Commencement Creek and Pine Creek are non-designated streams which serve as tributaries to the West Branch of the Manistique River. 100' plus 5' per 1% increase in slope; buffers are recommended for Commencement Creek and Pine Creek to protect riparian areas in accordance with Best Management Practices (specifically stand 41014) In the central region of this compartment, Pine Creek and Star Creek conjoin to serve as tributaries to the West Branch of the Manistique River. Star Creek is a designated Type 1 trout stream less than 50' width. A 300' buffer is recommended for Star Creek in riparian areas susceptible to Aspen regeneration. For areas not susceptible to Aspen regeneration, 100' plus 5' per 1% increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices (specifically stand 28). The West Branch of the Manistique River is a non-designated stream less than 50' width. 100' plus 5' per 1% increase in slope; buffers are recommended for the West Branch of the Manistique River to protect riparian areas in accordance with Best Management Practices (specifically stand 28).

The southern region of this compartment contains Hickey Creek which is a designated Type 1 trout stream less than 50' width. A 300' buffer is recommended for Hickey Creek in riparian areas susceptible to Aspen regeneration (specifically stand 36). For areas not susceptible to Aspen regeneration, 100' plus 5' per 1% increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices.

Wildlife Habitat Considerations:

Compartment 14 is located six miles east of Shingleton and one mile south of M-28 in the Seney Sand Lake Plain ecological sub-subsection. The ecosystems consist of upland pine intermixed with marshes, creek bottoms, and lowland poplar. Commencement, Star, and Hickey Creeks flow through the compartment. A large dense stand of hemlock lies in

the southwest corner of the compartment. This compartment receives a substantial amount of use by both moose and wolves. Wildlife

management objectives include maintaining travel corridor habitat of mature conifer forest to allow animals to travel through the forest without exposing themselves, providing early successional young deciduous forest, and maintaining the riverine system by placing a no-cut zone along the banks and floodplains of the Commencement, Star, and Hickey creeks.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine (lake) sand & gravel and peat & muck. There is insufficient data to determine the glacial drift thickness. The Ordovician Black River Group subcrops below the glacial drift. The Black River is quarried for dolostone in the UP. 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:

Is mainly poor. There is access for the northern part of the compartment via M-28 behind a gate for State use only. Access to the south is through Federal and private lands. Once on private land the road is gated. The State does not hold an easement on this road. However, the property owner allows us access for inventory and in the past timber harvesting.

Survey Needs:

Section 18, SESE.

Recreational Facilities and Opportunities:

none.

Fire Protection:

Fire response to the area will be extended due the access issues. The timbered islands surrounded by marsh are also contusive to good fire behavior.

Additional Compartment Information:

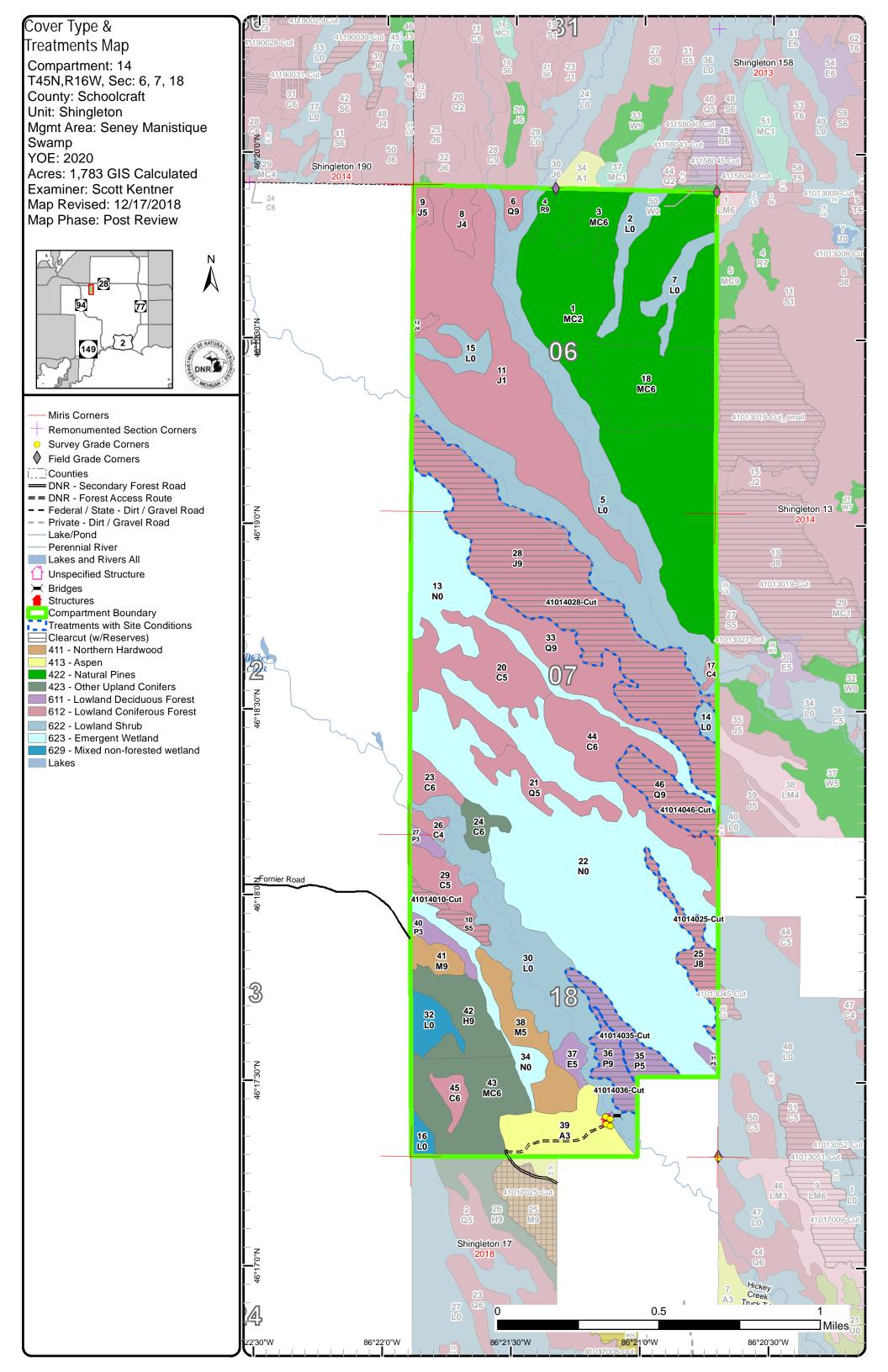
In Section 18 in the SWSE there is a small diamond shaped piece of private property. This small piece should be resolved in a more practical manner, to benefit the landowner and public interest.

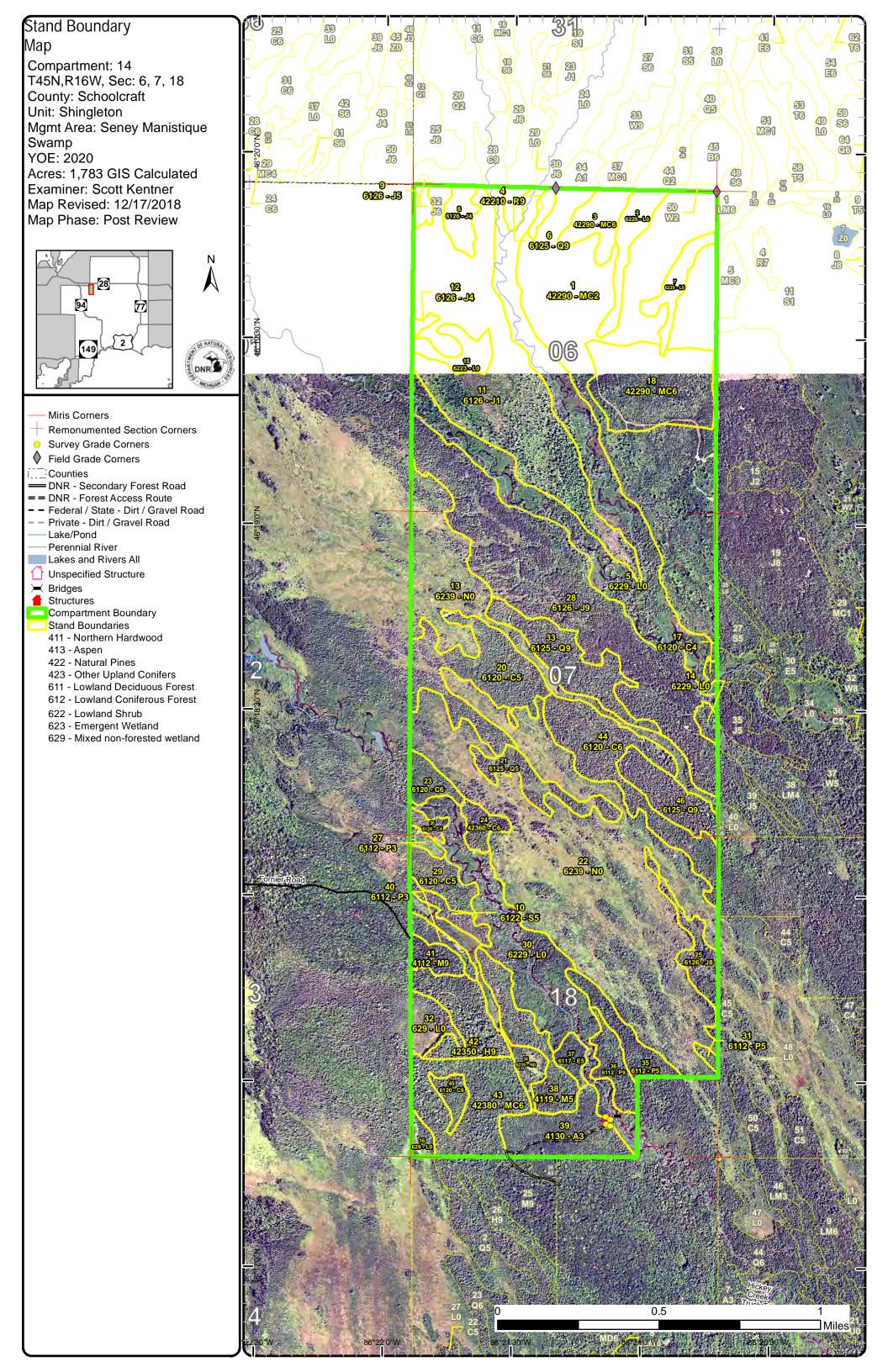
The following reports from the Inventory are attached:

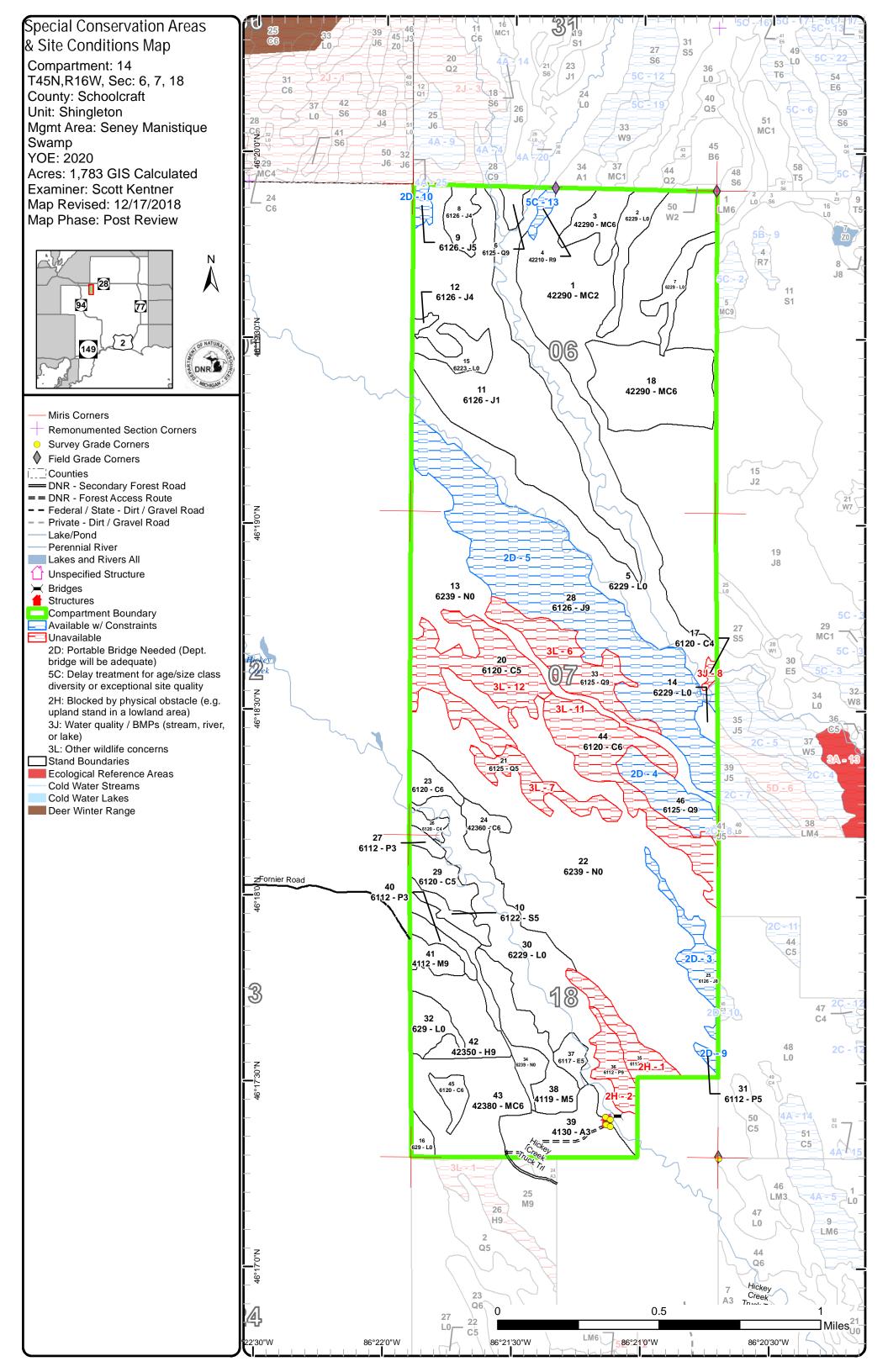
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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







Shingleton Mgt. Unit

Scott Kentner: Examiner

Compartment 14 Year of Entry 2020



Age Class

				,	,	,	,	,	,	,	,	,	,	,	,	,	,	,	/
	No.	HOE'S		82 / R		§ / §		, % /%					70,1	(2) / ₂ (5)			LE LE	D' Jres	No. No.
Aspen	0	0	0	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
Cedar	0	0	0	0	0	0	0	0	0	0	110	24	16	0	0	0	0	7	157
Hemlock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	30
Jack Pine	0	0	155	0	0	11	0	0	6	0	179	0	0	0	0	0	0	0	351
Lowland Aspen/Balsam Poplar	0	0	10	0	0	0	0	0	16	0	0	17	0	0	0	0	0	0	43
Lowland Conifers	0	0	0	0	0	0	0	5	0	0	78	0	0	0	0	0	0	0	83
Lowland Deciduous	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	7
Lowland Shrub	285	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	285
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8
Marsh	380	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	380
Natural Mixed Pines	0	0	0	254	60	0	0	0	0	0	0	0	0	0	0	0	0	0	314
Northern Hardwood	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	9	37
Red Pine	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	51
Total	665	0	165	289	60	11	0	33	29	4	367	49	16	0	0	0	0	97	1785



Report 2 – Treatment Summary

Shingleton Mgt. Unit Year of Entry: 2020

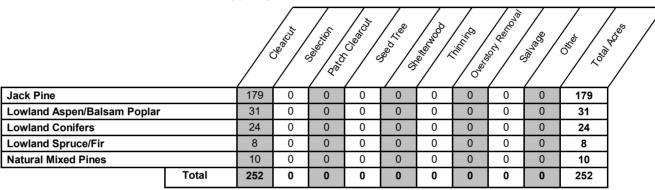
Acres of Harvest

Compartment 14
Total Compartment Acres: 1,783

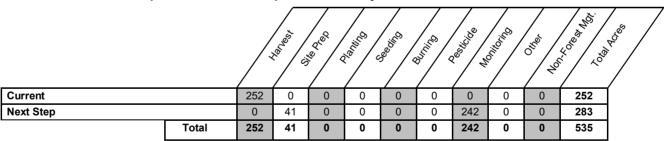
REEDH5

Commercial Harvest - 18 Harvests with Site Condition - 234 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



S t		Shin	gleton Mgt. Unit		Re	eport 3	Treatmer	nts		tment: 13 Entry: 2014	DNR DNR
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
45	41013045-Cut	3.0	6120 - Lowland Cedar	Poletimber Medium	98	Unspec ified	Harvest	Clearcut	612 - Lowland Coniferous Forest	Even-Aged	Draft Field Boundary
Pre	bitat Cut: No escription Cut all e ecs:	species w	Site Condition: ithin stand, Retention			_	ed				
	<u>xt Step</u> Monitor atments:	ring, Natur	ral Regen (Re-Invent	ory)							
	<u>ceptable</u> Any spo gen: ner	ecies curre	ently on site								
Cor	mment:										
<u>Pro</u>	posed Start Date: 41014010-Cut	•	/2019 6122 - Black Spruce	Polotimbor	100	81-110	Harvest	Clearcut with	6124 - Lowland	Even-Aged	Draft Field
Pre Spe Nex Tre	ecs: <u>kt Step</u> Monitor <u>atments:</u>	ring, Natur	Site Condition: ithin stand leaving restand Regen (Re-Inventional Regen, White pine, A	tention in po		arack		Retention	Spruce-Fir		Boundary
Oth Cor	<u>ner</u> mment:										
Pro	posed Start Date:	10/1	/2019								
	bitat Cut: No		6126 - Lowland Jack Pine Site Condition: ithin stand, Retention		Brid	_	Harvest ed	Clearcut with Retention	6126 - Lowland Jack Pine	Even-Aged	Draft Field Boundary
	<u>xt Step</u> Monitor <u>atments:</u>	ring, Natur	ral Regen (Intermedi	ate); SitePr	ep, Sca	arification					
	<u>ceptable</u> Jack pi gen:	ne, White	pine, Aspen.								
Oth Cor	<u>ner</u> mment:										
Pro	posed Start Date:	10/1	/2019								
28	41014028-Cut	161.6	6126 - Lowland Jack Pine	Sawtimber Well	98	111- 140	Harvest	Clearcut with Retention	6125 - Lowland Black Spruce, Jack Pine	Even-Aged	Draft Field Boundary
	bitat Cut: No	species e	Site Condition:			_		with heavier cedar			

Prescription Cut all species, except cedar, within stand. Retention should be in pockets (areas with heavier cedar preferred).

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any species surrently on site.

Regen:

<u>Other</u> Comment:

Proposed Start Date: 10/1 /2019

Shingleton Mgt. Unit Report 3 -- Treatments Compartment: 14 s Year of Entry: 2020 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age **Approval** n Method Objective Structure Status Name CoverType Density Age d Range Type 41014035-Cut 6112 - Lowland Poletimber Clearcut with 613 - Lowland Draft Field 35 17.2 1-50 Harvest Even-Aged Mixed Forest Boundary Aspen Medium Retention **Habitat Cut: No** Site Condition: Blocked by Obstacle Prescription Cut all trees within stand, leaving retention in pocket. Specs: Monitoring, Natural Regen (Intermediate) Next Step **Treatments:** Acceptable Any species currently on site. Regen: Other Comment: **Proposed Start Date:** 10/1 /2019 36 41014036-Cut 14 2 6112 - Lowland Sawtimber 111-Harvest Clearcut with 613 - Lowland Even-Aged Draft Field Aspen Well 140 Retention Mixed Forest Boundary **Habitat Cut: No** Site Condition: Blocked by Obstacle Prescription Cut all species on site leaving retention in stream buffer, 300ft per Fisheries request. Specs: Next Step Monitoring, Natural Regen (Intermediate) **Treatments:** Acceptable Any species currently on site Regen: **Other** Comment: 10/1 /2019 **Proposed Start Date:** Draft Field 41014046-Cut 23.7 6125 - Lowland Sawtimber 98 111-Harvest Clearcut with 612 - Lowland Even-Aged Coniferous Black Spruce, Jack Well 140 Retention Boundary Pine Forest **Habitat Cut: No** Site Condition: Portable Bridge Needed Prescription Cut all species, except Cedar, in stand. Retention should be in pockets (heavier cedar areas are preferred).

Specs:

Next Step SitePrep, Scarification; Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable any species currently on site.

Regen: Other Comment:

Proposed Start Date: 10/1 /2019

Total Treatment 245.0 Acreage Proposed:

Shingleton Mgt. Unit

Scott Kentner: Examiner

Compartment: 14
Year of Entry: 2020

Availa	ability for	Managemer	nt						
Total	Acres	Acres Avail	Acres	D	ominaı	nt Site	e Con	dition	S
Acres	Available	With Condition	Not Available		2D	5C	2H	3J	3L
35	35	0	0	Aspen					
156	45	0	112	Cedar				2	110
30	30	0	0	Hemlock					
351	168	183	0	Jack Pine	183				
44	10	2	31	Lowland Aspen/Balsam Poplar	2		31		
83	5	24	54	Lowland Conifers	24				54
7	7	0	0	Lowland Deciduous					
285	285	0	0	Lowland Shrub					
8	8	0	0	Lowland Spruce/Fir					
380	380	0	0	Marsh					
314	314	0	0	Natural Mixed Pines					
37	37	0	0	Northern Hardwood					
4	0	4	0	Red Pine		4			
51	51	0	0	Upland Conifers					
1,783	1,374	213	197	Total Forested Acres	209	4	31	2	164
	77%	12%	11%	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	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	17	2I: Survey needed	Unspecified	Unspecified	Unspecified
	Comments:						
2	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	14	2I: Survey needed	Unspecified	Unspecified	Unspecified
	Comments:						

Report 4 – Site Conditions

Shingleton Mgt. Unit

Scott Kentner: Examiner

Compartment: 14 Year of Entry: 2020

3	Available	2D: Portable Bridge Needed (Dept. bridge will be adequate)	17	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Available	2D: Portable Bridge Needed (Dept. bridge will be adequate)	24	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Available	2D: Portable Bridge Needed (Dept. bridge will be adequate)	162	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	3L: Other wildlife concerns	35	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Cedar on Purchase	ed Land					
7	Unavailable	3L: Other wildlife concerns	19	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Cedar on Purchase	ed Land					
8	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 4 – Site Conditions

Shingleton Mgt. Unit
Scott Kentner: Examiner

Compartment: 14 Year of Entry: 2020

9	Available	2D: Portable Bridge Needed (Dept. bridge will be adequate)	2	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
10	Available	2D: Portable Bridge Needed (Dept. bridge will be adequate)	4	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
11	Unavailable	3L: Other wildlife concerns	54	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Cedar on Purchase	ed Land					
12	Unavailable	3L: Other wildlife concerns	56	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Cedar on Purchase	ed Land					
13	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	4	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

Mgt. Unit

Compartment: #Type! Year of Entry:



Report 5 - 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
Comments				

Shingleton Mgt. Unit Compartment: 14
Year of Entry 2020



Report 6 - 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 of stocked trout populations and those of other coldwater fis conditions for coldwater fishes may occur in Michigan lak groundwater inflows, or are located in colder (northern) at Director's action and designated as trout resources by Fisher	sh species to persist from year to year. Suitable es if they are relatively deep, have substantial reas of the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxyge stocked trout populations and those of other coldwater fis year to year. Coldwater streams in Michigan typically provontributions of groundwater to their stream flows. Such stream as trout resources by Fisheries Order 210.	sh species (e.g., slimy sculpin) to persist from vide these conditions due to substantial

S t	Shingleton	n Mgt. Unit		Report 7	Forested	Stands Compartment: 14 Year of Entry: 2020
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42290 - Natural Mixed Pine	Sapling Medium	236.9	22	Immature	Stand was treated in 1996 with all species being harvested except red and white pine; which were thinned. Sale (41-001-93-01) was closed on 1/12/1999. It appears the FTP for the sale (C41-812) was never completed, but it regenerated naturally FTP was closed with a blanket closure on 2-8-05.
3	42290 - Natural Mixed Pine	Poletimber Well	17.1	22	Immature	Stand was treated in 1996 with all species being harvested white pine; which were thinned. Sale (41-001-93-01) was closed on 1/12/1999. It appears the FTP for the sale (C41-812) was never completed, but it regenerated naturally. FTP was closed with a blanket closure on 2-8-05.
4	42210 - Natural Red Pine	Sawtimber Well	3.7	89	111-140	Area cut in 1996 all spp. removed except white pine and red pine.
6	6125 - Lowland Black Spruce, Jack Pine	Sawtimber Well	5.0	60	81-110	Area has a high water table.
8	6126 - Lowland Jack Pine	Poletimber Poor	10.8	48	1-50	Stand hasn't changed much in 10 years, high water table is hindering the tree growth.
9	6126 - Lowland Jack Pine	Poletimber Medium	4.4	73	51-80	Stand hasn't changed much in 10 years, high water table is hindering the tree growth.
10	6122 - Black Spruce	Poletimber Medium	8.2	100	81-110	
11	6126 - Lowland Jack Pine	Sapling Poor	154.9	16	Immature	Stand contains some wet areas. Stand was harvested with sale number 41-039-00-01. Red and white pine were left when the sale was completed (2003). FTP # C41-1000 was completed by May, 2007. Large red and white pine located along the south edge near the Star creek.
12	6126 - Lowland Jack Pine	Poletimber Poor	1.8	73	1-50	Stand hasn't changed much in 10 years, high water table is hindering the tree growth.
17	6120 - Lowland Cedar	Poletimber Poor	1.8	115	81-110	Stand is within the buffer area of the West Branch Manistique and shouldn't be cut.
18	42290 - Natural Mixed Pine	Poletimber Well	59.5	31	81-110	
20	6120 - Lowland Cedar	Poletimber Medium	56.2	99	111-140	Stand is healthy, cedar has merchantable sticks in them. Stand has very poor access.
21	6125 - Lowland Black Spruce, Jack Pine	Poletimber Medium	18.9	97	81-110	Stand is made up of 7 small islands surrounded by marsh. It has extremely poor access and wet ground.
23	6120 - Lowland Cedar	Poletimber Well	10.0	115	171-200	Access is poor and the ground is wet. Very thick smaller sized cedar in spots.
24	42360 - Upland Cedar	Poletimber Well	8.6	103	81-110	

S t	Shingleton	Mgt. Unit		Report 7	– Forested	Stands Compartment: 14 Year of Entry: 2020
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
25	6126 - Lowland Jack Pine	Sawtimber Medium	17.1	98	111-140	Access is extremely poor.
26	6120 - Lowland Cedar	Poletimber Poor	4.2	115	111-140	Access is poor and the ground is wet.
27	6112 - Lowland Aspen	Sapling Well	3.5	13	Immature	Stand was cut with sale 41-005-02-01 in 2005. Regeneration was checked with 2010 OI cycle and was deemed adequately stocked with 1-3 ft. tall regeneration with a good species mix.
28	6126 - Lowland Jack Pine	Sawtimber Well	161.6	98	111-140	Two (2) bridges will be needed for access. Winter cut only.
29	6120 - Lowland Cedar	Poletimber Medium	14.9	100	81-110	
31	6112 - Lowland Aspen	Poletimber Medium	2.0	75	51-80	A bridge would be required for access or maybe through comp 13 stand 64, when that is being treated.
33	6125 - Lowland Black Spruce, Jack Pine	Sawtimber Well	35.3	98	111-140	Even aged stand with large mature Jack pine and Black spruce, cedar is evenly mixed under Jack pine. If stand were to be harvested cedar would have to cut to access other species.
35	6112 - Lowland Aspen	Poletimber Medium	17.2	100	1-50	
36	6112 - Lowland Aspen	Sawtimber Well	14.2	75	111-140	Bridge needed, unless cut with adjacent compartment to the east.
37	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Medium	6.6	75	81-110	Acreage will be lost to river buffer.
38	4119 - Mixed Northern Hardwoods	Poletimber Medium	27.9	60	51-80	less than 2% cadre and White pine scattered.
39	4130 - Aspen	Sapling Well	34.6	23	Immature	
40	6112 - Lowland Aspen	Sapling Well	6.9	13	Immature	Stand was cut with sale 41-005-02-01 in 2005 and had a residual basal area of 7 square feet of cedar.
41	4112 - Maple, Beech, Cherry Association	Sawtimber Well	9.0	74	51-80	Stand was cut with sale 41-005-02-01 in 2005 and had a residual basal area of 66 square feet of residual.
42	42350 - Upland Hemlock	Sawtimber Well	29.6	101	81-110	OPIC - FMD: [4/3/03] This stand is now under contract - TS# 005-02 Hickey Creek Contract. [8/20/03] Residual BA/acre = 88 [11/29/05] Cut under TS# 020-03 TCR dtd 11/07/05. Limiting Factor 1F: Stand was select cut leaving a fully-stocked stand of hemlock. Some Hemlock regen is growing, but mostly Red maple sprouts and Balsam fir, also some White pine. Not sure if harvest was a

s t	Shingleton	n Mgt. Unit		Report 7	– Forested	Stands	Compartment: 14 Year of Entry: 2020	DNR
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range		General Comments:	MICHIGAN .
43	42380 - Non Pine Upland Conifer, Mixed Deciduous	Poletimber Well	51.1	101	171-200	during the last OI c was to apply the s	me stand as stand 42, but it was lycle. The recommendation in the same treatment to this stand if the ul. 1/3 to 1/2 the stand at any place composed of Hemlock.	last OI cycle cut in stand
44	6120 - Lowland Cedar	Poletimber Well	53.7	98	111-140	Stand would re	quire two bridges for access and	winter cut.
45	6120 - Lowland Cedar	Poletimber Well	7.0	101	111-140			
46	6125 - Lowland Black Spruce, Jack Pine	Sawtimber Well	23.7	98	111-140	stand. Cedar will	re and ready to harvest along with need to be harvested to access a ention should be left in pockets.	

Report 8 - Nonforested Stands

Compartment: 14 Year of Entry: 2020



Stand	Cover Type	Acres	Managed Site	General Comments:
2	6229 - Mixed lowland shrub	16.1	No	
5	6229 - Mixed lowland shrub	138.1	No	Stand follows the Commencement Creek. There are <1 acre pockets of timber, cedar, jp, hem, asp, rm and tag alder can be found in the areas.
7	6229 - Mixed lowland shrub	12.9	No	
13	6239 - Mixed Emergent Wetland	72.9	No	Stand contains several small islands that are J6. However they are under an acre in size and difficult to get to. They also contain some mature red and white pine.
14	6229 - Mixed lowland shrub	4.1	No	
15	6223 - Inundated Shrub Swamp	12.6	No	
16	629 - Mixed non-forested wetland	4.9	No	
22	6239 - Mixed Emergent Wetland	288.7	No	: Stand contains small 1 acre or less islands of jack pine or Q- types surrounded by marsh.
30	6229 - Mixed lowland shrub	83.8	No	
32	629 - Mixed non-forested wetland	12.8	No	When surrounding sale was cut some of the red, white pine and hemlock that were close to the marsh edge were left, so there are now scattered red, white pine and hemlock in the marsh area.
34	6239 - Mixed Emergent Wetland	18.4	No	