

Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 107 Entry Year 2016 Acreage: 2,564 County Schoolcraft Management Area: Danaher Kingston Outwash

Revision Date: 02/21/2014

Stand Examiner: Rick James Hill

Legal Description:

T47N R13W Sections 22, 23, 27, 34

Identified Planning Goals:

The Kingston Plains and the Danaher Plains are large openings that are managed for a suite of open-land species including sharp-tailed grouse, merlin and upland sandpiper. Vegetative management in the Danaher Kingston Outwash management area will emphasize maintaining these large opening complexes; providing timber products; protecting unique areas and threatened, endangered and special concern species; and providing for forest based recreational uses. Wildlife habitat management objectives include enhancing the large opening complexes and providing opportunities for hunting and other wildlife related recreation. Timber management objectives include improving the age-class distribution of jack pine and red pine; and consolidating smaller plantations and openings into larger stands to better suit management objectives. Expected issues in this 10-year planning period include illegal use of off-road vehicles, introduced pests and diseases such as jack pine budworm and beech bark disease, and introduction and spread of invasive species.

Soil and topography:

The majority of the compartment is level ground. The terrain changes near Clear Creek are of steep banks sloping into the creek. There is also some lowland ground near the south of the compartment. The majority of the soil is Rubicon sands that are fair in natural fertility. Muck and peat soils appear near the swamp and bog stands.

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

There is no private land within the compartment boundaries. The majority of the surrounding land is still State of Michigan owned.

Unique Natural Features:

No Unique Natural Features known.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

None

Watershed and Fisheries Considerations:

Excellent. Clear Creek is a designated trout, cold-water tributary of the East Branch of the Fox River. Preventing encroachment by beaver and protecting against stream sedimentation are high priorities.

Wildlife Habitat Considerations:

This compartment lies within the eastern portion of a large opening complex corridor that extends east to west across north Schoolcraft County. The majority of the compartment is upland sandy plains. The original surveyor's notes indicate that the pre-settlement land cover consisted primarily of white pine, hemlock, red maple, yellow birch, and American beech. Mountain ash was a significant component in the understory.

Current vegetation is substantially different from pre-settlement conditions. Grassy openings and pine (red and jack) plantations now dominate the compartment.

Wildlife habitat objectives consist primarily of re-aligning the plantations and grassy openings into more consolidated blocks to better facilitate both the forest associated and the open land wildlife species. In addition, soft mast producing shrubs will be encouraged.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. There is insufficient data to determine the glacial drift thickness. The Ordovician Utica and Collingwood Shales and the Trenton Group subcrop below the glacial drift. The Trenton is quarried for stone/dolomite. Gravel pits are not found in the general area, but there may be potential. There is no commercial oil and gas production in the UP.

Vehicle Access:

Access is very good in the compartment. There is a large network of drivable two-tracks through all sections. The main access is from M-77 north.

Survey Needs:

None

Recreational Facilities and Opportunities:

The Seney Snowmobile Club has a main snowmobile trail through the compartment that leads north and east. The Danaher ORV trail is also located in the south part of section 34.

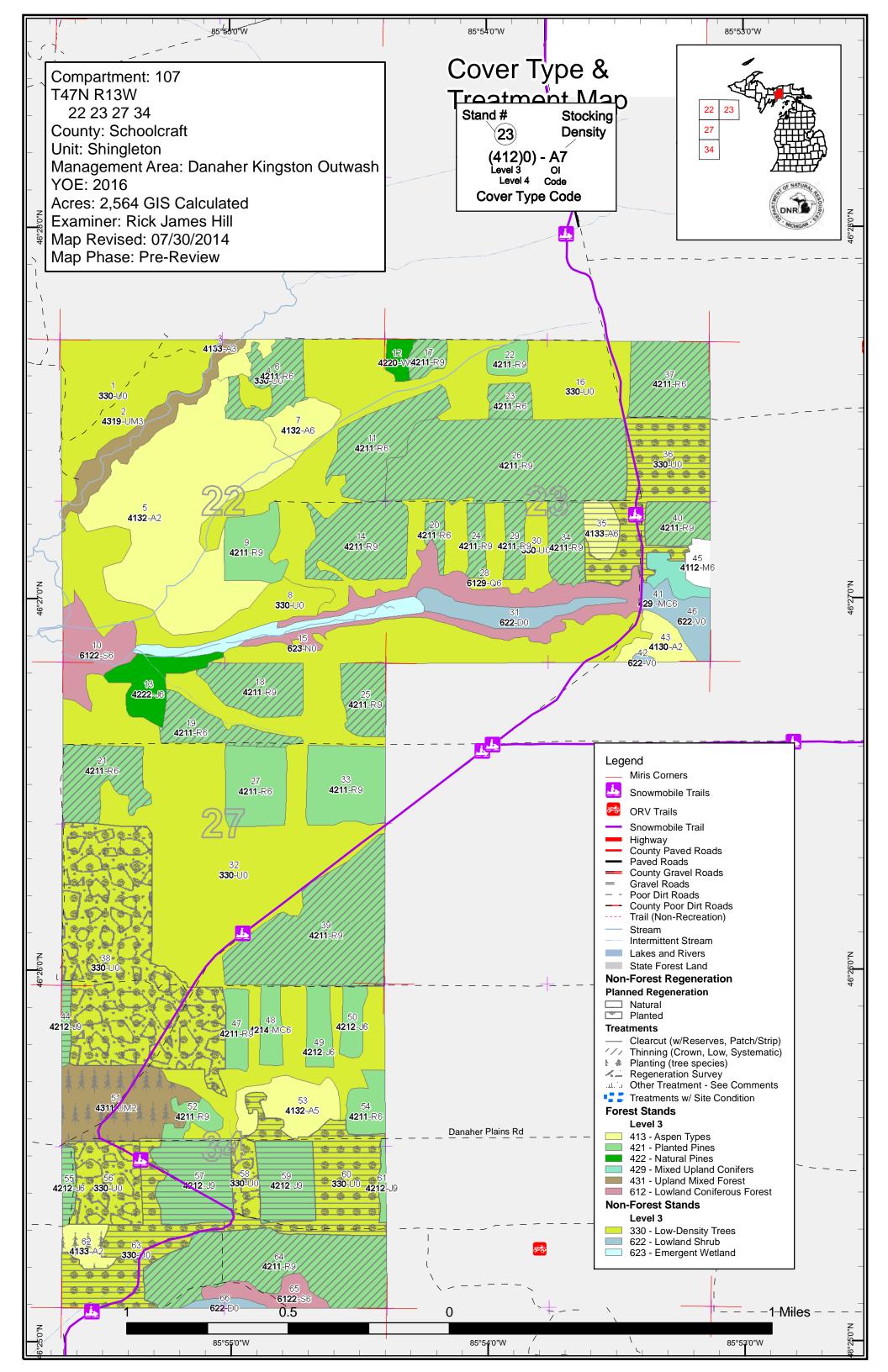
Fire Protection:

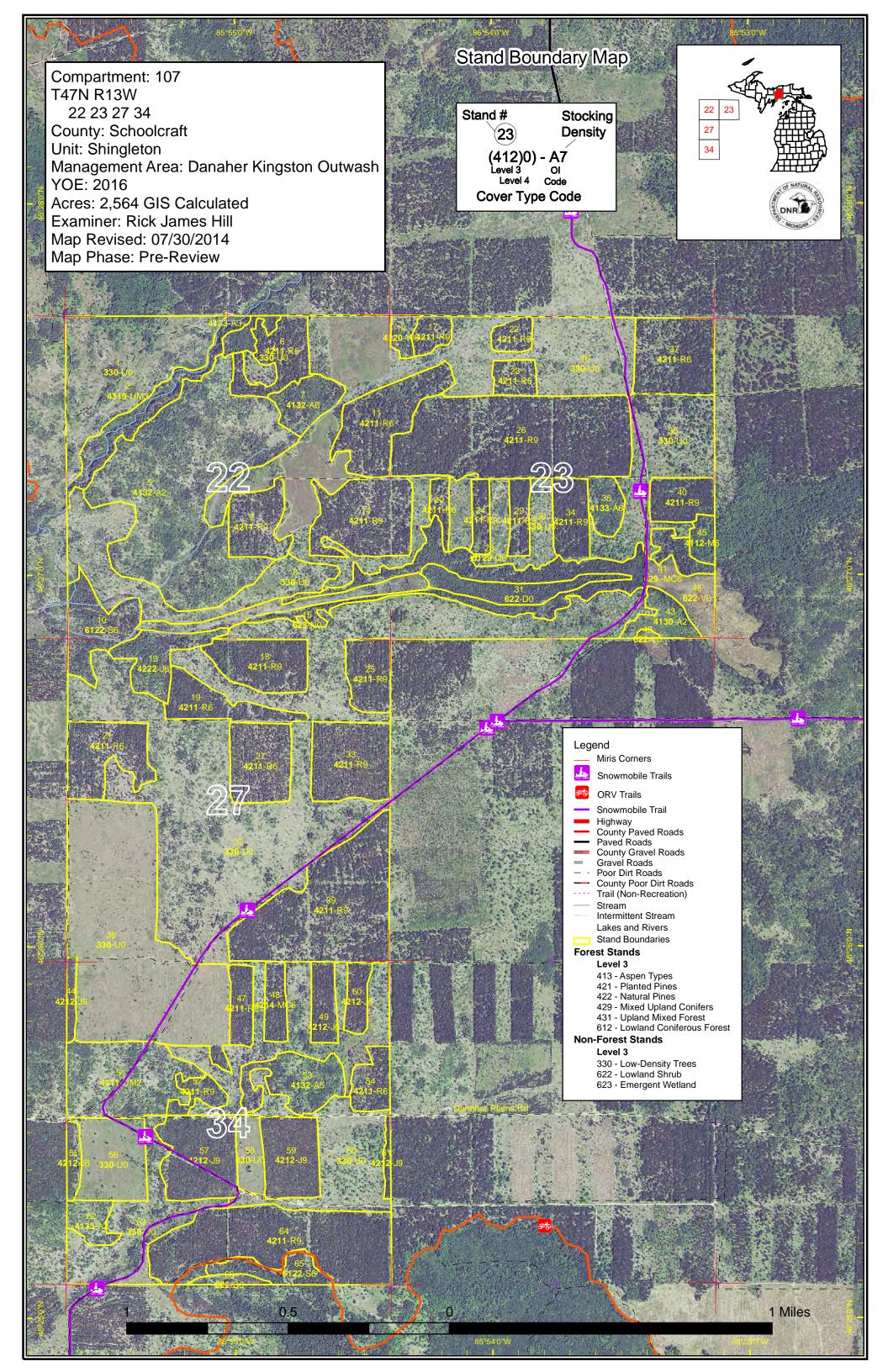
The compartment contains many mature pine plantations. Slash fuel loads in the understory of the pine plantations following proposed treatments could challenge fire control efforts. The open areas within the compartment are mainly grass with few conifer trees filling in. Access is good.

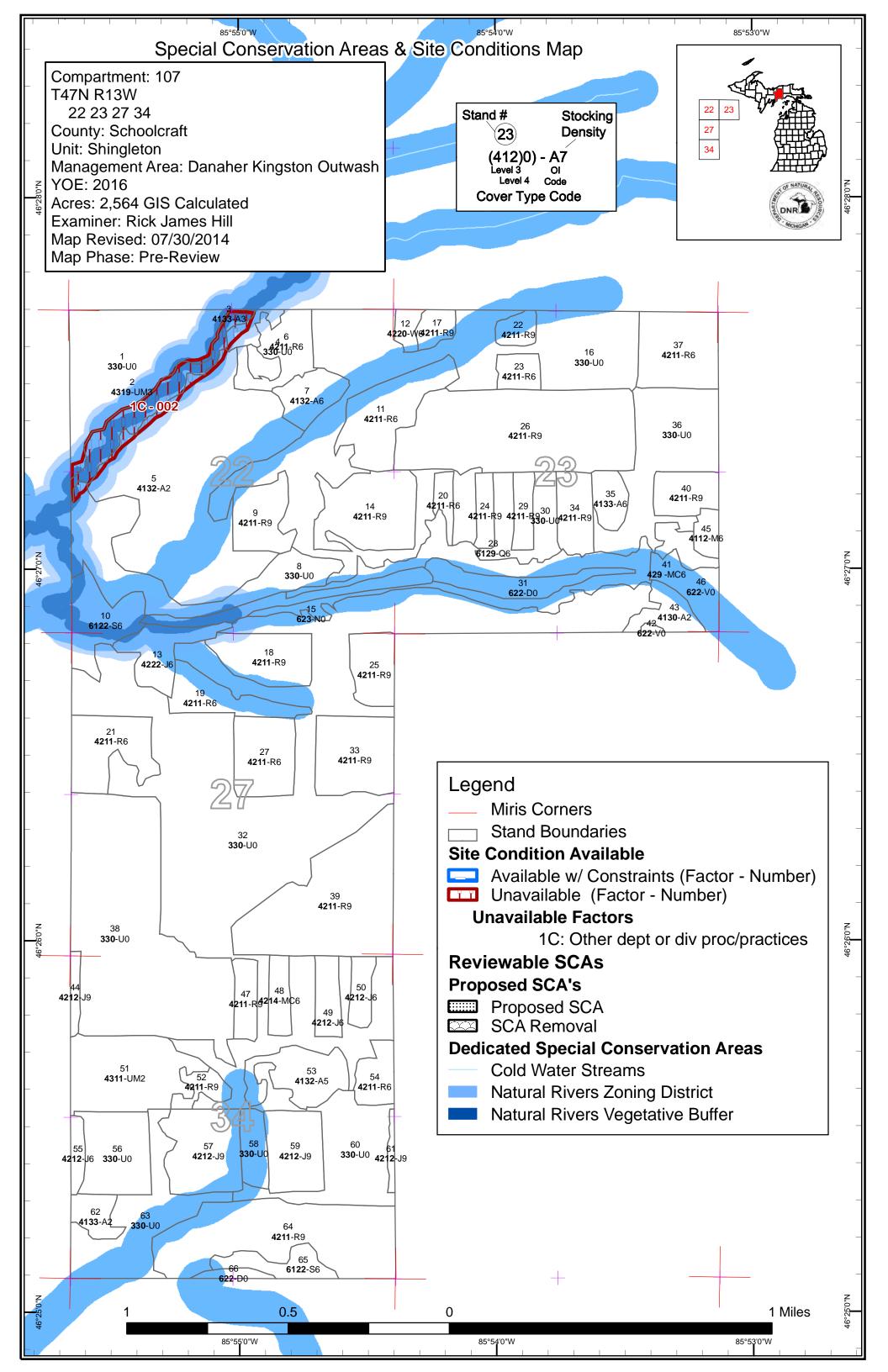
Additional Compartment Information:

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







Report 1 – Total Acres by Cover Type and Age Class

Compartment 107 Year of Entry 2016

Shingleton Mgt. Unit Rick James Hill : Examiner

DNR MICHIGAN

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	/	6.0	¹ 0'70	62-10-10-10-10-10-10-10-10-10-10-10-10-10-		AD AN	05:-30	60.00	10	99-99-90 99-90-90	86.30	100,000	021.021	120× 1510	A ASS	, 0 ² 0
Aspen	13	0	202	27	0	11	0	0	0	0	0	0	0	0	253	(
Bog	19	0	0	0	0	0	0	0	0	0	0	0	0	0	19	
Jack Pine	0	0	0	0	43	0	80	0	0	0	0	0	0	0	123	
Low-Density Trees	1170	0	0	0	0	0	0	0	0	0	0	0	0	0	1170	
Lowland Conifers	0	0	0	0	0	0	0	59	0	0	0	0	0	0	59	
Lowland Spruce/Fir	0	0	0	0	0	0	0	42	0	0	0	0	0	0	42	
Marsh	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20	
Northern Hardwood	0	0	0	0	0	0	7	0	0	0	0	0	0	0	7	
Planted Mixed Pines	0	0	0	0	10	0	0	0	0	0	0	0	0	0	10	
Red Pine	0	0	0	0	0	743	0	0	0	0	0	0	0	0	743	
Treed Bog	24	0	0	0	0	0	0	0	0	0	0	0	0	0	24	
Upland Conifers	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9	
Upland Mixed Forest	0	0	79	0	0	0	0	0	0	0	0	0	0	0	79	
White Pine	0	0	0	0	0	6	0	0	0	0	0	0	0	0	6	
Total	1246	0	281	27	54	759	87	111	0	0	0	0	0	0	2564	



Anchigan	Shingleton Mgt. Unit Year of Entry 2016										Compartment Total Compartment Acres:	
				Acres	s by T	reatm	ent Ty	ре				
	Commercial Harvest - 867	Tree Planting - 313		0	ther -	0						
	Habitat Cut - 6	Opening Maintenan	ice - 66	66								
				Cov	er Tyj	oe by H	larves	st Meth	nod			
			5	Co.	Contraction of the second	000 1000 15	Merrino d	ining of	in the second second	S. S		
	(Habitat Cut)Planted P	ines	0	0	0	0	6	0	6			
	Aspen Types		11	0	0	0	0	0	11			
	Low-Density Trees		173	0	0	0	0	0	173			
	Planted Pines		77	0	0	0	606	0	683			
		Total	261	0	0	0	612	0	873			



S t			Shingle	ton Mgt. Unit	Repo			nents Prescri iting Factor	bed	Compartment: 107 Year of Entry 2016	DR NATURAL HE BOUNCE
a n d		tment ame	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
6	41107	006-Cut	23.7	42110 - Planted Red Pine	High Density Pole	57	81-110	Harvest	Systematic Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
<u>Prese</u> Spec		trees. Co hemlock	ut all aspen should be	, red maple and jack	pine in the s	tand. Ma	ark white p	ine and cherry fo	r harvest if necess	hin to release, or remov ary for operability. All o ions easer. Some jack	ak and
<u>Othe</u> <u>Com</u>	<u>r</u> ments:	on snow	mobile trail		e sale will be					that result from hauling. This sale will be operab	
<u>Next</u> Steps											
Propo Start I		10/01/20	15								
11	41107	011-Cut	39.0	42110 - Planted Red Pine	High Density Pole	57	111-140	Harvest	Systematic Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
Prese Spec		trees. Co hemlock	ut all aspen should be	, red maple and jack	pine in the s	tand. Ma	ark white p	ine and cherry fo	r harvest if necess	hin to release, or remov eary for operability. All o ions easer. Some jack	ak and
<u>Othe</u> Com	<u>r</u> ments:	on snow	mobile trail		sale will be					that result from hauling. This sale will be operab	
<u>Next</u> Step											
Propo Start I		10/01/20	15								
14	41107	014-Cut	43.5	42110 - Planted Red Pine	High Density Log	57 J	51-80	Harvest	Systematic Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
Prese Spec		trees. Co hemlock	ut all aspen should be	, red maple and jack	pine in the s	tand. Ma	ark white p	ine and cherry fo	r harvest if necess	hin to release, or remov ary for operability. All o ions easer. Some jack	akand
<u>Othe</u> Com	<u>r</u> ments:	on snow	mobile trail		sale will be					that result from hauling. This sale will be operab	
<u>Next</u> Step:											
Propo Start I		10/01/20	15								
17	41107	017-Cut	7.8	42110 - Planted Red Pine	High Density Log	57	81-110	Harvest	Systematic Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
Prese Spec	•	trees. Co hemlock	ut all aspen should be	, red maple and jack	pine in the s	tand. Ma	ark white p	ine and cherry fo	r harvest if necess	hin to release, or remov ary for operability. All o ions easer. Some jack	ak and
<u>Othe</u> Com	<u>r</u> ments:	on snow	mobile trail		sale will be					that result from hauling. This sale will be operab	
<u>Next</u> Step:											

Proposed Start Date: 10/01/2015

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 107 Year of Entry 2016



S t			Shirigie		Керо			ting Factor	beu	Year of Entry 2016	DNR MILLING
a n d		tment ame	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
18	41107	018-Cut	28.2	42110 - Planted Red Pine	High Density Log	57	141-170	Harvest	Systematic Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
Preso Spec		trees. Cu hemlock	t all aspen should be	, red maple and jack	pine in the s	tand. Ma	ark white p	ine and cherry for	harvest if necess	hin to release, or remo sary for operability. All o tions easer. Some jack	bak and
<u>Othe</u> Com	<u>r</u> ments:	on snowr	nobile trail		e sale will be					that result from hauling This sale will be opera	
<u>Next</u> <u>Steps</u> <u>Propo</u> <u>Start I</u>	sed_	10/01/201	5								
19	41107	019-Cut	21.8	42110 - Planted Red Pine	High Density Pole	57	111-140	Harvest	Systematic Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
<u>Prese</u> Spec	•	trees. Cu hemlock	t all aspen should be	, red maple and jack	pine in the s	tand. Ma	ark white p	ine and cherry for	harvest if necess	hin to release, or remo sary for operability. All o tions easer. Some jack	bak and
<u>Othe</u> Com	<u>r</u> ments:	Consider on snowr	adding a i nobile trail	oad work spec to ha	e sale will be					that result from hauling This sale will be opera	
<u>Next</u> Steps	<u>8:</u>										
<u>Propo</u> Start I		10/01/201	5								
20	41107	020-Cut	6.1	42110 - Planted Red Pine	High Density Pole	57	51-80	Harvest	Systematic Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
<u>Prese</u> Spec		trees. Cu hemlock	t all aspen should be	, red maple and jack	pine in the s	tand. Ma	ark white p	ine and cherry for	harvest if necess	hin to release, or remo sary for operability. All o tions easer. Some jack	oak and
<u>Othe</u> Com		on snowr	nobile trail		e sale will be					that result from hauling This sale will be opera	
<u>Next</u> <u>Steps</u>											
Propo Start I		10/01/201	5								
21	41107	021-Cut	31.5	42110 - Planted Red Pine	High Density Pole	52	141-170	Harvest	Systematic Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
<u>Prese</u> Spec		trees. Cu hemlock	t all aspen should be	, red maple and jack	pine in the s	tand. Ma	ark white p	ine and cherry for	harvest if necess	hin to release, or remo sary for operability. All d tions easer. Some jack	bak and
<u>Othe</u> <u>Com</u>		on snowr	nobile trail		e sale will be					that result from hauling This sale will be opera	
<u>Next</u> Steps	<u>s:</u>										
<u>Propo</u>	sed_										

Proposed Start Date: 10/01/2015

S t			Shingle	ton Mgt. Unit	Repo			nents Prescri ting Factor	bed	Compartment: 107 Year of Entry 2016	DNR DNR
a n d		tment ime	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
23	41107	023-Cut	9.4	42110 - Planted Red Pine	High Density Pole	57	51-80	Harvest	Systematic Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
Preso Spec		trees. Cu hemlock	ut all aspen should be	, red maple and jack	pine in the s	tand. M	ark white p	ine and cherry fo	r harvest if necess	hin to release, or remov sary for operability. All o tions easer. Some jack	ak and
	ments:	on snow	mobile trail		sale will be					that result from hauling. This sale will be operab	
<u>Next</u> Steps Propo Start [<u>s:</u> sed_	10/01/20 [.]	15								
24	41107	024-Cut	8.3	42110 - Planted Red Pine	High Density Log	57	141-170	Harvest	Systematic Thinning	4211 - Planted Red Pine	Cmpt. Reviev Proposal
Preso Spec		trees. Cu hemlock	ut all aspen should be	, red maple and jack	pine in the s	tand. M	ark white p	ine and cherry fo	r harvest if necess	hin to release, or remov sary for operability. All o tions easer. Some jack	ak and
<u>Othe</u> Comi	<u>r</u> ments:	Conside on snow	r adding a mobile trail	road work spec to hav	sale will be					that result from hauling. This sale will be operat	
<u>Next</u> Steps		·									
Propo Start [10/01/20 ⁻	15								
25	41107	025-Cut	18.9	42110 - Planted Red Pine	High Density Log	57	111-140	Harvest	Systematic Thinning	4211 - Planted Red Pine	Cmpt. Reviev Proposal
Preso Spec	•	trees. Cu hemlock	ut all aspen should be	, red maple and jack	pine in the s	tand. M	ark white p	ine and cherry fo	r harvest if necess	hin to release, or remov sary for operability. All o tions easer. Some jack	ak and
<u>Othe</u> Comi		on snow	mobile trail		sale will be					that result from hauling. This sale will be operat	
<u>Next</u> Steps											
Propo Start [10/01/20 ⁻	15								
26	41107	026-Cut	114.0	42110 - Planted Red Pine	High Density Log		111-140	Harvest	Systematic Thinning	4211 - Planted Red Pine	Cmpt. Reviev Proposal
Preso Spec		trees. Cu hemlock	ut all aspen should be	, red maple and jack	pine in the s	tand. M	ark white p	ine and cherry fo	r harvest if necess	hin to release, or remov sary for operability. All o tions easer. Some jack	ak and
<u>Othe</u> Comi		on snow	mobile trail		sale will be					that result from hauling. This sale will be operat	
<u>Next</u> Steps											
Propo Start [10/01/20 [.]	15								

Start Date: 10/01/2015



S t			Shingle	ton Mgt. Unit	Repo			nents Prescri iting Factor	bed	Compartment: 107 Year of Entry 2016	DIR NATURAL
a n d	Treat Nai		Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
29	411070)29-Cut	9.6	42110 - Planted Red Pine	High Density Lo	57 g	200+	Harvest	Systematic Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
Preso Spec:	<u>s:</u>	trees. Cu hemlock	t all aspen should be	, red maple and jack	pine in the s	stand. Ma	ark white p	pine and cherry fo	r harvest if necess	hin to release, or remov ary for operability. All o ions easer. Some jack	ak and
<u>Other</u> Comr	ments:	on snown	nobile trail		e sale will be	restricte				that result from hauling. April. This sale will be c	
<u>Next</u> <u>Steps</u> <u>Propos</u> Start [sed	0/01/201	5								
34	411070		18.0	42110 - Planted Red Pine	High Density Lo	57 g	111-140	Harvest	Systematic Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
<u>Presc</u> Spec:	<u>s:</u>	trees. Cu hemlock	t all aspen should be	, red maple and jack	pine in the s	stand. Ma	ark white p	oine and cherry fo	r harvest if necess	hin to release, or remov ary for operability. All o ions easer. Some jack	ak and
<u>Other</u> Comr	<u>ments:</u>	Consider on snowr	adding a r nobile trail	oad work spec to ha	e sale will be					that result from hauling. This sale will be operat	
<u>Next</u> Steps											
Propo: Start D	<u>sed</u>	0/01/201	5								
35	411070)35-Cut	11.1	4133 - Aspen, Mixed Pine	High Density Pole	52		Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal
Preso Spec:				ept leave red pine, o a low stocked area					regenerate aspen	. Leave an island of 3- 7	10 percent for
<u>Other</u> Comr	ments:	on snown	nobile trail		e sale will be					that result from hauling. This sale will be operat	
<u>Next</u> Steps	<u>s:</u>										
Propos Start D		0/01/201	5								
37	411070)37-Cut	37.4	42110 - Planted Red Pine	High Density Pole	57	81-110	Harvest	Systematic Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
Presc Spec:	<u>s:</u>	trees. Cu hemlock	t all aspen should be	, red maple and jack	pine in the s	stand. Ma	ark white p	pine and cherry fo	r harvest if necess	hin to release, or remov ary for operability. All o ions easer. Some jack	ak and
<u>Other</u> Comr	ments:	on snown	nobile trail		e sale will be					that result from hauling. This sale will be operat	
<u>Next</u> Steps											
Propo		0/01/201	5								



S t			Shinglet	ton Mgt. Unit	Repo			nents Prescri iting Factor	bed	Compartment: 107 Year of Entry 2016	DR. MATURAL PROSPECTOR
a n d		tment ame	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
39	41107	039-Cut	90.4	42110 - Planted Red Pine	High Density Log	53	81-110	Harvest	Systematic Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
Presc Spece		trees. Cu hemlock	it all aspen, should be i	red maple and jack	pine in the st	and. Ma	ark white p	pine and cherry for	r harvest if necess	hin to release, or remov ary for operability. All o ions easer. Some jack j	ak and
<u>Other</u> Comr	<u>nents:</u>	on snow	nobile trail		e sale will be r					that result from hauling. April. This sale will be c	
<u>Next</u> <u>Steps</u>	<u>:</u>										
Propos Start D		10/01/201	5								
40	41107	040-Cut	16.7	42110 - Planted Red Pine	High Density Log	57	141-170	Harvest	Systematic Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
Presc Specs		trees. Cu hemlock	it all aspen, should be i	red maple and jack	pine in the st	and. Ma	ark white p	pine and cherry for	r harvest if necess	hin to release, or remov ary for operability. All o ions easer. Some jack j	ak and
<u>Other</u> Comr		on snow	nobile trail		e sale will be r					that result from hauling. This sale will be operab	
<u>Next</u> Steps	<u>::</u>										
<u>Propos</u> <u>Start D</u>		10/01/201	5								
44	41107	044-Cut	4.8	42120 - Planted Jack Pine	High Density Log	63		Harvest	Clearcut with Reserves	4212 - Planted Jack Pine	Cmpt. Review Proposal
Presc Spece		stand are		southeast edge of						ent. Leave a pocket (3- ssues still present from	
<u>Other</u> Comr	<u>nents:</u>	Cut with	compartme	ent 107 stand 43.							
<u>Next</u> <u>Steps</u>	<u>::</u>	any othe	r treatments		ecessary to r	egenera	ate jack pi	ne. Regeneration		cation fails trench and pl done per work instructio	
Propos Start D		10/01/201	6								
55	41107	055-Cut	6.2	42120 - Planted Jack Pine	High Density Pole	61		Harvest	Clearcut with Reserves	4212 - Planted Jack Pine	Cmpt. Review Proposal
Presc Spece	•	stand are		e southeast edge of						ent. Leave a pocket (3- ssues still present from	
<u>Other</u> Comr	nents:	Cut with	compartme	nt 107 stand 39.							
<u>Next</u> <u>Steps</u>	<u>;;</u>	any othe	r treatments		ecessary to r	egenera	ate jack pi	ne. Regeneration		cation fails trench and pl done per work instructio	
Propos Start D		10/01/201	6								

S t a

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 107 Year of Entry 2016



a n d		tment Ime	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
57	41107	057-Cut	38.0	42120 - Planted Jack Pine	High Density Log	61 I		Harvest	Clearcut with Reserves	4211 - Planted Red Pine	Cmpt. Review Proposal
Presci Specs		stand are		southeast edge of						ent. Leave a pocket (3- sues still present from	
<u>Other</u> Comm		hauling.	Hauling ma		trail #431; ar	ny opera	tions usir	ng the trail will be r	estricted with no o	nelp fix any blowouts the perations between 12-1 s.	
<u>Next</u> <u>Steps</u> :	<u>.</u>	any othe	r treatment		necessary to r	egenera	ite jack pi	ine. Regeneration		ation fails trench and pl done per work instructio	
<u>Propos</u> <u>Start D</u>		10/01/201	15								
59	41107	059-Cut	27.7	42120 - Planted Jack Pine	High Density Log	61 I		Harvest	Clearcut with Reserves	4212 - Planted Jack Pine	Cmpt. Review Proposal
Presci Specs		stand are		southwest edge of						ent. Leave a pocket (3- ssues still present from	
<u>Other</u> Comm		hauling.	Hauling ma		trail #431; ar	ny opera	tions usir	ng the trail will be	restricted with no o	nelp fix any blowouts the operations between 12- 3.	
<u>Next</u> Steps:	<u>:</u>	any othe	r treatment		necessary to r	egenera	ite jack pi	ine. Regeneration		ation fails trench and p done per work instructio	
<u>Propos</u> <u>Start D</u>		10/01/201	15				-				
64	41107	064-Cut	87.6	42110 - Planted Red Pine	High Density Log		111-140	Harvest	Systematic Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
Presc Specs		trees. Cu hemlock	ut all aspen, should be i	red maple and jack	pine in the s	tand. Ma	ark white	pine and cherry for	r harvest if necess	hin to release, or remov ary for operability. All o ons easer. Some jack j	ak and
<u>Other</u> Comm		hauling.	Hauling will	be on snowmobile t	trail #431; due	e to this	the sale v	will be restricted wi	ith no operations b	elp fix any blowouts that etween 12-1 and 3-31. the south side of the s	This sale will
<u>Next</u> <u>Steps:</u>	<u>.</u>										
<u>Propos</u> Start D		10/01/201	15								
36	_	107036- Sut	64.9	3302 - Low Density Conifer Trees				Harvest	Clearcut with Reserves	4212 - Planted Jack Pine	Cmpt. Review Proposal
Presc Specs	ription_ ::	pine alor	ng the stand		coded as no					ntion. Or leave a small perable though chipping	
<u>Other</u> Comm		on snow	mobile trail	oad work spec to ha #443; due to this the nas no spring weight	e sale will be	led to th restricte	e Star roa d with no	ad, this would help operations betwee	o fix any blowouts t en 12-1 and 3-31.	hat result from hauling. This sale will be operab	Hauling will be le during break
<u>Next</u> <u>Steps</u> :	<u>:</u>	Site nee	ds to be tre	nched and planted a	after harvest to	o jack pi	ne. Use a	any and all method	Is needed to regen	erate jack pine on site.	
Propos Start D		10/01/201	15								

S t a

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 107 Year of Entry 2016



a n d		tment ame	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
60	_	107060- Cut	56.5	3302 - Low Density Conifer Trees				Harvest	Clearcut with Reserves	4212 - Planted Jack Pine	Cmpt. Review Proposal
<u>Presc</u> Spec		along the	e stand ed		d as non-fo					ntion. Or leave a small le though chipping. Ke	
<u>Other</u> Comr	<u>r</u> ments:	hauling.	Hauling m		trail #431; a	ny opera	tions usi	ng the trail will be r	restricted with no c	elp fix any blowouts the perations between 12-	
<u>Next</u> Steps	<u>s:</u>			ite. Use any other trea Acceptable regeneration						neration counts should	be done per
Propo Start [10/01/20 ⁻	15								
63		107063- Cut	51.8	3302 - Low Density Conifer Trees				Harvest	Clearcut with Reserves	4211 - Planted Red Pine	Cmpt. Review Proposal
Preso Spec				able timber leave a fev nly operable though ch						led as non-forested so s.	cordage will be
<u>Other</u> Comr	<u>r</u> ments:	hauling.	Hauling m		trail #431; a	ny opera	tions usi	ng the trail will be re	estricted with no o	elp fix any blowouts the perations between 12-1	
<u>Next</u> Steps		Site nee regenera	ds to be tre ation is jac	enched and planted af k pine, spruce, balsam	ter harvest fir, oak, ree	to red pin d pine, ar	ie. Use a id white	ny and all methods pine.	needed to regene	erate red pine on site. A	cceptable
<u>Propo</u> Start [10/01/20 ⁻	15								
51)7051- lant	52.6	4311 - Pine, Aspen Mix	Medium Density Sapling	20		Tree Planting	Machine Plant	4212 - Planted Jack Pine	Cmpt. Review Proposal
Preso Spec		Plant jac	k pine in g	aps to fill site it and in	prove stock	ing.					
<u>Other</u> Comr	<u>r</u> ments:										
<u>Next</u> Steps	<u>8:</u>	Regener	ation chec	ks will be conducted p	er work ins	tructions.	Include	all commercial spe	cies in regeneratio	n counts.	
<u>Propo</u> Start [10/31/20 ⁻	14								
62)7062- lant	10.6	4133 - Aspen, Mixed Pine	Medium Density Sapling	21	1-50	Tree Planting	Machine Plant	4212 - Planted Jack Pine	Cmpt. Review Proposal
Preso Spec		plant jac	k pine in tł	ne gaps							
<u>Other</u> Comr	<u>r</u> ments:										
<u>Next</u> Steps		Regener	ation chec	ks will be conducted p	er work inst	tructions.	Include	all commercial spe	cies in regeneratio	n counts.	
<u>Propo</u> Start [10/31/20 ⁻	14								

Compartment: 107 Shingleton Mgt. Unit **Report 3 -- Treatments Prescribed** with No Limiting Factor Year of Entry 2016 S t а Treatment Size Stand BA Treatment Treatment Acres CoverType Cover Type Approval n d Name Density Age Range Type Method Objective Status 1 NF 41107001-82.1 330 - Low-Density Non-Forest **Brush Cutting** 3302 - Low Density Cmpt. Review NonFor Trees Management **Conifer Trees** Proposal Prescription Work in opening to enhance sharptail grouse habitat. Activities may include burning, mowing, brush cutting planting of species as wildlife division sees fit Specs: Other Comments: Next Steps: Proposed 10/31/2014 Start Date: 8 NF 41107008-62.6 330 - Low-Density Non-Forest **Brush Cutting** 3302 - Low Density Cmpt. Review NonFor Trees Management **Conifer Trees** Proposal Prescription Work in opening to enhance sharptail grouse habitat. Activities may include burning, mowing, brush cutting planting of species as wildlife division Specs: sees fit. Other Comments: Next Steps: Proposed Start Date: 10/31/2014 3302 - Low Density 175.7 3302 - Low Density Non-Forest NF 41107016-**Brush Cutting** Cmpt. Review 16 NonFor **Conifer Trees** Management **Conifer Trees** Proposal Prescription Work in opening to enhance sharptail grouse habitat. Activities may include burning, mowing, brush cutting planting of species as wildlife division sees fit. Specs: <u>Other</u> Please see stand management comments before treatment is carried out. Comments: Next Steps: Proposed 10/31/2014 Start Date: 32 NF 41107032-345.1 330 - Low-Density Non-Forest Brush Cutting 3302 - Low Density Cmpt. Review NonFor Trees Management **Conifer Trees** Proposal Prescription Work in opening to enhance sharptail grouse habitat. Activities may include burning, mowing, brush cutting planting of species as wildlife division Specs: sees fit. Other Comments: Next Steps: Proposed Start Date: 10/31/2014 38 NF 41107038-170.1 3301 - Low Density Regeneration Artificial 4212 - Planted Jack Cmpt. Review Deciduous Trees Survey Survey Regeneration Pine Proposal (3yr) Prescription Sale was cut in winter of 2009 under sale #41-003-06-01. Stand was panted at a cost of \$189.72 an ac. (89ac) under FTP c41-1274. First year count failed stand was replanted in 2012 at a cost of 136.05. First year count was 715 T/A, third year count to come in 2015. Specs: Other Comments: <u>Next</u> Steps: **Proposed** 03/03/2014 Start Date:

Shingleton Mgt. Unit **Report 3 -- Treatments Prescribed** Compartment: 107 Year of Entry 2016 with No Limiting Factor S t а Treatment Treatment Treatment Acres CoverType Size Stand BA Cover Type Approval n d Name Density Age Range Туре Method Objective Status NF 41107056-34.0 3302 - Low Density Artificial 56 Regeneration 4212 - Planted Jack Cmpt. Review Regeneration Survey Conifer Trees Pine Proposal Survey (3yr) Prescription Sale was cut in 2010 under sale #41-034-06-01 Danaher Jack Pine. The site was planted in 2010 at a cost of \$170.69 under FTP c41-1313. First Specs: year count in 2011 failed, third year count to be done in 2014. Other Comments: Next Steps: Proposed 10/31/2014 Start Date: Artificial NF_41107058-12.3 3303 - Mixed Low Regeneration 4212 - Planted Jack Cmpt. Review 58 Survey **Density Trees** Survey Regeneration Pine Proposal (3yr) Prescription Sale was cut in 2010 under sale #41-034-06-01 Danaher Jack Pine. The site was planted in 2010 at a cost of \$170.69 under FTP c41-1313. First year count in 2011 failed, third year count to be done in 2014. Specs: <u>Other</u> Comments: <u>Next</u> Steps: Proposed Start Date: 02/21/2014

Total Treatment Acreage Proposed: 1818.1

S t		Shinglet	on Mgt. Unit	Report 4		eatment Site Con	ts Prescribed Idition	l with	Compartment: 107 Year of Entry 2016	DNR DNR MCHIGAN
a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
		#Type!	#Type!							
Presc Specs Other	_									
Comr										
<u>Next</u> Steps	<u>::</u>									
<u>Propo</u> Start	<u>osed</u> <u>Date:</u> #Type!									
<u>Limiti</u>	ng Factor									
Ac	Total Treatme creage Propose)							

Compartment 107 Year of Entry 2016

Rick James Hill : Examiner

Availability for Management

Тс	otal	Acres	Acres		Domina	nt Site	• Conditions
Ac	cres	Available	Not Available		No	1C	
2	53	246	7	Aspen	246	7	
1	23	123		Jack Pine	123		
Ę	59	59		Lowland Conifers	59		
4	42	42		Lowland Spruce/Fir	42		
	7	7		Northern Hardwood	7		
1	10	10		Planted Mixed Pines	10		
7	43	743		Red Pine	743		
	9	9		Upland Conifers	9		
7	79	53	25	Upland Mixed Forest	53	25	
	6	6		White Pine	6		
1,:	331	1,299	32	Total Forested Acres	1,299	32	
_		98%	2%	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.

		Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
002	Not Available	1C: Other dept or div proc/practices	35	3J: Water quality / BMPs (stream, river, or lake)			
C	Comments:						



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
Comments			

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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.

Conservatio Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Archaeological Site	An aquatic or terrestrial area of the State that contains physical sites of cultural and historical significance that may occur upon bottomlands. They include thousands of Native American settle and British outposts, nineteenth century logging camps, mines the Great Lakes, there are shipwrecks and other remains docu be identified by Natural heritage data from the State Historic Pr this compartment will be implemented in such a manner as to n the sensitive nature of this information, no further detail about the	terrestrial areas and Great Lakes ements and burial sites, as well as French and homesteads. Beneath the waters of menting the maritime trade. Such sites may eservation Office. Proposed treatments in naintain the integrity of these sites. Due to
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen con stocked trout populations and those of other coldwater fish spe year to year. Coldwater streams in Michigan typically provide th contributions of groundwater to their stream flows. Such stream designated as trout resources by Fisheries Order 210.	cies (e.g., slimy sculpin) to persist from lese conditions due to substantial
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high communities are ecologically and socially significant in their effer as aesthetics, habitat, bank stability, timber production, and the	ne unique conditions adjacent to lakes, diversity of plants and wildlife. Riparian ects on water quality and quantity, as well
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from s approved distance from the river centerlines. The Natural Rive most Natural Rivers. The Vegetative Buffer ranges from 25 to and Vegetative Buffers for each Natural River see the table loca folder.	rs Zoning District is a 400 foot buffer for 100 feet. To view specific Zoning Districts

S t	Shingleton	n Mgt. Unit		Report 8	– Forested	Stands Compartment: 107 Year of Entry: 2016
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	4319 - Mixed Upland Forest	High Density Sapling	26.3	21		Clear creek river corridor, Fox River plan applies to this stand. The plan as well as step terrain will keep harvesting out of this stand.
3	4133 - Aspen, Mixed Pine	High Density Sapling	6.6	24		Aspen stand cut in 1992.
5	4132 - Aspen, Jack Pine	Medium Density	167.8	22		Area was grass but is converting to aspen. In 1992 the larger aspen was cut as time goes on the stand will continue to fill in.
6	42110 - Planted Red Pine	High Density Pole	23.7	57	81-110	Stand was planted in 1957 mostly poor to moderate quality look at thinning to add some volume before a final harvest.
7	4132 - Aspen, Jack Pine	High Density Pole	16.6	22		
9	42110 - Planted Red Pine	High Density Log	22.9	57	111-140	Evaluate for final harvest in ten years, Stand will have no issues holding till then.
10	6122 - Black Spruce	High Density Pole	27.6	73		
11	42110 - Planted Red Pine	High Density Pole	39.0	57	111-140	The basil area of this stand is quite variable. The quality of the stand is also quite variable with most being poor. The stand should be thinned to add some volume before a final harvest.
12	42200 - Natural White Pine	High Density Pole	5.7	53	1-50	This area is white pine filling in an opening. look at treating in 10 years.
13	42220 - Natural Jack Pine	High Density Pole	21.6	40		Uneven aged mix of jack pine cut this stand in 20 years.
14	42110 - Planted Red Pine	High Density Log	43.5	57	51-80	Stand was planted in 1957 mostly poor to moderate quality look at thinning to add some volume before a final harvest.
17	42110 - Planted Red Pine	High Density Log	7.8	57	81-110	Stand was planted in 1957 mostly poor to moderate quality look at thinning to add some volume before a final harvest.
18	42110 - Planted Red Pine	High Density Log	28.2	57	141-170	Stand was planted in 1957 mostly poor to moderate quality look at thinning to add some volume before a final harvest.
19	42110 - Planted Red Pine	High Density Pole	21.8	57	111-140	Stand was planted in 1957 mostly poor to moderate quality look at thinning to add some volume before a final harvest.
20	42110 - Planted Red Pine	High Density Pole	6.1	57	51-80	This stand is of poor quality, stand should be clearcut and replanted to red pine.
21	42110 - Planted Red Pine	High Density Pole	31.5	52	141-170	The basil area of this stand is quite variable. The quality of the stand is also quite variable with most being poor. There is a large frost pocket in the south side of the stand.

Report 8 – Forested Stands



S t	Shingleto		Report 8	– Forested	Stands Compartment: 107 Year of Entry: 2016			
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:		
22	42110 - Planted Red Pine	High Density Log	7.4	53	51-80	Evaluate for final harvest in ten years. Stand will have no issues holding till then.		
23	42110 - Planted Red Pine	High Density Pole	9.4	57	51-80	This stand is of poor quality, stand should be clearcut and replanted to red pine.		
24	42110 - Planted Red Pine	High Density Log	8.3	57	141-170	Stand was planted in 1957 mostly poor to moderate quality look at thinning to add some volume before a final harvest.		
25	42110 - Planted Red Pine	High Density Log	19.0	57	111-140	The basil area of this stand is quite variable. The quality of the stand is also quite variable with most being poor. The stand should be thinned to add some volume before a final harvest.		
26	42110 - Planted Red Pine	High Density Log	114.0	57	111-140	Stand was planted in 1957 mostly poor to moderate quality look at thinning to add some volume before a final harvest.		
27	42110 - Planted Red Pine	High Density Pole	29.5	54	81-110	This stand was cut in 2007, in the 3 camps pine sale. Stand was cut using a 3rd row thin.		
28	6129 - Mixed Coniferous Lowland Forest	High Density Pole	59.4	74		Stand surrounds a low bog area. Still a bit small, look at cutting in 10 years.		
29	42110 - Planted Red Pine	High Density Log	9.6	57	200+	One of the better red pine plantations in the area. Thin the stand, try to improve the quality and provide for operability.		
33	42110 - Planted Red Pine	High Density Log	37.4	57	81-110			
34	42110 - Planted Red Pine	High Density Log	18.0	57	111-140	Stand was planted in 1957 mostly poor to moderate quality look at thinning to add some volume before a final harvest.		
35	4133 - Aspen, Mixed Pine	High Density Pole	11.1	52				
37	42110 - Planted Red Pine	High Density Pole	37.4	57	81-110	The basil area of this stand is quite variable. The quality of the stand is also quite variable with most being poor. The stand should be thinned to add some volume before a final harvest.		
39	42110 - Planted Red Pine	High Density Log	90.7	53	81-110	The basil area of this stand is quite variable. The quality of the stand is also quite variable with most being poor. This is a large stand so only parts should be worked in this entry period.		
40	42110 - Planted Red Pine	High Density Log	16.7	57	141-170	The basil area of this stand is quite variable. The quality of the stand is also quite variable with most being poor. The stand should be thinned to add some volume before a final harvest.		
41	429 - Mixed Upland Conifers	High Density Pole	9.4	74		This stand is a mix of ages and sizes of spruce and aspen cut in ten years with adjacent hardwood and similar type stand in compartment 106.		

S t	Shingletor		Report 8	– Forested	Stands Compartment: 107 Year of Entry: 2016	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
43	4130 - Aspen	Medium Density	13.2	6		Stand was cut in 2008 in 3 Camps Pine Sale (41-036-06-01) residual of 4 Sq. Feet of red pine. Regeneration is coming in well and looks good. Stand passed walk though for natural regeneration.
44	42120 - Planted Jack Pine	High Density Log	4.8	63		Cut with stand 43 of compartment 108 In 2017 YOE.
45	4112 - Maple, Beech, Cherry Association	High Density Pole	6.8	65	81-110	This stand is an area of moderate to poor quality hardwood, quality is sufficient to allow uneven age management. Maintain stand in hardwood as this stand is good diversity in a mostly pine and grass compartment.
47	42110 - Planted Red Pine	High Density Log	11.5	56	111-140	Stand was planted in 1957 the red pine failed Jack pine was planted in 1965 and has allowed the stand to become fully stocked. This stand should be managed in the future for jack pine. When this stand is harvested replant it in one consolidated stand with the rest of the strips adjacent to this stand.
48	42140 - Planted Mixed Pine	High Density Pole	10.5	48	111-140	Stand was planted in 1957 the red pine failed jack pine was planted in 1965 and has allowed the stand to become fully stocked. This stand should be managed in the future for jack pine. When this stand is harvested replant it in one consolidated stand with the rest of the strips adjacent to this stand.
49	42120 - Planted Jack Pine	High Density Pole	12.4	48		Stand was planted in 1957 the red pine failed jack pine was planted in 1965 and has allowed the stand to become fully stocked. This stand should be managed in the future for jack pine. When this stand is harvested replant it in one consolidated stand with the rest of the strips adjacent to this stand.
50	42120 - Planted Jack Pine	High Density Pole	9.4	48		Stand was planted in 1957 the red pine failed jack pine was planted in 1965 and has allowed the stand to become fully stocked. This stand should be managed in the future for jack pine. When this stand is harvested replant it in one consolidated stand with the rest of the strips adjacent to this stand.
51	4311 - Pine, Aspen Mix	Medium Density	52.6	20		This stand is a mix of species as well as open areas. A new FTP is needed to fill in gaps.
52	42110 - Planted Red Pine	High Density Log	8.4	55	51-80	This stand was cut in the 80's all species but red pine where cut. Hold this entry period and evaluate for harvest in 10 years.
53	4132 - Aspen, Jack Pine	Medium Density Pole	27.2	32		Aspen was cut in 1982, at that time the red pine, oak and white pine where left.
54	42110 - Planted Red Pine	High Density Pole	13.2	53	81-110	This stand has been involved in a fire at some point. Look at treating this area in 10 years.
55	42120 - Planted Jack Pine	High Density Pole	6.2	61		

S t	Shingleton Mgt. Unit			Report 8 – Forested Stands			Compartment: 107 Year of Entry: 2016	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range		General Comments:	A. MICHIGAN
57	42120 - Planted Jack Pine	High Density Log	38.0	61		This stand is in decl	ine should be cut before more age.	is lost to old
59	42120 - Planted Jack Pine	High Density Log	27.7	61		This stand is in decl	ine should be cut before more age.	is lost to old
61	42120 - Planted Jack Pine	High Density Log	3.1	64		is part of Unit 1 of	nder contract with stand 57 of 41-018-13-01 Easygoing 106 I 7 for jack pine regeneration po	Vix. Stand
62	4133 - Aspen, Mixed Pine	Medium Density	10.6	21	1-50	1994 by departmen fairly well. Jack pine	of species; the large hardwood t of corrections. The stand is re e planting in gaps would impro ne to create a stand that is fully	egenerating ve stocking
64	42110 - Planted Red Pine	High Density Log	87.6	57	111-140		n 1957 mostly poor to moderate Id some volume before a final l	
65	6122 - Black Spruce	High Density Pole	14.2	73				

Report 9 – Nonforested Stands

Compartment: 107 Year of Entry: 2016



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
1	330 - Low-Density Trees	82.1	Unspecified	Unspecified	
4	330 - Low-Density Trees	4.7	Unspecified	Unspecified	
8	330 - Low-Density Trees	62.6	Unspecified	Unspecified	
15	6233 - Wet Meadow	19.6	Unspecified	Unspecified	
16	3302 - Low Density Conifer Trees	194.0	Yes	High	The west end of this stand was burned in June of 2011 in a grass conversion burn. The burn has been successful there is not a lot of regeneration in this area of the stand. Other areas may need some brush clearing work.
30	330 - Low-Density Trees	25.6	Unspecified	Unspecified	
31	6224 - Treed Bog	20.2	Unspecified	Unspecified	
32	330 - Low-Density Trees	410.9	Unspecified	Unspecified	
36	3302 - Low Density Conifer Trees	64.9	Plantation	Jack Pine	
38	3301 - Low Density Deciduous Tree	170.1	Plantation	Jack Pine	
42	6225 - Bog	1.0	Unspecified	Unspecified	
46	6225 - Bog	17.7	Unspecified	Unspecified	
56	3302 - Low Density Conifer Trees	34.0	Plantation	Jack Pine	
58	3303 - Mixed Low Density Trees	12.3	Plantation	Jack Pine	
60	3302 - Low Density Conifer Trees	56.7	Plantation	Jack Pine	
63	3302 - Low Density Conifer Trees	52.0	Plantation	Red Pine	
66	6224 - Treed Bog	4.0	Unspecified	Unspecified	