

Revision Date: 07-10-2012

Stand Examiner: Jason Caron

Legal Description: 42N-6E, Sections 20,29,30.

Drummond Township

RMU (if applicable):

Management Goals: Maintain age class diversity within the aspen types and selectively harvest hardwood stands to promote regeneration and stand diversity.

Soil and Topography: Shelter-Posen-Summerville association makes up the majority of the soils in this compartment. These are generally good soils and produce good quality hardwood. Wind throw can be, and is, a problem. Most of compartment can be considered gently rolling.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Private land surrounds the compartment with most of it being undeveloped. A private residence does exist on the SW corner of Spring Pond in Section 30.

Unique, Natural Features (include only non-site specific and non-sensitive information): A large pond or small lake exists within the central part of the island and is called Spring Pond. A karst feature is known to exist from the small creek that flows out of Spring Pond, during my inventory I did not see a karst feature.

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): On the East side of the compartment I found a stone fence within Section 29 from back in the homestead days I am assuming.

Special Management Designations or Considerations:

Watershed and Fisheries Considerations: This compartment contains Spring Pond. Treatments (all selection cuts) planned near the lake are appropriate for the protection of this waterbody.

Wildlife Habitat Considerations: This compartment is located in the Drummond Island Management Area, and is dominated by northern hardwoods. Spring Pond is near the center, and provides some habitat for waterfowl and wetland species. Aspen and lowland hardwoods and mixed stands are primarily located in the southeastern side southeast of Spring Pond.

Wildlife objectives for this compartment include maintaining early successional forest where it exists, providing age class and structural diversity in northern hardwoods, and protecting wetland areas for waterfowl and other wetland wildlife. Regenerating aspen stands will be allowed to mature, providing for various habitat needs of ruffed grouse and white-tailed deer as they mature. An older, mature stand will be harvested to encourage regeneration and provide young early successional growth. Snag will be left for cavity nesting species. Some large wolfy trees as well as all conifers will be left in northern hardwood stands. Wetlands and other waterbodies will be buffered appropriately.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of thin to discontinuous glacial deposits over bedrock. The glacial drift thickness varies between 10 and 50 feet. The Silurian Manistique and Burnt Bluff Groups subcrop below the thin glacial drift. These formations are quarried for stone/dolomite in Section 23. Gravel pits are located in Section 20 and potential appears to be good. There is no economic oil and gas production in the UP.

Vehicle Access: Vehicle access is pretty good within the compartment. Small two tracks offer good access especially within the large hardwood type in the NE corner of the compartment.

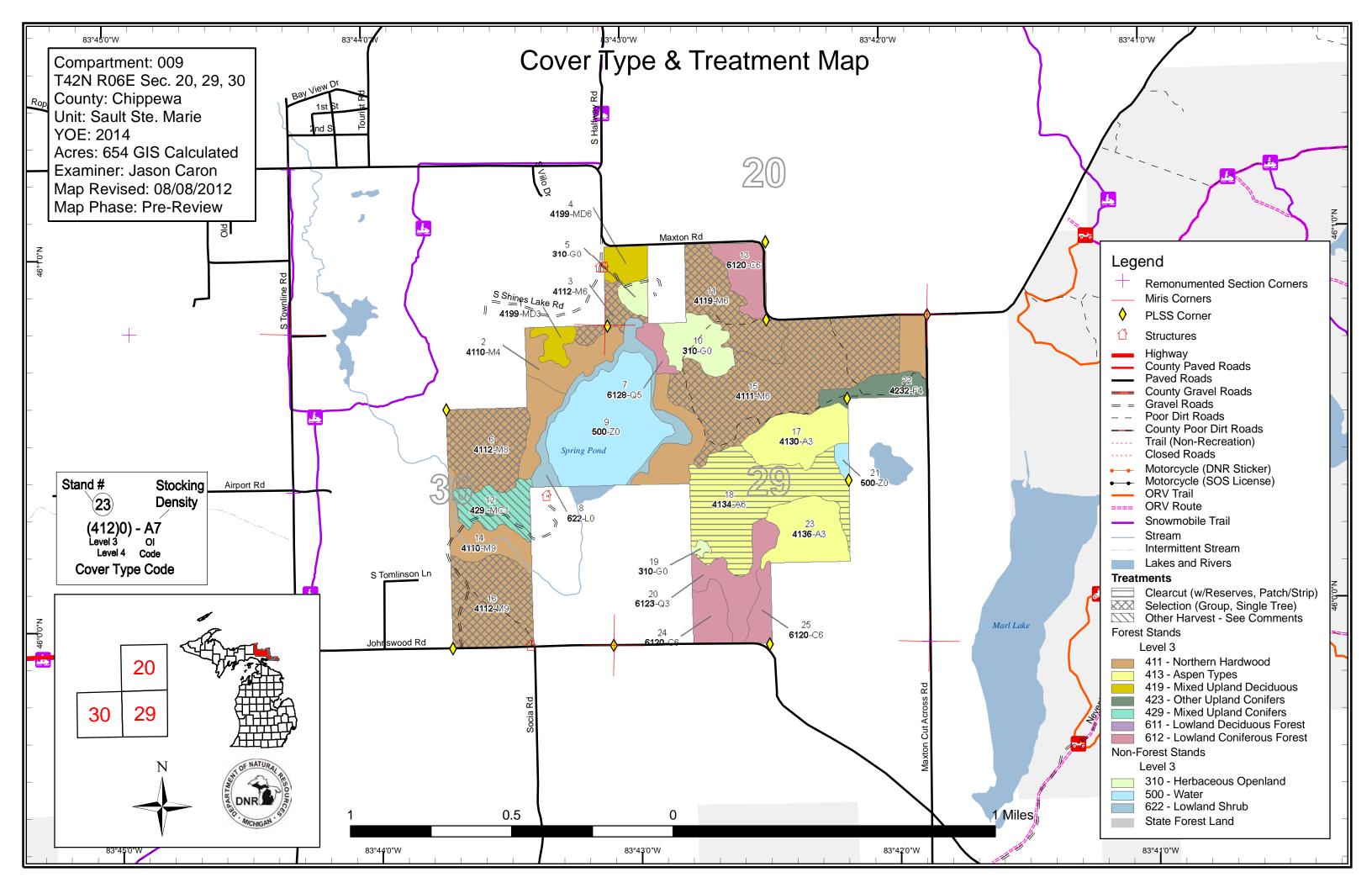
Survey Needs: None needed at this time.

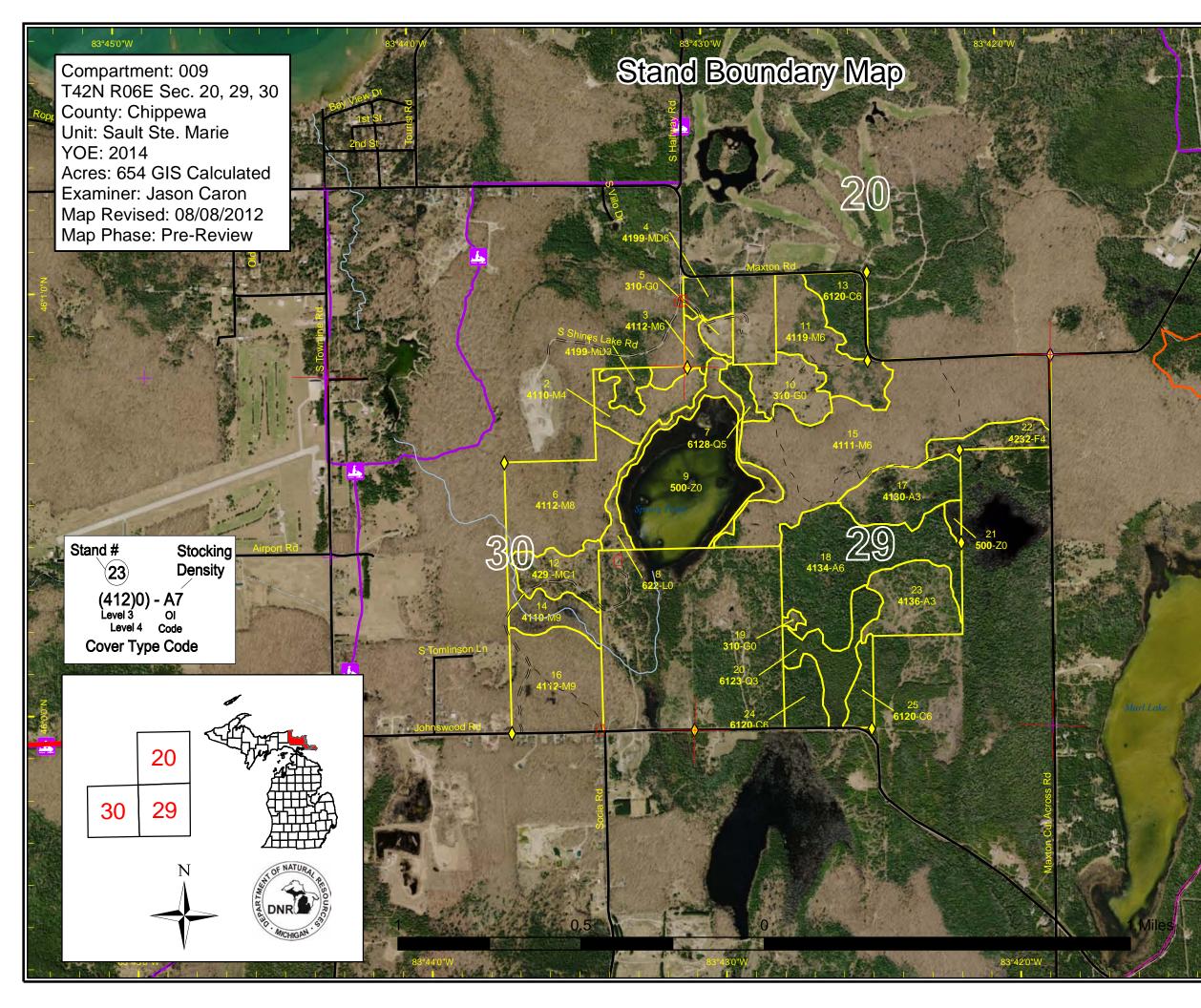
Recreational Facilities and Opportunities: Hunting for small game and deer are popular within this compartment. Cross country skiing is also popular along the two tracks within the hardwood stands.

Fire Protection: Access for fire protection would be pretty good given the two tracks that exist within the compartment. The majority of the ground is well drained which provides for a good road bed.

Additional Compartment Information:

- > Cover Type details, Proposed Treatments, and Stand listings are listed in the attached reports:
 - Proposed Treatments No Limiting Factors
 - Proposed Treatments With Limiting Factors
 - Stand Listing Forested
 - Stand Listing Non Forested
 - Special Conservation Area (SCA) Details
- > The following information is displayed, where pertinent, on the attached compartment maps:
 - Base feature information, stand numbers, cover types
 - Proposed treatments
 - Proposed road access system
- SCA Special Conservation Areas





Legend

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Remonumented Section Corners Miris Corners

PLSS Corner

台 Structures

- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads —
- Poor Dirt Roads ____
- County Poor Dirt Roads Trail (Non-Recreation)
- _ _ _ _ Closed Roads
- •
- Motorcycle (DNR Sticker) Motorcycle (SOS License)
- **ORV** Trail
- **ORV** Route ____
- Snowmobile Trail
- Stream
- Intermittent Stream
- Stand Boundaries

Forest Stands

Level 3

- 411 Northern Hardwood
- 413 Aspen Types

- 413 Aspen Types 419 Mixed Upland Deciduous 423 Other Upland Conifers 429 Mixed Upland Conifers 611 Lowland Deciduous Forest
- 612 Lowland Coniferous Forest
- Non-Forest Stands
 - Level 3

83°41'0"W

- 310 Herbaceous Openland 500 - Water
- 622 Lowland Shrub

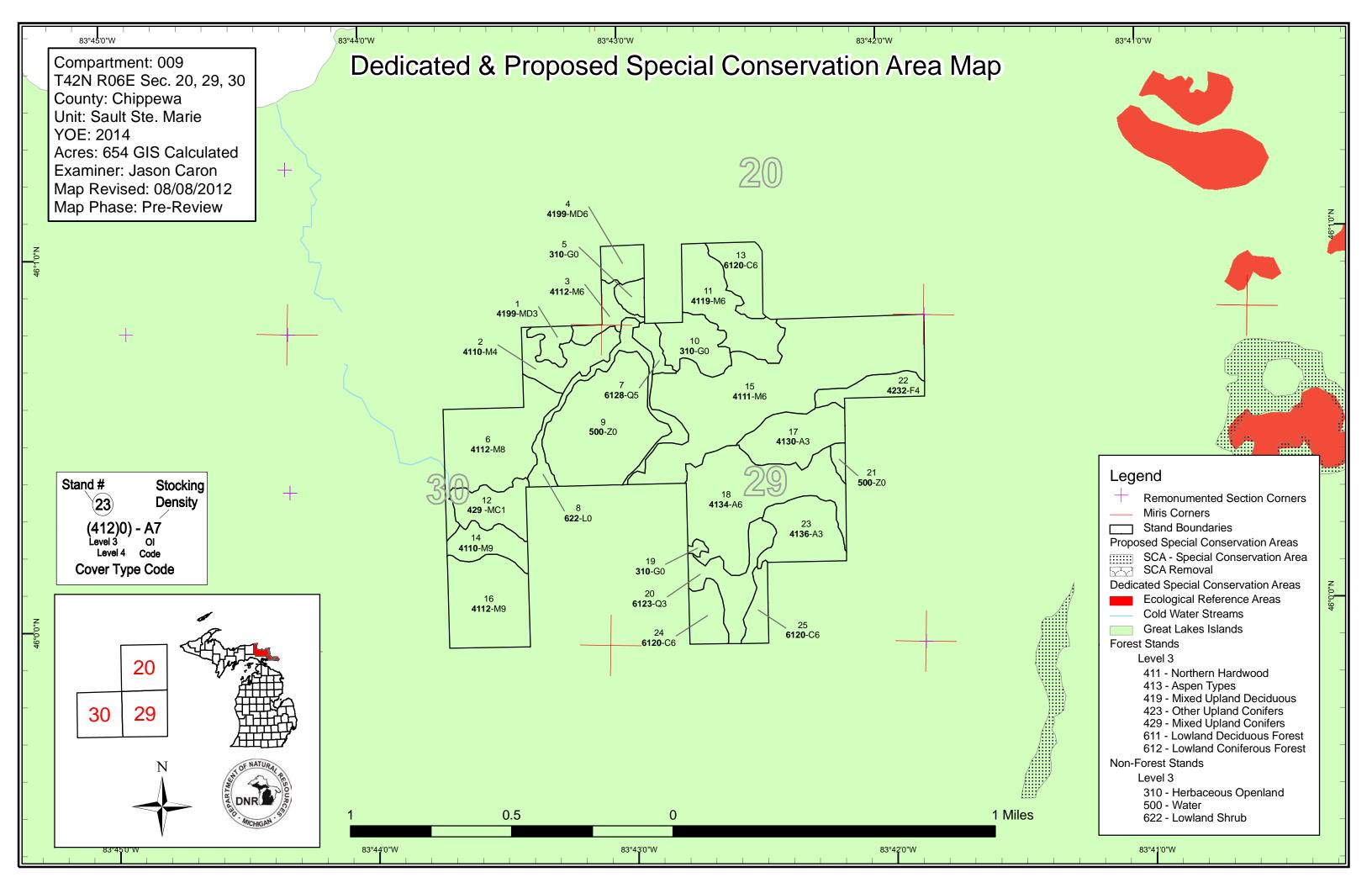


Table 1 – Total Acres by Cover Type and Age Class

Sault Ste. Marie Mgt. Unit Jason Caron : Examiner

Compartment 009 Year of Entry 2014



Age Class

	/	0°0	^{10,7} 0	10° C		100-100-100-100-100-100-100-100-100-100	S. S.	89 89	10	40 40 40 40 40	8	001001 	6179	60× 150	89 89 10 10	, ¹⁰ ,
Aspen	0	55	0	0	0	0	0	67	0	0	0	0	0	0	122	
Cedar	0	0	0	0	0	0	0	0	0	17	0	21	0	0	38	
Herbaceous Openland	26	0	0	0	0	0	0	0	0	0	0	0	0	0	26	
Lowland Conifers	0	0	0	22	0	6	0	0	0	0	0	0	0	0	28	
Lowland Shrub	19	0	0	0	0	0	0	0	0	0	0	0	0	0	19	
Mixed Upland Deciduous	0	7	0	0	0	10	0	0	0	0	0	0	0	0	16	
Northern Hardwood	0	0	0	0	0	62	0	239	0	0	0	0	0	0	301	
Upland Conifers	0	0	19	0	0	0	0	0	0	0	0	0	0	0	19	
Upland Spruce/Fir	0	0	0	13	0	0	0	0	0	0	0	0	0	0	13	
Water	71	0	0	0	0	0	0	0	0	0	0	0	0	0	71	
Total	116	62	19	35	0	77	0	306	0	17	0	21	0	0	654	



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MICHIGAN .	Sault Ste. Marie Mgt. Unit Year of Entry 2014											Compartment Total Compartment Acres:	
					Acre	s by T	reatm	ent Ty	ре				
	Commercial Harvest - 288	B Site I	Prep - 0		Т	ree Pl	lanting	- 0		Pres	cribed Burn - 0	Other - 0	
	Habitat Cut - 19	Oper	ning Maintena	nce - () Т	ree Se	eeding	- 0		Pesti	cide - 0		
					the construction of the co		000 1100 000 1100 000 1100 000 000 000		<u> </u>		Se of the second		
	Aspen			67	0	0	0	0	0	67	l		
	Northe	ern Hardwo	od	0	221	0	0	0	0	221			
	Uplane	d Conifers		0	0	0	0	0	19	19			
			Total	67	221	0	0	0	19	307			

Tabl ~



S t		Sa	ault Ste. M	larie Mgt. Unit	Tabl			ents Prescrik ting Factor	bed	Compartment: 009 Year of Entry 2014	DNR DNR
a n d		tment ame	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
3	45009	003-Cut	8.8	4112 - Maple, Beech, Cherry Association	High Density Pole	50	51-80	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<u>Prese</u> Spec										oth bark or minimal scal a cut all unmarked beech	
<u>Othe</u> Com	<u>r</u> ments:			od sale (chainsaw and o cut this stand. Retain			, ,		•	further beech regenera	tion. Do not
<u>Next</u> Steps			•	nt with a regeneration s spen, oak, ash and iro	• •	er the wo	ork instructi	ions. Acceptable	regeneration is ma	aple, cherry, beech, pap	er and yellow
Propo Start [10/07/20	12								
6	45009	006-Cut	36.6	4112 - Maple, Beech, Cherry Association	Medium Density Log	70 3	51-80	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<u>Preso</u> Spec		Only ren		e if it has major defect.						oth bark or minimal scal a cut all unmarked beech	
<u>Other</u> Com	<u>r</u> ments:			od sale (chainsaw and o cut this stand. Retain						further beech regenera	tion. Do not
<u>Next</u> Steps			•	nt with a regeneration s spen, oak, ash and iro	• •	er the wo	ork instructi	ions. Acceptable	regeneration is ma	aple, cherry, beech, pap	er and yellow
<u>Propo</u> Start [10/07/20	12								
11	45009	011-Cut	33.7	4119 - Mixed Northern Hardwoods	High Density Pole	50	51-80	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<u>Prese</u> Spec		Only ren		e if it has major defect.						smooth bark or minimal all unmarked beech. W	
<u>Othe</u> Com	<u>r</u> ments:	Set up fo Do not a wildlife t	allow wood	od sale (chainsaw and to be cut with process	small skidd or. Find som	er/tracto neone w	or is ideal). ho is intere	Keep disturbance ested in cutting fin	e to a minimum to rewood. Retain so	prohibit further beech rome beech with the smo	egeneration. oth bark and
<u>Next</u> Steps				nt with a regeneration s spen, oak, ash and iro		er the wo	ork instructi	ions. Acceptable	regeneration is ma	aple, cherry, beech, pap	er and yellow
<u>Propo</u> Start [10/07/20	12								
12	45009	012-Cut	18.7	429 - Mixed Upland Conifers	Low Density Sapling	20		Harvest	Other - Specify in Comments	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal
Preso Spec	•		ss opening e numerous		ferent specie	es. A fe	w scotch pi	ine exist and nee	d to be removed.	A couple of the scotch p	ine are large
<u>Othe</u> <u>Com</u> i	<u>r</u> ments:	Discuss	with wildlife	e biologist to see if the	ey can have	a summ	ier student	do this project. I	assume it would t	ake 2 days at most.	
<u>Next</u> Steps		Look at	opening ag	gain in the next invento	ory cycle to s	ee if an	y scotch pi	ne have seeded	in.		
<u>Propo</u>		10/01/20									

Sault Ste. Marie Mgt. Unit

Table 3 -- Treatments Prescribed

Compartment: 009



S t					with	No Limi	iting Factor		Year of Entry 2014	DNR MILLING
a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
15	45009015-Cu	t 98.8	4111 - S.Maple, Hard Mast Association	High Density Pole	70	81-110	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<u>Prese</u> Spec	<u>s:</u> scale.	Only mark m		efect. Walk th	hrough s	stand and	mark beech to lea	0	hat have smooth bark o hen cut all unmarked b	
<u>Othe</u> <u>Com</u>									and mark one or two be opth station in southeas	
<u>Next</u> <u>Step</u>			t with a regeneration s spen, oak, ash and irc		er the wo	ork instruct	ions. Acceptable	regeneration is ma	ple, cherry, beech, pap	er and yellow
<u>Propo</u> <u>Start I</u>		012								
16	45009016-Cu	t 43.5	4112 - Maple, Beech, Cherry Association	High Density Log	70 9	81-110	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<u>Prese</u> Spec	<u>s:</u> maple	if the basal a		vith less bee					ale or smooth bark. Ma h alot of beech can be	
<u>Othe</u> Com	<u>r</u> ments:									
<u>Next</u> <u>Step</u> :			t with a regeneration s spen, oak, ash and irc		er the wo	ork instruct	ions. Acceptable	regeneration is ma	ple, cherry, beech, pap	er and yellow
Propo Start		012								
18	45009018-Cu	t 67.0	4134 - Aspen, Spruce/Fir	High Density Pole	70		Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal
<u>Pres</u> Spec		y on contract	t Rainbow Ridge As	pen 45-002-	11-01					
<u>Othe</u> <u>Com</u>	<u>r</u> ments:									
<u>Next</u> <u>Step</u> :		•	t with a regeneration s spen, oak, ash and irc		er the wo	ork instruct	ions. Acceptable	regeneration is ma	ple, cherry, beech, pap	er and yellow
Propo Start		2011								
A	Total Treatm creage Propos		.0							

Acreage Proposed: 307.0

S t		Sault Ste. Mari	e Mgt. Unit	Table 4		atments imiting	s Prescribed Factor	with	Compartment: 009 Year of Entry 2014	OF NATURAL PRODUCTION
a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
			#Error							
Presc Spece	ription <u>s:</u>									
<u>Other</u> Comr										
<u>Next</u> Steps	<u>:</u>									
Propos Start D										
	ng Factor and ment Reason	<u>l No</u>								
Ac	Total Treatn creage Propo									

Out of YOE -- Treatments Prescribed with No Limiting Factor

Year of Entry: 2014

1	OF NATURAL	
RTME)		١
DEPA	DNR	
1	MICHIGAN	
Арр	roval	

	atment ame	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
	_OutOfY E-Cut	19.8					Harvest	Crown Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
Prescription Specs:	_ Thin to a	round 120	Basal Area. Leave spe	ecies divers	ity within	the stand	were present.			
<u>Other</u> Comments:	This was	a buffer le	ft along the creek from	n a sale call	ed Golde	en Eagle.				
<u>Next</u> <u>Steps:</u>										
Proposed Start Date:	10/01/20	13								
45152	2062-Cut	5.5	4115 - Y.Birch, Hemlock NH	High Density Log	76		Harvest	Clearcut with Reserves	4115 - Y.Birch, Hemlock NH	Cmpt. Review Proposal
Prescription Specs:			leaving all white pine, r maple in order to reta					one healthy, mature	red maple, black che	erry, spruce, fir,
<u>Other</u> Comments:	cut with a	adjacent co	ompartment.							
<u>Next</u> <u>Steps:</u>			tion in 4-5 years. Acce beech, and balsam fir		neration	will include	e red maple, yell	ow birch, hemlock, w	vhite pine, black che	rry, sugar
Proposed Start Date:	10/01/20	11								
	_OutOfY E-Cut	0.7					Harvest	Low Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
Prescription Specs:	_ Thin to a	round 120	Basal Area. Leave spe	ecies divers	ity within	the stand	where present.			
<u>Other</u> Comments:	cut with	stand 1 in o	comp 158.							
<u>Next</u> <u>Steps:</u>										
Proposed Start Date:	10/01/20	13								
	_OutOfY E-Cut	27.3					Harvest	Single Tree Selection	4111 - S.Maple, Hard Mast Association	Cmpt. Review Proposal
Prescription Specs:	_ Cut all of	the beech	in the stand. Mark 2-3	beech to l	eave whe	en cruising.				
<u>Other</u> Comments:	Beech ba	ark disease	e is affecting the beech	within this	stand.					
<u>Next</u> <u>Steps:</u>			t with a regeneration s od, balsam fir, white sp				ons. Acceptable	regeneration is aspe	en, maple, cherry, be	ech, yellow and
Proposed Start Date:	10/01/20	13								
	_OutOfY E-Cut	449.6					Harvest	Single Tree Selection	4111 - S.Maple, Hard Mast Association	Cmpt. Review Proposal
Prescription Specs:	Cut all b	eech in the	stand. While cruising	mark 2-3 b	eech per	acre to lea	ve.			
<u>Other</u> Comments:	Beech ba	ark disease	e is present in the stan	d.						
<u>Next</u> <u>Steps:</u>			t with a regeneration s od, balsam fir, white sp				ons. Acceptable	regeneration is aspe	en, maple, cherry, be	ech, yellow and
Proposed Start Date:	10/01/20	12								

	Out of YOE Treatments Prescribed with No Limiting Factor	4	DRR DR NATURAL PRODUCCES	
Treatment Acres CoverType Size Stand BA Treatment Treatment Cover Type Approv		Approval Status	<u></u>	

Total Treatment Acreage Proposed: 502.9

S t	Sault Ste. Marie Mgt. Unit			5 – Fo	prested Sta	ands Compartment: 009 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4199 - Other Mixed Upland Deciduous	High Density Sapling	6.8	13		Regeneration is decent within the stand. Part of the stand was cut and part of the stand looks like small diameter conifer and deciduous growing on shallow soil.
2	4110 - Sugar Maple Association	Low Density Pole	19.1	50	1-50	Looks like white birch and beech was cut during last timber sale. What remains is scattered poor quality sugar maple with beech and ironwood regeneration underneath. Crown dieback is occuring in the sugar maple. I typed out the overstory as the mature sugar maple and beech that is around 50 years old. The understory is 13 years old as the last cut was that old.
3	4112 - Maple, Beech, Cherry Association	High Density Pole	8.8	50	51-80	Stand is small but a few beech could be removed due to BBD. Sale could be set up as a firewood sale. Mark only beech due to low ba.
4	4199 - Other Mixed Upland Deciduous	High Density Pole	9.5	55	1-50	Stand is a mix of numerous species. Soil must be poor, trees look to be growing slowly, probably on rock. Sugar maple is poor quality and small diameter. Balsam regen is quite thick.
6	4112 - Maple, Beech, Cherry Association	Medium Density Log	52.7	70	51-80	Poor quality stand of sugar maple and beech. Beech is very scattered and not thick enough to thin out. Sugar maple is poor quality. Beech regeneration is thick and well established. Stand looks to have been thinned hard in the past. Basal area is low. Stand is unique in that it stair steps down to Spring Pond.
7	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	5.8	53		Stand of young cedar and tamarack mixed with aspen, bam, etc Southern part of stand is more wet than North part.
11	4119 - Mixed Northern Hardwoods	High Density Pole	33.7	50	51-80	Stand of young small diameter hardwood. Not much for beech within the stand, a couple here and there Balsam fir understory is thick in spots. Stand is still young and basal area is low.
12	429 - Mixed Upland Conifers	Low Density Sapling	18.7	20		OI typed this stand as a grass opening but it looks to be filling in. Stand is a mix of conifer, sugar maple and aspen. Impressive how the tamarack and white pine are filling in. Juniper bushes throughout and a few scotch pine to remove as well. Property owner on spring pond told me there was an old sugar shack in the NE corner of the opening many years ago. Very unique stand for drummond.
13	6120 - Lowland Cedar	High Density Pole	16.8	98		Stand consists of a mix of cedar, aspen and white spruce. The aspen and spruce are very scattered and very poor quality. The cedar looks in decent condition. A thick balsam fir understory exists within the stand. I typed the stand out as a lowland type but it could go either way. I have a feeling the stand is growing on rock.
14	4110 - Sugar Maple Association	High Density Log	14.9	70	51-80	Very unique stand. A low swale that has a mix of basswood, sugar maple and yellow birch. Swale is tied into spring pond, landowner on spring pond states that it is a karst feature and the stream goes underground at some point. It's been a very dry spring so I can't tell where this occurs. Stand contains alot of different species of ferns. I typed it out as an upland site but in years with alot of water it probably could be considered lowland.

S t	Sault Ste. Marie	e Mgt. Unit		5 – Fo	prested Sta	nds Compartment: 009 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
15	4111 - S.Maple, Hard Mast Association	High Density Pole	128.2	70	81-110	Stand has low basal area overall but contains pockets of large beech which is showing signs of BBD. I did alot of walking through this stand to try and determine what the best method of treatment would be. Unfortunately beech will be dead and gone in the next inventory cycle. I suggest doing a light thinning and removing diseased beech along with a few maple here and there. Creating some canopy gaps may help regenerate some maple, basswood, etc
16	4112 - Maple, Beech, Cherry Association	High Density Log	43.5	70	81-110	Stand of sugar maple and beech. Selectively thin to remove beech with BBD. In areas where basal area is heavier remove poor quality sugar maple if possible.
17	4130 - Aspen	High Density Sapling	27.7	13		Nice stand of aspen regeneration.
18	4134 - Aspen, Spruce/Fir	High Density Pole	67.0	70		Stand is currently under contract.
20	6123 - Lowland Fir	High Density Sapling	22.1	30		Stagnant stand of lowland conifer.
22	42320 - Upland Spruce	Low Density Pole	13.1	30		Old grass opening filling in with white spruce and sugar maple.
23	4136 - Aspen, Mixed Conifer	High Density Sapling	27.7	16		Decent stand of aspen regeneration. A mix of tamarack within the stand, makes for an interesting combo.
24	6120 - Lowland Cedar	High Density Pole	12.5	110		Stand is a mix of conifer and deciduous. Timber is very poor quality.
25	6120 - Lowland Cedar	High Density Pole	8.9	110		Stand of pole sized cedar mixed with a few aspen. Cedar looks to be decent quality the aspen is very poor quality.

Sault Ste. Marie Mgt. Unit

Compartment: 009

Year of Entry: 2014



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:	(Smb)
5	310 - Herbaceous Openland	5.2	N\A	Unspecified		
8	622 - Lowland Shrub	19.5	N\A	Unspecified		
9	50 - Water	68.0	N\A	Unspecified		
10	310 - Herbaceous Openland	19.4	N\A	Unspecified		
19	310 - Herbaceous Openland	1.4	N\A	Unspecified		
21	50 - Water	2.6	N\A	Unspecified		



7 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

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

Stand	SCA Туре	SCA Name	Acres	Comments



8 – DEDICATED CONSERVATION AREA DETAILS

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

Conservation Area	Туре	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.	
SCA	Great Lakes Islands	Great Lakes Islands provide significant habitat for numerous species, including many rare plants and animals, several of which are endemic or largely restricted to the Great Lakes region. Due to their isolation, islands provide good examples of many Great Lakes-associated natural communities and ecosystems, and thus have potential to provide insights for understanding the consequences of human disturbance on the increasingly fragmented ecosystems of the mainland.	