

Compartment Review Presentation

Escanaba Forest Management Unit Compartment 80 Entry Year 2015 Acreage: 1,027 County Delta Management Area: Green Bay Lake Plain

Revision Date: 07/12/2013

Stand Examiner: Dan Racine

Legal Description:

T37N, R24W, SEC. 3, 10, 15, 22, 27, Delta County, Michigan

Identified Planning Goals:

Management will occur on 276 acres in this compartment. The 5 timber types that will be treated using a variety of silvicultural treatments are Aspen, Lowland Coniferous, Lowland Deciduous, Mixed Upland Conifer, Natural Pine, and Other Upland Conifer. Hemlock regeneration has had success in this area, so treatment of the hemlock stands in this area will focus on trying to recruit what has already began regenerating into the overstory, and trying to establish regeneration in the stands that have not been treated. Most of the pine types have been cut in previous years and contain a good amount of young pine seedlings, the focus in these stands, will be to open it up and allow the seedlings to grow.

Soil and topography:

Topography is level to slightly rolling. Soils are poorly drained, somewhat poorly drained, and well drained sands and very poorly drained, extremely acid mucks and peats. Major soil series are AuGres, Rubicon, Roscommon, Charlevoix, Tawas, and Ensley.

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

This compartment is spread between five sections of land on the east side of T37N, R24W. Most of the ownership in and around the compartment is non industrial private lands. The major land use is forest management, with opportunities for hunting, fishing, trapping and camping. The Forest Island O.R.V. trailhead is located in this compartment and provides for the opportunity for this type of recreational activity.

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:

The Bark River watershed is located in this area. There has been some sediment trap work done in this area. Special consideration should be given along this watershed when timber sale work is being done.

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of medium-textured glacial till and lacustrine (lake) sand and gravel. The glacial drift thickness varies between 10 and 50 feet. The Ordovician Trenton Limestone underlies the glacial drift. The Trenton is quarried for stone just west of Escanaba. This Compartment has not been previously leased for metallic exploration. Gravel pits are located in Section 10 and there appears to be potential. No economic oil and gas production has been found in the UP.

Vehicle Access:

Most of the access into the compartment is poor due to private ownership and type of terrain. The only good access is off the Bark River Truck Trail into that part of the compartment that is located in Section 10.

Survey Needs:

None.

Recreational Facilities and Opportunities:

Hunting, trapping, fishing and camping are the main opportunities available in this area. The Forest Islands O.R.V. Trail also provides a good opportunity for O.R.V. riders.

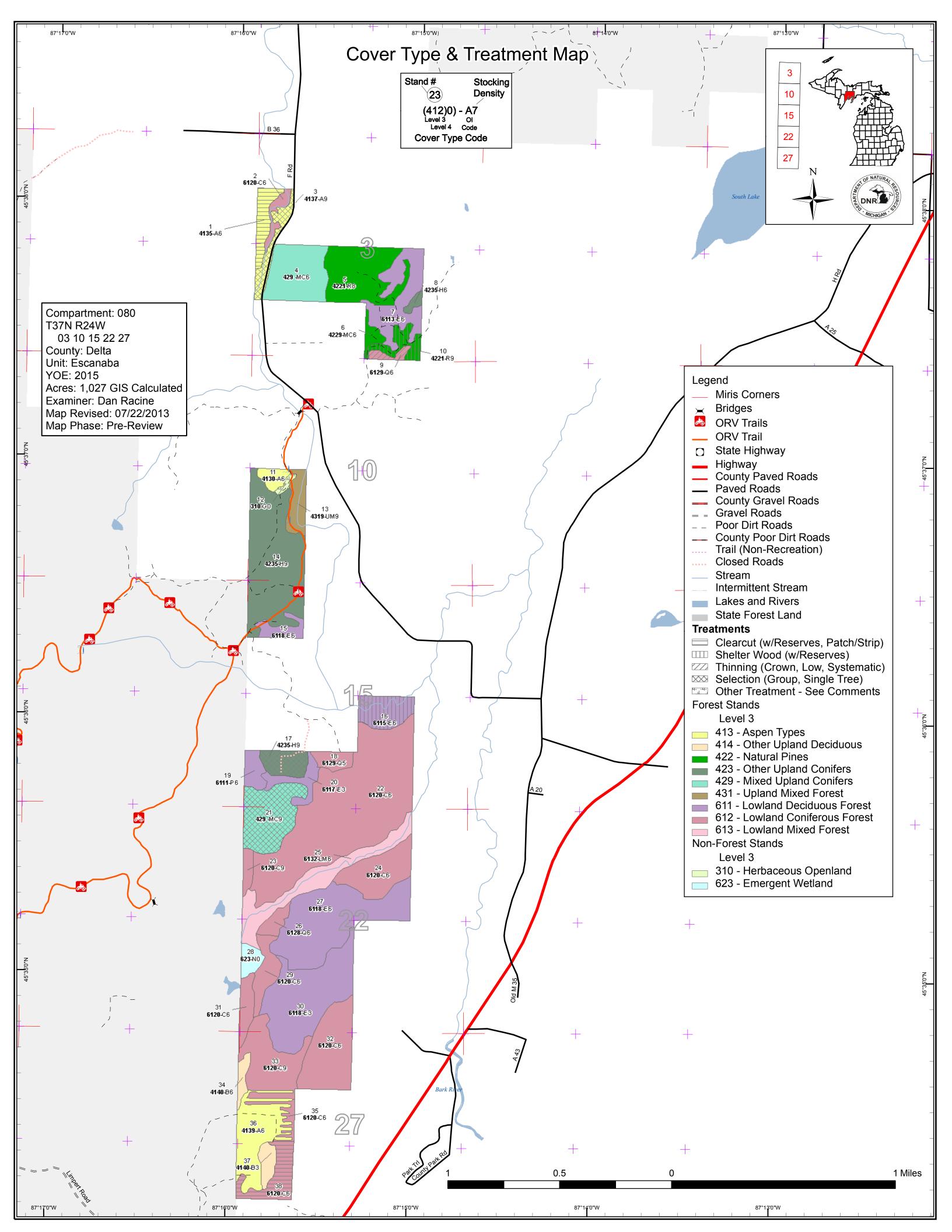
Fire Protection:

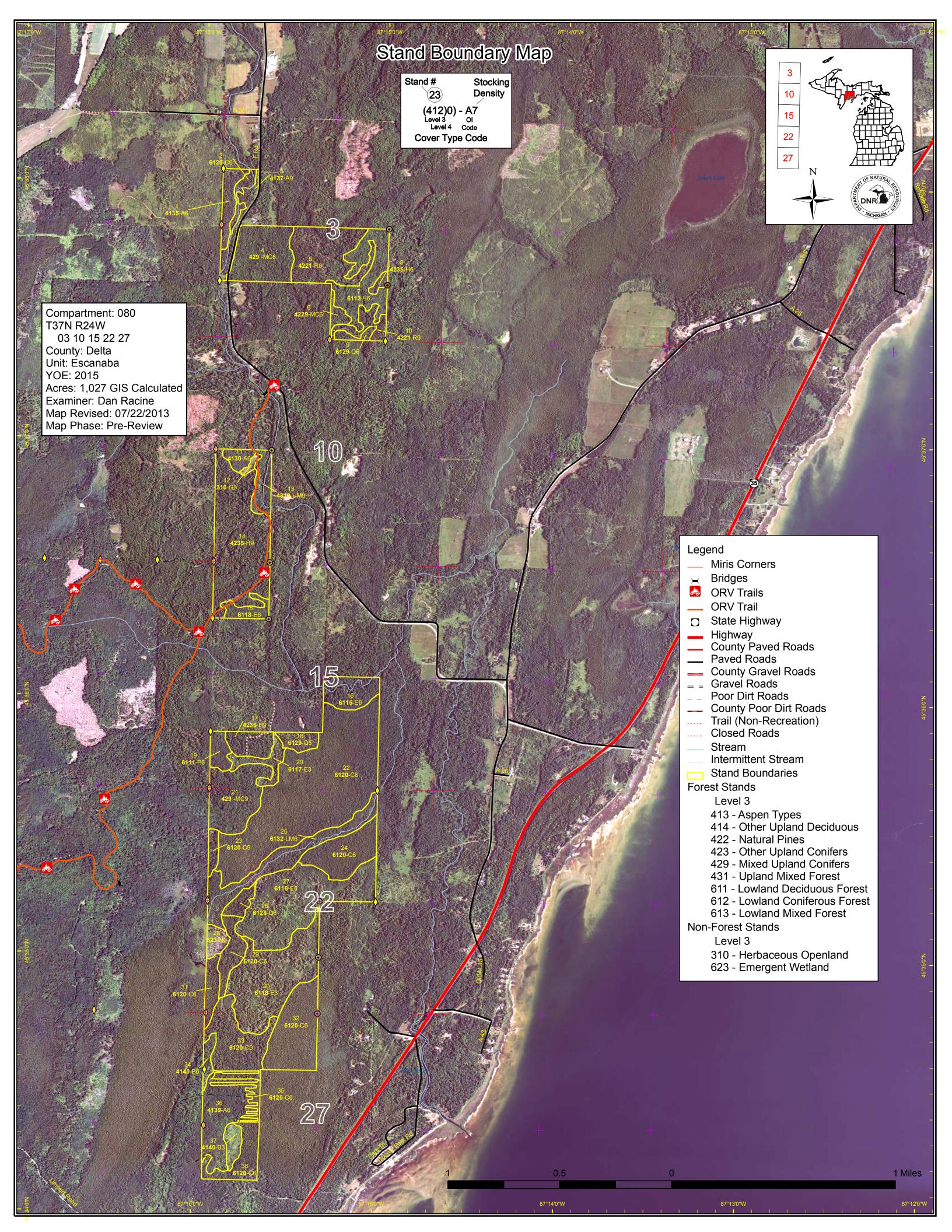
Fire could be a problem in this area due to the lack of good access, should a fire get started in this area.

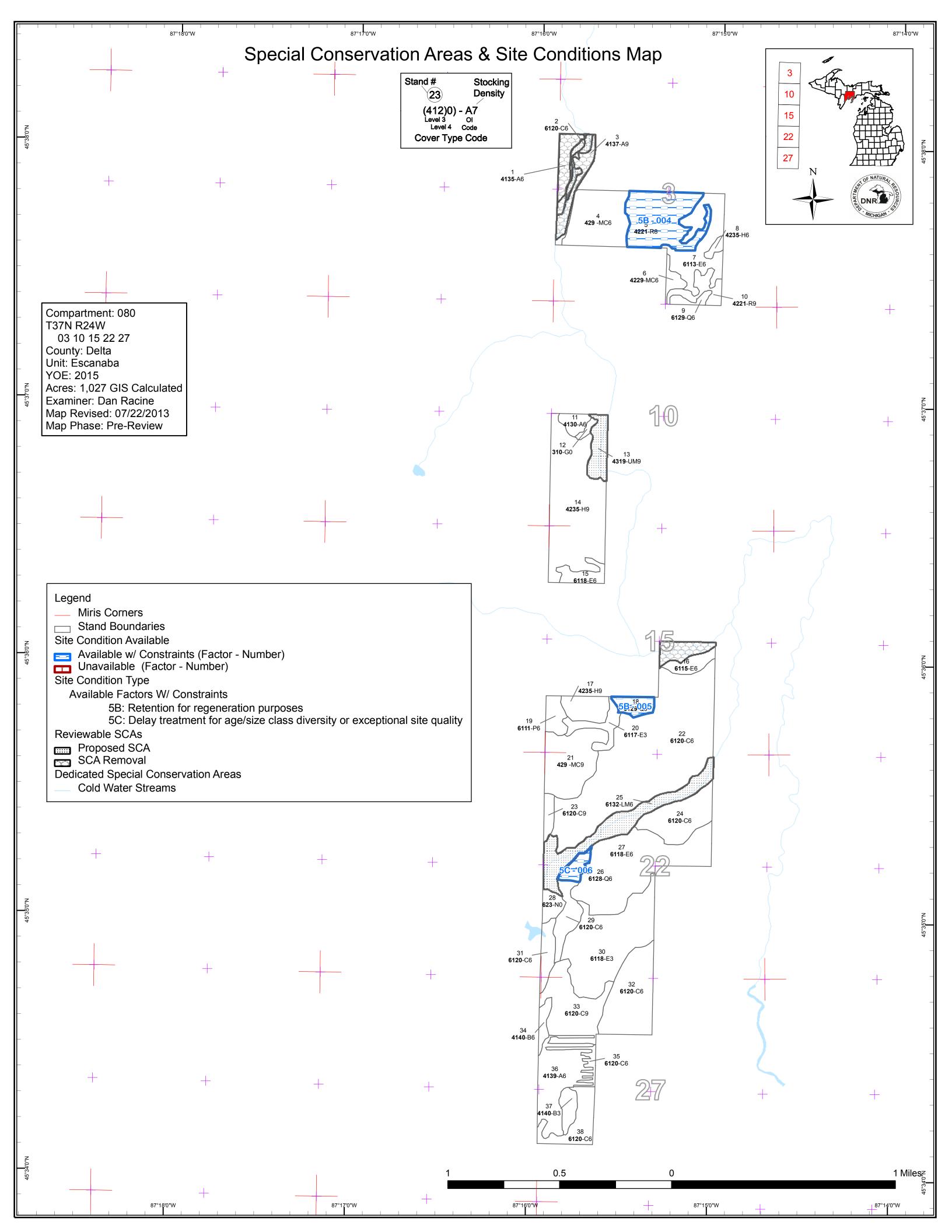
Additional Compartment Information:

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

Escanaba Mgt. Unit

Dan McNamee : Examiner

Compartment 080 Year of Entry 2015



Age	Class
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		00	70,79	40 43	30.30	OP OP	30.30	60 ^{.60}	a s	00000000000000000000000000000000000000	85.00	100,100	12,12	120× 150	AND
Aspen	0	0	6	41	0	0	0	25	0	0	0	0	0	0	73
Cedar	0	0	0	0	0	0	0	0	33	0	319	0	5	0	357
Hemlock	0	0	0	0	0	0	0	0	0	0	90	3	14	0	107
Herbaceous Openland	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Lowland Aspen/Balsam Poplar	0	0	0	9	0	0	0	0	0	0	0	0	0	0	9
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	4	16	0	0	19
Lowland Deciduous	0	96	75	0	0	0	0	47	0	20	0	0	0	0	238
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	42	0	0	0	42
Marsh	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Natural Mixed Pines	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5
Paper Birch	8	0	0	5	0	0	0	0	0	0	0	0	0	0	13
Red Pine	0	0	0	0	0	0	0	0	0	48	11	0	0	0	59
Upland Conifers	0	0	0	0	0	0	0	41	0	0	0	0	41	0	82
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	14	0	14
Total	17	96	86	55	0	0	0	114	33	69	466	18	74	0	1027



MICHIGAN :	Escanaba Mgt. Unit Year of Entry 2015								Compartment Total Compartment Acres:	
			Acre	es by 1	Freatm	ent Ty	pe			
	Commercial Harvest - 177 Tre	ee Planting - 0		Other -	- 0					
	Habitat Cut - 0 Op	ening Maintenance	- 2							
			Co	ver Ty	pe by l	Harves	st Meth	od		
	Annen Timor				00000000000000000000000000000000000000	etternood	Criminas	53 10 10 10 10 10 10 10 10 10 10 10 10 10		
	Aspen Types	13		-		0	0			
	Lowland Coniferous Fores			0	0	4	0	23		
	Lowland Deciduous Forest	38	3 0	0	20	0	0	59		
	Mixed Upland Conifers	0	41	0	0	0	0	41		
	Natural Pines	0	0	0	11	0	0	11		
	Other Upland Conifers	0	14	0	0	3	0	17		
		Total 71	68	0	31	7	0	177		

S t		Esca	naba Mgt. Unit	Repo			ents Prescri ing Factor	ibed	Compartment: 080 Year of Entry 2015	DR NATURAL PHOLOR
a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
1	33080001-Cut	12.9	4135 - Aspen, Cedar	High Density Pole	72		Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal
<u>Prese</u> Spec		leaving a	1 chain reserve area (b	ouffer) along	g the Bar	k River.				
<u>Othe</u> Com	r Access ments:	will be froi	m the west through prive	ate land.						
<u>Next</u> Steps		heck per	work instructions. Accep	otable rege	n spp = A	A, P, Fb an	d Fs.			
<u>Propo</u> <u>Start I</u>		14								
3	33080003-Cut	12.6	4137 - Aspen, Birch	High Density Log	72 g		Harvest	Single Tree Selection	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal
<u>Prese</u> Spec		the matu	re aspen, birch, spruce/	fir,between	the cour	nty road an	d the river. Do n	ot cut Cedar and H	emlock.	
<u>Othe</u> Com	<u>r</u> ments:									
<u>Next</u> Steps										
<u>Propo</u> <u>Start I</u>		14								
8	33080008-Cut	2.7	42350 - Upland Hemlock	High Density Pole	112		Harvest	Crown Thinning	4312 - Hemlock, Mixed Deciduous	Cmpt. Review Proposal
Prese Spec		nlock to tł	ne recommended stocki	ng level pe	r the eas	tern hemlo	ck guide.			
<u>Othe</u> Com	<u>r</u> ments:									
<u>Next</u> Steps		stand and	if regen occurs, manag	e using the	e eastern	hemlock s	ilviculture guide.			
<u>Propo</u> Start I		14								
9	33080009-Cut	3.8	6129 - Mixed Coniferous Lowland Forest	High Density Pole	108		Harvest	Crown Thinning	6131 - Hemlock, White Pine, Maple, Birch	Cmpt. Review Proposal
Prese Spec		nd to reco	mmended stocking leve	els accordir	ng to the	eastern he	mlock silvicultur	e guide.		
<u>Othe</u> Com	<u>r</u> ments:									
<u>Next</u> Steps		stand and	if hemlock regen occur	s, treat as	prescribe	ed using the	e eastern hemlo	ck guidelines.		
<u>Propo</u> Start I		14								

S t			Escar	naba Mgt. Unit	Repo			nents Prescr iting Factor	ibed	Compartment: 080 Year of Entry 2015	ANATURAL PROVINCE
a n d		ment me	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
10	330800	010-Cut	11.1	42210 - Natural Red Pine	High Density Log	109 g	1-50	Harvest	Shelterwood	42210 - Natural Red Pine	Cmpt. Review Proposal
Presci Specs				9 40-90 BA. where star r in SE corner of stanc	•	n started	, thin to 40	0BA, where stand	d has very litItle rege	en mark between 70-90	BA. Leave
<u>Other</u> Comm	-										
<u>Next</u> Steps:	<u>:</u>	Regen c	heck per v	vork instructions. Acce	ptable rege	n spp = I	Rp, Wp.				
<u>Propos</u> Start D		10/01/20 ⁻	14								
16	330800	016-Cut	20.4	6115 - Lowland Ash	High Density Pole	90		Harvest	Shelterwood	6115 - Lowland Ash	Cmpt. Review Proposal
Presci Specs		No treati Leave C		n 1 chain of the river. N	lo treatmen	t north o	f the river.	Remove most c	of the trees (> than	6"dbh) leaving a BA of	30 -40
<u>Other</u> Comm	-	Access	will be fror	n the west through priv	vate land.						
<u>Next</u> Steps:	<u>.</u>	Regen c	heck per v	vork instructions. Acce	ptable rege	n spp = I	Rmaple, B	alm and ash.			
<u>Propos</u> Start D		10/01/20 ⁻	14								
17	330800	017-Cut	14.2	42350 - Upland Hemlock	High Density Log		141-170	Harvest	Group Selection	4312 - Hemlock, Mixed Deciduous	Cmpt. Review Proposal
Presci Specs				Create gaps to allow es hin BA to the recomme						of the stand down to 70	-80 BA. Where
<u>Other</u> Comm	-	Stand w	as selectiv	ely cut in 1990. Some	Wp, Fb, an	d Rm reo	generatior	n but not alot.			
<u>Next</u> <u>Steps:</u>	<u>:</u>	Conduct	regen che	eck per work instructior	ns. Accepta	ble reger	n spp = W	p, Fb, Rm, Yb, a	nd H.		
<u>Propos</u> <u>Start D</u>		10/01/20 [.]	14								
21	330800)21-Cut	41.2	429 - Mixed Upland Conifers	High Density Log	125 g		Harvest	Group Selection	4113 - R.Maple, Conifer	Cmpt. Review Proposal
<u>Presci Specs</u>		Group S	election - (Create canopy gaps at	pout 2 X the	height o	f the over	story and leave n	nost of the pine in th	nese gaps.	
<u>Other</u> Comm	-	Stand tre	eated in 20	008, Z's Legacy Sale							
<u>Next</u> Steps:	<u>:</u>	Conduct	regenerat	ion check per work ins	tructions, A	cceptabl	e regen sj	pp = Rmaple, Y. I	birch , Wpine and h	emlock.	
<u>Propos</u> Start D		10/01/20 [.]	14								
38	330800)38-Cut	19.7	6120 - Lowland Cedar	High Density Pole	106		Harvest	Clearcut with Reserves	6117 - Lowland Deciduous, Mixed Coniferous	Cmpt. Review Proposal
Presci Specs		Clear-cu to be he		es. leave residual pato	ches .15 :	ac in size	e scattere	d throughout the	stand. Try to place t	hese where the cedar	has a tendancy
<u>Other</u> Comm		Cedar is	catfaced a	and crooked. Ash, Wb,	, Rm, Fb an	d Fs is c	vermature	e.			
<u>Next</u> Steps:		Conduct	regen che	eck per work instructior	ns. Accepta	ble reger	n spp= P,	Rm, Wb, Fb, Fs,	Ash and Cedar.		
Propos Start D	ed_	10/01/20 [.]	14								

S t		Escar	aba Mgt. Unit	Repo			nents Prescri iting Factor	bed	Compartment: 080 Year of Entry 2015	DI NATURAL PLAN
a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
12	NF_33080012- NonFor	2.0	31022 - Warm Season Grass				Non-Forest Management	Other - Specify	310 - Herbaceous Openland	Cmpt. Review Proposal
<u>Spec</u> Othe Com <u>Next</u>	<u>cs:</u> or soft m opportun er iments:	ast plants							le if need and funding orage, brood rearing, a	
<u>Step</u> Propo <u>Start</u>	osed	ed								
А	Total Treatmen creage Propose		0.6							

S t		Escana	ba Mgt. Unit	Report 4		eatment imiting	ts Prescribed Factor	with	Compartment: 080 Year of Entry 2015	DF NATURAL PLANE
a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
			#Type!							
Presc Specs Other										
Comn Next Steps										
<u>Propo</u> Start I										
<u>Limitir</u>	ng Factor									
Ac	Total Treatme reage Propose		0							

Escanaba Mgt. Unit

Dan Racine : Examiner

Compartment 080 Year of Entry 2015

Availability for Management

Total Acres Acres

Dominant Site Conditions No 5C 5B

Acres	Available	Not Available		No	5C	5B
73	73		Aspen	73		
357	357		Cedar	357		
107	107		Hemlock	107		
9	9		Lowland Aspen/Balsam Poplar	9		
19	19		Lowland Conifers	4	7	8
238	238		Lowland Deciduous	238		
42	42		Lowland Mixed Forest	42		
5	5		Natural Mixed Pines	5		
13	13		Paper Birch	13		
59	59		Red Pine	11		48
82	82		Upland Conifers	82		
14	14		Upland Mixed Forest	14		
1,018	1,018		Total Forested Acres	954	7	57
	100%		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 Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
004	Available	5B: Retention for regeneration purposes	48				
C	Comments:						
005	Available	5B: Retention for regeneration purposes	9				
C	Comments:						

Compartment 080 Year of Entry 2015

Dan Racine : Examiner

Comments:

To small of an area to treat alone. Treat when strips to the south are ready to be treated, probably next treatment period.



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
SCA #1 Comments	Spring-Seeps, Riparian Areas	Riparian Area	SCA	5.9
SCA #2 Comments	Spring-Seeps, Riparian Areas	Riparian Area	SCA	13.5
SCA #3 Comments Alot of blowdown of all spp.,	Spring-Seeps, Riparian Areas Tops of yb, rm, ash are dying. Floo	Riparian Area	SCA	41.5
SCA removal #1 Comments OLD GROWTH POT. ASH I	Potential Old Growth S GREEN ASH NOT WHITE, BUT	THERE IS NO SPECIES # FOR GREE	SCA Removal	10.9
Unspecified Comments	Spring-Seeps, Riparian Areas	Riparian Area	SCA Removal	12.9
Unspecified Comments	Spring-Seeps, Riparian Areas	Riparian Area	SCA Removal	17.6



Report 7 – 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.

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 r sites of cultural and historical significance that may occur upon to bottomlands. They include thousands of Native American settlen and British outposts, nineteenth century logging camps, mines a the Great Lakes, there are shipwrecks and other remains docum be identified by Natural heritage data from the State Historic Pre- this compartment will be implemented in such a manner as to ma the sensitive nature of this information, no further detail about log	errestrial areas and Great Lakes nents and burial sites, as well as French and homesteads. Beneath the waters of enting the maritime trade. Such sites may servation Office. Proposed treatments in aintain the integrity of these sites. Due to
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen condition 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

S t	S Escanaba Mgt. Unit			Report 8	– Forested St	ands	Compartment: 080 Year of Entry: 2015	DRR DRR
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range		General Comments:	B. MICHIGAN
1	4135 - Aspen, Cedar	High Density Pole	12.9	72				
2	6120 - Lowland Cedar	High Density Pole	6.1	106		Sta	and borders the Bark River.	
3	4137 - Aspen, Birch	High Density Log	12.6	72				
4	429 - Mixed Upland Conifers	High Density Pole	41.2	72				
5	42210 - Natural Red Pine	Medium Density Log	48.3	98	51-80	S	tand was treated in 2006.	
6	42290 - Natural Mixed Pine	High Density Pole	4.8	26				
7	6113 - Lowland Maple	High Density Pole	38.3	75		Stand is current	ly under contract. Gyrzb Hardwo	ood sale.
8	42350 - Upland Hemlock	High Density Pole	2.7	112				
9	6129 - Mixed Coniferous Lowland Forest	High Density Pole	3.8	108				
10	42210 - Natural Red Pine	High Density Log	11.1	109	1-50			
11	4130 - Aspen	High Density Pole	6.4	28				
13	4319 - Mixed Upland Forest	High Density Log	13.5	127				
14	42350 - Upland Hemlock	High Density Log	90.2	108				
15	6118 - Lowland Deciduous with Cedar	High Density Pole	8.9	70				
16	6115 - Lowland Ash	High Density Pole	20.4	90				
17	42350 - Upland Hemlock	High Density Log	14.2	125	141-170			
18	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	8.5	112	51-80			
19	6111 - Lowland Balsam Poplar	High Density Pole	8.9	36				

S t	Escanaba Mgt. Unit			Report 8	– Forested	Stands Compartment: 080 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
20	6117 - Lowland Deciduous, Mixed Coniferous	High Density Sapling	11.5	12		Phragmites is located within this stand.
21	429 - Mixed Upland Conifers	High Density Log	41.2	125		
22	6120 - Lowland Cedar	High Density Pole	173.4	102		Cedar wirh small diameter ash, wb, fb fs 4-7"dbh.
23	6120 - Lowland Cedar	High Density Log	5.3	121		
24	6120 - Lowland Cedar	High Density Pole	32.7	82		
25	6132 - Mixed Lowland Forest with Cedar	High Density Pole	41.5	103	81-110	Alot of blowdown of all spp., Tops of yb, rm, ash are dying. Floodplain of a tributary of the Bark River.
26	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	7.1	112		Good size hemlock and Pine. Rm and Sm are just getting into sawlog size.
27	6118 - Lowland Deciduous with Cedar	High Density Pole	84.4	15		Lots of cedar blowdown.
29	6120 - Lowland Cedar	High Density Pole	14.9	106		Mix of high ground cedar and lowground. Strips were harvested in this area and came back to a mix of spp. , ash, Fs, Fb, P, Rm, and Wb. Timber in strips average 7" dbh, 3-4 sticks tall, mostly Wb.
30	6118 - Lowland Deciduous with Cedar	High Density Sapling	74.8	20		
31	6120 - Lowland Cedar	High Density Pole	10.5	106		Poor quality cedar, short, crooked, stunted, lots of blowdown.
32	6120 - Lowland Cedar	High Density Pole	46.4	106		Spruce, white pine and balsam is scattered. Cedar is 5-7"dbh, 3 sticks. Spruce is 9"dbh but scattered. Fb mostly unmerchantable 3-4" dbh, 1 stick. Small patch on east side is balm and Fb that is filling in.
33	6120 - Lowland Cedar	High Density Log	42.1	106		High ground cedar. Areas that were harvested are filling in with ash, P, Wb, and maple.
34	4140 - Other Upland Deciduous	High Density Pole	5.4	36		Was cut, regenerated back to G. ash, Wb and Rm. Some of the timber is ready to be harvested(must have been left) but it is scattered throughout stand.
35	6120 - Lowland Cedar	High Density Pole	6.0	106		Leave strips.
36	4139 - Aspen, Mixed Deciduous	High Density Pole	40.7	33		

S t n d	Escanaba Mgt. Unit			Report 8	– Forested	I Stands Compartment: 080 Year of Entry: 2015
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
37	4140 - Other Upland Deciduous	High Density Sapling	7.6	5		Mix of high and low ground, primarily a P stand. There are some open areas that will probably fill in with sp/fb. Heavy blowdown on east side.
38	6120 - Lowland Cedar	High Density Pole	19.7	106		

Compartment: 080 Year of Entry: 2015



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:	
12	31022 - Warm Season Grass	2.0	N\A	Unspecified		
28	6233 - Wet Meadow	7.1	No	Unspecified		