

Compartment Review Presentation

Escanaba Forest Management Unit

Compartment 33076 Entry Year 2018 Acreage: 1,764 County Delta

Management Area: Green Bay Lake Plain

Revision Date: 2016-06-24

Stand Examiner: Dan McNamee

Legal Description:

T37N-R24W, Sections 19, 20, 21.

Identified Planning Goals:

Timber Sale guidelines for deer wintering complexes will guide the harvest of timber in this compartment. This compartment has been actively managed in the past and will continue to be managed in

much the same manner. Northern hardwoods will be maintained; Red pine will be maintained and expanded. Northern white cedar and hemlock regeneration will be encouraged.

Soil and topography:

Topography is level to slightly rolling. Soils are poorly drained sand, well drained sands, and very poorly drained extremely acid mucks and peats.

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

State land borders this compartment on all sides. Eighty acres of private land is located in the S1/2NW1/4 Section 20, and 30 acres is located in the NWSE Section 19.

Unique Natural Features:

None known.

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

Timber sales located along the Forest Islands ORV Trail will be done in such a way as to minimize impact and keep aesthetics in mind when preparing the sales.

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations:

Two-thirds of this compartment is comprised of lowland cover types: cedar/swamp conifer, lowland hardwoods, lowland poplar, black spruce and tamarack. Cedar has not regenerated reliably in past years and is of modest age (only about 120 years old). For these reasons, it will be maintained without treatment to benefit wildlife that utilize closed-canopy conifer forest. This habitat is particularly critical for deer, bobcats, and other wildlife during the winter months. Several other lowland conifer stands will be treated using standard silvicultural practices, and a couple small aspen stands will be clearcut to promote early successional habitat. This compartment also contains some game purchased lands that will be managed to enhance wildlife cover and food resources.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine (lake) sand and gravel and medium-textured glacial till. The glacial drift thickness varies between 10 and 50 feet. The Ordovician Trenton Formation underlies the glacial drift. The Trenton is quarried for stone west of Escanaba. This area has not been leased previously for metallic exploration. A gravel pit is located in Section 29 and potential appears to be good on the upland drumlins. No economic oil and gas production has been found in the UP.

Vehicle Access:

The 7 Mile Marsh Road, Limpert Road, and Bark River Truck Trail allow for easy access into this compartment.

Survey Needs:

None.

Recreational Facilities and Opportunities:

Hunting, trapping, snowmobiling and ORV use are common in this compartment.

Fire Protection:

Access within this compartment is good, fire protection should not be a problem if a fire should get started.

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

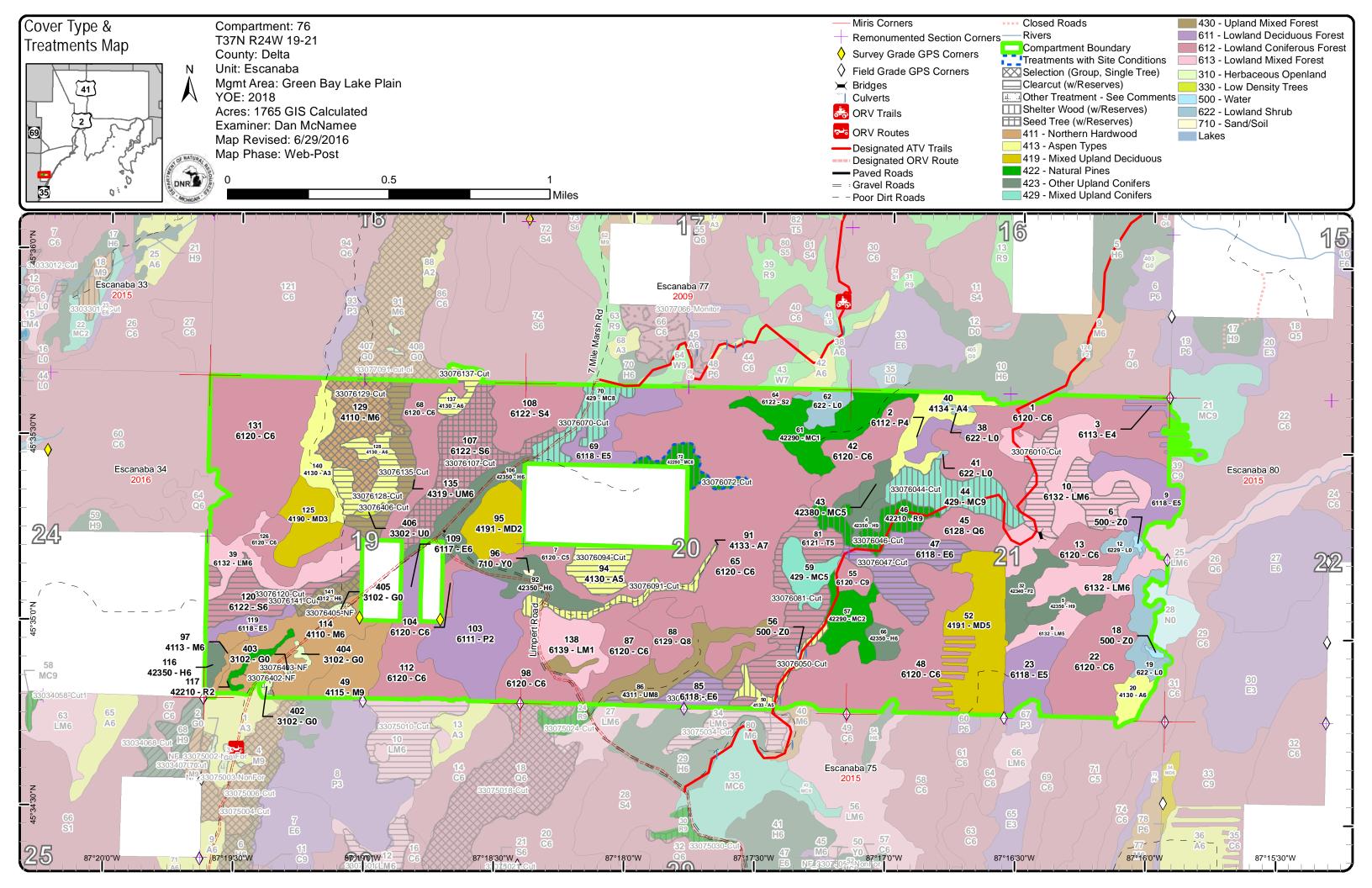
Site Condition Details

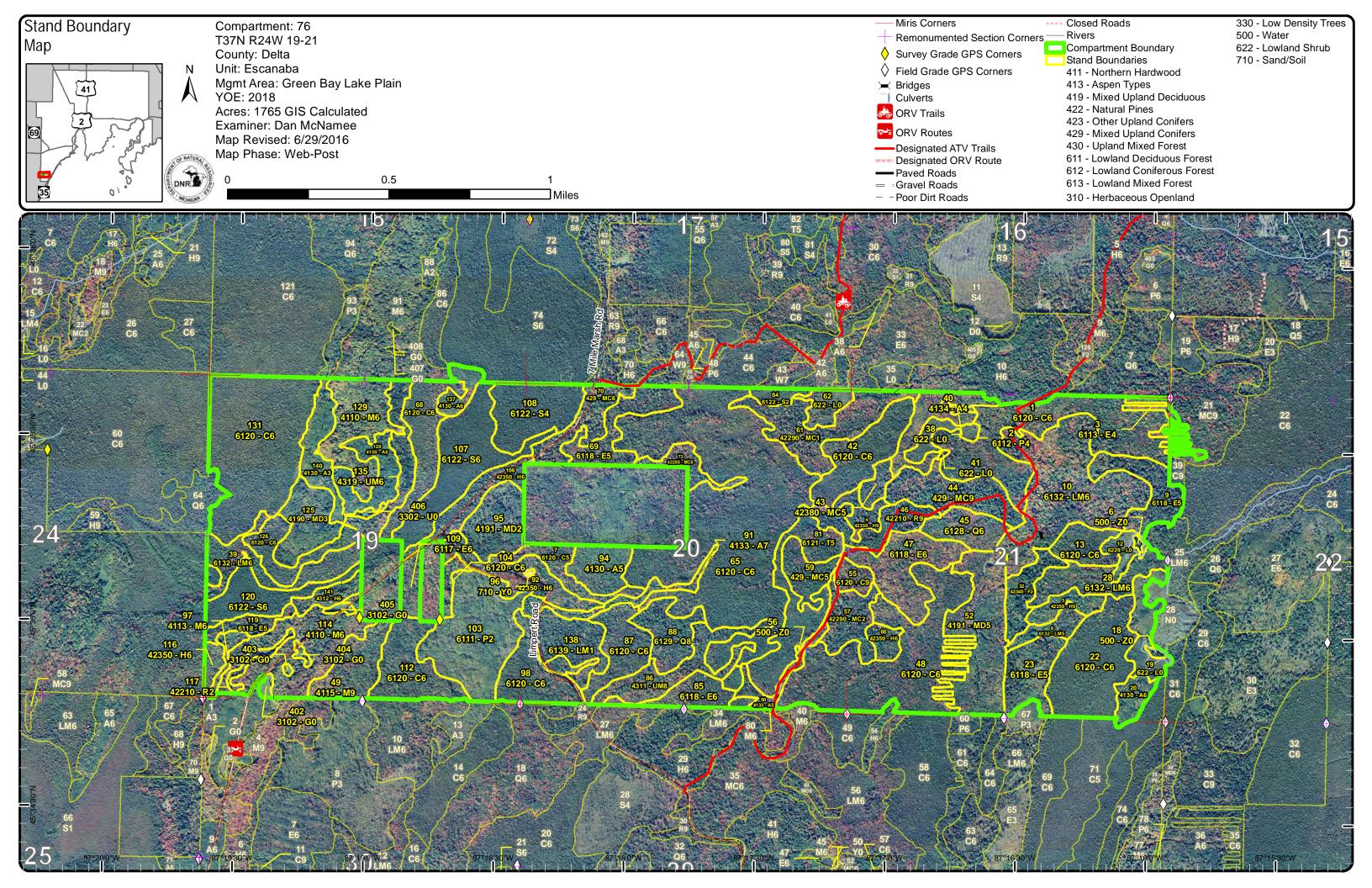
The following information is displayed, where pertinent, on the attached compartment maps:

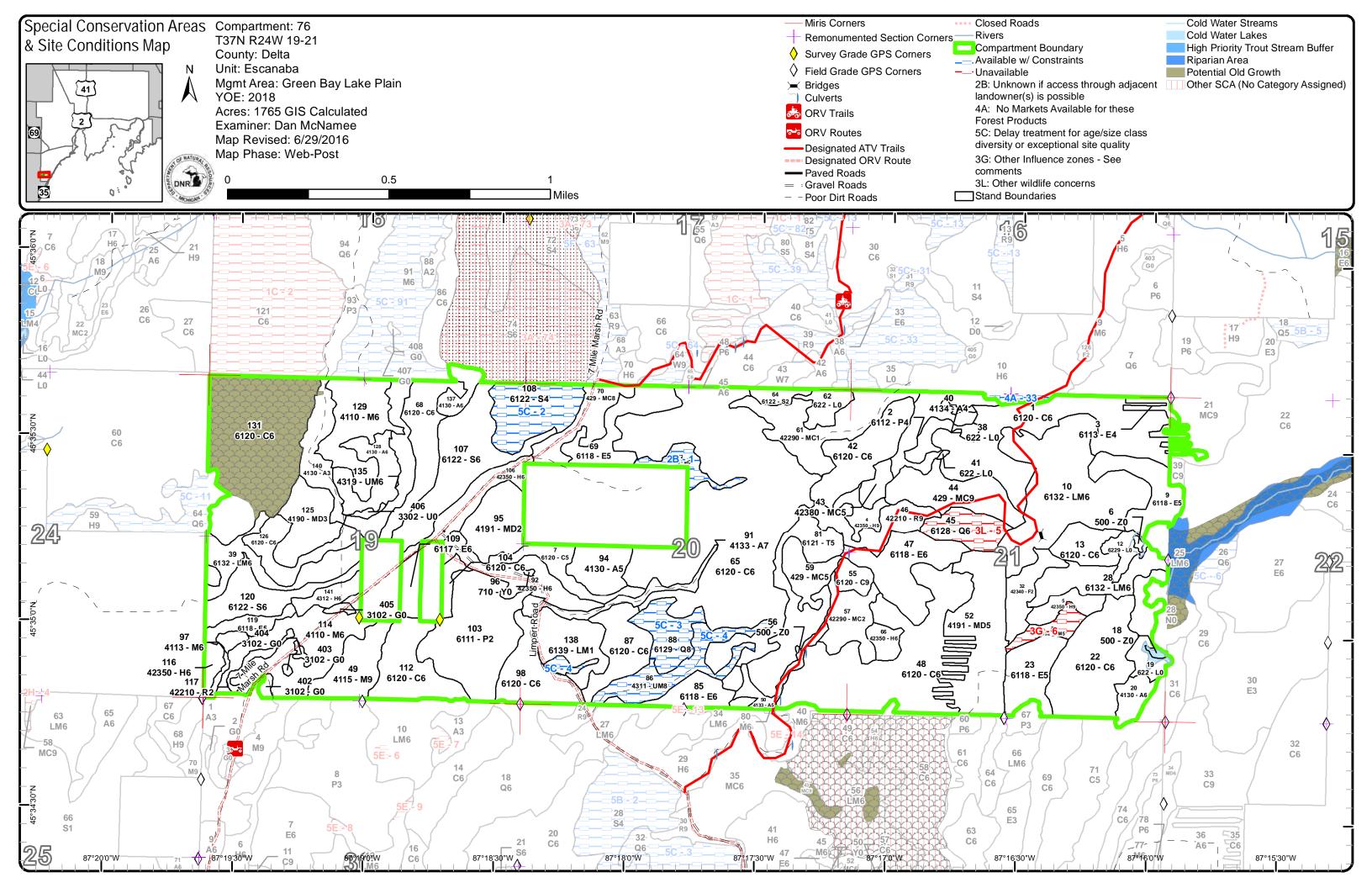
Base feature information, stand boundaries, cover types, and numbers Proposed treatments

Site condition boundaries

Details on the road access system







Escanaba Mgt. Unit

Dan McNamee : Examiner

Compartment 76 Year of Entry 2018



Age Class

						,		,						,					, ,
	, Nor	kon (\$ / E		, 8 / 8		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			00/2/20/2			\$ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	N. K.	Jros	No. No. No.
Aspen	0	0	0	17	18	26	41	0	0	0	0	0	0	0	0	0	0	0	102
Cedar	0	0	0	0	0	0	0	0	0	0	0	326	317	0	0	0	0	0	643
Hemlock	0	0	0	0	0	0	0	0	0	0	0	16	56	0	0	0	0	0	72
Herbaceous Openland	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Low-Density Trees	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lowland Aspen/Balsam Poplar	0	0	52	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	59
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	34	0	0	0	0	0	34
Lowland Deciduous	0	0	20	42	8	0	0	0	8	45	0	0	0	0	0	0	0	8	131
Lowland Mixed Forest	0	0	0	21	0	0	0	0	0	73	0	53	0	0	0	0	0	0	147
Lowland Shrub	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
Lowland Spruce/Fir	0	0	0	0	0	0	0	5	0	23	72	0	0	0	0	0	0	0	100
Mixed Upland Deciduous	0	0	44	0	0	49	0	0	0	0	0	0	0	0	0	0	0	0	93
Natural Mixed Pines	0	0	34	18	0	0	0	0	0	0	0	0	9	0	0	0	0	0	61
Northern Hardwood	0	0	0	0	0	0	0	0	0	48	0	0	0	0	0	0	0	52	100
Red Pine	0	0	4	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	22
Sand, Soil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tamarack	0	0	0	0	0	0	0	0	0	38	0	0	0	0	0	0	0	0	38
Upland Conifers	0	0	6	0	0	13	0	0	0	0	0	0	45	0	0	0	0	0	64
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	28	0	0	0	0	18	46
Upland Spruce/Fir	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Water	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	40	0	174	98	33	88	41	5	8	227	72	395	507	0	0	0	0	78	1766



Report 2 – Treatment Summary

Escanaba Mgt. Unit Year of Entry: 2018

Acres of Harvest

Compartment 76
Total Compartment Acres: 1,764

Commercial Harvest - 360 Harvests with Site Condition - 9 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method

		/ (110 to 875	(0)10 (0) (0) (0) (0) (0) (0) (0) (0) (0) (0			O MOHOLI	Orinin See	ka day kay	8 / 8 / S		Ros Ros
Aspen		41	0	0	0	18	0	0	0	0	59	ĺ
Hemlock		0	8	0	0	0	0	0	0	0	8	1
Low-Density Trees		1	0	0	0	0	0	0	0	0	1	1
Lowland Deciduous		45	0	0	0	0	0	0	0	0	45	1
Lowland Mixed Forest		30	0	0	0	0	0	0	0	0	30	1
Lowland Spruce/Fir		23	0	0	43	0	0	0	0	0	67	1
Natural Mixed Pines		0	0	0	0	9	0	0	0	0	9	1
Northern Hardwood		0	31	0	0	0	0	0	0	0	31	1
Red Pine		0	0	0	0	18	0	0	0	0	18	1
Tamarack		38	0	0	0	0	0	0	0	0	38	1
Upland Conifers		0	0	0	0	45	0	0	0	0	45	1
Upland Mixed Forest		18	0	0	0	0	0	0	0	0	18]
	Total	196	39	0	43	91	0	0	0	0	369	

Proposed and Next Step Treatments by Method

•			•		,							
				0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			Solition /		ouioius.		To	
Current		369	0	0	0	0	0	0	0	4	372	
Next Step		0	0	0	0	0	0	369	0	0	369	
	Total	369	0	0	0	0	0	369	0	4	741	

Treatments:

Regen:

Other Add spec for 50 inch standard trail consideration language to the contract.

Comment:

Proposed Start Date: 10/01/2017

33076047-Cut 6118 - Lowland 81 81-110 Clearcut with 613 - Lowland 31.2 Poletimber Harvest Even-Aged Proposal

Retention

Mixed Forest

Deciduous with Well

Cedar

Habitat Cut: No Site Condition:

Prescription Harvest all Rm, Ash, Wb. Leave the heavy pockets of C&H intact. Harvest sale in winter due to access and low ground conditions.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Rm, Ash, Wb, Fb, Fs, Wp.

Regen:

Other Add spec for 50 inch standard trail consideration language to the contract.

Comment:

Proposed Start Date: 10/01/2017

Treatments:

Acceptable Rp, Wp, H, Fb, Fs and some hardwood spp. Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

33076081-Cut 38.2 6121 - Tamarack Poletimber 80 1-50 Harvest Clearcut with 6121 - Tamarack Even-Aged Proposal

Medium

Retention

Habitat Cut: No Site Condition:

Prescription Cut all T, Fs, Rm. Leave the heavier pockets of cedar.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable T, Rm, Fs.

Regen:

Other Comment:

Proposed Start Date: 10/01/2017

s		Esc	anaba Mgt. Unit		Re	port 3	Treatme	nts		tment: 76 Entry: 2018	OF NATURAL PRODUCTION
t 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
85	33076085-Cut	13.4	6118 - Lowland Deciduous with Cedar	Poletimber Well	89	51-80	Harvest	Clearcut with Retention	611 - Lowland Deciduous Forest	Even-Aged	Proposal
		trees exce	Site Condition: ept leave the heavy of		s intact.						
	Step Monitor tments:	ring, Natur	al Regen (Re-Inven	tory)							
Acce Reg	e <u>ptable</u> Rm, as en:	sh, Yb, Fb,	Fs.								
	ment:										
Prop	osed Start Date:	10/0	1/2017								
91	33076091-Cut	10.3 4	1133 - Aspen, Mixed Pine	I Sawtimber Poor	40	1-50	Harvest	Shelterwood	4133 - Aspen, Mixed Pine	Even-Aged	Proposal
Pres Spec Next	<u>CS:</u>		Site Condition: able aspen and red in al Regen (Re-Inven	maple. Remo	ove som	ne of the p	oine where the I	BA's are heavy.			
	eptable A, Rp,	Wp, Fb.									
<u>Othe</u>											
Prop	osed Start Date:	10/0	1/2017								
94	33076094-Cut	15.3	4130 - Aspen	Poletimber Medium	54	51-80	Harvest	Clearcut	413 - Aspen	Even-Aged	Proposal
	nitat Cut: No ecription Cut all es:	trees > tha	Site Condition: an 2".								
	Step Monitor	ring, Natur	al Regen (Re-Inven	tory)							
Acce Reg	e <u>ptable</u> A, P, R en:	m, Wb ,F	b, Wp.								
Othe Com	<u>er</u> iment:										
Prop	osed Start Date:	10/0	1/2017								
107	33076107-Cut	43.4	6122 - Black Spruce	Poletimber Well	95	51-80	Harvest	Seed Tree with Retention	6122 - Black Spruce	Even-Aged	Proposal
		spruce an	Site Condition: d tamarack trees > 3	=	seed sou	urce alonç	g the NW and w	vest side.			
	Step Monitor tments:	ring, Natur	al Regen (Re-Inven	tory)							

10/01/2017

Acceptable Fs, T, C. Regen:

Proposed Start Date:

Other Comment:

S t		Esc	canaba Mgt. Unit		Re	port 3	Treatme	nts		tment: 76 Entry: 2018	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
120	33076120-Cut	23.3	6122 - Black Spruce	Poletimber Well	86	51-80	Harvest	Clearcut with Retention	6122 - Black Spruce	Even-Aged	Proposal
		ut leaving	Site Condition: a seed source along	the line(nort	h and w	vest).					
Next Treat	Step Monito ments:	ring, Natu	ıral Regen (Re-Invent	ory)							
Acce Rege	<u>ptable</u> Fsb, T, <u>n:</u>	Wp, C.									
Other Comr	-										
Propo	osed Start Date	<u>:</u> 10/0	01/2017								
128	33076128-Cut	18.1	4130 - Aspen	Poletimber Well	57	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
		trees > 2'	Site Condition: ". Leave a retention pa	atch that is 3	3-10% c	of sale are	a.				
Next Treat	Step Monito ments:	ring, Natu	ıral Regen (Re-Invent	ory)							
Acce Rege	<u>ptable</u> A, Rm, <u>n:</u>	Ch, ash,	Fb, Fs.								
Other Comr	_										
Propo	osed Start Date	<u>:</u> 10/0	01/2017								
129	33076129-Cut	31.4	4110 - Sugar Maple Association	Poletimber Well	89	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal
		tand to re or individ	Site Condition: esidual BA =70. Leave lually.	some beed	h and c	other unde	r represented s	pp. Leave some iro	nwood scattered a	along the edge	in clumps of 5-
Next Treat	Step Monito ments:	ring, Natu	ıral Regen (Re-Invent	ory)							
Acce Rege		and other	hardwood associated	d spp.							
Other Comr											
Propo	osed Start Date	<u>:</u> 10/0	01/2017								

Habitat Cut: No

135 33076135-Cut

Upland Forest **Site Condition:**

4319 - Mixed

Poletimber

Well

59 51-80

Harvest

Clearcut

4319 - Mixed

Upland Forest

Even-Aged

<u>Prescription</u> Remove all merchantable timber. Leave the immature A/P.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

17.6

Treatments:

Acceptable Fb, Fs, Rm, A.

Regen:
Other
Comment:

Proposed Start Date: 10/01/2017

POLEYN

Proposal

Escanaba Mgt. Unit Report 3 -- Treatments Compartment: 76 s Year of Entry: 2018 а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type Approval** n Age Type Method Objective Status Name Density Structure d CoverType Age Range 33076137-Cut 137 7.5 4130 - Aspen Poletimber 52 51-80 Harvest Clearcut 413 - Aspen Even-Aged Proposal Well **Habitat Cut: No** Site Condition: Prescription Cut all trees > 2". Specs: Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable A, P, Fb, Fs, Rm. Regen: Other Comment: Proposed Start Date: 10/01/2017 141 33076141-Cut 4312 - Hemlock. 7.6 Poletimber 112 81-110 Harvest Single Tree 4312 - Hemlock. Uneven-Proposal Mixed Deciduous Well Selection Mixed Deciduous Aged **Habitat Cut: No Site Condition:** Prescription Remove the larger short lived spp (Rm, Wb) and pine that are showing signs of deline. Small amount of hemlock will have to be removed, Keep Specs: canopy closure 70% for the hemlock areas. Monitoring, Natural Regen (Re-Inventory) Next Step Treatments: Acceptable Rm, Wb, H, Wp, Fb. Regen: Other Comment: **Proposed Start Date:** 10/01/2017 402 33076402-NF 1.6 3102 - Grass Nonstocked Unspec NonForestMgt Other - Specify 310 -Proposal ified Herbaceous Openland **Habitat Cut: No Site Condition:** Prescription Prescribed fire, farming (dozing, disking, raking, herbiciding, seeding (native or naturalized species only), fertilizing and liming, brushhog/saw removal

of competing trees and establishment of native hard and soft mast producers such as red oak, crabapple or others. Also sharecropping could be Specs:

considered for this opening.

Next Step Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2016

Other - Specify 33076403-NF 0.5 3102 - Grass Nonstocked Unspec NonForestMgt 310 -Proposal ified Herbaceous Openland

Habitat Cut: No Site Condition:

Prescription Prescribed fire, farming (dozing, disking, raking, herbiciding, seeding (native or naturalized species only), fertilizing and liming, brushhog/saw removal of competing trees and establishment of native hard and soft mast producers such as red oak, crabapple or others. Also sharecropping could be Specs:

considered for this opening.

Next Step **Treatments:**

<u>Acceptable</u>

Regen: Other

Comment:

Proposed Start Date: 10/01/2016

Escanaba Mgt. Unit Report 3 -- Treatments Compartment: 76 s Year of Entry: 2018 а **Cover Type Treatment** Acres Stand Size Stand BA **Treatment Treatment** Age **Approval** n CoverType Density Method Objective Structure Status Name Range d Age Type 33076405-NF 3102 - Grass Nonstocked NonForestMgt Other - Specify 310 -405 1.5 Unspec Proposal ified Herbaceous Openland **Habitat Cut: No Site Condition:** Prescription Prescribed fire, farming (dozing, disking, raking, herbiciding, seeding (native or naturalized species only), fertilizing and liming, brushhog/saw removal of competing trees and establishment of native hard and soft mast producers such as red oak, crabapple or others. Also sharecropping could be Specs: considered for this opening. Next Step **Treatments:** Acceptable Regen: Other Comment: 10/01/2017 **Proposed Start Date:** 406 33076406-Cut 1.2 3302 - Low Density Nonstocked Unspec Harvest Clearcut 3102 - Grass Proposal Conifer Trees ified **Habitat Cut:** No **Site Condition:** Prescription Harvest the Fb,Fs,and aspen that has encroached into the stand. After harvest frost seed with a wildlife mix. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) **Treatments:**

Proposed Start Date:

Total Treatment
Acreage Proposed:

Acceptable Grass

Regen:
Other
Comment:

372.2

10/01/2017

Escanaba Mgt. Unit

Dan McNamee : Examiner

Compartment: 76
Year of Entry: 2018

Availability for Management Total Acres Acres Avail Acres **Dominant Site Conditions** Available With Condition Not Available 5C 3G Acres Aspen Cedar Hemlock Herbaceous Openland Low-Density Trees Lowland Aspen/Balsam Poplar **Lowland Conifers Lowland Deciduous Lowland Mixed Forest** Lowland Shrub Lowland Spruce/Fir **Mixed Upland Deciduous Natural Mixed Pines** Northern Hardwood Red Pine Sand, Soil **Tamarack Upland Conifers Upland Mixed Forest** Upland Spruce/Fir Water 1,764 1,657 **Total Forested Acres** 5 1% 94% Relative Percent 5%

*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
1	Available	2B: Unknown if access through adjacent landowner(s) is possible	9	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						

Report 4 – Site Conditions

Escanaba Mgt. Unit
Dan McNamee: Examiner

Compartment: 76 Year of Entry: 2018

2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	29	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	18	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	28	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	3L: Other wildlife concerns	16	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	3G: Other Influence zones - See comments	8	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Wet						
33	Available	4A: No Markets Available for these Forest Products	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Escanaba Mgt. Unit

Compartment: 076 Year of Entry: 2018



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
	Potential Old Growth		SCA Removal	73
Comments Does not meet SCA criteria.				

Escanaba Mgt. Unit Compartment: 76
Year of Entry 2018



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	ion Type	Description	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 oxyge stocked trout populations and those of other coldwater conditions for coldwater fishes may occur in Michigan groundwater inflows, or are located in colder (northern Director's action and designated as trout resources by	r fish species to persist from year to year. Suitable lakes if they are relatively deep, have substantial) areas of the state. Such lakes are established by								
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved ox stocked trout populations and those of other coldwater year to year. Coldwater streams in Michigan typically p contributions of groundwater to their stream flows. Suc designated as trout resources by Fisheries Order 210.	fish species (e.g., slimy sculpin) to persist from provide these conditions due to substantial ch streams are established by Director's action and								

S t	Escanaba	Mgt. Unit		Report 7	– Forested	Stands Compartment: 76 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6120 - Lowland Cedar	Poletimber Well	67.4	112	111-140	2016- Good quality cedar near the transition zone, quality declines as you move to the interior. OPIC - FMD: Most of the Balm is dead, cedar is large diameter (8-12" dbh) and nice quality.
2	6112 - Lowland Aspen	Poletimber Poor	7.4	34	1-50	2016 - lowland hardwood with scattered timber. Stand is filling in with A, P, Ash. OPIC - FMD: Lower ground, some softwood patches within this stand.
3	6113 - Lowland Maple	Poletimber Poor	7.6	38	1-50	2016- Strips are primarily Red Maple, southern most strip is balm but as you go north more red maple. Northern most strip is balsam and balm. OPIC - FMD: Strips cut in 1978. Contain lots of balsam,spruce and some balm.
4	42350 - Upland Hemlock	Sawtimber Well	7.3	116	81-110	2016- No hemlock regen. OPIC - FMD: Treated in 2001, contract 008-98-01. Stand was marked and selectively harvested.
5	42350 - Upland Hemlock	Sawtimber Well	8.5	116	111-140	OPIC - FMD: Quite a mix of species. Species vary as you move along in stand, some places almost pure cedar and hemlock, ohters contain mix of cedar, hemlock and hdwd. Stand was treated in 1986. Hardwood that had regenerated has been browsed by deer. Mix hdwd component in stand is mis of green ash and yellow birch.
7	6120 - Lowland Cedar	Poletimber Medium	13.7	118	51-80	2016- Bigger diameter cedar, balm is dead and dying, most of the short lived spp are un-merchantable small diameter. OPIC - FMD: OI Stand Year Origin was 1971
8	6132 - Mixed Lowland Forest with Cedar	Poletimber Medium	7.8	108	51-80	OPIC - FMD: Ash swale.
9	6118 - Lowland Deciduous with Cedar	Poletimber Medium	20.8	27	51-80	2016-Residual C&H left in pockets and ind. scattered trees, ind trees have blown down. Where stand has been opened up, it is filling in with P, Rm, ash and Fb. OPIC - FMD: Stand has had some of the intolerant species removed in 1994 (Costell Lake Sale). Hardwood component is Green Ash>
10	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	73.0	89	111-140	2016- Mix of cedar & hemlock and short lived spp. Stand is operable if you stay in areas of heavier to Rm and other short lived spp and stay out of the heavier C&H areas. There is a creek on south side of stand and the Forest Island ORV trail is located on west side.OPIC - FMD: Quite a mix of species. Species vary as you move along in stand, some places almost pure cedar and hemlock, ohters contain mix of cedar, hemlock and hdwd. Stand was treated in 1986. Hardwood that had regenerated has been browsed by deer. Mix hdwd component in stand is mis of green ash and yellow birch.
13	6120 - Lowland Cedar	Poletimber Well	12.8	116	111-140	OPIC - FMD: OI Stand Year Origin was 1897
20	4130 - Aspen	Poletimber Well	8.4	40	51-80	OPIC - FMD: Northern part of stand contains more balm, but as a whole the stand is predominately Aspen.
22	6120 - Lowland Cedar	Poletimber Well	46.1	112	51-80	2016 Poor quality cedar with ash and Wb. OPIC - FMD: Quality gets better on the west edge.

S t	Escanaba Mgt. Unit			Report 7	– Forested	Stands Compartment: 76 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
23	6118 - Lowland Deciduous with Cedar	Poletimber Medium	20.3	15	Immature	2016-stand was treated and where it was opened up it has come back to a fully stocked P, Rm stand. Heavy pockets of C were left in NE and west edge. OPIC - FMD: Stand was treated in 2002, contract 33-008-98-01. All balm and white birch was cut. Some cedar had to be cut to allow operator room to harvest the designated spp. Yellow birch and ash < 12" dbh were left. Check this stand out the next time inventory is done in 2008.
28	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	21.3	108	81-110	2016- let it go for 10 yrs. OPIC - FMD: Species that could be harvested are small diameter ash, yellow birch, red maple etc. would have to remove cedar and hemlock to fell othe species.
32	42340 - Upland Spruce/Fir	Sapling Medium	13.5	15	Immature	2016- Fb, Fs, Wp filling in in places, raspberry has filled in the remaining areas. OPIC - FMD: Stand was treated in 2002, contract 33-008-98-01. All balm and white birch was cut. Some cedar had to be cut to allow operator room to harvest the designated spp. Yellow birch and ash < 12" dbh were left. Check this stand out the next time inventory is done in 2008.
39	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	23.6	108	51-80	2016- Very little merchantable volume, small diameter timber. OPIC - FMD: Illegal ORV use on winter road used for logging.
40	4134 - Aspen, Spruce/Fir	Poletimber Poor	17.9	34	1-50	OPIC - FMD: Lower ground, some softwood patches within this stand.
42	6120 - Lowland Cedar	Poletimber Well	28.4	108	111-140	
43	42380 - Non Pine Upland Conifer, Mixed Deciduous	Poletimber Medium	5.7	15	1-50	Cedar and hemlock with young red maple.
44	429 - Mixed Upland Conifers	Sawtimber Well	27.2	115	51-80	2016- Wp with hemlock. Open areas filling in with Wp and Fb. Hemlock seedlings < 6" on the ground floor in places. OPIC - FMD: STAND WAS TREATED IN 2001 UNDER CONTRACT 008-98-01. IT RECEIVED A LIGHT THINNING TO ALLOW STAND TO GROW AND START SOME REGENERATION OF PINE.
45	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	15.5	112	51-80	2016- Mix of lowland conifer with Rm, Wb, Yb. OPIC - FMD: OI Stand Year Origin was 1897
46	42210 - Natural Red Pine	Sawtimber Well	18.4	115	81-110	2016-Lots of hemlock regen under Wp regen that is 3- 10' tall. Good amount of Rp and Wp regen throughout the stand. OPIC - FMD: Treated in 2001, contract 008-98-01. Stand was marked and selectively harvested.
47	6118 - Lowland Deciduous with Cedar	Poletimber Well	31.2	81	81-110	2016- Primarily a lowland Hdwd stand with patches of C & H included. There is also scattered C throughout the stand. OPIC - FMD: Treat next time stand 46 is treated.
48	6120 - Lowland Cedar	Poletimber Well	86.0	108	81-110	Mix of good and poor quality cedar.

s t	Escanaba Mgt. Unit			Report 7	- Forested	Stands Compartment: 76 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
49	4115 - Y.Birch, Hemlock NH	Sawtimber Well	20.9	81	81-110	2016- stand is just starting to fill in with some regen. Let go another 10 yrs to see how stand fills in. OPIC - FMD: Treated in 2012 permit 33-10-08-01. OI 2006-FDF POT. Retain some of the yellow birch and beech component, leave hemlock.
50	4133 - Aspen, Mixed Pine	Poletimber Medium	7.9	44	51-80	2016- Large pine with aspen. There are areas where pine is heavy and areas where aspen is heavy.OPIC - FMD: Mixed hardwood component contains red maple and white birch.
52	4191 - Mixed Upland Deciduous with Conifer	Poletimber Medium	48.9	40	51-80	2016- South end of stand has more P, as you move north through stand more RM/Fb. Combined stand 51 because it was similar. OPIC - FMD: OI Stand Year Origin was 1976
55	6120 - Lowland Cedar	Sawtimber Well	6.3	108	51-80	Unique stand with mix of pine, cedar, Rm and Wb.
57	42290 - Natural Mixed Pine	Sapling Medium	17.8	23	51-80	2016- Residual log sized Rp/Wp was left with some C & H. Stand has filled in with Rp/Wp. OPIC - FMD: Treated in 1993, contract 057-91-01, Excellent regeneration and recruitment of pine
59	429 - Mixed Upland Conifers	Poletimber Medium	13.1	41	1-50	2016- Wp with Fs. High ground with a few low pockets of Cedar. Fsb varies in size from unmerchantable to merchantable (3"- 8" diam) Pine is mostly pole sized with some larger diameter trees. North tip has cedar mixed in. OPIC - FMD: Mix of young spruce and Red pine in the understory.
61	42290 - Natural Mixed Pine	Sapling Poor	33.9	15	Immature	2016- Same comments as previous inventory. OPIC - FMD: Stand had a removal cut in 2001 under contract 33-013-98-01, the Z Pine sale. A light stocking of residual pine sawtimber. Thick wp, rp, and fir regeneration. Future treatments are not planned for some time. (CUT ST 20 R9 WITH THIS SALE IT IS SAME RIDGE ON SAME ROAD COMP 77)
64	6122 - Black Spruce	Sapling Medium	4.6	69	Unspecified	2016- Most of this stand is unmerchantable Spruce and tamarack. The SW edge has merchantable Spruce 8" 4-5 stick tall. OPIC - FMD: OI Stand Year Origin was 1947
65	6120 - Lowland Cedar	Poletimber Well	179.3	108	81-110	2016- Predominately cedar, cedar is good quality in some areas and poor in others. There are areas of small un-merchantable ash and lowland hdwoods mixed throughout especially in the south part of stand. OPIC - FMD: A ONE ACRE AREA BETWEEN R9 AND WEST PT OF ST I5 MAY BE CUT
66	42350 - Upland Hemlock	Poletimber Well	5.9	116	81-110	2016 - Isand of almost pure hemlock. OPIC - FMD: OI Stand Year Origin was 1900
68	6120 - Lowland Cedar	Poletimber Well	25.5	108	51-80	2016- As you go east there is less cedar and more ash, cedar is poorer quality as you go east.OPIC - FMD: Small poor quality timber.

6118 - Lowland

Deciduous with Cedar

Poletimber

Medium

21.1

23

1-50

69

2016-Stand has regenerated back to a mix of P, Rm, Ash, Fb/Fs with thick understory of Fb/Fs.

OPIC - FMD: Treated in 1993, contract 33-27-92-01, Back to Back hdwds. Coming back to balsam fir in places, balm in others.

S t	Escanaba	Escanaba Mgt. Unit			– Forested	Stands Compartment: 76 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
70	429 - Mixed Upland Conifers	Sawtimber Medium	17.8	115	51-80	2016- Mix of upland conifer with red and sugar maple. Understory contains a mix of all spp., Rp is recruiting into the stand in the more open areas where the BA is 30. OPIC - FMD: Treated in 1991, " 7 mile marsh #2" heavy understory of balsam fir.
72	42290 - Natural Mixed Pine	Sawtimber Medium	9.0	114	1-50	2016- West side of stand contains more Wp,H &C. East side contains more Rp. Stand was treated 10 yrs ago and is filling in with pine. OPIC - FMD: Scattered pine, mixture of R. pine and W. pine overstory with young pine and basam fir in understory. Was treated 20 years ago approx.
81	6121 - Tamarack	Poletimber Medium	38.2	80	1-50	2016- Stand varies from areas of good stocking to poor stocking. there are pockets of cedar. Northern area has pockets of Rm. OPIC - FMD: Black spruce and cedar make up mix softwood component.
85	6118 - Lowland Deciduous with Cedar	Poletimber Well	13.4	89	51-80	2016- Pole sized lowland hardwoods with patches of cedar.
86	4311 - Pine, Aspen Mix	Sawtimber Medium	27.8	115	51-80	2016- Residual pine with 1-2 stick aspen. OPIC - FMD: Understory contains A3,W3,R3. Wait another 10 years then release the understory.
87	6120 - Lowland Cedar	Poletimber Well	21.1	118	51-80	OPIC - FMD: OI Stand Year Origin was 1897
88	6129 - Mixed Coniferous Lowland Forest	Sawtimber Medium	17.9	112	51-80	2016- Hemlock, Cedar and Pine with young ash and r.maple in cutover areas OPIC - FMD: Treated in 1995, contract#33-32-92-02.
91	4133 - Aspen, Mixed Pine	Sawtimber Poor	10.3	40	1-50	2016- Narrow ridge with Rp, Wp, and Aspen. Aspen can be cut now. OPIC - FMD: treated in 1971, fir and aspen in the understory.
92	42350 - Upland Hemlock	Poletimber Well	21.9	116	141-170	
94	4130 - Aspen	Poletimber Medium	15.3	54	51-80	2016- Timber is falling over. Balm is located along the edges of the stand. OPIC - FMD: OI Stand Year Origin was 1971
95	4191 - Mixed Upland Deciduous with Conifer	Sapling Medium	22.4	14	Immature	2016- Predominately Green ash and a mix of other lowland hardwoods spp Cedar and Hemlock patches were left. OPIC - FMD: Stand was harvested under contract #33-005-98-01, the Survey Crew Balm Sale, in early 2002. Stand 95 is now 17 acres in size. Lowland aspen and balm regeneration with hemlock and cedar pole timber. The P type is the featured type. A fair amount of blow down experienced due to wind damage.
97	4113 - R.Maple, Conifer	Poletimber Well	4.1	89	1-50	2016- Residual Rm, Yb, Wp with heavy understory of upland conifer, Rm, and A. OPIC - FMD: Treated in 2000, 06-98-01, White pine expansion sale.

6120 - Lowland Cedar

98

Poletimber

Well

23.7

116

81-110

2016- Cedar except for the north tip which contains mature Fs, P, Ash ,Rm, OPIC - FMD: OI Stand Year Origin was 1900

S t	Escanaba Mgt. Unit			Report 7	– Forested	Stands Compartment: 76 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
103	6111 - Lowland Balsam Poplar	Sapling Medium	52.2	14	Immature	2016- Cedar and Hemlock residual with P & A. A lot of the C has blown over. OPIC - FMD: Stand was harvested under contract 33-005-98-01, the survey crew balm sale. Stand is regenerating to lowland aspen and balm and has a residual of cedar and hemlock pole timber. The aspen is the featured type. A fair amount of blow down of residual trees due to wind damage. Stand is 54 acres in size.
104	6120 - Lowland Cedar	Poletimber Well	4.6	116	111-140	2016- Leave Strip of Cedar. OPIC - FMD: OI Stand Year Origin was 1900
106	42350 - Upland Hemlock	Poletimber Well	16.1	104	81-110	2016- Very little hemlock seedling on the ground. More Wp and Rp as you go north and on west edge. OPIC - FMD: OI Stand Year Origin was 1912
107	6122 - Black Spruce	Poletimber Well	43.4	95	51-80	Nice pole-timber spruce stand.
108	6122 - Black Spruce	Poletimber Poor	29.3	95	1-50	2016- Smaller timber than stand 107, scattered merchantable timber with non-merchantable timber. OPIC - FMD: Smaller timber, more scattered and diameter smaller.
109	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	7.7	89	51-80	2016- As you move from north to south in stand you are going through 3 different stand, it gets wetter and more C&H show up. the south 3rd is P and Fb . OPIC - FMD: Treated in 2012, under permit33-10-08-01. OI notes from 2006 - Retain some of the yellow birch and beech component within this stand, leave hemlock.
112	6120 - Lowland Cedar	Poletimber Well	27.7	116	81-110	2016- stand has lots of blowdown. OPIC - FMD: OI Stand Year Origin was 1900
114	4110 - Sugar Maple Association	Poletimber Well	44.2	89	81-110	2016- Areas are regenerating to Maple, beech and aspen. West side of rd. has pockets of hemlock. OPIC - FMD: Treated in 2012 permit 33-10-08-01. OI 2006-FDF POT. Retain some of the yellow birch and beech component, leave hemlock.
116	42350 - Upland Hemlock	Poletimber Well	4.8	116	111-140	2016- Stand is variable. North part is hemlock with small area of "E" type. South end more of an "E" type then back into Hemlock. OPIC - FMD: White birch and red maple make up the mix hardwood component.
117	42210 - Natural Red Pine	Sapling Medium	3.7	15	Immature	2016- Red pine starting to take off. 1-1.5 sticks tall OPIC - FMD: Treated in 2000, contract 006-98-01. Amix of Rpine and White pine was planted in this strip. Seedlings are 2-3' tall.
119	6118 - Lowland Deciduous with Cedar	Poletimber Medium	7.6	76	1-50	2016- Small diameter lowland hardwood with cedar. OPIC - FMD: OI Stand Year Origin was 1940

6122 - Black Spruce

120

Poletimber

Well

23.3

86

51-80

2016- Parts of stand higher to tamarack but mostly a spruce stand. OPIC - FMD: OI Stand Year Origin was 1930

s t	Escanaba Mgt. Unit			Report 7	– Forested	Stands Compartment: 76 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
125	4190 - Mixed Upland Deciduous with Cedar	Sapling Well	21.7	14	Immature	2016- Stand coming back to a fully stocked stand of lowland hdwd (P&A). Scattered cedar trees and patches of cedar and hemlock were left, Where cedar is 30 + BA there is very little regen, where there is less regen is good. OPIC - FMD: Stand was harvested in 2002 under contract 33-012-98-01, the Second String sale. A SMALL AMOUNT OF HEMLOCK AND CEDAR WAS CUT TO ALLOW LOGGER TO MOVE AROUND
126	6120 - Lowland Cedar	Poletimber Well	16.3	116	81-110	OPIC - FMD: SCA - POG - Part of a large treed bog/lowland conifer complex extending into Compartment 34. OI Stand Year Origin was 1900
128	4130 - Aspen	Poletimber Well	18.1	57	81-110	2016- Heavy to aspen, with mix of other spp. OPIC - FMD: Stand could be treated now but is being held to treat this island as one sale in the next treatment period. Treat with hdwds to make sale worthwhile.
129	4110 - Sugar Maple Association	Poletimber Well	31.4	89	81-110	2016-Nice hardwoods, very little regeneration. OPIC - FMD: Stand was harvested in 2002 under contract 33-012-98-01, the Second String sale.
131	6120 - Lowland Cedar	Poletimber Well	83.2	116	111-140	
135	4319 - Mixed Upland Forest	Poletimber Well	17.6	59	51-80	2016- South part of stand was cut,residual Rm, Fb, Fs. North part of stand was treated approx. 14 years ago, balsam and spruce were left and are now mature. OPIC - FMD: Stand was harvested in 2002 under contract 33-012-98-01, the Second String sale.
137	4130 - Aspen	Poletimber Well	7.5	52	51-80	2016- Aspen and balm with heavy understory of Fb that is small diameter. There is merchantable Fb that is 7" 2-3 sticks. Aspen is declining and has conks and dead tops.OPIC - FMD: OI Stand Year Origin was 1977

21

21

112

Immature

Immature

81-110

21.4

17.0

7.6

6139 - Mixed Lowland

Forest

4130 - Aspen

4312 - Hemlock, Mixed

Deciduous

138

140

141

Sapling Poor

Sapling Well

Poletimber

Well

2016- Fully stocked stand of P, Rm, Fb, Fs, Wp. Residual C & H.

OPIC - FMD: Treated in 1995, contract 32-92-01. P2,F3, and W2 coming in under residual timber.

2016- Fully stocked stand of aspen. OPIC - FMD: Treated in 1995, contract 11-90-01, Slush bucket harwood sale.

2016- Nice hemlock stand. Could be treated top remove short

lived spp and pine. OPIC - FMD: Illegal ORV use through wetland.

Compartment: 76 Year of Entry: 2018



Stand	Cover Type	Acres	Managed Site	General Comments:
6	500 - Water	0.7	No	
12	6229 - Mixed lowland shrub	6.2	No	OPIC - FMD: has increased in size since last inventory.
18	500 - Water	0.9	No	OPIC - FMD: OI Stand Year Origin was
19	622 - Lowland Shrub	15.6	No	OPIC - FMD: OI Stand Year Origin was
38	622 - Lowland Shrub	1.2	No	OPIC - FMD: OI Stand Year Origin was
41	622 - Lowland Shrub	0.4	No	OPIC - FMD: OI Stand Year Origin was
56	500 - Water	0.3	No	OPIC - FMD: OI Stand Year Origin was
62	622 - Lowland Shrub	8.4	No	OPIC - FMD: OI Stand Year Origin was
96	710 - Sand, Soil	0.3	No	OPIC - FMD: SAND PIT ALONG THE LIMPERT ROAD
402	3102 - Grass	1.6	Yes	OPIC - FMD: W33643 - Stds 402, 403, 404, 405 and 406 are to be planted into a wildlife mix. Std. 406 was not planted, due to the logging road being too wet to gain access. Four openings is 5.6 acres. 03/10/2009 - Pesticide Application Plan submitted. 08/06/2008 - Pesticide Evaluation Report submitted. 08/29/2008 - planted into a wildlife mix. 10/23/2008 - partial forest treatment completion report submitted. Topdressing with fertilizer, mowing, and frost-seeding is needed annually for this multi-year FTP. 03/17/210 - frost-seeded. 05/05/2010 - fertilized. 08/05/2010 - mowed. 04/07/11 - Frost seeded 8lbs per acre, 75% red clover / 25% dutch white clover. 5/23/11 - Fertilized with 0-14-42, 250lbs per acre. OI Stand Year Origin was
403	3102 - Grass	0.5	Yes	OPIC - FMD: Once was a managed opening. Mainly cool summer grasses. Fair amount of birdsfoot trefoil present. Small patch of rubus. FTP will be prepared and implemented only if desired as a project by a conservation organization. W33643 - Stds 402, 403, 404, 405 and 406 are to be planted into a wildlife mix. Std. 406 was not planted, due to the logging road being too wet to gain access. Four openings is 5.6 acres. 03/10/2009 - Pesticide Application Plan submitted. 08/06/2008 - Pesticide Evaluation Report submitted. 08/29/2008 - planted into a wildlife mix. 10/23/2008 - partial forest treatment completion report submitted. Topdressing with fertilizer, mowing, and frost-seeding is needed annually for this multi-year FTP. 03/17/210 - frost-seeded. 05/05/2010 - fertilized. 08/05/2010 - mowed. 04/07/11 - Frost seeded 8lbs per acre, 75% red clover / 25% dutch white clover. 5/23/11 - Fertilized with 0-14-42, 250lbs per acre. OI Stand Year Origin was

Compartment: 76 Year of Entry: 2018



Stand	Cover Type	Acres	Managed Site	General Comments:
404	3102 - Grass	1.2	Yes	OPIC - FMD: Once was a managed opening. Mainly cool summer grasses. Fair amount of birdsfoot trefoil present. Small patch of rubus. FTP will be prepared and implemented only if desired as a project by a conservation organization. W33643 - Stds 402, 403, 404, 405 and 406 are to be planted into a wildlife mix. Std. 406 was not planted, due to the logging road being too wet to gain access. Four openings is 5.6 acres. 03/10/2009 - Pesticide Application Plan submitted. 08/06/2008 - Pesticide Evaluation Report submitted. 08/29/2008 - planted into a wildlife mix. 10/23/2008 - partial forest treatment completion report submitted. Topdressing with fertilizer, mowing, and frost-seeding is needed annually for this multi-year FTP. 03/17/210 - frost-seeded. 05/05/2010 - fertilized. 08/05/2010 - mowed. 04/07/11 - Frost seeded 8lbs per acre, 75% red clover / 25% dutch white clover. 5/23/11 - Fertilized with 0-14-42, 250lbs per acre. OI Stand Year Origin was
405	3102 - Grass	1.5	Yes	OPIC - FMD: Once was a managed opening. Mainly cool summer grasses. Fair amount of birdsfoot trefoil present. Small patch of rubus. FTP will be prepared and implemented only if desired as a project by a conservation organization. W33643 - Stds 402, 403, 404, 405 and 406 are to be planted into a wildlife mix. Std. 406 was not planted, due to the logging road being too wet to gain access. Four openings is 5.6 acres. 03/10/2009 - Pesticide Application Plan submitted. 08/06/2008 - Pesticide Evaluation Report submitted. 08/29/2008 - planted into a wildlife mix. 10/23/2008 - partial forest treatment completion report submitted. Topdressing with fertilizer, mowing, and frost-seeding is needed annually for this multi-year FTP. 03/17/210 - frost-seeded. 05/05/2010 - fertilized. 08/05/2010 - mowed. 04/07/11 - Frost seeded 8lbs per acre, 75% red clover / 25% dutch white clover. 5/23/11 - Fertilized with 0-14-42, 250lbs per acre. OI Stand Year Origin was
406	3302 - Low Density Conifer Trees	1.2	Yes	OPIC - FMD: Once was a managed opening. Mainly cool summer grasses. Fair amount of birdsfoot trefoil present. Small patch of rubus. FTP will be prepared and implemented only if desired as a project by a conservation organization. W33643 - Stds 402, 403, 404, 405 and 406 are to be planted into a wildlife mix. Std. 406 was not planted, due to the logging road being too wet to gain access. OI Stand Year Origin was