

Compartment Review Presentation

Escanaba Forest Management Unit

Compartment 107
Entry Year 2016

Acreage: 2,043
County Delta

Management Area: Brampton Lake Plain

Revision Date: 06/20/2014

Stand Examiner: Dan McNamee

Legal Description:

T41N, R22W, SECTIONS 34-36; T40N, R22W, SECTIONS 2-5, 8, and 16

Identified Planning Goals:

This tract of land provides opportunity for a variety of recreational activities and timber management. Timber Management will focus on aspen, pine, spruce and lowland mixed conifer management. There is evidence of beech scale on the east side of the compartment and a timbersale will be done to salvage the beech according to the Beech Bark Disease Guidelines. Special guidelines will be followed during timber sale preparation to protect the recreational values of this compartment

Soil and topography:

Soils include excessively drained sands, organic soils and sand ridges. Topography is nearly level to moderately steep.

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

Large block of state land surrounded by private ownership

Unique Natural Features:

No Unique Natural Features known.

Archeological, Historical, and Cultural Features:

There are known concerns within the compartment. All proposed management activities have taken these concerns into consideration.

Special Management Designations or Considerations:

Days River ski pathway, and snowmobile trail are located within this compartment.

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations:

The area is predominantly upland aspen and pine cover types. Future management will strive to balance the age-class distribution and enhance the conifer component of mixed stands. The compartment tends to naturally recruit to upland conifer forest. Because upland conifers are important to many species of wildlife, and these forest types have declined substantially during the past century, future management will emphasize restoration where possible. Red pine plantations will be cut in a manner that encourages natural regeneration and aspen and birch stands that have understories of red pine, white pine, and balsam fir will be treated in a manner that encourages natural conversion to conifer. Several riparian corridors will be protected to provide wildlife movement corridors and habitat. This compartment also contains the Gladstone Marsh which is located within the Gladstone city limits, and the Days River Nature Trail at the mouth of the Days River. These two sites are excellent locations for organizations looking to undertake wildlife habitat enhancement projects and for public wildlife viewing and recreational use.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and peat and muck. The glacial drift thickness varies between 10 and 100 feet. The Ordovician Trenton Limestone underlies the glacial drift. The Trenton is quarried for stone to the northeast, north of Rapid River and may overlap Precambrian aged rocks which may have metallic and nonmetallic mineral potential. This Compartment has not been previously leased for metallic exploration. Gravel pits are located in Section 34 and there appears to be potential on the uplands. No economic oil and gas production has been found in the UP.

Vehicle Access:

Good road system. Some roads are blocked to protect recreational values within this compartment.

Survey Needs:

None.

Recreational Facilities and Opportunities:

Hunting, fishing, cross-country skiing, hiking, snowmobiling, and mountain biking.

Fire Protection:

Road access to most of the compartment is good and if a fire should start, response should keep the fire small.

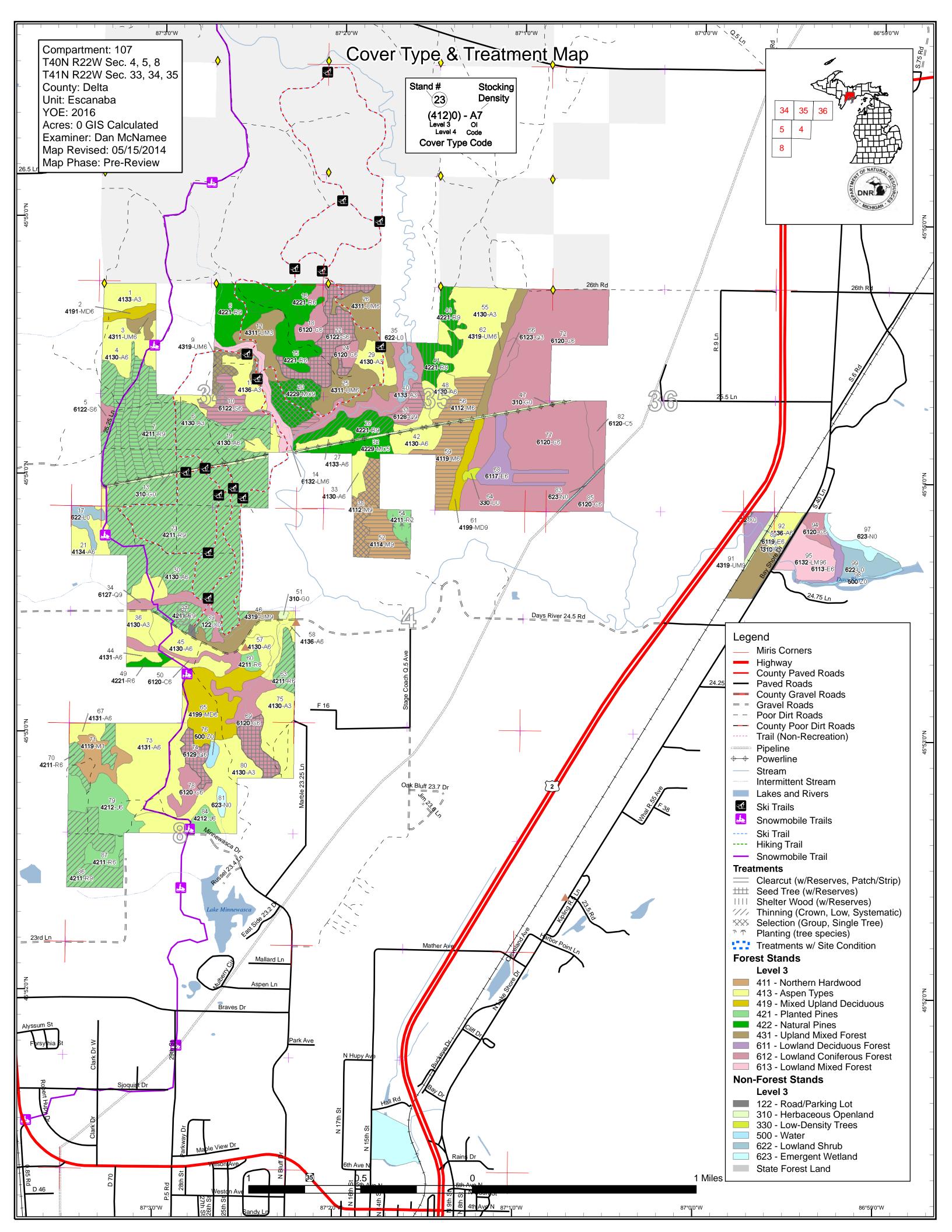
Additional Compartment Information:

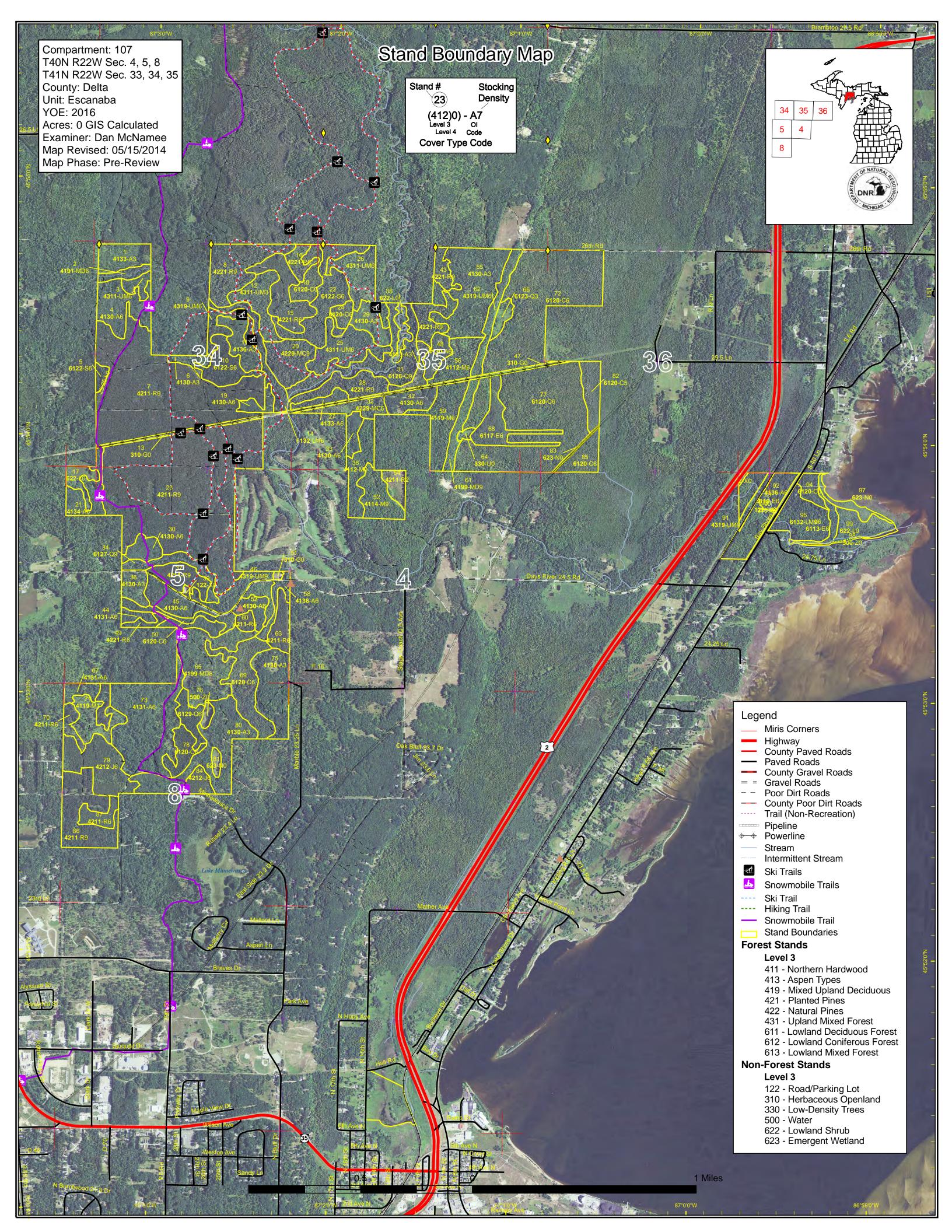
The following reports from the Inventory are attached:

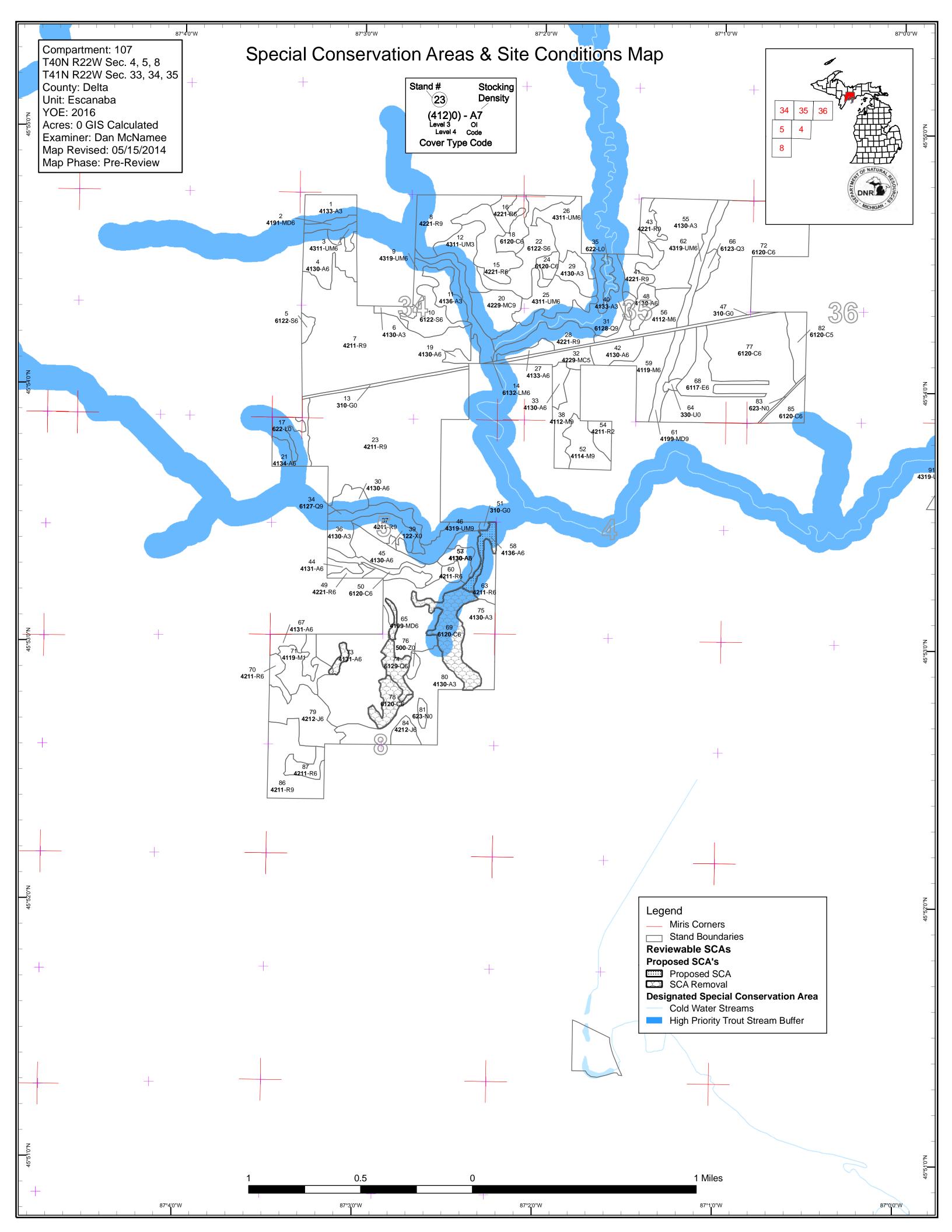
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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







Dan McNamee: Examiner

Compartment 107 Year of Entry 2016



Age Class 11.00 M 70,703 70,79 10,0 % % 20.25 % % 70× Aspen Cedar Herbaceous Openland Jack Pine **Low-Density Trees Lowland Conifers** Lowland Deciduous **Lowland Mixed Forest** Lowland Shrub Lowland Spruce/Fir Marsh Mixed Upland Deciduous Natural Mixed Pines Northern Hardwood Red Pine Upland Mixed Forest Urban Water Total



Report 2 – Proposed Treatment Summaries

Escanaba Mgt. Unit Year of Entry 2016

Compartment 107
Total Compartment Acres: 2,043

Acres by Treatment Type

Commercial Harvest - 698 Tree Planting - 43 Other - 0

Habitat Cut - 0 Opening Maintenance - 33

		Cover Type by Harvest Method								
		/	Contract of	Section of	1.00 S	Sternoo	Children O. S.		A CONTRACTOR OF THE PROPERTY O	
Lowland Coniferous Forest		31	0	63	0	0	0	94		
Natural Pines		0	23	0	22	20	0	65		
Northern Hardwood		64	20	0	0	0	0	84		
Planted Pines		35	0	0	0	409	0	444		
Upland Mixed Forest	·	0	11	0	0	0	0	11		
	Total	130	54	63	22	429	0	698		

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 107
Year of Entry 2016

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t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	Age Range Type Method	Cover Type Objective	Approval Status		
7	33107007- Cut strips	34.9	42110 - Planted Red Pine	High Density Loc	-	141-170	Harvest	Patch or Strip Clearcut	4211 - Planted Red Pine	Cmpt. Review Proposal

<u>Prescription</u> Within the stand use either strips or patch cuts to start regenerating this area. Run strips in contour with the ski trail and snow mobile trail. Check <u>Specs:</u> with TMS which treatment to use (patch or strips). Check with PRD on what is needed along trails.

Other Comments:

S

Monitor success of regeneration and do regeneneration survey per work instructions. Acceptable regen spp.= Rp. Try to regenerate this stand within the next 3 decades using the above treatment.

Steps: Proposed

Next

Start Date: 10/01/2015

7 33107007- 116.3 42110 - Planted High 62 141-170 Harvest Crown Thinning 4211 - Planted Red Cmpt. Review thinning Red Pine Proposal

Prescription Thin the pine to Residual BA 100-110. Check with PRD on what is needed along trails.

Specs:

Other Comments:

Next Monitor success of regeneration and do regeneneration survey per work instructions. Acceptable regen spp.= Rp. Try to regenerate this stand

Steps: within the next 3 decades using the above treatment.

Proposed

Start Date: 10/01/2015

9 33107009-Cut 11.2 4319 - Mixed High 54 Harvest Single Tree 4221 - Natural Red Cmpt. Review Density Selection Pine Proposal

Pole

Prescription Remove Aspen, Rm, Fb, Fs, Wb and mark or remove pine on diameter limit. Remove pine > than 14' dbh. Care will be taken to minimize the

Specs: impact to the ski trail.

Other Consider doing this cut to mitigate hazard trees along trail. Work with PRD on layout of job and where to cross ski trail.

Comments:

Next Do regen check at appropriate time as per work instructions.

Steps:

Proposed Start Date: 10/01/2015

10 33107010-Cut 18.7 6122 - Black Spruce High 88 Harvest Clearcut with 6122 - Black Spruce Cmpt. Review Proposal

Pole

<u>Prescription</u> Clearcut leaving some spruce seed treas along the west and north portions of the stand. Leave the heavy areas of Cedar intact for retention.

Specs:

Other Comments:

Next Conduct regen check at appropriate time per work instructions. acceptable regen spp = C, Sp, T

Steps:

<u>Proposed</u>

Start Date: 10/01/2015

20 33107020-Cut 23.2 42290 - Natural High 70 Harvest Group Selection 429 - Mixed Upland Cmpt. Review Mixed Pine Density Log Conifers Proposal

Mixed Tille Dellekty Log

Prescription Remove red and white pine to help facilitate regeneration of pine. Create some gaps large enough to enourage the Red pine rather than

Specs: whitepine.

Other Consult with PRD as the ski trail is located within the stand.

Comments:

Next Conduct regen check per work intructions, Acceptable regen spp. = Rp, Wp, Fb, Fs, Rm.

<u>Steps:</u> WLD will create FTP for planting hard and soft mast within patches or gaps.

Proposed

Start Date: 10/01/2015

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 107
Year of Entry 2016

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a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
22	33107022-Cut	36.4	6122 - Black Spruce	High Density Pole	93		Harvest	Seed Tree with Reserves	6129 - Mixed Coniferous Lowland Forest	Cmpt. Review Proposal

<u>Prescription</u> Clearcut leaving a seed source, either ind trees or patches. Leave any large heavy cedar areas intact if found when sale is set up.

Specs:

Other Eastern larch beetle is evident in thsi stand. This stand was hard to break out, cutting boundaries may have to be adjusted when sale is put up.

Comments:

Next Conduct regen check per work instructions. Acceptable regen = T, Sp, C, Fb.

Steps:

<u>Proposed</u>

Start Date: 10/01/2015

23 33107023-Cut 213.6 42110 - Planted High 62 141-170 Harvest Crown Thinning 4221 - Natural Red Cmpt. Review Red Pine Proposal

Prescription Harvest stand down to a residual BA of 100-110. Consult with PRD to conduct sale so trails have minimal impact.

Specs:

Other Stand has been treated at least 3 x before this.

Comments:

Conduct regen check per work instructions. Acceptable regen = Rp. wp. Check with TMS about scarifying post harvest.

Next Steps:

Proposed

Start Date: 10/01/2015

28 33107028- 19.7 42210 - Natural High 74 81-110 Harvest Crown Thinning 4221 - Natural Red Cmpt. Review Cut1 Red Pine Density Log Pine Proposal

Prescription Select cut; thin stand to BA=100

Specs:

Other cut in 1992, Red Ant sale.

Comments:

Next Conduct regen check according to work instructions. Acceptable regen spp = Rp.

Steps:

<u>Proposed</u>

Start Date: 10/01/2015

33107031-31 12.4 6128 - Lowland High 70 81-110 Harvest Clearcut with 6128 - Lowland Cmpt. Review Cut_small Coniferous, Mixed Density Log Reserves Coniferous, Mixed Proposal Deciduous Deciduous

<u>Prescription</u> Remove the overmature A,Fsb, Fsw, Fb, Rm, Wb ,ash. Leave a 100' buffer along the river, Leave heavy Cedar patches intact. Cut only those pine trees that are showing decline. Leave some Wb (1-2/acre)The entire stand will not be harvested, only areas that provide enough room to

allow harvest and keep the buffer at the 100' distance.

Other This is a overmature stand of timber, lots of balsam and spruce is dead.

Comments:

Conduct regen check as per work instructions, Accept regen spp= A, Wb, Fb, Fsb, Fsw, and pine.

Next Steps:

Proposed

Start Date: 10/01/2015

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 107 Year of Entry 2016

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
37	33107037-Cut	15.8	42110 - Planted Red Pine	High Density Log	64	111-140	Harvest	Crown Thinning	4221 - Natural Red Pine	Cmpt. Review Proposal

Prescription Thin stand to BA = 100 - 110. Consult with PRD to minimize the impact to the trail.

Specs:

S

Other Days river ski trail and the parking lot are located within this stand. Stand was last harvested in 1997 under contract 45-96-01, Parking lot pine

sale. Work with PRD to reduce impact on trail. Comments:

Next Conduct regen check per work instructions. Accept. regen spp.= Rp.

Steps:

Proposed

10/01/2015 Start Date:

38 33107038-Cut 19.9 4112 - Maple, High 80 111-140 Harvest **Group Selection** 4113 - R.Maple, Cmpt. Review Beech, Cherry Density Log Conifer Proposal

Association

Prescription Thin and create gaps to help facilitate regen of spp. that make up this stand.

Specs:

Other Stand was treated in 2009, brampton east sale, 330080601

Comments:

Conduct regen check per work instructions. Accept. rengen spp = Rm, Wb, beech, and Sm. Next

Steps:

<u>Proposed</u>

Start Date: 10/01/2015

33107041-Cut 14.1 42210 - Natural High 72 51-80 Harvest Shelterwood 4221 - Natural Red Cmpt. Review Red Pine **Density Log** Pine Proposal

Prescription Shelterwood harvest. retain approx. 30-40 BA Create some gaps.

Specs:

Other Treated in 2009 under Brampton east sale, 330080601

Comments:

Conduct regen check per work instructions. Accept. regen spp. Rp, Wp, Fb. Check with TMS on option to scarify post harvest. Next

Steps:

Proposed

Start Date: 10/01/2015

33107043-Cut 7.7 42210 - Natural High 75 51-80 Harvest Shelterwood 4221 - Natural Red Cmpt. Review Red Pine **Density Log** Pine Proposal

Prescription Shelterwood Harvest. Open stand up leaving 20-30 BA of Rp.

Specs:

Other_ Treated in 2009, Brampton east sale, 330080601.stand is currently regenerating to more Wp than Rp.

Comments:

Next Conduct regen check per work instructions, Accept. regen spp = Rp, Wp, Fb, A.

Steps:

Proposed

Start Date: 10/01/2015

33107052-Cut 19.2 4114 - Beech. High 145 Harvest Clearcut with 4114 - Beech, Cmpt. Review Hemlock **Density Log** Reserves Hemlock Proposal

Prescription Clear cut w/reserves, leave the hemlock and cut everything else. leave a retention patch around one of the heaviest hemlock areas.

Specs:

Other beech has beech scale, Stand was treated in 1991, Par 4 hardwood sale.

Comments:

conduct regen check per work instructions. Accept. regen = Rm, Beech, Y birch, Hemlock.

Next Steps:

<u>Proposed</u> 10/01/2015

Start Date:

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 107 Year of Entry 2016

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a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
56	33107056-Cut	18.0	4112 - Maple, Beech, Cherry Association	High Density Pole	80	81-110	Harvest	Clearcut with Reserves	4113 - R.Maple, Conifer	Cmpt. Review Proposal

Prescription Clear cut with reserves. Leave patches (.1-.25 ac) or clumps (4-5) scattered throughout stand. leave pine.

Specs:

S

Other Stnd was treated in 2009, Brampton east sale, 330080601. no regen what so ever.

Comments:

<u>Next</u> Conduct regen check per work instructions. Acceptable regen spp= Rm, Wb, Rp, Wp. Fb.

Steps:

<u>Proposed</u>

Start Date: 10/01/2015

33107059-Cut 27.1 4119 - Mixed High 76 Harvest Clearcut with 4113 - R.Maple, Cmpt. Review Northern Hardwoods Reserves Proposal Density Conifer

Prescription Clearcut with reserves. Leave retention (3-10%) by either leaving clumps or patches. Leave hemlock patch located near northeast corner of pvt

land. Harvest in areas that will allow operator to harvest trees without taking hemlock. Specs:

<u>Other</u> Stand harvested in 2009, Brampton East sale, 330080601. No visible regen.

Comments:

Conduct regen check per work instructions. Accept. regen spp. = Rm, Wb, Fb, pine. <u>Next</u>

Steps:

Proposed

Start Date: 10/01/2015

33107063-Cut 12.0 42110 - Planted High 63 171-200 Harvest Systematic 4221 - Natural Red Cmpt. Review 63 Red Pine Density Thinning Pine Proposal

Pole

Prescription thin stand to 90 BA. Create gaps where possible. Specs:

<u>Other</u> Thinned in 2009, Brampton south sale, 330070601.

Comments:

Next Regen check per work instructions, Accept. regen spp = Rp.

Steps:

Proposed

10/01/2015 Start Date:

33107069-69 16.0 6120 - Lowland High 93 Harvest Seed Tree 6122 - Black Spruce Cmpt. Review Cut_small Cedar Density Proposal Pole

Prescription Seed tree harvest, leave scattered seed trees along edge (N&W). Retain heavy areas of cedar rhat are located within the area.

Specs:

Other Stand was previously Old Growth.

Comments:

Conduct regen check per work instructions. Accept. regen spp. = Sp. T, C.

Steps:

Next

Proposed

Start Date: 10/01/2015

Acres

12.4

Report 3 -- Treatments Prescribed with No Limiting Factor

Treatment

Type

Harvest

Treatment

Method

Systematic

Thinning

BA

Range

111-140

Compartment: 107
Year of Entry 2016

Cover Type

Objective

4211 - Planted Red

Pine

DNR DNR
Approval

Status

Cmpt. Review

Proposal

Prescription Thin stand to BA 100-110.

Specs:

Орсоо.

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70

Other Stand thinned in 2009, brampton south sale,330070601. Small areas.

CoverType

42110 - Planted

Red Pine

Size

Density

High

Density

Pole

Age

62

Comments:

Next Thin again in 10 yrs.

Treatment

Name

33107070-Cut

Steps:

<u>Proposed</u>

Start Date: 10/01/2015

74 33107074-Cut 10.8 6129 - Mixed High 80 Harvest Seed Tree with 6121 - Tamarack Cmpt. Review Coniferous Lowland Density Reserves Proposal

Forest Pole

Prescription Seed tree leaving seed source along edge (N&W).

Specs:

Other More tamarack than spruce, Tamarack has the bug. there is some cedar but it is scattered of in clumps of 3-5 trees/clump.

Comments:

Next Conduct regen check per work instruction. Accept. regen spp = T, Sp, C.

Steps:

Proposed

Start Date: 10/01/2015

33107086-Cut 38.8 42110 - Planted High 56 111-140 Harvest Systematic 4211 - Planted Red Cmpt. Review 86 Red Pine **Density Log** Thinning Pine Proposal

Prescription Thin stand to BA = 100-110.

Specs:

Other Stand was thinned in 1992 and again in 2009 under the Brampton south sale. There is some aspen regen in places.

Comments:

Next Conduct regen checks per work instructions.

Steps:

<u>Proposed</u>

Start Date: 10/01/2015

54 33107054- 8.1 42110 - Planted Medium 10 Tree Planting Hand Plant 4122 - Oak, Pine Cmpt. Review Plant Red Pine Density Proposal

Sapling

<u>Prescription</u> Plant Oak per TMS recommendations in the open areas where planting did not take. <u>Specs:</u>

Other Area was planted approx. 10 years ago. Some areas did well while others did not.

Other Comments:

Conduct regen check per work instructions. Acceptable Spp. = whatever TMS decides along with input from WLD.Once decided fill out FTP.

Next Steps:

Proposed

Start Date: 10/01/2014

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 107 Year of Entry 2016

S t					with	No Limi	ting Factor	Year of Entry 2016	DNR	
a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
75	33107075- NonFor	32.6	4130 - Aspen	High Density Sapling	22		Non-Forest Management	Other - Specify	413 - Aspen	Cmpt. Review Proposal

Prescription Plant soft mast within openings in the aspen to promote cover and browse for deer, grouse, woodcock and non-game species Specs:

<u>Other</u>

Comments:

<u>Next</u> Create FTP

Steps:

Proposed

Start Date: Unspecified

Total Treatment

738.8 Acreage Proposed:

Escanaba Mgt. Unit Report 4 -- Treatments Prescribed with Compartment: 107 a Site Condition s Year of Entry 2016 t **Treatment** Acres CoverType Size Stand ВА **Treatment Treatment Cover Type Approval** n Objective Method Status Name Range Density Age Type #Type! #Type! **Prescription** Specs: Other Comment: **Next** Steps: <u>Proposed</u> #Type! Start Date:

Total Treatment

Limiting Factor

Acreage Proposed: 0.0

Report 5 – Site Conditions

Escanaba Mgt. Unit

Dan McNamee : Examiner

Compartment 107
Year of Entry 2016

Avail	ability for I	Management						
Total	Acres	Acres	D	omina	nt Site	Cond	ditions	3
Acres	Available	Not Available		No	5C	3J	3D	1D
437	419	18	Aspen	419		7		11
338	338		Cedar	338				
41	41		Jack Pine	41				
71	57	14	Lowland Conifers	57		14		
36	22	14	Lowland Deciduous	22			6	8
41	41		Lowland Mixed Forest	41				
58	58		Lowland Spruce/Fir	58				
66	66		Mixed Upland Deciduous	66				
35	35		Natural Mixed Pines	35				
102	102		Northern Hardwood	102				
579	579		Red Pine	579				
140	140		Upland Mixed Forest	114	25			
1,944	1,898	46	Total Forested Acres	1,873	25	21	6	19
	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 Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
Available	5C: Delay treatment for age/size class diversity or exceptional site quality	25				
omments:						
Not Available	3J: Water quality / BMPs (stream, river, or lake)	14				
omments:						
	Availability Available omments:	Available 5C: Delay treatment for age/size class diversity or exceptional site quality Omments: Not Available 3J: Water quality / BMPs (stream, river, or lake)	Available 5C: Delay treatment for age/size class diversity or exceptional site quality Not Available 3J: Water quality / BMPs (stream, river, or lake)	Available 5C: Delay treatment for age/size class diversity or exceptional site quality Not Available 3J: Water quality / BMPs (stream, river, or lake) Other Site Condition 25 25	Available 5C: Delay treatment for age/size class diversity or exceptional site quality Not Available 3J: Water quality / BMPs (stream, river, or lake) Other Site Condition Other Site Condition Other Site Condition Other Site Condition Other Site Condition	Available 5C: Delay treatment for age/size class diversity or exceptional site quality Not Available 3J: Water quality / BMPs (stream, river, or lake) Other Site Condition Oth

Report 5 – Site Conditions

Escanaba Mgt. Unit
Dan McNamee : Examiner

Compartment 107 Year of Entry 2016

006	Not Available	3J: Water quality / BMPs (stream, river, or lake)	7
С	omments:		
007	Not Available	1D: Interest Group / Neighbor	8
С	omments:		
008	Not Available	1D: Interest Group / Neighbor	11
С	omments:		
009	Not Available	3D: Recreational / Scenic values	6
С	omments:		

Compartment: 107 Year of Entry: 2016



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				

Escanaba Mgt. Unit Compartment: 107





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.

Conservation 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 at the Great Lakes, there are shipwrecks and other remains docum be identified by Natural heritage data from the State Historic Presthis compartment will be implemented in such a manner as to matthe 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 specific 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 ey 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
SCA	Great Lakes Islands	Great Lakes Islands provide significant habitat for numerous spe animals, several of which are endemic or largely restricted to the isolation, islands provide good examples of many Great Lakes-a ecosystems, and thus have potential to provide insights for unde disturbance on the increasingly fragmented ecosystems of the m	Great Lakes region. Due to their ssociated natural communities and rstanding the consequences of human
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in 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 effect as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, liversity of plants and wildlife. Riparian cts on water quality and quantity, as well
HCVA	Coastal Environmental Areas	The public designation process is defined by Part 323, Shoreland Natural Resources and Environmental Protection Act, 1994 PA 4 Michigan Department of Environmental Quality (DEQ). This is an currently under consideration by the DEQ.	51. The program is administered by the

s t	Escanaba	Escanaba Mgt. Unit			Forested	Stands Compartment: 107 Year of Entry: 2016
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4133 - Aspen, Mixed Pine	High Density Sapling	16.8	4		Aspen sapling stand with mix of residual R. pine and W.pine pole/sawlogs. More aspen and rm saplings on west side less pine more wp/rp with a/rm on east side.
2	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	6.1	70		Buffer area along creek that runs E-W. Contains Pine (rp,wp) Rm,A, Ch, Wb.
3	4311 - Pine, Aspen Mix	High Density Pole	5.7	50		P/L R. pine with A/Rm in the more open areas. Cut in 1998, Brampton Pine, #330189601
4	4130 - Aspen	High Density Pole	26.6	16		Residual R.p, Wp and Oak were left. Cut in 1998, Brampton Pine sale, #330189601
5	6122 - Black Spruce	High Density Pole	3.4	68		boggy area, mainly black spruce with some white pine mixed in.
6	4130 - Aspen	High Density Sapling	5.5	4		treated in 2010, Brampton Pine, #330110601.
7	42110 - Planted Red Pine	High Density Log	151.2	62	141-170	
8	42210 - Natural Red Pine	High Density Log	34.7	67	51-80	Treated in 1991, third loop pine, 330509001, also treated again in 2008, brampton north sale, #330090601, ski trail located within this stand.
9	4319 - Mixed Upland Forest	High Density Pole	11.2	54		
10	6122 - Black Spruce	High Density Pole	18.7	88		
11	4136 - Aspen, Mixed Conifer	High Density Sapling	15.4	16		Treated in 1998, brampton pine, #330189601
12	4311 - Pine, Aspen Mix	High Density Sapling	20.3	6		Treated in 2008, Brampton North sale. #330090601. Heavy to aspen in North end of stand, Aspen, fb,fs, rm. wb cut on 8"> diameter limit, Rp,Wp cut on 18" > diam limit.
14	6132 - Mixed Lowland Forest with Cedar	High Density Pole	15.5	106		Buffer along the days river, Steep slopes on E&W sides tha tgrade into small tributary, Fb,Fs are falling down or dying, A, Wb overmature.
15	42210 - Natural Red Pine	High Density Pole	27.1	21	111-140	
16	42210 - Natural Red Pine	High Density Pole	7.8	70		Treated in 2008, Brampton North. #330090601. Residual Rp/Wp with Aspen regen in the more opn areas.
18	6120 - Lowland Cedar	High Density Pole	13.0	106		•

S t	Escanaba	naba 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:
19	4130 - Aspen	High Density Pole	6.2	27		
20	42290 - Natural Mixed Pine	High Density Log	23.2	70		
21	4134 - Aspen, Spruce/Fir	High Density Pole	16.2	29		Patches of Fb, Fs, Wp. border the L0 type, more A as you get farther from L0.
22	6122 - Black Spruce	High Density Pole	36.4	93		
23	42110 - Planted Red Pine	High Density Log	213.6	62	141-170	
24	6120 - Lowland Cedar	High Density Pole	5.4	106		
25	4311 - Pine, Aspen Mix	High Density Pole	26.9	20		Treated in 1994, section 34 Pine, #330589201. Ski trail located within stand.
26	4311 - Pine, Aspen Mix	High Density Pole	25.2	73		Treated in 2008, #330090601, brampton north sale.
27	4133 - Aspen, Mixed Pine	High Density Pole	5.8	24		Treated in 1984. Almost a pure stand of Aspen with mix of Rp/Wp residual.
28	42210 - Natural Red Pine	High Density Log	19.7	74	81-110	
29	4130 - Aspen	High Density Sapling	12.9	6		Treated in 2008, brampton north sale, 330090601.
30	4130 - Aspen	High Density Pole	9.7	15		treated in 1999, #330479601, Mini Mac Pine sale.
31	6128 - Lowland Coniferous, Mixed Deciduous	High Density Log	39.8	70	81-110	
32	42290 - Natural Mixed Pine	Medium Density Pole	12.2	74		Treated in 2008, Brampton East sale, 330080601
33	4130 - Aspen	High Density Pole	7.3	25		Treated under contract 33188901, Par 4 hdwd sale
34	6127 - Lowland Pine	High Density Log	14.0	84		Mix of high and low ground along tributary that flows into Days river. Mini Mac bridge and Snowmobile trail and ski trail located in parts of this stand.
36	4130 - Aspen	High Density Sapling	10.2	5		Trated in 2009. #330070601, Brampton south sale. Good A/Rm, residual Rp, Wp, oak.

s t	Escanaba	Escanaba Mgt. Unit			Forested	Stands Compartment: 107 Year of Entry: 2016
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
37	42110 - Planted Red Pine	High Density Log	15.8	64	111-140	
38	4112 - Maple, Beech, Cherry Association	High Density Log	19.9	80	111-140	
40	4133 - Aspen, Mixed Pine	High Density Sapling	7.0	5		cut in 2009, brampton east sale, #330080601.
41	42210 - Natural Red Pine	High Density Log	14.1	72	51-80	
42	4130 - Aspen	High Density Pole	13.4	22		
43	42210 - Natural Red Pine	High Density Log	7.7	75	51-80	
44	4131 - Aspen, Oak	High Density Pole	4.6	18		Cut under contract, 330459601, parking lot pine sale.
45	4130 - Aspen	High Density Pole	26.2	35		Small tributary devides the stand. Small patch of nice R pine sawlogs with young A, Rm, understory ner the stand line of 35/48
46	4319 - Mixed Upland Forest	High Density Log	14.4	97		Multiple stands in this area. was SCA last time around. Stand is adjacent to a tributary of the Days river. Fisheries has sediment trap ocated in this area. This stand has a creek bottom and steep hillsides. stand provides water quality and watershed habitat.
48	4130 - Aspen	High Density Pole	9.9	22		treated in 1992, High rollaways sale.
49	42210 - Natural Red Pine	High Density Pole	3.6	52	81-110	
50	6120 - Lowland Cedar	High Density Pole	10.6	106		Tributary buffer.
52	4114 - Beech, Hemlock	High Density Log	19.2	145		
53	4130 - Aspen	High Density Sapling	7.4	5		Treated in 2009, Brampton south sale. Aspen removed, heavy regen in areas where no pine, W pine and Rm were left. Stand was cut on diameter limit.
54	42110 - Planted Red Pine	Medium Density	8.1	10		
55	4130 - Aspen	High Density Sapling	57.2	17		Treated in 1997, The bluff sale. Red pine was left. More sapling than pole, but a mix of both.
56	4112 - Maple, Beech, Cherry Association	High Density Pole	18.0	80	81-110	

s t	Escanaba	Escanaba Mgt. Unit			Forested	Stands Compartment: 107 Year of Entry: 2016
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
57	4130 - Aspen	High Density Pole	8.8	20		
58	4136 - Aspen, Mixed Conifer	High Density Pole	7.4	66		This is a buffer along a small trib to the Days river. There is quite a mixture of timber along it.
59	4119 - Mixed Northern Hardwoods	High Density Pole	27.1	76		
60	42110 - Planted Red Pine	High Density Pole	4.1	52	81-110	Pine Plantation, Thinned in 2009, Brampton south sale.
61	4199 - Other Mixed Upland Deciduous	High Density Log	11.4	80		Very Steep part of bluff.
62	4319 - Mixed Upland Forest	High Density Pole	14.5	76		Steep part of the Bluff.
63	42110 - Planted Red Pine	High Density Pole	12.0	63	171-200	
65	4199 - Other Mixed Upland Deciduous	High Density Pole	45.6	76		Cut in 2009, Brampton south sale.
66	6123 - Lowland Fir	High Density Sapling	5.9	20		Stand cut 1994, #330339401. filling in with Fb/Fs/Wp in majority of stand, R/Rm in others. Some Cedar seeding < 1'.
67	4131 - Aspen, Oak	High Density Pole	6.8	22		Patch of timber that was not cut in 2009.
68	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	21.8	35		Cut in 1980, Power line sale.
69	6120 - Lowland Cedar	High Density Pole	32.3	93		
70	42110 - Planted Red Pine	High Density Pole	12.4	62	111-140	
71	4119 - Mixed Northern Hardwoods	Low Density Sapling	17.4	5		Stand was treated in 2009, Brampton south sale, 330070601. Residual cherry left, stand filling in with Rm/A.
72	6120 - Lowland Cedar	High Density Pole	104.7	103		This whole area was trated in the early 70's by cutting 1 chain wide strips throughout, Strips are regen to Wb, ash, balm, Fb/Fs. Most of the area is good quality cedar although it gets smaller as you go from north to south. the private land adjacent to this was cut about 10 yrs ago, it has T, Fs and cedar filling in. It seems the more the stand is opened up the better chance to get cedar regen started, this cedar is 1-3' tall

S t	Escanab	ba 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:
73	4131 - Aspen, Oak	High Density Pole	70.8	22		Stand was harvested in multiple years but the difference in age is 6 years. Cut under contracts 330319102, 330428801, 33068502. Stand contains areas of Aspen with areas of oak, Rm andpine. there is a pocket of timber in middle of stand that is wet in spring but has merchantable Wp/A/Rm/Fb.
74	6129 - Mixed Coniferous Lowland Forest	High Density Pole	10.8	80		
75	4130 - Aspen	High Density Sapling	32.6	22		There was a fire here, Stand was cut in 1992, Oak Ridge aspen sale, resid. oak left should cut some the bigger oak when treated the next time. There are a couple of small open areas within the stand.
77	6120 - Lowland Cedar	High Density Pole	125.2	103		Strip cuts were done throughout this stand (1 ch) Strips regenerating to Wb/Rm/P/ fb/fs. The majority of the stand is Cedar medium quality.
78	6120 - Lowland Cedar	High Density Pole	12.4	106		Heavy to cedar.
79	42120 - Planted Jack Pine	High Density Pole	33.8	24		Planted in 1992 and 1989.
80	4130 - Aspen	High Density Sapling	49.4	21		cut in 1993, AJ patches sale.
82	6120 - Lowland Cedar	Medium Density Pole	14.0	103		Scattered Cedar that is in clumps of of 4-6/clump. Heavy tag alder throughout the stand.
84	42120 - Planted Jack Pine	High Density Pole	7.4	21		
85	6120 - Lowland Cedar	High Density Pole	12.8	103		This area is south of the pipeline and has had no strip cuts done.
86	42110 - Planted Red Pine	High Density Log	38.8	56	111-140	
87	42110 - Planted Red Pine	High Density Pole	8.6	22		Planted in 1992.
89	6119 - Mixed Lowland Deciduous Forest	High Density Pole	8.1	85		Mature timber but no access due to RR and state hiway.
91	4319 - Mixed Upland Forest	High Density Log	16.8	116		This stand is a mixed bag, E type in areas, H in others.
92	4136 - Aspen, Mixed Conifer	High Density Pole	10.8	75		Aspen is 52 (younger) on east side of driveway and 75 (estimated) on west side, tried to bore 2 aspen and they are hollow.

S t	Escanab		Report 8	– Forested	Compartment: 107 Year of Entry: 2016	RESOURCE	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	HIGAN
94	6120 - Lowland Cedar	High Density Pole	7.5	96		Access road to little bay de noc (days river) is located within stand. timber is big and overmature and falling over.Some ce has tops dying. Where timber has fallen, Fb regen is heavy	edar
95	6132 - Mixed Lowland Forest with Cedar	High Density Log	25.6	78		Mix of H9/C9/M9. Days River Nature trail located within thi stand.	s
96	6113 - Lowland Maple	High Density Pole	5.9	78		North part of stand is loland Decid,(G.ash), south part is upla Decid. (R.m). Nature trail located within this stand.	and

Compartment: 107 Year of Entry: 2016



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
13	310 - Herbaceous Openland	5.8	Unspecified	Unspecified	
17	6220 - Alder/willow	8.2	Unspecified	Unspecified	
35	6220 - Alder/willow	6.7	Unspecified	Unspecified	
39	122 - Road/Parking Lot	1.0	Unspecified	Unspecified	
47	310 - Herbaceous Openland	9.6	Unspecified	Unspecified	
51	31022 - Warm Season Grass	1.0	Unspecified	Unspecified	
64	3303 - Mixed Low Density Trees	1.9	Unspecified	Unspecified	
76	50 - Water	2.9	Unspecified	Unspecified	
81	6239 - Mixed Emergent Wetland	2.9	Unspecified	Unspecified	
83	6230 - Cattail	1.5	Unspecified	Unspecified	
88	122 - Road/Parking Lot	0.9	Unspecified	Unspecified	
90	310 - Herbaceous Openland	4.4	Unspecified	Unspecified	
93	122 - Road/Parking Lot	3.9	Unspecified	Unspecified	
97	6230 - Cattail	6.6	Unspecified	Unspecified	
98	50 - Water	2.6	Unspecified	Unspecified	
99	6220 - Alder/willow	15.3	Unspecified	Unspecified	
100	6230 - Cattail	23.8	Unspecified	Unspecified	