

Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32023 Entry Year 2024 Acreage: 2,964

County Marquette

Management Area: Cyr Swamp

Stand Examiner: Peter Holodnick

Legal Description:

T44N R25W Section(s) 21-27, 36

Identified Planning Goals:

Long term goal should be to develop permanent access into State lands. Access has been restricted from the south this entry by private landowner; access was denied last entry also (in 2004). From the north, numerous stream crossings and drainages, and a narrow, high ground riverbank along the Escanaba River would create water quality and soil compaction issues with a road being built.

Soil and topography:

Ranges from extensive level bog and small wetland drainages to rolling or only slightly hilly upland terrain. Some steep moraine or old dune ridges in Section 23. Major soils are Carbondale and Tawas, Tawas-Deford mucks, Croswell-Deford complex, Rubicon sands, Greenwood Croswell complex, Evart-Pelkie-Sturgeon complex, Emmet fine sandy loam, Emmet-Escanaba complex, Shoepac-Ensley and AuGres-Deford.

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

Multiple, large

private land ownerships along the south side of compartment. These private lands are generally held for recreational use of hunting, with production of forest products as a secondary objective. During the last 10 year treatment cycle (2002), access was denied to the State for removal of timber products on State lands. This resulted in ~39 acres of incomplete selection cutting of northern hardwoods. This would still be the case in 2012. Access from the north would be extremely difficult due to many stream crossings and the narrowness of the high ground between the Escanaba River and the large bog complex. Access from the east would be difficult, also, as this would require crossing Sawmill Creek and /or Mud Creek as well as additional drainages.

Unique Natural Features:

None identified with MNFI. Potential for english sundew and narrow leaved gentian in bogs. Potential for canada rice grass in open wetlands. Potential for calypso orchid, limestone oak fern, round leaved orchid and ram's head orchid. Compartment contains Escanaba River, numerous large bogs and treed bogs with potential for Frigga fritillary. Potential for wood turtle along Escanaba River and Blanding's turtle.

Archeological, Historical, and Cultural Features:

None listed with HAL, although old logging camp sites are present.

Special Management Designations or Considerations:

Large bog complex at the north end is part of the Cyr swamp.

Watershed and Fisheries Considerations:

This compartment contains the Main Branch Escanaba River, Sawmill Creek, Mud Creek, and numerous unnamed tributaries.

The Main Branch Escanaba River is a designated Type 1 trout stream greater than 50' width with a predicted mean July temperature of 69.3 °F (cool stream). 100' plus 5' per 1% increase in slope; buffers are recommended for the Main Branch Escanaba River to protect these areas in accordance with Best Management Practices.

Sawmill Creek, Mud Creek, and the unnamed tributaries are all designated Type 1 trout streams less than 50' width with predicted mean July temperatures that range from 63.5 to 67.6 °F (cold to cool streams). 300' buffers are recommended for Sawmill Creek, Mud Creek, and the unnamed tributaries in riparian areas susceptible to Aspen regeneration. For areas

8/4/2022 1:11:39 PM - Page 1 of 2

not susceptible to Aspen regeneration, 100' plus 5' per 1% increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices.

Wildlife Habitat Considerations:

Compartment 023 is found within the Cyr Swamp Management Area, which is a Swamp landform in Southeastern Marquette County. The State Forest covers about 9,200 acres and is mostly contiguous. The dominant Natural Communities are poor conifer swamps. Major forest cover types include Mixed Lowland Conifer, Bogs and Treed Bogs. The Cyr Swamp is the largest swamp in WUP on State Forest. The State Forest portion of the swamp is about 9,200 mostly contiguous acres and State Forest makes up the major ownership in this area. The management priority for this area is to maintain and promote the un-fragmented, old forest character nature of this management area. Some of the most significant wildlife management issues in the management area are: early successional forest; coarse woody debris; mature forest; and mast.

The following have been identified as featured species for the Cyr Swamp Management Area: Red-shouldered Hawk, Snowshoe Hare, and white-tailed deer.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of peat

and muck and an end moraine of medium-textured till. There is insufficient data to determine the glacial drift thickness. The Cambrian Trempealeau Formation and Ordovician Prairie du Chien Group subcrop below the glacial drift. These formations could be used for stone. The nearest gravel pit is located four miles to the east and there may be some potential on the upland areas. Abandoned iron mines are located three miles to the north and part of this compartment was previously leased for metallic exploration. There is no economic oil and gas production in the UP.

Vehicle Access:

Access from the south is off the end of the Escanaba River Road through gated private lands. Access from the east is off the end of the Swampbuck Road and then across Sawmill Creek. Access from the north is off the end of the Iron Pin Road and then primarily by foot traffic only. Right now, most of this compartment is only accessible by walk-in.

Survey Needs:

Recreational Facilities and Opportunities:

No formal facilities, although there are dispersed campsites along the Escanaba River. Opportunity for hunting, fishing, and scenic viewing.

Fire Protection:

Relatively low fire frequency; mainly lightning caused. Due to the remoteness and lack of roads, suppression would be difficult. Should consider other tactics for suppression other than mechanical.

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

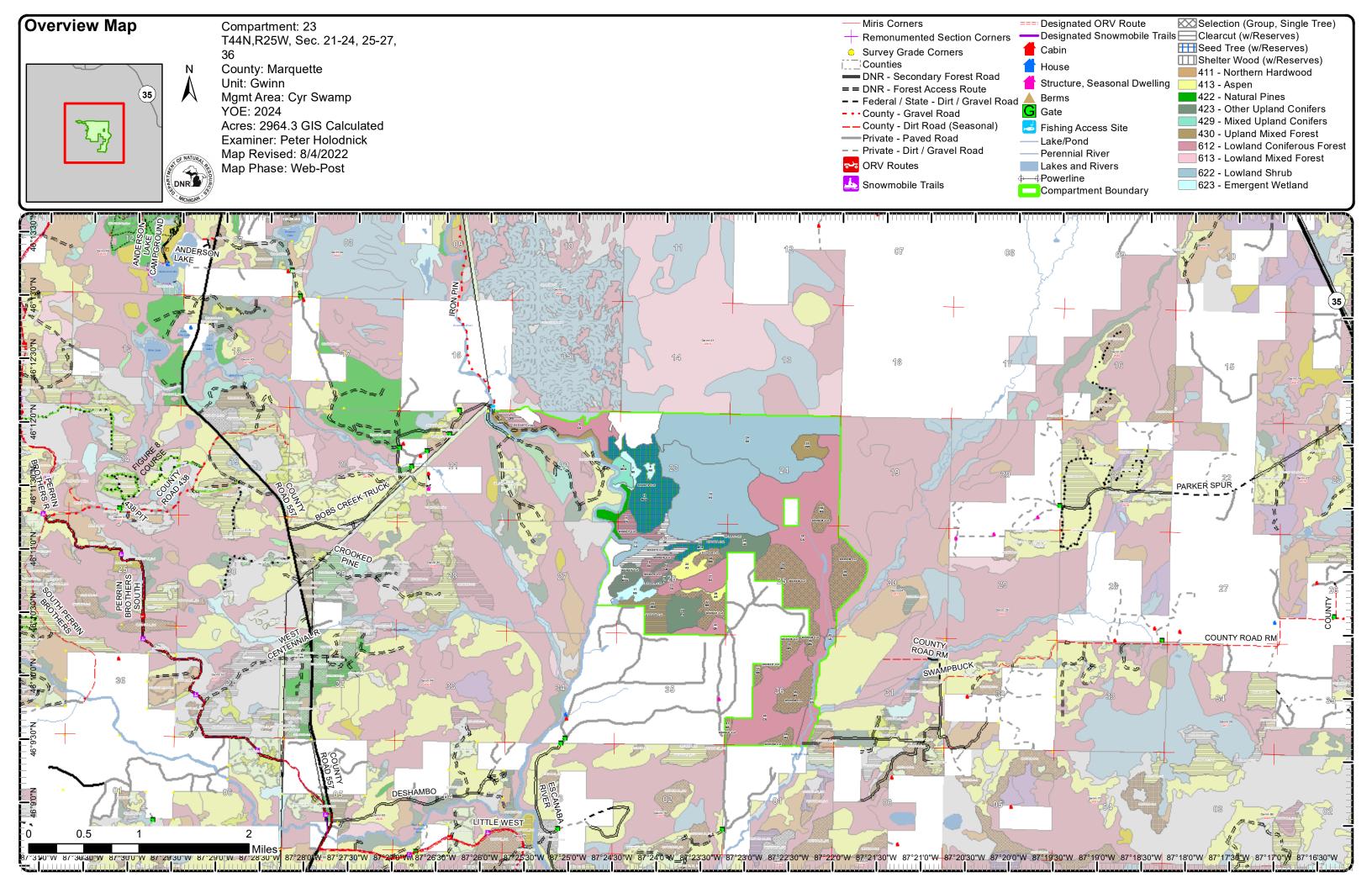
The following information is displayed, where pertinent, on the attached compartment maps:

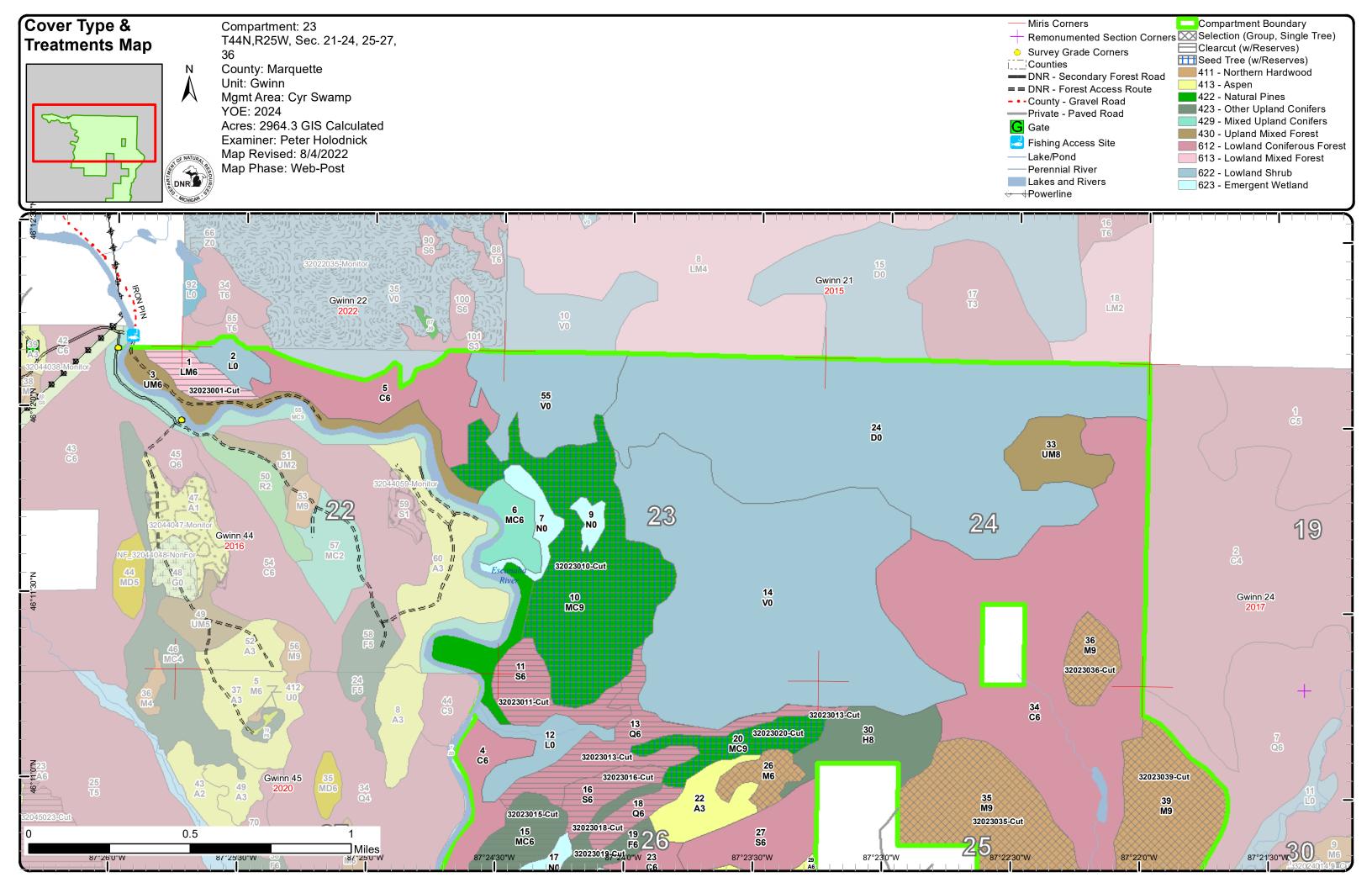
Base feature information, stand boundaries, cover types, and numbers

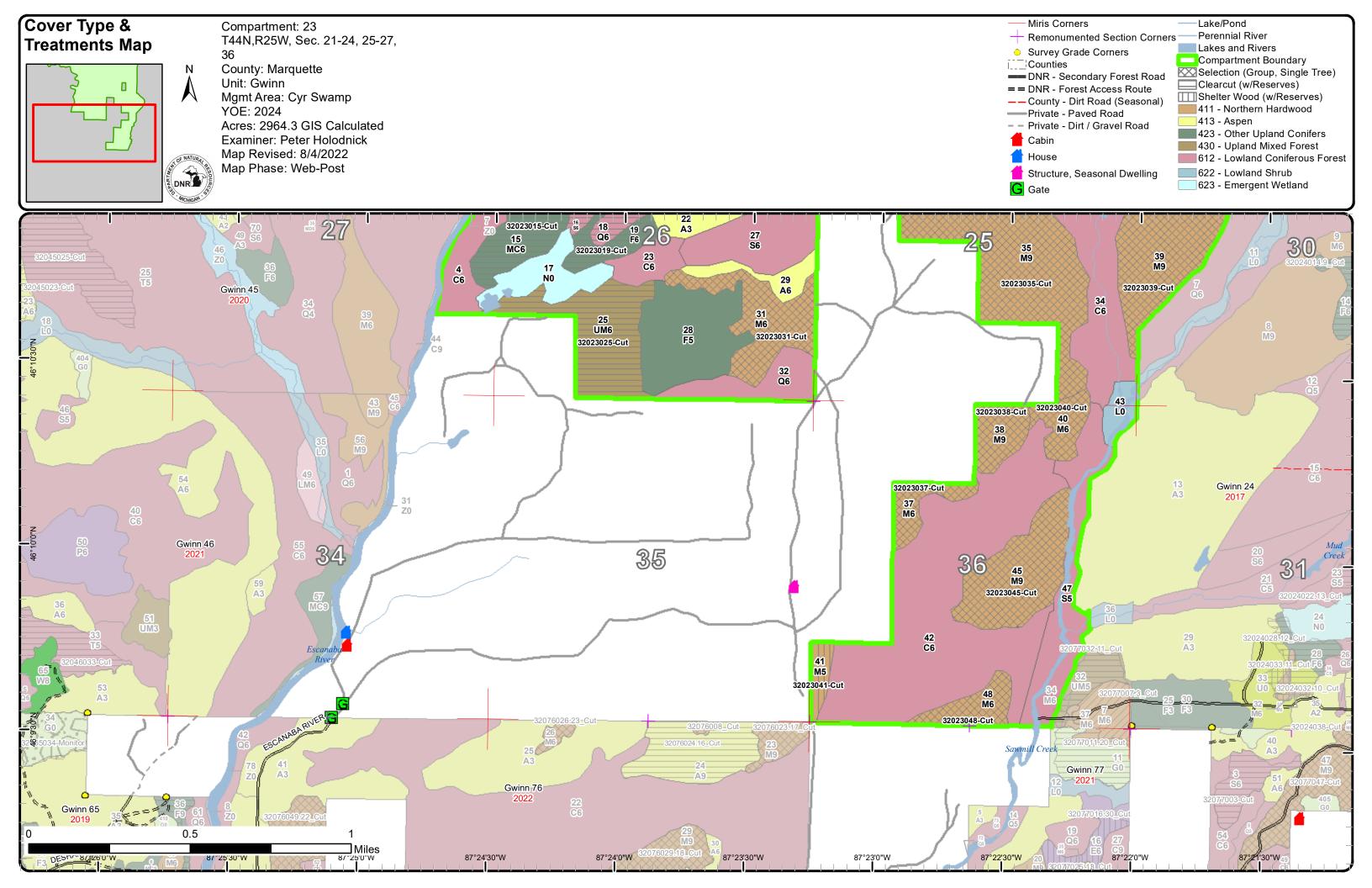
Proposed treatments

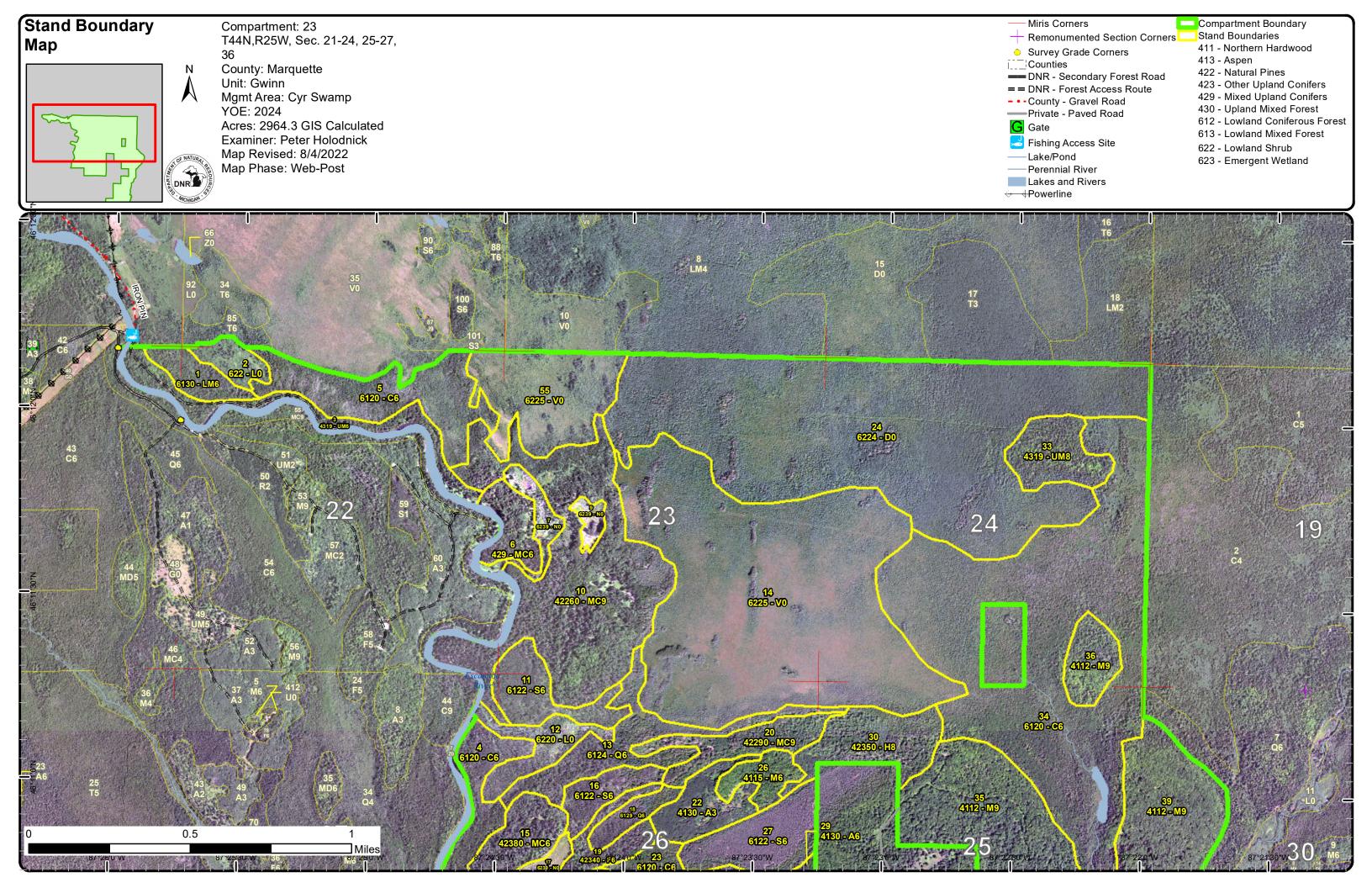
Site condition boundaries

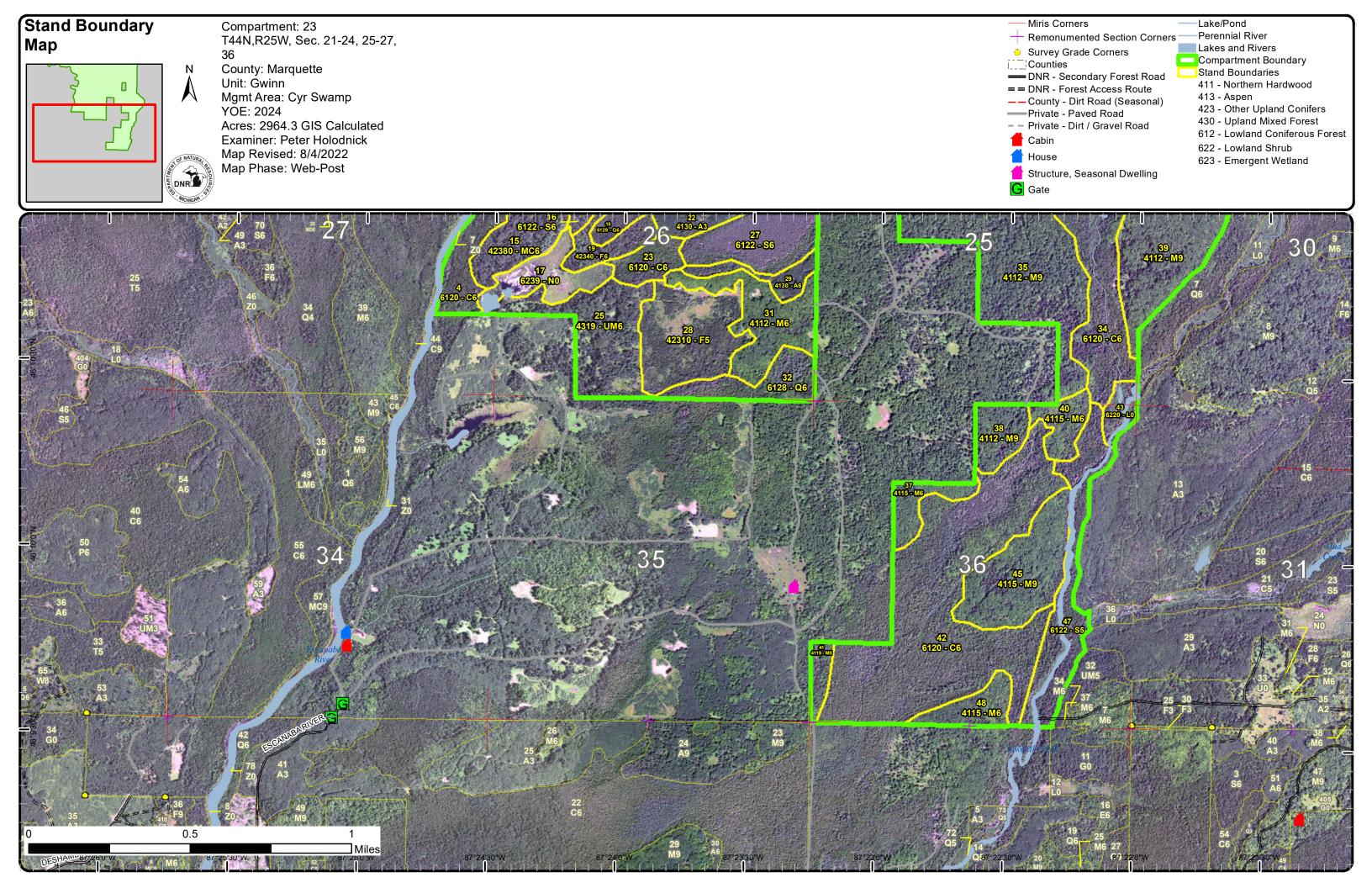
Details on the road access system

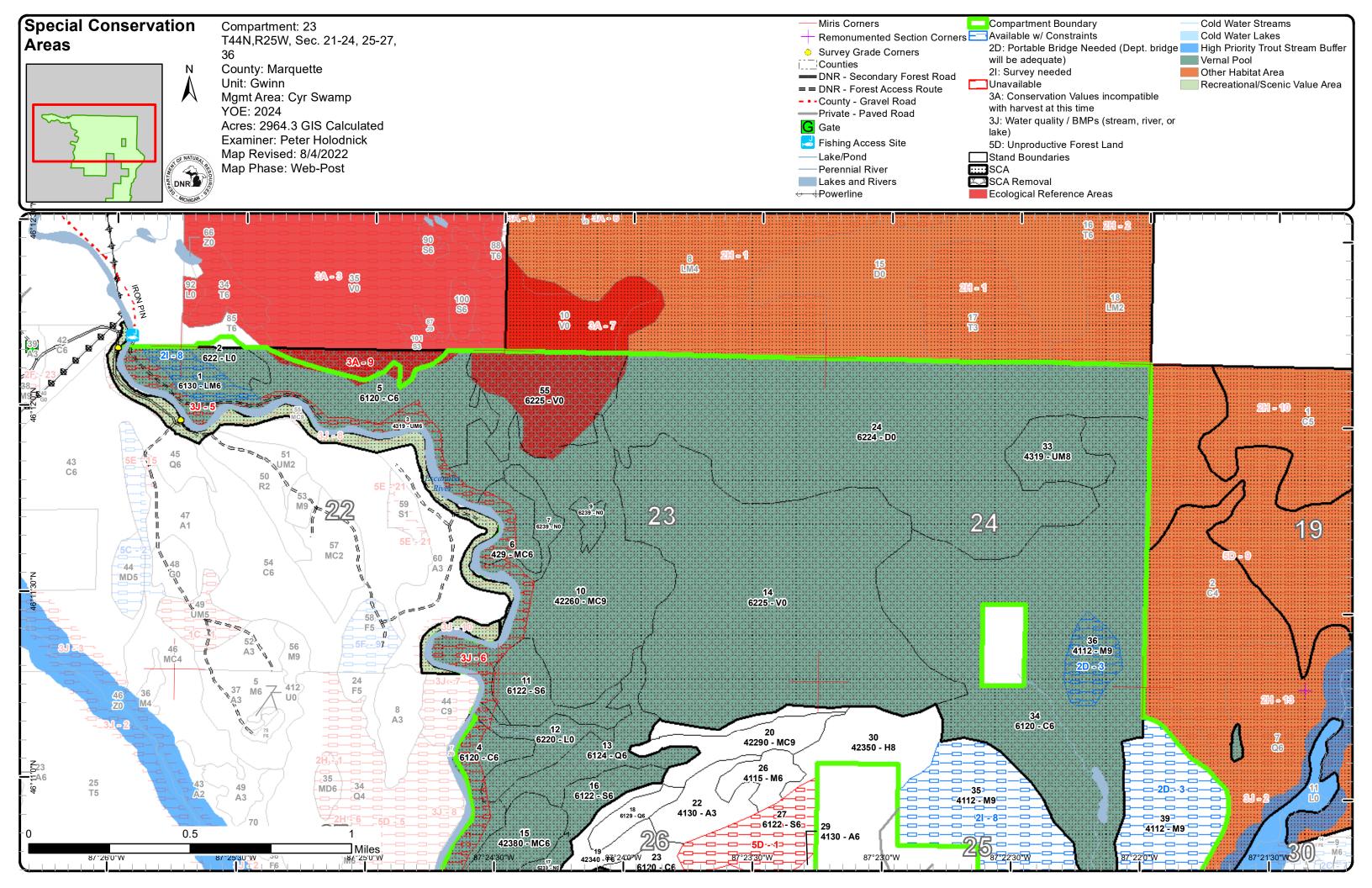


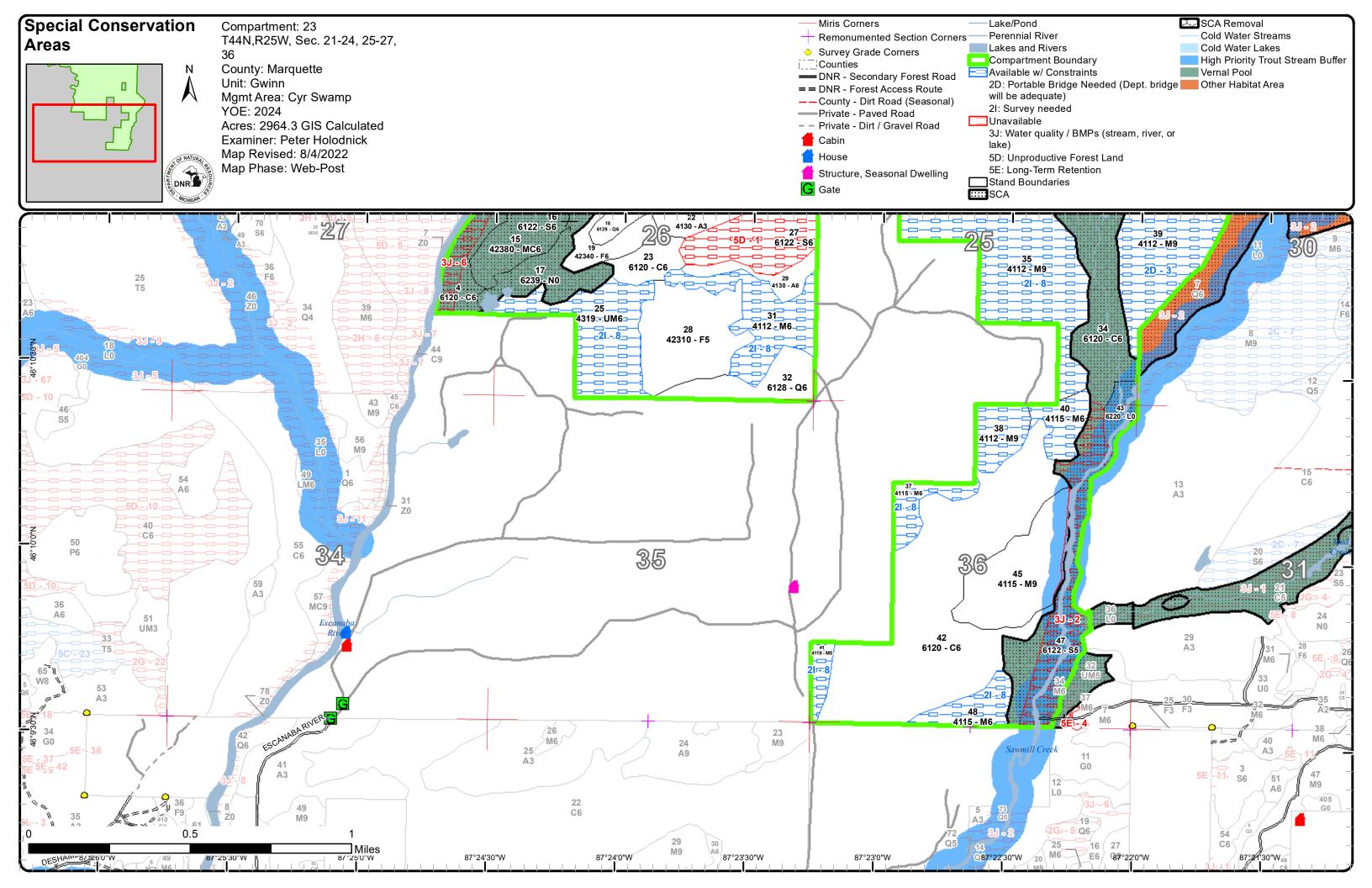












Gwinn Mgt. Unit

Compartment 23 Year of Entry 2024

Peter Holodnick: Examiner

Age Class

	Zac	KO C	3 / 4	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		3 / 4	a a) } /&	/ 8 / K	R. S.	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		707.	Ø. /&			Wind St.	R Jug	No. No.
Aspen	0	0	0	30	13	0	0	0	0	0	0	0	0	0	0	0	0	0	43
Bog	452	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	452
Cedar	0	0	0	0	0	0	0	0	0	0	42	70	588	0	0	0	0	0	700
Hemlock	0	0	0	0	0	0	0	0	0	46	0	0	0	0	0	0	0	0	46
Lowland Conifers	0	0	0	0	0	26	0	0	13	0	55	0	0	0	0	0	0	0	94
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	18
Lowland Shrub	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	100	54	0	0	0	0	0	0	0	154
Marsh	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	0	222	0	0	0	0	0	0	0	222
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	456	456
Treed Bog	412	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	412
Upland Conifers	0	0	0	0	0	0	0	0	0	55	0	0	0	0	0	0	0	0	55
Upland Mixed Forest	0	0	0	0	0	0	0	56	0	0	0	0	34	0	0	0	0	44	134
Upland Spruce/Fir	0	0	0	0	57	0	0	0	0	20	0	0	0	0	0	0	0	0	77
Total	965	0	0	30	70	26	0	56	13	221	373	70	622	0	0	0	0	518	2964



Report 2 – Treatment Summary

Gwinn Mgt. Unit

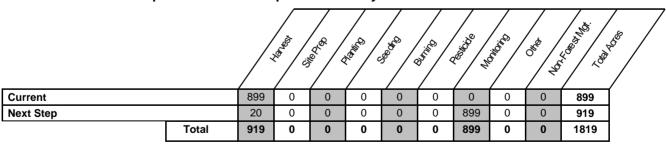
Compartment 23 **Acres of Harvest** Year of Entry: 2024 **Total Compartment Acres: 2,964**

> Commercial Harvest - 441 Harvests with Site Condition - 458 Next Step Harvest - 20 Habitat Cut - 20

Cover Type by Harvest Method

		/				\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	TO THE PARTY OF TH	Jan San San San San San San San San San S	ROLL O			7 \$ /
Lowland Conifers		68	0	0	0	0	0	0	0	0	68	
Lowland Mixed Forest		18	0	0	0	0	0	0	0	0	18	l
Lowland Spruce/Fir		54	0	0	0	0	0	0	0	0	54	l
Natural Mixed Pines		0	0	0	196	0	0	0	0	0	196	l
Northern Hardwood		0	448	0	0	8	0	0	0	0	456	l
Upland Conifers		32	0	0	0	0	0	0	0	0	32	l
Upland Mixed Forest		56	0	0	0	0	0	0	0	0	56	l
Upland Spruce/Fir		20	0	0	0	0	0	0	0	0	20	
	Total	248	448	0	196	8	0	0	0	0	899	

Proposed and Next Step Treatments by Method



Gwinn Mgt. Unit

Report 3 -- Treatments

Compartment: 23 Year of Entry: 2024



n Treatment A d Name Stand CoverType Size S Density

Stand BA Age Range Treatment Type Treatment Method

Cover Type Objective

Age Structure Habitat Cut

Proposed Treatments:

132023001-Cut18.16130 - Fir, Aspen, MaplePoletimber Vell64Unspec VellHarvest RetentionClearcut with Retention6130 - Fir, Aspen, MapleEven-Aged No

Prescription Cut all but Hemlock and Cedar. Leave 3-10% retention. Retention should be closer to 10%. Look for opportunity to retain some larger

Specs: Black Ash in the retention.

Next Step Monitoring, Natural Regen (Re-Inventory)

Acres

Treatments:

Acceptable Any tree species currently in the overstory is acceptable.

Regen:

S

t a

Other WLD: in addition: Higher density cedar should be avoided to prevent tree damage and root compaction. Retain some larger Black Ash - Comment: seeds of black ash are used by game birds, songbirds, and small animals. Even if they die these trees will persist in the environment for

cavity nesters. Retention should be near 10% - This stand was purchased with State Game funds

<u>Site Condition</u> Survey Needed Proposed Start Date: 10/1 /2023

32023010-Cut 163.2 42260 - Natural Sawtimber 92 111-Harvest Seed Tree with 429 - Mixed Even-Aged No **Upland Conifers** Pine, Mixed Well 140 Retention

Deciduous

<u>Prescription</u> Leave tree mark to a residual of 10-30 BA. Leave all Hemlock and Cedar. Retain all Oversized White Pine. In the hardwood pockets favor Specs: Yellow Birch and Black Cherry to keep in the stand. Leave retention in the stream buffer. In retention look for opportunity to retain large fork

crowned bigtooth aspen. Retention should be closer to 10%.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any tree species currently in the overstory is acceptable.

Regen:

Other WLD: state game fund.

Comment:
Site Condition

Proposed Start Date: 10/1 /2023

11 32023011-Cut 33.6 6122 - Black Spruce Poletimber 91 111- Harvest Clearcut with 6122 - Black Even-Aged No Well 140 Retention Spruce

Prescription Cut all but Cedar and White Pine. Leave 3-10% retention. Retention should be closer to 10%. In retention look for the opportunity to retain

Specs: some older Tamarack.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any tree species currently in the overstory is appreciated.

Regen:

Other WLD: state game fund

Comment:
Site Condition

Compartment: 23

S t		Gwiiii	n Mgt. Omt		ĸepo	п э	rreatments		Compartmer Year of Entr		DNR
••	tment me	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habita Cut
13 32023	3013-Cut	55.0	6124 - Lowland Spruce-Fir	Poletimbe Well	er 90	111- 140	Harvest	Clearcut with Retention	6124 - Lowland Spruce-Fir	Even-Aged	No
Prescription Specs: Next Step	of heavy retention	Cedar. I look for	unless Cedar is ma Retention should be the opportunity to a ral Regen (Re-Inver	e closer to retain some	10%. T	his treatm	ient area could b				
Treatments	<u>:</u>		• ,	• /	4-6-1	l-					
Regen: Other	_ Any tree	species	currently in the ove	erstory is ac	ceptabl	ie.					
Comment:											
Site Condit											
Proposed S											
15 32023	3015-Cut	31.8	42380 - Non Pine Upland Conifer, Mixed Deciduous	Poletimbe Well	er 84	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	N
Prescription Specs:			ock and Cedar. Lea ed aspen, black che					ser to 10%. In reter	ntion look for the c	opportunity to I	retain
Next Step Treatments		ng, Natur	ral Regen (Re-Invei	ntory)							
Acceptable Regen:	_ Any tree	species	currently in the over	erstory is ac	ceptabl	le.					
Other Comment:	Wld: sta	ate game	funds.								
Site Condit	<u>ion</u>										
Proposed S	Start Date:	10/1 /20)23								
16 32023	8016-Cut	19.9 6	6122 - Black Spruce	e Poletimbe Well	er 92	141- 170	Harvest	Clearcut with Retention	6122 - Black Spruce	Even-Aged	N
Prescription Specs:	Cut all b	ut Cedar	and hemlock. Lea	ve 3-10% r	etentior	n in areas	of denser cedar	pockets. Leave c	loser to 10% reter	ntion.	
Next Step Treatments		ng, Natur	ral Regen (Re-Inver	ntory)							
Acceptable Regen:	_ Any tree	species	currently in the over	erstory is ac	ceptabl	le.					
Other Comment:	state ga	me fund									
Site Condit	<u>ion</u>										
Proposed S	Start Date:	10/1 /20)23								
18 32023	8018-Cut	13.1	6129 - Mixed Coniferous Lowland Forest	Poletimbe Well	er 77	81-110	Harvest	Clearcut with Retention	6123 - Lowland Fir	Even-Aged	N
Prescription Specs:	Cut all b	ut Cedar	and hemlock. Lea	ve 3-10% r	etentior	n. Leave	closer to 10% re	etention.			
Next Step Treatments		ng, Natur	ral Regen (Re-Invei	ntory)							
Acceptable Regen:	_ Any tree	species	currently in the over	erstory is ac	ceptabl	le.					
Other Comment:	state ga	me fund									
Site Condit	<u>ion</u>										
Proposed 9	Start Date:	10/1 /20)23								

Compartment: 23

S Year of Entry: 2024 t а Treatment Acres Stand Size Stand RΔ **Treatment** Treatment Cover Type Age Habitat n Method Objective Name CoverType Density Age Range Type Structure Cut d Clearcut with 19 32023019-Cut 20.0 42340 - Upland Poletimber 84 Unspec Harvest 42340 - Upland Even-Aged Nο Spruce/Fir Well ified Retention Spruce/Fir Prescription Cut all but Hemlock, Cedar, White Pine and Red Pine. Leave 3-10% retention. Leave closer to 10% retention. Specs: Harvest, Clearcut with Retention; Monitoring, Natural Regen (Re-Inventory) Next Step **Treatments:** Acceptable Any tree species currently in the overstory is acceptable. Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2023

32023020-Cut 32.4 42290 - Natural Sawtimber 98 111-Harvest Seed Tree with 429 - Mixed Even-Aged No **Upland Conifers** Mixed Pine Well 140 Retention

Prescription Leave tree mark Red Pine and White Pine down to 10-30 BA. Retain all oversized White Pine. Leave 3-10% retention. Leave closer to 10% Specs: retention. There will be some walk through areas as some of this stand is already at 30 BA. Size of this treatment may be significantly reduced because of varying Basal Area.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any tree species currently in the overstory is acceptable.

Other Comment:

Regen:

Site Condition

Proposed Start Date: 10/1 /2023

32023025-Cut 56.4 4319 - Mixed Poletimber 62 81-110 Harvest Clearcut with 413 - Aspen Even-Aged No **Upland Forest** Well Retention

Prescription Cut all trees except hemlock and cedar. Leave 3-10% retention. Retention should be closer to 10%. Look for opportunities to include lesser Specs: occurring species in the retention pockets.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any tree species currently in the overstory is acceptable.

Regen: Other Comment:

Site Condition Survey Needed

Proposed Start Date: 10/1 /2023

Single Tree 411 - Northern 32023026-Cut 17.5 4115 - Y.Birch. Poletimber 89 111-Harvest Uneven-No Hemlock NH Well 140 Selection Hardwood Aged

Mark hardwoods to 80-90 BA. No cut Hemlock and Cedar. Favor retention and recruitment of Yellow Birch, Black Cherry, and White Pine. <u>Prescription</u> Designate all merchantable White Spruce and Balsam Fir for removal. Specs:

Monitoring, Natural Regen (Re-Inventory) Next Step

Treatments:

Acceptable Any tree species currently in the overstory is acceptable.

Regen: **Other**

Comment:

Site Condition

s t		Gwinn	Mgt. Unit	Report			Treatments		Compartmen Year of Entry		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	Habit Cut	
31	32023031-Cut	43.6	4112 - Maple, Beech, Cherry Association	Poletimber Well	89	111- 140	Harvest	Single Tree Selection	4119 - Mixed Northern Hardwoods	Uneven- Aged	No	
Pres Spe		mlock. Fa						ersized White Pine . Designate all me				
	Step Monitor	ing, Natura	al Regen (Re-Inver	ntory)								
Acce Reg		e species o	currently in the ove	erstory is acc	eptabl	e.						
Othe Com	<u>er</u> nment:											
		vey Neede										
<u>Prop</u>	osed Start Date:	10/1 /202	23									
35	32023035-Cut	144.1	4112 - Maple, Beech, Cherry Association	Sawtimber Well	89	141- 170	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	No	
<u>Pres</u> Spe	cs: all mero	chantable s		ome large fu	ture sr	nag trees f	for wildlife. Leav	eating new ones to e Cedar and Heml			n. Remove	
	Step Monitor	ing, Natura	al Regen (Re-Inver	ntory)								

<u>Other</u> Comment: Site Condition Survey Needed Proposed Start Date: 10/1 /2023

36 32023036-Cut 23.0 4112 - Maple, Sawtimber 103 141- Harvest Single Free 411 - Northern Uneven-Beech, Cherry Well 170 Selection Hardwood Aged Association	No
------------------------------------------------------------------------------------------------------------------------------------------------------------	----

Prescription Mark stand to 70-90 BA. Maintain older canopy gaps that are growing in while creating new ones to establish/release regeneration. Remove Specs: all merchantable spruce/fir. Leave some large future snag trees for wildlife. Leave cedar ,hemlock, and Yellow Birch. Favor retention and recruitment of black cherry, and basswood.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

 $\underline{\mbox{Acceptable}}$ Any tree species currently in the overstory is acceptable. $\underline{\mbox{Regen:}}$

Other Comment:

Site Condition Portable Bridge Needed

S t	Tanatanant Assas Ctond			F	Report 3 Treatments					Compartment: 23 Year of Entry: 2024		
a n d	Treatment Name	Acres	Stand CoverType	Size S Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habita Cut	
37	32023037-Cut	15.0	4115 - Y.Birch, Hemlock NH	Poletimber Well	89	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	No	
Next Trea Accor Reg Othe Com	cs: all mer Favor t Step Monito atments: eptable Any tre en: er ament:	rchantable retention a vring, Natur ee species	spruce/fir. Leave s and recruitment of al Regen (Re-Inve currently in the over	some large fur black cherry, entory)	ture sr bassw	nag trees vood and	for wildlife. Lea	ereating new ones to ve cedar and hemio		regeneration	n. Remove	
38	32023038-Cut	18.7	4112 - Maple, Beech, Cherry Association	Sawtimber Well	89	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	No	
Pres Spec	<u>cs:</u> all mei	chantable		some large fu	ture sr	nag trees		reating new ones to ve cedar ,hemlock,		regeneration	n. Remove	
	t Step Monito atments:	ring, Natur	al Regen (Re-Inve	entory)								

Regen:

<u>Acceptable</u> Any tree species currently in the overstory would be acceptable.

Other Comment:

Site Condition Survey Needed Proposed Start Date: 10/1 /2023

39	32023039-Cut	97.2	4112 - Maple,	Sawtimber	89	141-	Harvest	Single Tree	411 - Northern	Uneven-	No
			Beech, Cherry	Well		170		Selection	Hardwood	Aged	
			Association								

Prescription Mark stand to 70-90 BA. Maintain older canopy gaps that are growing in while creating new ones to establish/release regeneration. Remove Specs: all merchantable spruce/fir. Leave some large future snag trees for wildlife. Leave cedar ,hemlock, and yellow birch.

Favor retention and recruitment of black cherry, basswood.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any tree species currently in the overstory would be acceptable.

Regen:

<u>Other</u> Comment:

Site Condition Portable Bridge Needed

a n d	Treatment Name	Acres	Stand CoverType	Size Stan Density Age		Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
40	32023040-Cut	15.8	4115 - Y.Birch, Hemlock NH	Poletimber 8 Well	9 111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	No

<u>Prescription</u> Mark stand to 70-90 BA. Maintain older canopy gaps that are growing in while creating new ones to establish/release regeneration. Do not <u>Specs:</u> cut any oversized trees of any species. Remove all merchantable spruce/fir. Leave some large future snag trees for wildlife. Leave cedar and

hemlock.

Favor retention and recruitment of black cherry, yellow birch and basswood.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any tree species currently in the overstory would be acceptable.

Regen:

Other Comment:

<u>Site Condition</u> Survey Needed <u>Proposed Start Date:</u> 10/1 /2023

41 32023041-Cut 8.3 4119 - Mixed Poletimber 89 111- Harvest Shelterwood 411 - Northern Uneven-Northern Hardwoods Medium 140 Hardwood Aged

Prescription Mark stand to 40-60 BA. Maintain older canopy gaps that are growing in while creating new ones to establish/release regeneration. Remove all merchantable spruce, fir, and aspen. Leave some large future snag trees for wildlife. Leave cedar and hemlock. Favor basswood, black cherry, and yellow birch to keep in the stand.

<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any tree species currently in the overstory is acceptable.

Regen:

Other Comment:

<u>Site Condition</u> Survey Needed <u>Proposed Start Date:</u> 10/1 /2023

4115 - Y.Birch. 45 32023045-Cut 54.9 Sawtimber 89 141-Harvest Single Tree 411 - Northern Uneven-Nο Hemlock NH Well 170 Selection Hardwood Aged

Prescription Mark stand to 70-90 BA. Maintain older canopy gaps that are growing in while creating new ones to establish/release regeneration. Remove all merchantable spruce/fir. Leave some large future snag trees for wildlife. Leave Cedar ,Hemlock, and Yellow Birch. Favor retention and recruitment of black cherry basswood.

<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any tree specie currently in the overstory would be acceptable.

Regen:

Other Put a 100ft buffer on sawmill creek.

Comment:

Site Condition

Proposed Start Date: 10/1 /2023

32023048-Cut 4115 - Y.Birch, 17.8 Poletimber 111-Harvest Single Tree 411 - Northern Uneven-No Hemlock NH Well 140 Selection Hardwood Aged

<u>Prescription</u> Mark stand to 70-90 BA. Maintain older canopy gaps that are growing in while creating new ones to establish/release regeneration. Remove <u>Specs:</u> all merchantable spruce/fir. Leave some large future snag trees for wildlife. Leave cedar and hemlock.

Favor retention and recruitment of black cherry, yellow birch and basswood.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any tree species currently in the overstory is acceptable.

Regen:

Other Comment:

<u>Site Condition</u> Survey Needed <u>Proposed Start Date:</u> 10/1 /2023

Gwinn Mgt. Unit Report 3 -- Treatments Compartment: 23 s Year of Entry: 2024 t а Cover Type Objective Treatment Size Stand ВА Treatment Acres Stand **Treatment** Age n Habitat Name CoverType Density Age Range Type Method Structure Cut d

Total Treatment 899.4 Acreage Proposed:

Gwinn Mgt. Unit

Peter Holodnick: Examiner

Compartment: 23 Year of Entry: 2024

Availa	ability for	Managemer	nt						
Total	Acres	Acres Avail	Acres		Domina	nt Site	e Con	dition	s
Acres	Available	With Condition	Not Available		2D	21	ЗА	3J	5D
43	43	0	0	Aspen					
451	451	0	0	Bog					
700	673	0	27	Cedar			4	23	
46	46	0	0	Hemlock					
94	94	0	0	Lowland Conifers					
18	0	18	0	Lowland Mixed Forest		18			
52	50	0	2	Lowland Shrub				2	
154	53	0	101	Lowland Spruce/Fir				55	46
49	47	0	2	Marsh				2	
222	196	0	26	Natural Mixed Pines				26	
456	70	384	2	Northern Hardwood	120	263		2	
412	412	0	0	Treed Bog					
55	44	0	10	Upland Conifers				10	
134	34	56	44	Upland Mixed Forest		56		44	
77	77	0	0	Upland Spruce/Fir		0			
2,964	2,291	458	215	Total Forested Acres	120	338	4	164	46
	77%	15%	7%	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.

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	5D: Unproductive Forest Land	46	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
2	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	56	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

Report 4 – Site Conditions

Gwinn Mgt. Unit

Compartment: 23 Year of Entry: 2024 Peter Holodnick: Examiner

3	Available	2D: Portable Bridge Needed (Dept. bridge will be adequate)	120	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	57	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	52	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
8	Available	2I: Survey needed	338	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
9	Unavailable	3A: Conservation Values incompatible with harvest at this time	24	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: ERA: Cyr Fen, Par	tterned Fen					

Mgt. Unit

Compartment: #Type! Year of Entry:



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
Comments				

Gwinn Mgt. Unit Compartment: 23
Year of Entry 2024



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.

Conservation	on Type	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 oxygen conditions 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	ies 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 specified 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.	ies (e.g., slimy sculpin) to persist from ese conditions due to substantial
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems ir 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 effe as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, diversity of plants and wildlife. Riparian cts on water quality and quantity, as well
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of identified as Element Occurrences (EOs) by the Michigan Natural context of their natural community classification system. Elemen (Excellent) or B (Good) and a Global (G) or State (S) element (rathreatened (2), or rare (3) serve as an initial base of ERAs. They the State. The system is comprised of individual or associations managed for restoration and maintenance of natural ecological public recommendations for lands as ERAs using the DNR Content of the Michigan Natural ecological public recommendations for lands as ERAs using the DNR Content of the Michigan Natural ecological public recommendations for lands as ERAs using the DNR Content of the Michigan Natural ecological public recommendations for lands as ERAs using the DNR Content of the Michigan Natural ecological public recommendations for lands as ERAs using the DNR Content of the Michigan Natural ecological public recommendations for lands as ERAs using the DNR Content of the Michigan Natural ecological public recommendations for lands as ERAs using the DNR Content of the Michigan Natural ecological public recommendations for lands as ERAs using the DNR Content of the Michigan Natural ecological public recommendations for lands as ERAs using the DNR Content of the Michigan Natural ecological public recommendations for lands as ERAs using the DNR Content of the Michigan Natural ecological public recommendations for lands as ERAs using the DNR Content of the Michigan Natural ecological public recommendations for lands as ERAs using the DNR Content of the Michigan Natural ecological public recommendations for lands as ERAs using the DNR Content of the Michigan Natural ecological public recommendations for lands as ERAs using the DNR Content of the Michigan Natural ecological public recommendations for lands as ERAs using the DNR Content of the Michigan Natural ecological public recommendations for lands as ERAs using the DNR Content of the Michigan Natural ecological public recommendations for	al Features Inventory (MNFI) within the t Occurrences with viability ranks of A arity) ranking of endangered (1), may be located upon any ownership in of natural community types that are processes and values. The public may



Stand	tand Level 4 Cover Type Size Dens					Acres Stand Age BA Range Managed Site				Site	General Comments		
1	6130 - Fir, A	spen, Mar	ole Po	letimb	er Well	18.1	64 l	Unspecified	N/A		Lowland stand		
(Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size			
North	thern White Cedar	10	Pole	8		Ta	ng Alder	High	5 - 10 feet	Tall Shrub			
	Black Spruce	10	Pole/Sapling	7		Ва	lsam Fir	Medium	Variable	Sapling			
	Black Ash	14	Pole/Log	8									
	Red Maple	15	Log/Pole	12									
	Paper Birch	5	Pole/Sapling	5									
	Hemlock	1	Log/Pole	16									
C	Quaking Aspen	20	Pole/Sapling	7	64								
E	Balsam Poplar	5	Pole	7									
	Balsam Fir	20	Pole/Sapling	6									
2	622 - Lowl	land Shrub) 1	Nonst	cked	14.1	Į	Unspecified	No				
						Sub-Ca	nopy Species	s Density	Avg. Height	Size			
							White Cedar		5 - 10 feet	Sapling			
						Ta	ng Alder	Medium	5 - 10 feet	Tall Shrub			
3	4319 - Mixed	Upland Fo	rest Po	letimb	er Well	43.9	90	51-80	N/A		Mainly high ground along Escanaba River. Old trail is badly rutted by		
(Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	ORV traffic and growing in with tagalder/saplings. Rustic campsite on river.		
E	Balsam Poplar	5	Pole	8		Bals	am Poplar	Low	10 - 20 feet	Sapling			
	White Pine	10	XLog	18		Ва	lsam Fir	High	Variable	Sapling			
	Balsam Fir	15	Pole	7	52	Ta	ng Alder	Medium	5 - 10 feet	Tall Shrub			
1	White Spruce	10	Pole/Log	8									
Nort	thern White Cedar	10	Pole/Log	8									
C	Quaking Aspen	10	Pole/Log	10									
	Paper Birch	20	Pole/Log	9	90								
	Black Cherry	3	Pole	7									
	Red Maple	12	Pole/Log	8									
	Hemlock	5	Log	11									
4	Hemlock 6120 - Low			11	er Well	42.4	98	141-170	N/A				
-	6120 - Low		ır Po	11 letimb	er Well	42.4	98	141-170	N/A				
	6120 - Low	land Ceda	ır Po	11 letimb		42.4	98	141-170	N/A				
	6120 - Low Canopy Species	vland Ceda	r Po	11 letimb		42.4	98	141-170	N/A				
	6120 - Low Canopy Species Black Spruce	vland Ceda	size Class Pole/Log	11 letimb		42.4	98	141-170	N/A				



Stand	Level 4 Co	over Type	S	ize De	ensity	Acres	Stand Age B	BA Range	Managed S	ite	General Comments
5	6120 - Lov	wland Ceda	ır Po	oletimb	er Well	69.8	101 U	Jnspecified	N/A		Primarily cedar interior (3 - 8") with mixed areas of spruce, tamarack, fir,
C	anopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size	ash, birch and aspen. Scattered large white pine.
В	lack Spruce	5	Pole/Log	8		Northern	White Cedar	Low	5 - 10 feet	Sapling	
North	ern White Cedar	80	Pole	5	101						
	Black Ash	5	Pole	8							
F	Paper Birch	5	Pole/Sapling	6							
	Tamarack	5	Pole/Log	8							
6	429 - Mixed L	Jpland Con	ifers Po	oletimb	er Well	23.0	87	1-50	N/A		Mix of spruce/fir and aspen. Lots of dead Fir and Damaged spruce due to spruce budworm.
C	anopy Species	% Cover	Size Class	DBH	l Age						to spruce budworm.
	Jack Pine	5	Log/Pole	8							
Qı	uaking Aspen	15	Pole/Log	8							
В	Black Spruce	10	Pole/Log	8							
North	ern White Cedar	5	Pole/Log	8							
	Balsam Fir	15	Log/XLog	8							
	Hemlock	10	Log/Pole/XLog	10							
'	White Pine	40	XLog/Log	20	87						
7	6239 - Mixed E	mergent W	etland	Nonst	ocked	15.9	U	Inspecified	No		flooded timber, due to beaver activity, and drainage into Escanaba River.
		•			Sub-Car	nopy Species	Density	Avg. Height	Size		
						Bal	sam Fir	Low	5 - 10 feet	Sapling	
							00	LOW	0 101000	Capiling	
							White Cedar	Low	5 - 10 feet	Sapling	
9	6239 - Mixed E	mergent W	etland	Nonsto	ocked		White Cedar				beaver activity
	6239 - Mixed E 12260 - Natural Pir			awtimb	er Well	Northern	White Cedar	Low	5 - 10 feet		Isolated stand surrounded by lowlands within Escanaba River zone.
10 4	12260 - Natural Pii anopy Species	ne, Mixed D	Deciduous Sa	awtimb DBH		6.8 189.9 Sub-Car	White Cedar U 92 nopy Species	Low Unspecified	5 - 10 feet No N/A Avg. Height	Sapling	Isolated stand surrounded by lowlands within Escanaba River zone. There are a few pockets of poor quality maple but this is mostly a White
10 4	12260 - Natural Pir	ne, Mixed D	Deciduous Sa Size Class Log/Pole	DBH	er Well	6.8 189.9 Sub-Car	White Cedar U 92 nopy Species ite Pine	Low Unspecified	No N/A Avg. Height 10 - 20 feet	Sapling Size Sapling	Isolated stand surrounded by lowlands within Escanaba River zone.
10 4	12260 - Natural Pin anopy Species Red Maple ern White Cedar	ne, Mixed D % Cover 15 5	Deciduous Sa Size Class Log/Pole Log/Pole	DBH 14 10	er Well	6.8 189.9 Sub-Car	White Cedar U 92 nopy Species	Low Unspecified 111-140 Density	5 - 10 feet No N/A Avg. Height	Sapling	Isolated stand surrounded by lowlands within Escanaba River zone. There are a few pockets of poor quality maple but this is mostly a White
10 4 Ca	12260 - Natural Pinanopy Species Red Maple ern White Cedar uaking Aspen	ne, Mixed D **Cover** 15	Deciduous Sa Size Class Log/Pole Log/Pole Log/Pole	DBH 14 10 10	er Well	6.8 189.9 Sub-Car	White Cedar U 92 nopy Species ite Pine	Jnspecified 111-140 Density High	No N/A Avg. Height 10 - 20 feet	Sapling Size Sapling	Isolated stand surrounded by lowlands within Escanaba River zone. There are a few pockets of poor quality maple but this is mostly a White
10 4 Ca	12260 - Natural Pinanopy Species Red Maple ern White Cedar uaking Aspen gtooth Aspen	ne, Mixed D % Cover 15 5	Deciduous Sa Size Class Log/Pole Log/Pole	DBH 14 10	er Well	6.8 189.9 Sub-Car	White Cedar U 92 nopy Species ite Pine	Jnspecified 111-140 Density High	No N/A Avg. Height 10 - 20 feet	Sapling Size Sapling	Isolated stand surrounded by lowlands within Escanaba River zone. There are a few pockets of poor quality maple but this is mostly a White
10 4 Ca	12260 - Natural Pinanopy Species Red Maple ern White Cedar uaking Aspen	ne, Mixed E **Cover* 15 5 10 5 10	Deciduous Sa Size Class Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole	DBH 14 10 10 12 16	er Well	6.8 189.9 Sub-Car	White Cedar U 92 nopy Species ite Pine	Jnspecified 111-140 Density High	No N/A Avg. Height 10 - 20 feet	Sapling Size Sapling	Isolated stand surrounded by lowlands within Escanaba River zone. There are a few pockets of poor quality maple but this is mostly a White
10 4 Ca Northe	12260 - Natural Pinanopy Species Red Maple ern White Cedar uaking Aspen gtooth Aspen	ne, Mixed D **Cover** 15 5 10 5 10 40	Deciduous Sa Size Class Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole XLog/Log	DBH 14 10 10 12 16 20	er Well	6.8 189.9 Sub-Car	White Cedar U 92 nopy Species ite Pine	Jnspecified 111-140 Density High	No N/A Avg. Height 10 - 20 feet	Sapling Size Sapling	Isolated stand surrounded by lowlands within Escanaba River zone. There are a few pockets of poor quality maple but this is mostly a White
10 4 Ca	42260 - Natural Pinanopy Species Red Maple ern White Cedar uaking Aspen gtooth Aspen Red Pine	ne, Mixed E **Cover* 15 5 10 5 10	Deciduous Sa Size Class Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole	DBH 14 10 10 12 16	er Well	6.8 189.9 Sub-Car	White Cedar U 92 nopy Species ite Pine	Jnspecified 111-140 Density High	No N/A Avg. Height 10 - 20 feet	Sapling Size Sapling	Isolated stand surrounded by lowlands within Escanaba River zone. There are a few pockets of poor quality maple but this is mostly a White
Northe	anopy Species Red Maple ern White Cedar uaking Aspen gtooth Aspen Red Pine White Pine Jack Pine	ne, Mixed D **Cover** 15 5 10 5 10 40	Size Class Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole XLog/Log Log/Pole	DBF 14 10 10 12 16 20 10	er Well	6.8 189.9 Sub-Car	92 nopy Species ite Pine sam Fir	Jnspecified 111-140 Density High	No N/A Avg. Height 10 - 20 feet	Sapling Size Sapling	Isolated stand surrounded by lowlands within Escanaba River zone. There are a few pockets of poor quality maple but this is mostly a White
10 4 Ca	anopy Species Red Maple ern White Cedar uaking Aspen gtooth Aspen Red Pine White Pine Jack Pine	ne, Mixed E **Cover* 15	Size Class Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole XLog/Log Log/Pole	DBH 14 10 10 12 16 20 10 Deletimb	er Well Age	6.8 189.9 Sub-Car Wh Bal	92 nopy Species ite Pine sam Fir	Low Unspecified 111-140 Density High Medium	5 - 10 feet No N/A Avg. Height 10 - 20 feet 5 - 10 feet	Sapling Size Sapling	Isolated stand surrounded by lowlands within Escanaba River zone. There are a few pockets of poor quality maple but this is mostly a White Pine stand. Lots of topography but still operable.
10 4 Ca Northe	anopy Species Red Maple ern White Cedar uaking Aspen gtooth Aspen Red Pine White Pine Jack Pine	ne, Mixed E **Cover* 15 5 10 40 15 ack Spruce **Cover*	Size Class Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole XLog/Log Log/Pole	DBH 14 10 10 12 16 20 10 DBH	er Well 92 er Well Age	6.8 189.9 Sub-Car Wh Bal	92 nopy Species ite Pine sam Fir	Low Unspecified 111-140 Density High Medium	5 - 10 feet No N/A Avg. Height 10 - 20 feet 5 - 10 feet	Sapling Size Sapling	Isolated stand surrounded by lowlands within Escanaba River zone. There are a few pockets of poor quality maple but this is mostly a White Pine stand. Lots of topography but still operable.
North Qu Big	anopy Species Red Maple ern White Cedar uaking Aspen gtooth Aspen Red Pine White Pine Jack Pine 6122 - Bl anopy Species	ne, Mixed E **Cover* 15 5 10 40 15 ack Spruce **Cover*	Size Class Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole XLog/Log Log/Pole	DBH 14 10 10 12 16 20 10 DBH	er Well 92 er Well Age	6.8 189.9 Sub-Car Wh Bal	92 nopy Species ite Pine sam Fir	Low Unspecified 111-140 Density High Medium	5 - 10 feet No N/A Avg. Height 10 - 20 feet 5 - 10 feet	Sapling Size Sapling	Isolated stand surrounded by lowlands within Escanaba River zone. There are a few pockets of poor quality maple but this is mostly a White Pine stand. Lots of topography but still operable.
10 4 Norther Qu Big	anopy Species Red Maple ern White Cedar uaking Aspen gtooth Aspen Red Pine White Pine Jack Pine 6122 - Bl anopy Species	ne, Mixed E **Cover** 15 5 10 5 10 40 15 ack Spruce **Cover** 90	Deciduous Sa Size Class Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole Log/Pole XLog/Log Log/Pole Size Class Log/Pole/XLog	DBH 10 10 10 10 10 10 10 10 10 10 10 10 10	er Well 92 er Well Age	6.8 189.9 Sub-Car Wh Bal	92 nopy Species ite Pine sam Fir	Low Unspecified 111-140 Density High Medium	5 - 10 feet No N/A Avg. Height 10 - 20 feet 5 - 10 feet	Sapling Size Sapling	Isolated stand surrounded by lowlands within Escanaba River zone. There are a few pockets of poor quality maple but this is mostly a White Pine stand. Lots of topography but still operable.



Stand	Level 4 Cove	er Type	S	ize Density	Acres	Stand Age	BA Range	Managed S	Site	General Comments
12	6220 - Alde	r/willow	1	Nonstocked	27.9	ı	Jnspecified	No		contains unnamed drainage/creek
					Sub-Ca	nopy Species	Density	Avg. Height	Size	
					Ва	Isam Fir	Low	< 5 feet	Sapling	
					Northerr	White Cedar	Low	< 5 feet	Sapling	
					Blac	k Spruce	Low	< 5 feet	Sapling	
13	6124 - Lowland	Spruce	-Fir Po	letimber Well	55.1	90	111-140	N/A		
(Canopy Species %	Cover	Size Class	DBH Age						
	Black Spruce	45	Log/Pole	10 90						
	hern White Cedar	20	Pole/Log	8						
	Tamarack	15	Log/Pole	10						
	Balsam Fir	20	Pole/Sapling	5						
14	6225 - E	Bog	1	Nonstocked	376.3		Jnspecified	No		Black spruce and tamarack bog.
					Sub-Ca	nopy Species	Density	Avg. Height	Size	
					Northern	White Cedar	High	10 - 20 feet	Sapling	
					Та	g Alder	High	5 - 10 feet	Tall Shrub	
15	42380 - Non Pine Upla Decidud		fer, Mixed Po	letimber Well	31.9	84	81-110	N/A		Semi-open aspen, due to beaver feeding. Heavier conifers along edges.
(Canopy Species %	Cover	Size Class	DBH Age						
Nort	hern White Cedar	10	Log/XLog/Pole	12						
	Black Spruce	15	Pole/Log	8						
	Hemlock	10	Log/Pole	16						
	White Spruce	10	Pole/Log	8						
	Red Maple	10	Log/Pole	8						
	Balsam Fir	22	Sapling/Pole	4						
(Quaking Aspen	23	Log/Pole	10 84						
16	6122 - Black	Spruce	e Po	letimber Well	19.9	92	141-170	N/A		Contains small stream.
•		Cover		DBH Age						
	Tamarack	5	Log/Pole	10						
	Black Spruce	85	Log/Pole	12 92						
Nort	hern White Cedar	10	Pole/Log	8						
17	6239 - Mixed Eme	rgent W	etland I	Nonstocked	26.0	ı	Jnspecified	No		Beaver ponds and creek with surrounding tagalder - drains into Escanaba
					Sub-Ca	nopy Species	Density	Avg. Height	Size	River.
						k Spruce	Low	10 - 20 feet	Sapling	
					Ва	Isam Fir	Low	10 - 20 feet	Sapling	
							,			



Stand	Level 4 C	over Type		Size Densit	y Acre	es Stai	nd Age	BA Range	Managed S	Site	General Comments
18	6129 - Mixed Conif	erous Lowla	and Forest F	Poletimber V	Vell 13.	1	77	81-110	N/A		Spruce/cedar swamp in middle of narrow aspen ridges.
	Canopy Species	% Cover	Size Class	DBH Ag	je						
	Tamarack	45	Pole	9 7	7						
	Black Spruce	40	Log/Pole	10							
No	rthern White Cedar	15	Pole/Log	8							
19	42340 - Upla	and Spruce	/Fir F	Poletimber V	Vell 20.	0	84	Unspecified	N/A		Narrow upland ridge surrounding lowland spruce/cedar. Aspen is falling
	Canopy Species	% Cover	Size Class	DBH Ag	je						apart
	White Pine	3	Log/Pole	16							
	Hemlock	10	Log/Pole	16							
	Balsam Fir	20	Pole/Sap/Log	5							
	Black Spruce	15	Pole/Log	8							
	Quaking Aspen	25	Log/Pole	14 84	4						
	Red Pine	2	Log/Pole	16							
	White Spruce	25	Log/Pole	10							
20	42290 - Natu	ural Mixed F	Pine S	Sawtimber V	Vell 32.	4	98	111-140	N/A		
	Canopy Species	% Cover	Size Class	DBH Ag	je Sub-	Canopy	/ Specie	es Density	Avg. Height	Size	
	Red Pine	40	XLog/Log	18		Balsam	Fir	Medium	10 - 20 feet	Sapling	
	White Pine	50	XLog/Log	18 98		ualdaa /	lanan	NA a alicensa	40 00 (0 1'	
	***************************************	50	ALUG/LUG	10 90		uaking A	лъреп	Medium	10 - 20 feet	Sapling	
	Balsam Fir	5	Sapling/Pole		5 Q	White P		High	5 - 10 feet	Sapling	
				3	5 Q						
22	Balsam Fir Quaking Aspen	5	Sapling/Pole	3		White P					T. sale #013-94 "Larson Camp sale" (unit 8) - cut in1999.
22	Balsam Fir Quaking Aspen 4130	5 5	Sapling/Pole Pole/Sapling	3 6 Sapling We	ell 30.	White P	Pine	High	5 - 10 feet		T. sale #013-94 "Larson Camp sale" (unit 8) - cut in1999.
22	Balsam Fir Quaking Aspen	5 5 - Aspen	Sapling/Pole Pole/Sapling	3 6 Sapling We	ell 30.	White P	Pine	High	5 - 10 feet		T. sale #013-94 "Larson Camp sale" (unit 8) - cut in1999.
22	Balsam Fir Quaking Aspen 4130 Canopy Species	5 5 5 - Aspen 85	Sapling/Pole Pole/Sapling Size Class	3 6 Sapling We	ell 30.	White P	Pine	High	5 - 10 feet		T. sale #013-94 "Larson Camp sale" (unit 8) - cut in1999.
22	Balsam Fir Quaking Aspen 4130 Canopy Species Quaking Aspen	5 5 - Aspen % Cover	Sapling/Pole Pole/Sapling Size Class Pole/Sapling	3 6 Sapling We DBH Ag 5 23	ell 30.	White P	Pine	High	5 - 10 feet		T. sale #013-94 "Larson Camp sale" (unit 8) - cut in1999.
22	Balsam Fir Quaking Aspen 4130 Canopy Species Quaking Aspen White Spruce Balsam Fir	5 5 5 - Aspen 85 5	Sapling/Pole Pole/Sapling Size Class Pole/Sapling Sapling Sapling Sapling	3 6 Sapling We DBH Ag 5 23 1	30 18 30	White P	Pine	High	5 - 10 feet		cedar/spruce swamp with small drainage which feeds into adjacent
	Balsam Fir Quaking Aspen 4130 Canopy Species Quaking Aspen White Spruce Balsam Fir 6120 - Lor	5 5 - Aspen % Cover 85 5 10 wland Ceda	Sapling/Pole Pole/Sapling Size Class Pole/Sapling Sapling Sapling Sapling	Sapling We DBH Ag 5 23 1 1 Poletimber V	30. 	White P	23	High 1-50	5 - 10 feet N/A		
23	Balsam Fir Quaking Aspen 4130 Canopy Species Quaking Aspen White Spruce Balsam Fir	5 5 5 - Aspen 85 5 10 wland Ceda	Sapling/Pole Pole/Sapling Size Class Pole/Sapling Sapling Sapling Sapling	Sapling We DBH Ag 5 23 1 1 1 Poletimber V	30 	White P	23	High 1-50	5 - 10 feet N/A		cedar/spruce swamp with small drainage which feeds into adjacent
23	Balsam Fir Quaking Aspen 4130 Canopy Species Quaking Aspen White Spruce Balsam Fir 6120 - Lov Canopy Species	5 5 5	Sapling/Pole Pole/Sapling Size Class Pole/Sapling Sapling Sapling Sapling Sapling Sapling Pole/Log	Sapling We DBH Ag 5 23 1 1 Poletimber V DBH Ag 8 11	30 	White P	23	High 1-50	5 - 10 feet N/A		cedar/spruce swamp with small drainage which feeds into adjacent
23	Balsam Fir Quaking Aspen 4130 Canopy Species Quaking Aspen White Spruce Balsam Fir 6120 - Loo Canopy Species rthern White Cedar	5 5 5 Cover 85 10 Wland Cedar % Cover	Sapling/Pole Pole/Sapling Size Class Pole/Sapling Sapling Sapling Sapling Sapling Sapling	3 6 Sapling We DBH Ag 5 23 1 1 1 Poletimber V DBH Ag 8 11 7 1	30 	White P	23	High 1-50	5 - 10 feet N/A		cedar/spruce swamp with small drainage which feeds into adjacent
23	Balsam Fir Quaking Aspen 4130 Canopy Species Quaking Aspen White Spruce Balsam Fir 6120 - Lov Canopy Species rthern White Cedar Tamarack Black Spruce	5 5 5 - Aspen 85 5 10 wland Ceda 85 5 5	Sapling/Pole Pole/Sapling Size Class Pole/Sapling Sapling Sapling Sapling Size Class Pole/Log Pole/Sap/Log	3 6 Sapling We DBH Ag 5 23 1 1 1 Poletimber V DBH Ag 8 11 7 1	30	White P	23	High 1-50	5 - 10 feet N/A		cedar/spruce swamp with small drainage which feeds into adjacent lowland stand. Denser bog (tamarack, spruce) with scattered islands of larger timber -
23	Balsam Fir Quaking Aspen 4130 Canopy Species Quaking Aspen White Spruce Balsam Fir 6120 - Lov Canopy Species rthern White Cedar Tamarack Black Spruce	5 5 5 - Aspen 85 5 10 wland Ceda 85 5 10	Sapling/Pole Pole/Sapling Size Class Pole/Sapling Sapling Sapling Sapling Size Class Pole/Log Pole/Sap/Log	3 6 Sapling We DBH Ag 1 1 Poletimber V DBH Ag 8 11 7 6 6	30. 15. 15. 16 4 4 4 4 4 4 4 4 4	White P	23 114	High 1-50 Unspecified Unspecified	5 - 10 feet N/A		cedar/spruce swamp with small drainage which feeds into adjacent lowland stand. Denser bog (tamarack, spruce) with scattered islands of larger timber - some heavier cedar pockets noted. W. portion of stand was logged in
23	Balsam Fir Quaking Aspen 4130 Canopy Species Quaking Aspen White Spruce Balsam Fir 6120 - Lov Canopy Species rthern White Cedar Tamarack Black Spruce	5 5 5 - Aspen 85 5 10 wland Ceda 85 5 10	Sapling/Pole Pole/Sapling Size Class Pole/Sapling Sapling Sapling Sapling Size Class Pole/Log Pole/Sap/Log	3 6 Sapling We DBH Ag 1 1 Poletimber V DBH Ag 8 11 7 6 6	30. 15. 15. 16 4 4 4 4 4 4 4 4 4	White P	23 114 / Specie	High 1-50 Unspecified Unspecified	5 - 10 feet N/A N/A	Seeding	cedar/spruce swamp with small drainage which feeds into adjacent lowland stand. Denser bog (tamarack, spruce) with scattered islands of larger timber - some heavier cedar pockets noted. W. portion of stand was logged in the mid-late1930's, as old 1939 photos indicate and remainder was
23	Balsam Fir Quaking Aspen 4130 Canopy Species Quaking Aspen White Spruce Balsam Fir 6120 - Lov Canopy Species rthern White Cedar Tamarack Black Spruce	5 5 5 - Aspen 85 5 10 wland Ceda 85 5 10	Sapling/Pole Pole/Sapling Size Class Pole/Sapling Sapling Sapling Sapling Size Class Pole/Log Pole/Sap/Log	3 6 Sapling We DBH Ag 1 1 Poletimber V DBH Ag 8 11 7 6 6	30. 15. 15. 16 4 4 4 4 4 4 4 4 4	White P	23 114 / Specie	High 1-50 Unspecified Unspecified B Density	5 - 10 feet N/A N/A No Avg. Height	Seeding	cedar/spruce swamp with small drainage which feeds into adjacent lowland stand. Denser bog (tamarack, spruce) with scattered islands of larger timber some heavier cedar pockets noted. W. portion of stand was logged in the mid-late1930's, as old 1939 photos indicate and remainder was logged in the early 50's as 1954 photos indicate. Low productivity, but



Stan	d Level 4 Cover Type		Size Density		Acres	Acres Stand Age BA Range		Managed Site		General Comments	
25	4319 - Mixed	d Upland Fo	orest F	Poletimb	er Well	56.4	62	81-110	N/A		Part of stand was harvested in 1984-85 (t sales #020-84-2 and #24-84-
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	 Patchy stand with mature clones and scattered larger trees. Variable BA with areas areas of openings. The aspen is starting to fall apart.
	Black Cherry	2	Pole/Log	8		Quak	ing Aspen	Medium	>20 feet	Sapling	27 min areas areas or epormiger the aspert to starting to rail aparti
N	orthern White Cedar	1	Log/Pole	8							
	Quaking Aspen	55	Log/Pole	10	62						
	Balsam Fir	30	Pole	7							
	White Spruce	10	Log/Pole	10							
	Red Maple	2	Pole/Log	8							
26	4115 - Y.Bird	ch, Hemlock	NH F	Poletimb	er Well	17.5	89	111-140	N/A		Last thinned under timber sale #013-94 "Larson Camp Sale" (unit 7).
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	
	Sugar Maple	10	Pole/Log	8		Whit	te Spruce	Low	Variable	Sapling	
	White Pine	5	XLog/Log/Pol	e 20		Мар	ole (spp.)	Low	10 - 20 feet	Sapling	
	Yellow Birch	20	Log/Pole	12		Ва	Isam Fir	Low	Variable	Sapling	
	Hemlock	10	Log	12		Quak	ing Aspen	Low	10 - 20 feet	Sapling	
	Red Maple	55	Log/Pole	14	89			'		1	
27	6122 - B	lack Spruce		Poletimb		46.4	82	Unspecified	N/A		Nearly pure black spruce with cedar fringe.
	Canopy Species	% Cover	Size Class	DBH	Age						
N	orthern White Cedar	5	Pole/Log	8							
	Black Spruce	95	Sapling/Pole	4	82						
28		anted Spru	ce Po		Medium	56.7	33	51-80	N/A		Planted (red pine and white spruce both) 3 times, with limited success (heavy sod; grubs). More spruce noted in the NW and SE. Poor form
	Canopy Species Balsam Fir	10			Age						Red Pine.
	Red Pine	30	Sapling/Pole Log/Pole	10							
	White Spruce	60	Sapling/Pole		33						
	writte Sprace	00	Заріпід/ Роїе	4	33						
29		- Aspen	F	Poletimb		12.7	36	Unspecified	N/A		Cut fall,1985 under permit #040-84-2. Some spruce and fir mixed within
	Canopy Species	% Cover			Age						
	Quaking Aspen	85	Pole/Sapling		36						
	White Spruce	5	Sapling/Pole								
	Balsam Fir	10	Pole/Sapling	5							
30	42350 - Up	land Hemlo	ock Sa	wtimber	Medium	45.9	85	141-170	N/A		Cut under permit #013-94 "Larson Camp Sale" (unit 5,6). Cedar, pine
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	and hemlock were left.
	Balsam Fir	10	Pole/Sapling	6		Ва	Isam Fir	Low	5 - 10 feet	Sapling	
N	orthern White Cedar	5	Log/XLog	16		Wh	nite Pine	Medium	5 - 10 feet	Sapling	
	Hemlock	70	XLog/Log	18	85						•
	Black Spruce	5	Pole/Log	8							



Stand	Level 4 Co	over Type	;	Size De	ensity	Acres	Stand Age B	A Range	Managed S	Site	General Comments
31	4112 - Maple, Beecl	h, Cherry A	Association F	Poletimb	er Well	43.6	89	111-140	N/A		Stand was last thinned in 1985, permit #030-84-2, removing marked
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	maple, basswood and yellow birch.
	Yellow Birch	1	Sapling/Pole	8		Ва	lsam Fir	Low	Variable	Sapling	
	Balsam Fir	5	Pole	4		Ma	ple (spp.)	Low	Variable	Sapling	
	White Pine	3	XLog/Log	18							-
	Black Spruce	3	Log/Pole	10							
	Black Cherry	1	Pole/Log	8							
No	rthern White Cedar	3	Pole/Sapling	6							
	Sugar Maple	54	Pole/Log	8	89						
	Red Maple	30	Pole/Log	8							
32	6128 - Lowland (Deci	Coniferous duous	, Mixed F	Poletimb	er Well	26.2	43	81-110	N/A		Mostly small cedar with fringes of upland types - stand was treated undo permit #29-77A (1977-1982).
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Sugar Maple	5	Log/Pole	12		Ва	lsam Fir	Low	5 - 10 feet	Sapling	
	Black Ash	10	Pole	6		Re	ed Maple	Low	5 - 10 feet	Sapling	
	Yellow Birch	2	Pole/Sapling	5							-
No	rthern White Cedar	18	Sapling/Pole	4							
	Tamarack	3	Pole/Sapling	7							
	Black Spruce	20	Sapling/Pole	4	43						
	White Pine	2	XLog/Log	18							
	Red Maple	20	Log/Pole	14							
	Balsam Fir	20	Sapling/Pole	4							
33	4319 - Mixed	Upland Fo	orest Sa	wtimbe	r Mediur	n 33.9	110	1-50	N/A		Hardwood island within swamp, fringed with conifers.
34	6120 - Lov	vland Ceda	ar F	oletimb	er Well	377.2	110	81-110	N/A		Cedar with spruce, tamarack and some white pine within. Some pine
	Canopy Species	% Cover	Size Class	DBH	l Age						islands. Unnamed tributary/creek within which flows into Sawmill Creek
No	rthern White Cedar	85	Pole/Log	8	110						
	Black Spruce	10	Pole/Log	8							
	Tamarack	5	Pole/Sap/Log	6							
35	4112 - Maple, Beecl	h, Cherry A	Association S	Sawtimb	er Well	144.1	89	141-170	N/A		Thinned under permit #013-94 "Larson Camp Sale" (unit 2-5) in 1999.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Hemlock	3	Log	16		Ма	ple (spp.)	Medium	>20 feet	Sapling	
	Yellow Birch	5	Log/XLog	18							-
	Basswood	5	Log	14							
	Sugar Maple	70	Log/XLog/Pole	e 12	89						
	White Spruce	2	Log	14							
	Red Maple	15	Log/Pole	9							



Stand	Level 4 Co	over Type		Size De	ensity	Acres	Stand Age	BA Range	Managed S	ite	General Comments
36	4112 - Maple, Beec	h, Cherry /	Association S	Sawtimb	er Well	23.0	103	141-170	N/A		Remote stand of timber within swamp.
(Canopy Species	% Cover	Size Class	DBH	H Age						
	Yellow Birch	5	Log/Pole	10							
	Red Maple	50	Log/Pole	12	103						
Nort	thern White Cedar	5	Log/Pole	10							
	Hemlock	5	Log/Pole	14							
	Sugar Maple	35	Log/Pole	12							
37	4115 - Y.Birc	h, Hemloc	k NH F	Poletimb	er Well	15.0	89	111-140	N/A		TSI completed in 1982.
(Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Hemlock	10	Log/Pole	12		Mar	ole (spp.)	Low	>20 feet	Sapling	
	Red Maple	20	Pole/Log	8				· ·		1	
	Yellow Birch	10	Log	14							
Nort	thern White Cedar	5	Log/Pole	10							
	Sugar Maple	55	Pole/Log	9	89						
38	4112 - Maple, Beec	h, Cherry /	Association S	Sawtimb	er Well	18.7	89	111-140	N/A		Thinned in 1999 under permit #013-94 "Larson Camp Sale" (unit 1).
(Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	31	Pole/Log	9		Mar	ole (spp.)	Low	10 - 20 feet	Sapling	
	Sugar Maple	62	Pole/Log	9	89			,			•
	Yellow Birch	5	Log/Pole	10							
	Hemlock	2	Log	12							
39	4112 - Maple, Beec	h, Cherry /	Association S	Sawtimb	er Well	97.2	89	141-170	N/A		Should be treated with adjacent compartment to the east (C. 024) when
(Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	possible due to access and marketability. Many large overmature trees wildlife quality.
	Sugar Maple	75	Log/Pole/XLog			Mar	ole (spp.)	Low	Variable	Sapling	wilding quanty.
	Hemlock	10	Log/XLog	16							
	Red Maple	10	Pole/Log	8							
	Yellow Birch	5	Log/XLog	18							
40	4115 - Y.Birc	h, Hemloc	k NH F	Poletimb	er Well	15.8	89	111-140	N/A		Heavier conifer component than adjacent upland stand.
_		% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Canopy Species	70 COVE				Mar	ole (spp.)	Low	Variable	Sapling	
	Yellow Birch	15	Log/XLog	16		ivia	olo (opp.)				
			Log/XLog Pole/Log	16	89		Isam Fir	Medium	Variable	Sapling	
	Yellow Birch	15			89		,		Variable		
	Yellow Birch Red Maple	15 30	Pole/Log	8	89		,		Variable		
	Yellow Birch Red Maple Sugar Maple	15 30 20	Pole/Log Pole/Log	8	89		,		Variable		
	Yellow Birch Red Maple Sugar Maple Balsam Fir	15 30 20 5	Pole/Log Pole/Log Pole	8 8 6 16	89		,		Variable		



Stand	d Level 4 C	over Type	s	ize Density	Acres	Stand Age B	A Range	Managed S	Site	General Comments
41	4119 - Mixed N	orthern Hard	dwoods Pole	etimber Medium	n 8.3	89	111-140	N/A		Previously thinned in 1977 (#33-74) and1997 - understocked stand as
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	residual with aspen patches.
	Yellow Birch	10	Log	16	Мар	ole (spp.)	Low	10 - 20 feet	Sapling	
	Black Cherry	10	Pole/Sapling	6	Quak	ing Aspen	Medium	>20 feet	Sapling	
	Quaking Aspen	15	Pole/Sapling	5	Ва	lsam Fir	Medium	Variable	Sapling	
	Red Maple	55	Pole/Log	8 89			'		1	1
	White Spruce	10	Pole/Log	8						
42	6120 - Lo	wland Ceda	ar Po	oletimber Well	195.7	114 U	nspecified	N/A		Contains stream headwaters.
	Canopy Species	% Cover	Size Class	DBH Age						
	Tamarack	5	Pole/Sap/Log	6						
	Black Spruce	10	Pole/Sapling	6						
No	rthern White Cedar	80	Pole/Log	8 114						
	Balsam Fir	5	Sapling/Pole	4						
43	6220 - <i>F</i>	Alder/willow	ı	Nonstocked	10.0		nspecified	No		Contains Sawmill Creek and tributary
						nopy Species	Density	Avg. Height	Size	
						White Cedar	Low	5 - 10 feet	Sapling	
					Ва	Isam Fir	Low	5 - 10 feet	Sapling	
45	4115 - Y.Bird	ch, Hemlock	NH Sa	awtimber Well	54.9	89	141-170	N/A		A lot of defect, although there is timber potential. Remote stand.
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	White Pine	3	XLog	18	Мар	ole (spp.)	Medium	Variable	Sapling	
	Sugar Maple	25	Log/Pole/XLog	12						-
	White Spruce	2	Log/Pole	12						
	Yellow Birch	10	Log/Pole	14						
	Red Maple	45	Pole/Log	9 89						
	Hemlock	13	Log/Pole	11						
	Black Cherry	2	Log/Pole	10						
47	6122 - B	lack Spruce	e Pole	etimber Medium	n 54.3	88 U	nspecified	N/A		Low, wet stand with plenty of regeneration filling in.
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Black Spruce	55	Pole	8 88	Che	erry (spp.)	Low	< 5 feet	Seeding	
No	orthern White Cedar	10	Log/Pole	12	Ва	Isam Fir	Full	5 - 10 feet	Sapling	
	White Spruce	25	Log	14	Ta	ng Alder	High	5 - 10 feet	Tall Shruk	
	Quaking Aspen	5	Log/Pole	13		erican Elm	Low	10 - 20 feet	Sapling	
	Paper Birch	5	Pole/Log	8						1



Stand	Level 4 Cover Type			Size De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments	MICHIGAN
48	4115 - Y.Birc	h, Hemlock	NH	Poletimb	er Wel	l 17.8	89	111-140	N/A			
(Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	anopy Specie	s Density	Avg. Height	Size		
	Red Maple	20	Pole/Log	8		Ма	ple (spp.)	Medium	Variable	Sapling		
	Sugar Maple	50	Pole/Log	8	89						-	
North	hern White Cedar	5	Log/Pole	10								
	Hemlock	5	Log/Pole	12								
	Yellow Birch	18	Log/Pole	10								
	Black Cherry	2	Pole/Log	8								
55	6225	i - Bog		Nonsto	ocked	75.2		Unspecified	No		Black spruce and tamarack bog.	
						Sub-Ca	anopy Specie	s Density	Avg. Height	Size		
						Ta	ag Alder	Medium	5 - 10 feet	Tall Shrub		
						Norther	n White Ceda	r Medium	5 - 10 feet	Sapling		