

# **Compartment Review Presentation**

**Escanaba Forest Management Unit** 

Compartment 33012 Entry Year 2021 Acreage: 685

**County Menominee** 

Management Area: Menominee End Moraine

Revision Date: 2019-07-01

Stand Examiner: Dustin Salter

**Legal Description:** 

T37N R28W Sections 28, 32, and 33

#### **Identified Planning Goals:**

This compartment is comprised of primarily aspen, with some other upland areas of oak and white pine. There are a few small mixed lowland types. The aspen has a mix of age classes, but the two largest stands are 38 and 49 years old. A portion of the 38 year old aspen will be harvested to begin to breakup the age class of this large stand. And about half of the 49 year old stand will be harvested to break up the age class of this stand. The spruce budworm has caused significant mortality of the spruce/fir within the compartment. The eastern larch beetle has also killed most of the tamarack. This compartment and surrounding area have a very high deer population. The stands that were harvested last entry period, overall have very poor regeneration. The deer have heavily browsed the sprouting trees, causing a very high percentage to die. Larger harvests are needed to overwhelm the deer to obtain the desired regeneration. There have been numerous treatments to treat Oak Wilt epi-centers in the past. If oak wilt is identified again, treat it as necessary.

### Soil and topography:

Topography is nearly level to moderately steep. Soils include well drained sand over loamy soils and excessively drained sands. Prominent soil series are Leelanau. Menominee, and Grayling.

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

This compartment is located at the west edge of a belt of state forest land that is about 20 miles long and 8 miles wide in southwestern Menominee County. This belt of land is highly splintered with private in-holdings, and this compartment is fractured with privately owned forest land, which is used primarily for recreation. There are some private residences just to the west of the compartment, along the State Road.

#### **Unique Natural Features:**

None Known

#### Archeological, Historical, and Cultural Features:

None Known

#### **Special Management Designations or Considerations:**

None

#### Watershed and Fisheries Considerations:

The Miscauna Creek flows through the northern half of the compartment. And Goodman Brook flows just southeast of the southern half of the compartment. Both of these creeks and brooks flow into the Menominee River. There are no developed access areas for either of these waterbodies.

#### Wildlife Habitat Considerations:

This is an early successional compartment that provides habitat for many of the most popular game species and other wildlife using early stages of forest succession. Two-thirds of this compartment is comprised of aspen forest, some stands will be treated this decade providing varying age classes. There is some proposed timber harvesting in oak stands and upland deciduous types, and harvest prescriptions will retain mature oak for mast production and stand diversity. Some oak will be harvested this decade in an attempt to regenerate trees via stump sprouting.

#### Mineral Resource and Development Concerns and/or Restrictions

There has been a history of metallic mineral leasing to the east of the compartment but there was no documented exploration of state-owned minerals, and there are no active leases in the area. Active mineral leases associated with the Back Forty project are located six miles to the south. Aquila Resources currently have all necessary permits approved to begin mine development. There is potential for additional discoveries of similar ore bodies in the area. Aeromagnetic surveys show a positive anomaly underlying the compartment, which could be related to iron formation. Some core

samples from the area show presence of iron oxide minerals but not much in the way of sulfide minerals. Active aggregate (sand, gravel, and limestone) mining operations are located to the east along US-41. Glacial sediments within the compartment are probably less than 40 feet thick pit in most places. The best potential for sand & gravel within the compartment is in Section 28, which is on the edge of a drumlin field. There is no known potential for economic hydrocarbon production in the UP.

#### **Vehicle Access:**

The primary road into the southern half of the compartment is the Miscauna Creek Road. This road is a state maintained road. There are a couple of two-track roads that branch off of this road into other parts of the compartment. Access into some of the compartment is through private property. The northern portion is accessed from an old railroad grade, which is in very poor condition. There is a good system of old logging roads within the northern portion of the compartment that branch off of the old railroad grade, that will need to opened up to access the proposed treatments in this area.

#### **Survey Needs:**

Three registered corners will need to be set, to prepare the proposed timber sales.

# **Recreational Facilities and Opportunities:**

There are no developed recreational facilities within the compartment, or adjacent to it. The primary uses of the compartment are hunting and riding ATV's.

#### **Fire Protection:**

The majority of this compartment consists of dry sandy soils, but most of them are covered by deciduous species, thus reducing the potential for large uncontrolled fires. During the spring time a fast moving surface fire is possible, though. The primary water site would be the Menominee River and the Miscauna Creek.

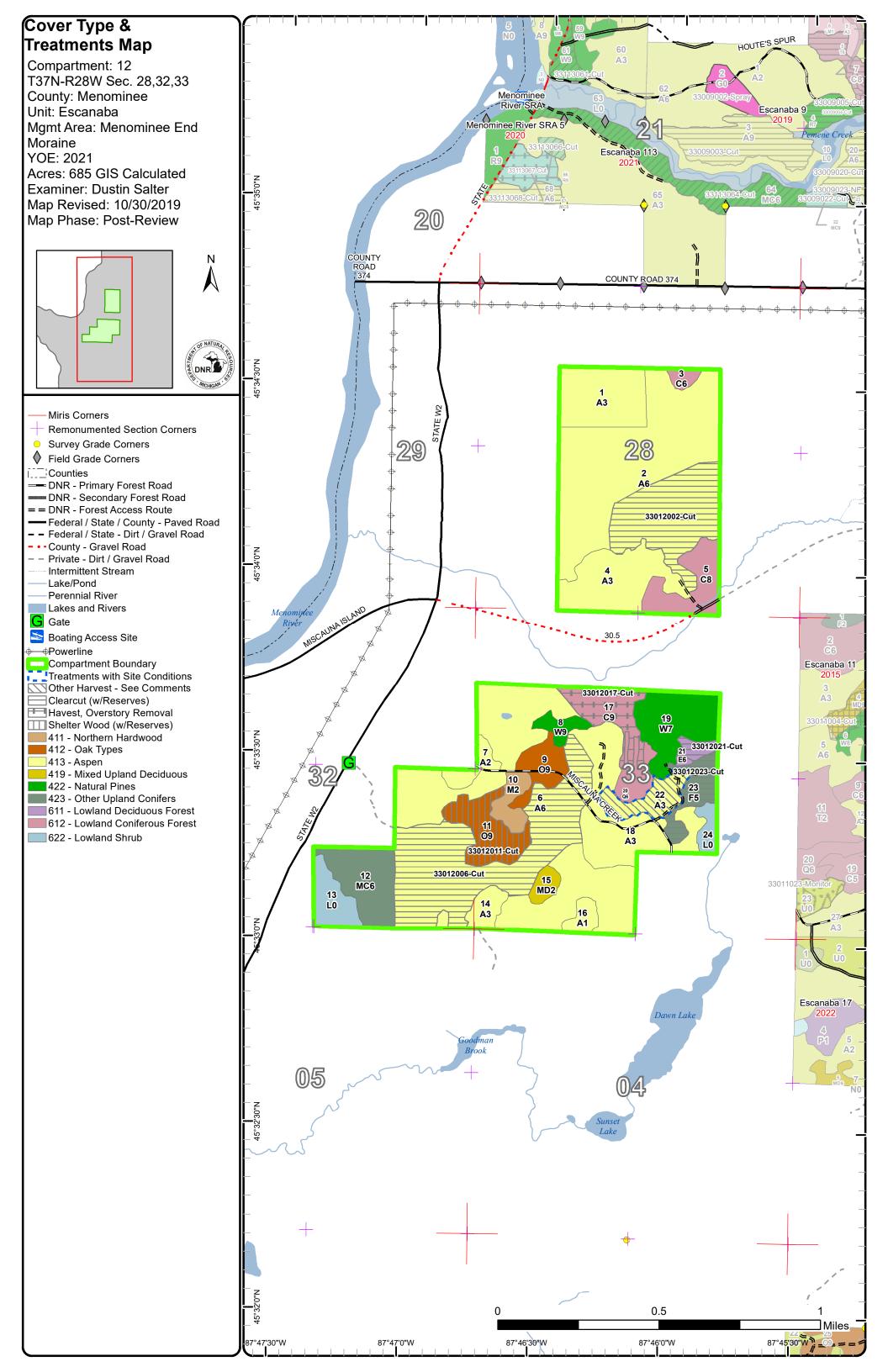
#### **Additional Compartment Information:**

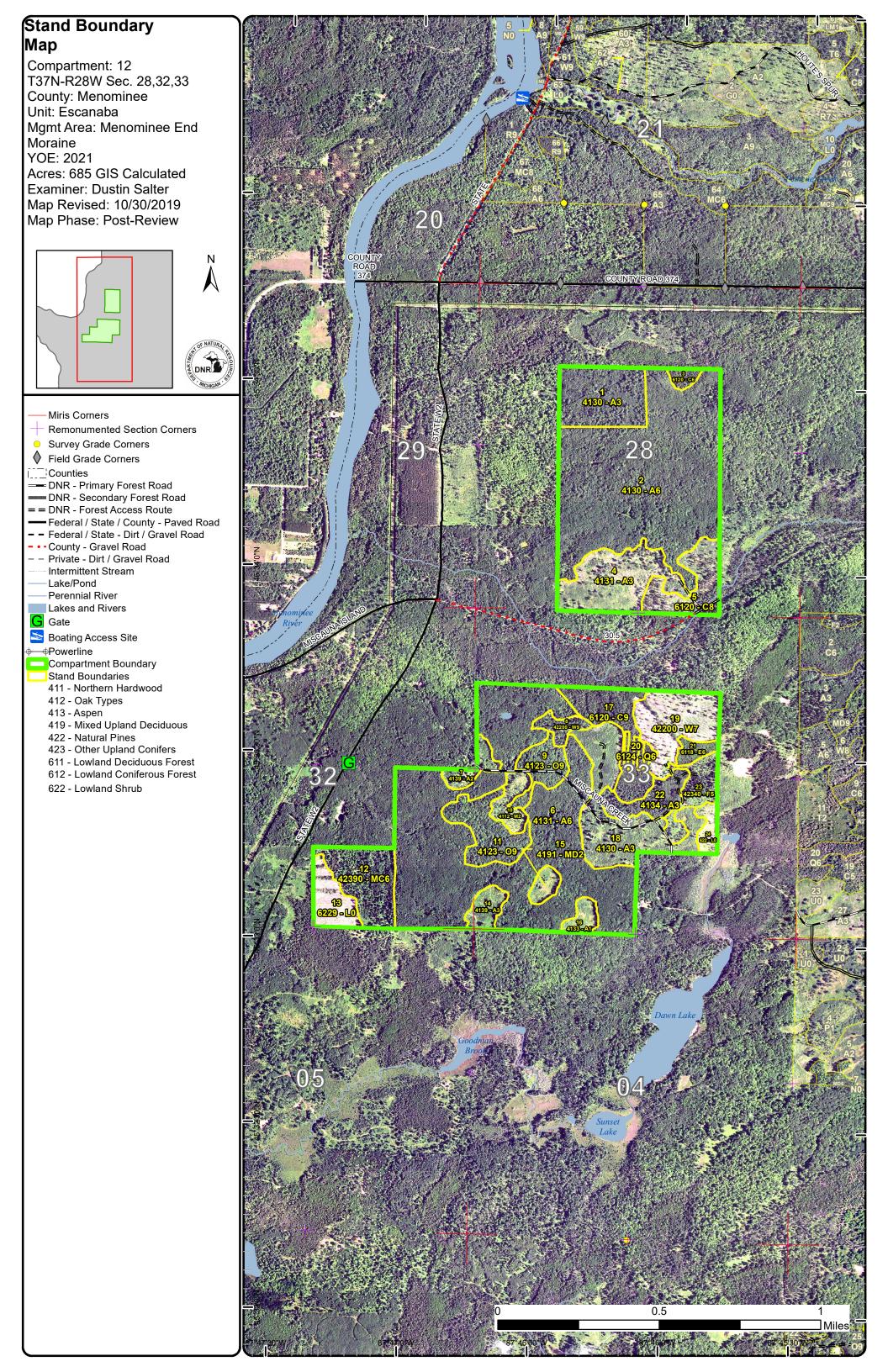
The following reports from the Inventory are attached:

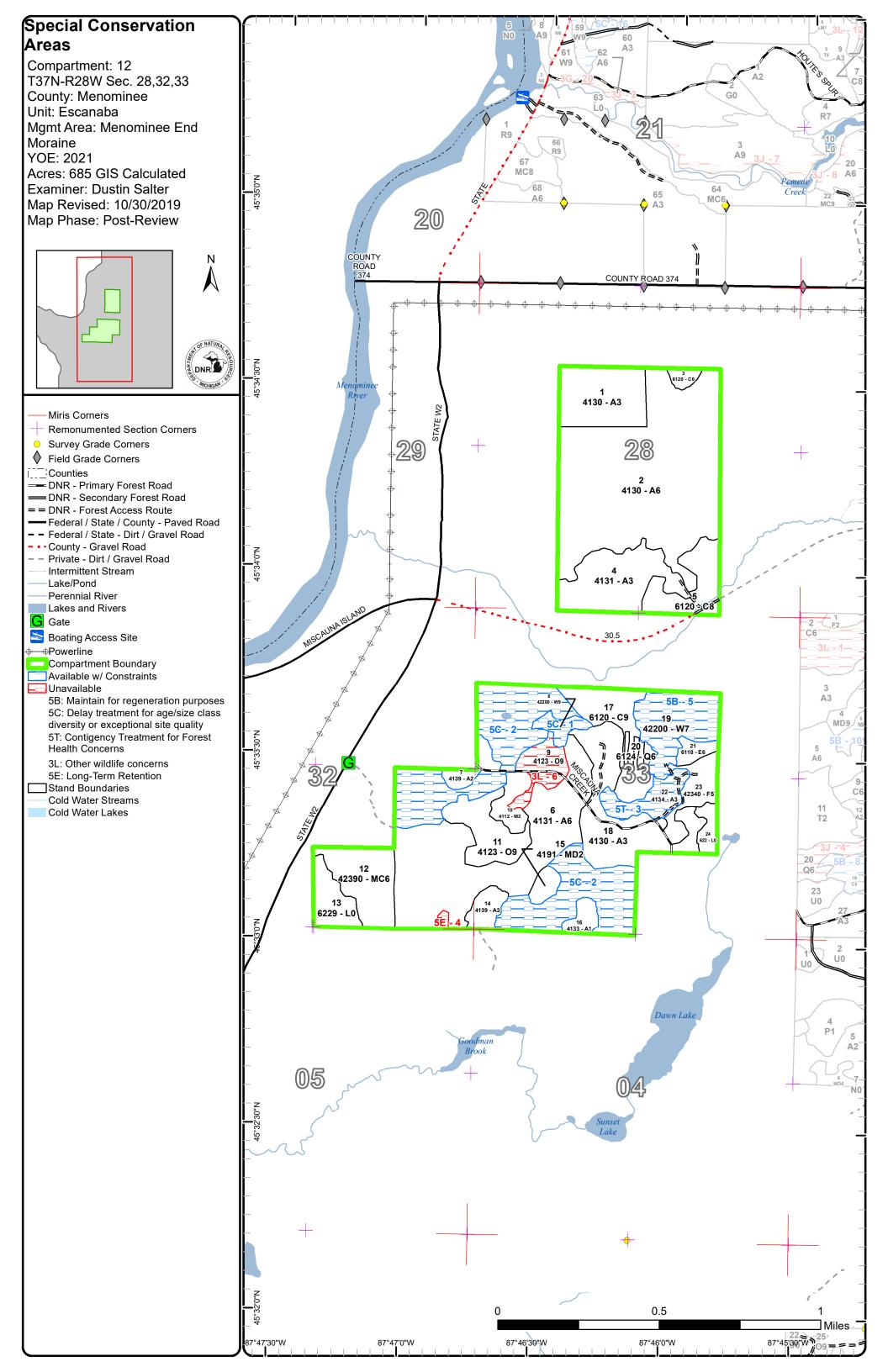
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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

Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system







Escanaba Mgt. Unit

Compartment 12 Year of Entry 2021

**Dustin Salter: Examiner** 



# Age Class

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Aspen	0	101	14	32	152	189	0	0	0	0	0	0	0	0	0	0	0	0	488
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	21	21	0	0	0	0	42
Lowland Conifers	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	9
Lowland Deciduous	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5
Lowland Shrub	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Mixed Upland Deciduous	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Northern Hardwood	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Oak	0	0	0	0	0	0	0	0	0	0	0	34	0	0	0	0	0	0	34
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	26
Upland Spruce/Fir	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	13
White Pine	0	0	0	0	0	0	0	0	0	0	0	6	30	0	0	0	0	0	36
Total	19	115	14	32	152	189	9	13	0	0	0	40	56	21	0	0	0	27	686



# **Report 2 – Treatment Summary**

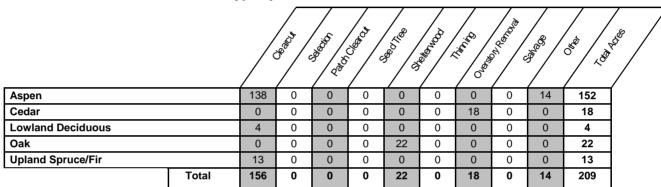
# Escanaba Mgt. Unit Year of Entry: 2021

#### **Acres of Harvest**

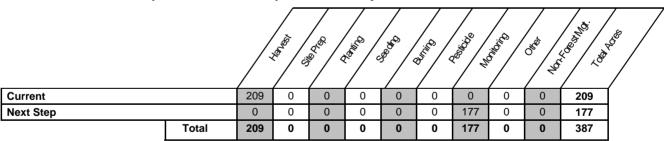
Compartment 12
Total Compartment Acres: 685

Commercial Harvest - 195 Harvests with Site Condition - 14 Next Step Harvest - 0 Habitat Cut - 0

## **Cover Type by Harvest Method**



# **Proposed and Next Step Treatments by Method**



Compartment: 12

Year of Entry: 2021

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a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
2	33012002-Cut	49.2	4130 - Aspen	Poletimber Well	38	51-80	Harvest	Clearcut with Retention	4131 - Aspen, Oak	Even-Aged	Draft Field Boundary

**Habitat Cut: No Site Condition:** 

Prescription Cut all trees greater than 3" inches; except retain all white and red pine. Also, retain some dense clumps/pockets of oak. Most of these pockets are on the west side of the treatment area. But maintain clumps of oak throughout the stand. Protect the vernal ponds within the stand. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, oak, maple, pine, and spruce/fir.

Regen: Other Comment:

**Proposed Start Date:** 10/1 /2020

33012006-Cut 89.2 4131 - Aspen, Oak Poletimber 51-80 Harvest Clearcut with 4131 - Aspen. Two-Aged Draft Field Well Retention Oak Boundary

Site Condition: **Habitat Cut: No** 

Prescription Cut all trees greater than 3" inches; except retain some clumps/patches/individual trees of oak and pine. Also, there is a small patch of lowland Specs: cedar and conifer on the southern end of the treatment area that will be retained.

Monitoring, Natural Regen (Re-Inventory) Next Step

Treatments:

Acceptable Aspen, oak, maple, pine, and spruce/fir.

Regen:

If oak wilt is identified within the stand, treat it as necessary to prevent the spread. Other

Comment:

Proposed Start Date: 10/1 /2020

11 33012011-Cut 21.5 4123 - Red Oak Sawtimber 111-Harvest Shelterwood 4122 - Oak, Pine Two-Aged Draft Field Well 140 Boundary

**Habitat Cut: No Site Condition:** 

Prescription Mark to retain 30 to 40 BA of oak and pine, cutting all other merchantable trees.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable Oak, pine, maple, and aspen.

Regen:

Other Comment:

**Proposed Start Date:** 

10/1 /2020

33012017-Cut 18.2 6120 - Lowland Sawtimber 115 111-Harvest Overstory 6132 - Mixed Two-Aged Draft Field Removal Lowland Forest Cedar Well 140 Boundary with Cedar

**Site Condition: Habitat Cut: No** 

Prescription Cut all trees greater than 3" inches; except retain all cedar. Also, mark to retain some white pine seed trees.

Specs:

Next Step **Treatments:** 

Acceptable Pine, cedar, aspen, balm, birch, maple, and spruce/fir.

Regen:

Other This stand has over 45% cedar, but because of the past management activities of strip cutting in the past, the majority of the stand is mature and

Comment: ready to be harvested. All cedar is being retained to protect the dense areas of cedar, that were retained during the last harvest about 50 years

ago.

**Proposed Start Date:** 10/1 /2020

a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
21	33012021-Cut	4.1	6118 - Lowland Deciduous with Cedar	Poletimber Well	r 115	51-80	Harvest	Clearcut with Retention	6115 - Lowland Ash	Even-Aged	Draft Field Boundary

Habitat Cut: No Site Condition:

Prescription Cut all trees greater than 3" inches; except retain the dense patch of cedar in the southwestern part of the stand.

Specs:

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Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable Spruce/fir, tamarack, ash, and cedar.

Regen:

Other Comment:

Proposed Start Date: 10/1 /2020

22 33012022-Cut 14.0 4134 - Aspen, Sapling 17 1-50 Harvest Other - Specify 4136 - Aspen, Even-Aged Draft Field Spruce/Fir Well Mixed Conifer Boundary

Habitat Cut: No Site Condition: Contingency Treatment

 $\underline{\underline{Prescription}} \ \ \text{Cut all merchantable spruce and balsam fir. Also, cut the mature pine, leaving some seed trees.}$ 

Specs:

Next Step Treatments:

Acceptable Aspen, balm, pine, and spruce/fir.

Regen:

Other The spruce budworm is defoliating the spruce/fir, but there isn't enough volume to harvest this stand by itself. If there is enough volume left

Comment: when the adjacent treatments are set up as part of the 2021 POW include this treatment.

Proposed Start Date: 10/1 /2020

42340 - Upland 65 33012023-Cut 13.2 Poletimber 1-50 Harvest Clearcut with 4319 - Mixed Draft Field Even-Aged Spruce/Fir Medium Retention **Upland Forest** Boundary

Habitat Cut: No Site Condition:

<u>Prescription</u> Cut all trees greater than 4" inches; except mark to retain some pine seed trees.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Spruce/fir, pine, aspen, balm, birch, and cherry.

Regen:

Other Comment:

Proposed Start Date: 10/1 /2020

Total Treatment Acreage Proposed:

209.4

Escanaba Mgt. Unit

**Dustin Salter: Examiner** 

Compartment: 12 Year of Entry: 2021

Availa	ability for	Managemer	nt						
Total	Acres	Acres Avail	Acres	D	omina	nt Site	e Cond	ditions	S
Acres	Available	With Condition	Not Available		5B	5C	5T	3L	5E
487	373	112	1	Aspen		98	14		1
42	42	0	0	Cedar					
9	9	0	0	Lowland Conifers					
5	5	0	0	Lowland Deciduous					
19	19	0	0	Lowland Shrub					
5	5	0	0	Mixed Upland Deciduous					
9	9	0	0	Northern Hardwood					
34	21	0	12	Oak				12	
26	26	0	0	Upland Conifers					
13	13	0	0	Upland Spruce/Fir					
36	0	36	0	White Pine	30	6			
685	524	148	14	Total Forested Acres	30	104	14	12	1
	76%	22%	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
1	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6	Unspecified	Unspecified	Unspecified	Unspecified
•							
	Comments:	thinned again, but hold the sta	and until	next entry period because	of the number of adjacent	treatments	
		thinned again, but hold the sta	and until	next entry period because	of the number of adjacent		
_		5C: Delay treatment for age/size class diversity or	and until 98	next entry period because Unspecified	of the number of adjacent Unspecified	treatments.  Unspecified	Unspecified
T 2	his stand could be	5C: Delay treatment for		, , , , , , , , , , , , , , , , , , ,	•		Unspecified

# **Report 4 – Site Conditions**

Escanaba Mgt. Unit

Compartment: 12 Year of Entry: 2021 **Dustin Salter: Examiner** 

3	Available	5T: Contigency Treatment for Forest Health Concerns	14	Unspecified	Unspecified	Unspecified	Unspecified
		rm is defoliating the spruce/fir, but as part of the 2021 POW inc			arvest this stand by itself. It	there is enough volume le	ft when the adjacent
4	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Lowland conifer pa	tch within a large upland stand.					
5	Available	5B: Maintain for regeneration purposes	30	Unspecified	Unspecified	Unspecified	Unspecified
5	Comments:			<u> </u>		<u> </u>	Unspecified
6	Comments:	regeneration purposes		<u> </u>		<u> </u>	Unspecified  Unspecified

10/30/2019 11:38:13 AM - Page 2 of 2 **POLEYN**  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				

Escanaba Mgt. Unit Compartment: 12





# 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 Area	Туре	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	stocked trout populations and those of other coldwayear to year. Coldwater streams in Michigan typical	lly provide these conditions due to substantial Such streams are established by Director's action and

DNR DNR

Stand	d Level 4 Co	over Type	9	Size Der	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
1	4130	- Aspen		Sapling	Well	31.8	22	1-50	N/A		Good quality aspen sapling/pole stand with residual mature oak on the
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	east half and older spruce/fir on the west half. The stand was clearcut between 1996 and 1999 on contract 008-96-01. The spruce/fir is being
	Red Oak	15	Log	14	103	Hazelr	nut (Beaked)	Low	5 - 10 feet	Tall Shrub	defoliated by the spruce budworm, but there isn't enough volume to
	Balsam Fir	10	Pole/Sapling	6	50						salvage.
	White Spruce	6	Pole/Sapling	6	50						
	Bigtooth Aspen	60	Sapling/Pole	4	22						
2	4130	- Aspen	P	oletimbe	er Well	151.6	38	51-80	N/A		Good quality aspen stand with pockets of mature red oak mixed in. This
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	stand was clearcut between 1982 and 1986 on contracts 037-81A and 053-81-01. The oak and pine was retained. The southern end is older
	Red Oak	15	Log	14	103	WI	nite Pine	Low	10 - 20 feet	Sapling	than the north end. The aspen has much larger diameters on the
	Quaking Aspen	24	Pole/Log/Sap	7	38	Hazelr	nut (Beaked)	Low	5 - 10 feet	Tall Shrub	southern end. The western half of the stand has more conifer
	Bigtooth Aspen	50	Pole/Log	9	38			,			regeneration. To break up the age class of this large aspen stand a portion of it will be harvested this entry, prior to it reaching maturity.
3	6120 - Lov	vland Ceda	r P	oletimbe	er Well	3.2	115	141-170	N/A		Dense high quality cedar stand with some other scattered species mixed
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	in.
No	orthern White Cedar	65	Pole/Log	9	115	Ва	lsam Fir	Low	< 5 feet	Sapling	
	Tamarack	10	Pole/Log	9	115					,	•
	Black Spruce	12	Log/Pole	10	115						
4	4131 - A	spen, Oak		Sapling	Well	35.5	6	1-50	N/A		Stand was clearcut in 2013 on contract 031-11-01. Some pine, oak,
	Canopy Species	% Cover	Size Class	DBH	Age						spruce, and cedar were marked to retain. Two aged stand with mature oak and pine with an understory of aspen, maple and conifer
	Red Oak	20	Log	14	103						regeneration. The west and east ends have more aspen regeneration
	Quaking Aspen	40	Sapling	1	6						and the central part has more conifer regeneration. The deer have
	Balsam Poplar	10	Sapling	1	6						heavily browsed the aspen, maple, and oak regeneration. Most of the oak sprouts have been killed by over browsing. Also, a significant
	Red Maple	10	Sapling	1	6						amount of the aspen and maple sprouts have been killed by over browsing.
5	6120 - Lov	vland Ceda	ır Sav	vtimber	Medium	20.8	121	51-80	N/A		Stand was clearcut in 2015 on contract 031-11-01. All trees greater tha
J	Canopy Species		Size Class	DBH			py Species	Density	Avg. Height	Size	3 inches were cut, except some pine and spruce were marked to retain.
Nic	orthern White Cedar	80	Log/Pole	12	121		am Poplar	High	5 - 10 feet	Sapling	Also, all cedar greater than 10" inches was retained. The residual BA ranges from 20 to 120, with an average of 50. Balm is regenerating
140	White Pine	15	Log	16	121		king Aspen	Low	5 - 10 feet	Sapling	throughout most of the stand and in the more open areas there is some
	V V I III C I III C	10	Log	10	121		Isam Fir	Low	< 5 feet	Sapling	spruce and white pine regeneration. The Miscauna creek flows through
							te Spruce	Low	< 5 feet	Sapling	the SW portion of this stand and a 100' buffer was left along it.
							nite Pine	Low	< 5 feet	Sapling	
						VVI	INC I IIIC	LOW	< 0 leet	Japinig	



Stand	d Level 4 C	over Type	;	Size De	ensity	Acres	Stand Age	BA Range	Managed 9	Site	General Comments
6	4131 - A	Aspen, Oak	Р	oletimb	er Well	188.7	49	51-80	N/A		Mature good quality aspen stand, with some older mature oak and pine
	Canopy Species	% Cover	Size Class	DBH	H Age	Cano	y Species	Density	Avg. Height	Size	mixed in. The eastern and western thirds of the stand have a higher percentage of big tooth aspen and the central portion has a higher
	Red Oak	20	Log/Pole	14	103	Wh	ite Pine	Medium	>20 feet	Sapling	percentage of quaking aspen. To spread out the age classes of this
	Quaking Aspen	30	Pole/Log	9	49	Blac	k Cherry	Low	10 - 20 feet	Sapling	large stand, only about half of the stand will be harvested this year of
	Bigtooth Aspen	40	Pole/Log	9	49	Hazeln	ut (Beaked)	Medium	5 - 10 feet	Tall Shrub	
						Bal	sam Fir	Low	10 - 20 feet	Sapling	
						Whit	e Spruce	Low	10 - 20 feet	Sapling	
7	4139 - Aspen,	Mixed Deci	iduous S	apling	Medium	7.0	7	1-50	N/A		Stand was clearcut in 2012 on contract 032-11-01. Some oak and pine
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	y Species	Density	Avg. Height	Size	were marked to retain, about 20 BA. The northern half of the stand has regenerated well where there was more aspen. But, the southern half of
	Red Oak	10	Log/Pole	14	103	Wh	ite Pine	Medium	< 5 feet	Sapling	the stand where it had more red maple and oak has very little
	Bigtooth Aspen	50	Sapling	1	7	Hazeln	ut (Beaked)	Medium	5 - 10 feet	Tall Shrub	regeneration. The deer have heavily browsed the maple and oak
	Red Maple	35	Sapling	1	7		, ,				sprouts, causing most of them to die.
8	42200 - Nat	ural White F	Pine S	awtimb	er Well	5.7	103	81-110	N/A		Stand was thinned in 2012 on contract 032-11-01. The pine and oak was
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	y Species	Density	Avg. Height	Size	marked to cut and all other species greater than 3" inches were cut. The hardwood and aspen that sprouted have been heavily browsed by deer,
	Red Oak	10	Log/Pole	12	103	Quak	ng Aspen	Low	< 5 feet	Sapling	causing a significant amount of mortality. The stand is too dense overal
	White Pine	85	Log/XLog	16	103	Red	d Maple	Low	< 5 feet	Sapling	to get much regeneration. This stand could be thinned again, but hold
						Wh	ite Pine	Low	< 5 feet	Sapling	the stand until next entry period because of the adjacent treatments around it.
						Whit	e Spruce	Low	5 - 10 feet	Sapling	around it.
						Hazeln	ut (Beaked)	Medium	5 - 10 feet	Tall Shrub	
9	4123 -	Red Oak	S	awtimb	er Well	12.5	103	81-110	N/A		This stand was final harvested in the 1970's, except the oak and pine
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	y Species	Density	Avg. Height	Size	were retained. The stand is now two-aged. It has mature red oak over 4 year old hardwood poles and saplings. The oak is mature and we need
	Red Oak	85	Log/Pole	14	103	Red	d Maple	Medium	>20 feet	Sapling	to begin to regenerate. The stand will be shelterwood cut to release the
	White Pine	15	Log/Pole	15	103	Suga	ar Maple	Medium	>20 feet	Sapling	advanced hardwood regeneration and get some pine and oak to seed in
							ite Pine	Low	10 - 20 feet	Sapling	
						Iro	nwood	Low	>20 feet	Sapling	
						В	eech	Low	>20 feet	Sapling	
						Hazeln	ut (Beaked)	Low	5 - 10 feet	Tall Shrub	
10	4112 - Maple Ass	ociation	•		Medium	9.0	5	1-50	N/A		This stand was final harvested in the 1970's, except the oak and pine were retained. Oak wilt was identified and treated in 2014 and cut on
	Canopy Species	% Cover	Size Class	_	l Age		y Species	Density	Avg. Height	Size	contract 032-11-01. The stand had sprouted with red maple, aspen, and oak sprouts, but the deer have heavily browsed them, killing most of the
	White Pine	12	Log/XLog/Pole	16	103	Hazeln	ut (Beaked)	Low	5 - 10 feet	Tall Shrub	oak and aspen sprouts and only about half of the red maple sprouts have
	Red Maple	75	Sapling/Pole	1	5	Wh			< 5 feet	Sapling	survived. The more open areas are filling in with white pine.

Report 7 – Stands



Compartment: 12

Year of Entry: 2021

	d Level 4 C	over Type	;	Size De	ensity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
11	4123 -	Red Oak	S	awtimb	er Well	21.5	103	111-140	N/A		This stand was harvested in the 1970's, all species; except oak and pine were cut. The4 stand is a two aged stand with mature oak and pine over
	Canopy Species	% Cover		DBH	l Age	Canop	y Species	Density	Avg. Height	Size	an understory of aspen and hardwood saplings/poles. This stand will be
	Red Oak	75	Log/Pole	14	103	Red	Maple	Medium	>20 feet	Pole	shelterwood cut to begin to regenerate the oak and pine and to release
	White Pine	10	Log/XLog	16	103	Bigtoo	th Aspen	Medium	>20 feet	Pole	the advanced aspen and hardwood regeneration.
	Red Pine	15	Log/XLog	16	103	Whi	te Pine	Low	5 - 10 feet	Sapling	
							nwood	Low	10 - 20 feet	Sapling	
						Hazelnu	it (Beaked)	Low	5 - 10 feet	Tall Shrub	
12	42390 - Mixed Co	Non-Pine U nifers	lpland P	oletimb	er Well	26.5	45	1-50	N/A		Stand was cut in 1995 on contract 027-94-01. All aspen, balm, and birch were cut, the pine was marked to cut, the balsam fir and spruce with
	Canopy Species	% Cover	Size Class	DBH	l Age	Canop	y Species	Density	Avg. Height	Size	more than 3 sticks were cut, and the maple and ash greater than 6" inches was cut. The stand is very diverse, with the highest densities of
	Red Maple	10	Pole/Sapling	7	103	Whi	te Pine	Low	10 - 20 feet	Sapling	spruce/fir. The ages are very variable with the past treatment. The
	Balsam Fir	25	Pole/Sapling	5	45						spruce/fir is being defoliated by the spruce budworm, but there isn't
	White Spruce	30	Pole/Sapling	5	45						enough volume to try and salvage it. There is a retention patch of dense cedar in the northeast part of the stand.
	White Pine	10	Log/XLog	16	103						cedar in the northeast part of the stand.
						•	y Species sam Fir	<b>Density</b> Low	Avg. Height >20 feet	Size Sapling	when this stand was looked at, so no regeneration was visible.
							er Birch	Low	>20 feet	Sapling	
14	4139 - Aspen,	Mixed Deci	duous	Sapling	g Well		er Birch	-		, ,	Stand was clearcut in 2012 on contract 032-11-01. A few scattered oak
14	4139 - Aspen, Canopy Species					7.5		Low	>20 feet N/A	, ,	and pine were marked to retain. The stand has regenerated with a mix of
14			duous Size Class Sapling		g Well  i Age  7	7.5 <b>Canop</b>	7	Low	>20 feet	Sapling	
14	Canopy Species	% Cover	Size Class	DBH	l Age	7.5 <b>Canop</b>	7 by Species	Low Immature Density	>20 feet N/A Avg. Height	Sapling	and pine were marked to retain. The stand has regenerated with a mix of red maple and aspen and some scattered white pine seedlings. The aspen, maple, and oak have been heavily browsed by deer, with about half of the aspen and maple being killed and all of the oak sprouts being
14	Canopy Species Red Maple	<b>% Cover</b> 45	Size Class Sapling	DBH 1	Age 7	7.5 <b>Canop</b>	7 by Species	Low Immature Density	>20 feet N/A Avg. Height	Sapling	and pine were marked to retain. The stand has regenerated with a mix of red maple and aspen and some scattered white pine seedlings. The aspen, maple, and oak have been heavily browsed by deer, with about
14	Canopy Species Red Maple White Pine Bigtooth Aspen  4191 - Mixed Upla	% Cover 45 10 45	Size Class Sapling Sapling Sapling	<b>DBH</b> 1 1 1	7 7	7.5 <b>Canop</b>	7 by Species	Low Immature Density	>20 feet N/A Avg. Height	Sapling	and pine were marked to retain. The stand has regenerated with a mix of red maple and aspen and some scattered white pine seedlings. The aspen, maple, and oak have been heavily browsed by deer, with about half of the aspen and maple being killed and all of the oak sprouts being killed.  This stand was cut in 2014 on contract 032-11-01. Oak wilt was identified and treated within this stand. A few large pine were retained.
	Canopy Species Red Maple White Pine Bigtooth Aspen  4191 - Mixed Upla	% Cover  45  10  45  and Deciduonifer	Size Class Sapling Sapling Sapling	DBH 1 1 1 apling I	7 7 7	7.5 Canop Hazelnu 4.9	7 by Species at (Beaked)	Immature  Density  Low	>20 feet  N/A  Avg. Height 5 - 10 feet	Sapling	and pine were marked to retain. The stand has regenerated with a mix of red maple and aspen and some scattered white pine seedlings. The aspen, maple, and oak have been heavily browsed by deer, with about half of the aspen and maple being killed and all of the oak sprouts being killed.  This stand was cut in 2014 on contract 032-11-01. Oak wilt was identified and treated within this stand. A few large pine were retained. The deer have heavily browsed and killed a significant amount of the
	Canopy Species Red Maple White Pine Bigtooth Aspen  4191 - Mixed Upla	% Cover  45  10  45  and Deciduonifer	Size Class Sapling Sapling Sapling Ous with S	DBH 1 1 1 apling I	Age 7 7 7 7 Medium	7.5 Canop Hazelnu 4.9 Canop	7 y Species at (Beaked)	Immature  Density  Low  Immature	>20 feet  N/A  Avg. Height 5 - 10 feet  N/A	Sapling  Size  Tall Shrub	and pine were marked to retain. The stand has regenerated with a mix of red maple and aspen and some scattered white pine seedlings. The aspen, maple, and oak have been heavily browsed by deer, with about half of the aspen and maple being killed and all of the oak sprouts being killed.  This stand was cut in 2014 on contract 032-11-01. Oak wilt was identified and treated within this stand. A few large pine were retained. The deer have heavily browsed and killed a significant amount of the aspen, maple, and all of the oak sprouts. There is now just scattered
	Canopy Species Red Maple White Pine Bigtooth Aspen  4191 - Mixed Upla Co Canopy Species	% Cover  45  10  45  and Deciduonifer  % Cover	Size Class Sapling Sapling Sapling Ous with Size Class	DBH 1 1 1 1 apling I	Age 7 7 7 7 Medium	7.5 Canop Hazelnu 4.9 Canop	7 y Species it (Beaked) 5	Immature  Density  Low  Immature  Density	>20 feet  N/A  Avg. Height 5 - 10 feet  N/A  Avg. Height	Sapling  Size  Tall Shrub	and pine were marked to retain. The stand has regenerated with a mix of red maple and aspen and some scattered white pine seedlings. The aspen, maple, and oak have been heavily browsed by deer, with about half of the aspen and maple being killed and all of the oak sprouts being killed.  This stand was cut in 2014 on contract 032-11-01. Oak wilt was identified and treated within this stand. A few large pine were retained. The deer have heavily browsed and killed a significant amount of the aspen, maple, and all of the oak sprouts. There is now just scattered
	Canopy Species Red Maple White Pine Bigtooth Aspen  4191 - Mixed Upla Co Canopy Species Red Maple	% Cover	Size Class Sapling Sapling Sapling ous with Size Class Sapling Sapling	DBH 1 1 1 1 DBH 1 1	Age	7.5 Canop Hazelnu 4.9 Canop	7 y Species it (Beaked) 5	Immature  Density  Low  Immature  Density	>20 feet  N/A  Avg. Height 5 - 10 feet  N/A  Avg. Height	Sapling  Size  Tall Shrub	and pine were marked to retain. The stand has regenerated with a mix of red maple and aspen and some scattered white pine seedlings. The aspen, maple, and oak have been heavily browsed by deer, with about half of the aspen and maple being killed and all of the oak sprouts being killed.  This stand was cut in 2014 on contract 032-11-01. Oak wilt was identified and treated within this stand. A few large pine were retained. The deer have heavily browsed and killed a significant amount of the aspen, maple, and all of the oak sprouts. There is now just scattered aspen and maple sprouts with some pockets of white pine regeneration.  This stand was cut in 2014 on contract 032-11-01. Oak wilt was
15	Canopy Species Red Maple White Pine Bigtooth Aspen  4191 - Mixed Upla Co Canopy Species Red Maple Bigtooth Aspen	% Cover	Size Class Sapling Sapling Sapling ous with Size Class Sapling Sapling	DBH 1 1 DBH 1 1 Sapling	Age	7.5 Canop Hazelnu 4.9 Canop Hazelnu 5.4	7  y Species at (Beaked)  5  y Species at (Beaked)	Immature  Density Low  Immature  Density Low  Low	>20 feet  N/A  Avg. Height 5 - 10 feet  N/A  Avg. Height 5 - 10 feet	Sapling  Size  Tall Shrub	and pine were marked to retain. The stand has regenerated with a mix of red maple and aspen and some scattered white pine seedlings. The aspen, maple, and oak have been heavily browsed by deer, with about half of the aspen and maple being killed and all of the oak sprouts being killed.  This stand was cut in 2014 on contract 032-11-01. Oak wilt was identified and treated within this stand. A few large pine were retained. The deer have heavily browsed and killed a significant amount of the aspen, maple, and all of the oak sprouts. There is now just scattered aspen and maple sprouts with some pockets of white pine regeneration.  This stand was cut in 2014 on contract 032-11-01. Oak wilt was identified and treated within this stand. A few large pine were retained.
15	Canopy Species Red Maple White Pine Bigtooth Aspen  4191 - Mixed Upla Co Canopy Species Red Maple Bigtooth Aspen	% Cover	Size Class Sapling Sapling Sapling Ous with Size Class Sapling Sapling Sapling	DBH 1 1 DBH 1 1 Sapling	Age 7 7 7 7 Medium Age 5 5 9 Poor	7.5 Canop Hazelnu 4.9 Canop Hazelnu 5.4 Canop	7 y Species at (Beaked)  5 y Species at (Beaked)	Immature  Density Low  Immature  Density Low  Immature	>20 feet  N/A  Avg. Height 5 - 10 feet  N/A  Avg. Height 5 - 10 feet	Size Tall Shrub Size Tall Shrub	and pine were marked to retain. The stand has regenerated with a mix of red maple and aspen and some scattered white pine seedlings. The aspen, maple, and oak have been heavily browsed by deer, with about half of the aspen and maple being killed and all of the oak sprouts being killed.  This stand was cut in 2014 on contract 032-11-01. Oak wilt was identified and treated within this stand. A few large pine were retained. The deer have heavily browsed and killed a significant amount of the aspen, maple, and all of the oak sprouts. There is now just scattered aspen and maple sprouts with some pockets of white pine regeneration.  This stand was cut in 2014 on contract 032-11-01. Oak wilt was

Stand	Level 4 Co	over Type		Size De	ensity	Acres	Stand Age	BA Range	Managed (	Site	General Comments		
17	6120 - Lov	vland Ceda	ar :	Sawtimb	er Well	18.2	115	111-140	N/A		This stand is a mix of lowland and upland. The western half of the stand		
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	y Species	Density	Avg. Height	Size	is lower, with mature cedar and strips that were cut out of the stand about 50 years ago. The eastern half is higher with a higher percentage of		
	Black Spruce	12	Log/Pole	13	115	Bal	sam Fir	Low	5 - 10 feet	Sapling	white pine and hardwood. The strip cuts regenerated with a mix of		
No	rthern White Cedar	55	Log/Pole	10	115					,	aspen, balm, birch, and balsam fir. There are some dense patches of		
	White Pine	20	XLog/Log	18	115						cedar on the west end of the stand.		
18	4130	- Aspen		Saplin	g Well	45.3	7	Immature	N/A		Stand was clearcut in 2012 on contract 032-11-01. Some pine and oak		
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	y Species	Density	Avg. Height	Size	were marked to retain. The stand has regenerated well with aspen. There are some open patches that are filling in with white pine. These		
	Quaking Aspen	30	Sapling	2	7		ite Pine	Low	10 - 20 feet	Sapling	open areas had more red maple and oak in them previous to the		
	Red Oak	10	Log	14	103						harvest. The deer have browsed and killed nearly all of the oak and		
	Bigtooth Aspen	50	Sapling	2	7						maple sprouts throughout the stand.		
19	42200 - Natu	ıral White F	Pine	Sawtimb	er Poor	29.9	115	1-50	N/A		This stand was shelterwood cut in 2016 on contract 032-11-01. About 20		
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	y Species	Density	Avg. Height	Size	BA of white and red pine and oak were marked to retain. There is a narrow drain that flows through the center of the stand, this was buffered		
	White Pine	80	Log/XLog	16	115	Quak	ng Aspen	High	5 - 10 feet	Sapling	and left un-cut. About half of the stand has regenerated with aspen and		
						Balsa	m Poplar	Medium	< 5 feet	Sapling	balm. The deer have browsed and killed almost all of the maple and oak		
						Whit	e Spruce	Low	5 - 10 feet	Sapling	sprouts. Over time the open areas should fill in with pine, balm, and spruce/fir, but the hardwood and oak have been eliminated from the		
											stand by the deer.		
20	6124 - Lowla	and Spruce	-Fir I	Poletimb		9.3	50	1-50	N/A		Stand was harvested about 50 years ago and has is now a mix of lowland conifers and hardwoods. The balsam fir has been heavily defoliated by		
	Canopy Species	% Cover	Size Class		l Age	Cano	y Species	Density	Avg. Height	Size	the spruce budworm, but there isn't enough volume to harvest at this time		
	Red Maple	10	Pole/Sapling		50	Ta	g Alder	Medium	Variable	Tall Shrub			
	Paper Birch	7	Pole/Sapling		50								
	Balsam Fir	15	Pole/Sapling	-	50								
	Black Spruce	45	Pole/Sapling		50								
	Tamarack	15	Pole/Sapling	7	50								
21	6118 - Lowland De	eciduous w	ith Cedar I	Poletimb		4.7	115	51-80	N/A		Low quality black ash stand with a dense pocket of cedar in the southwestern part of the stand and some low quality cedar scattered		
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	y Species	Density	Avg. Height	Size	throughout. The ash should be harvested prior to the arrival of the		
No	rthern White Cedar	20	Pole/Log	9	115	Bal	sam Fir	Low	10 - 20 feet	Sapling	emerald ash borer.		
	Black Ash	75	Pole/Sap/Log	g 8	115	Ta	g Alder	Medium	< 5 feet	Tall Shrub			
22	4134 - Aspe	en, Spruce/	Fir	Saplin	g Well	14.0	17	1-50	N/A		Stand was clearcut in 2002 on contract 022-01-01. The pine and oak		
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	y Species	Density	Avg. Height	Size	was retained. There was also a significant amount of advanced spruce/f regeneration retained. The stand has thick aspen and balm regeneration		
	Quaking Aspen	50	Sapling	3	17	Blac	k Cherry	Low	5 - 10 feet	Sapling	with patches of older spruce/fir, and also some large mature pine(most o		
	Balsam Fir	10	Pole/Sapling	9 6	50						which is on the west end). The spruce budworm is defoliating the		
		4.5	Pole/Sapling	7	50						spruce/fir, but there isn't enough volume to harvest this stand by itself. If		
	White Spruce	15	r ole/Sapilitiç	9   '	30						there is enough volume left when the adjacent treatments are set up as		
	White Spruce White Pine	15	Log/Pole/Sapiling	_	103						there is enough volume left when the adjacent treatments are set up as part of the 2021 POW include this treatment.		



Stand	Level 4 Cover Type			Size Density		Acres Stand Age BA		BA Range	Managed Site		General Comments
23	42340 - Upland Spruce/Fir			Poletimber Medium		13.2 65 1-50		1-50	N/A		This stand is a mix of older spruce/fir, birch, and white pine with pockets
	Canopy Species	% Cover	Size Class	DBH Age		Canopy Species		Density	Avg. Height	Size	of younger black cherry, white pine, and spruce/fir. The spruce budworm has caused a significant amount of spruce and balsam fir defoliation.
	White Spruce	55	Pole/Log/Sap	8	65	White Pine		Medium	10 - 20 feet	Sapling	
	Paper Birch	8	Log/Pole	10							-
	White Pine	10	Log/XLog	16							
	Black Cherry	10	Pole/Sapling	6							
	Balsam Fir	15	Pole/Sapling	7	65						
24	622 - Lowland Shrub		ס	Nonstocked		5.5	0	Unspecified	specified 612 - Lowland Coniferous Forest		Stand was seed tree cut in 2012 on contract 032-11-01. There is already quite a bit of regeneration present, even with over 2' of snow on the
						Cano	ppy Species	Density	Avg. Height	Size	ground. The stand should be fully stocked by next entry period.
						Norther	n White Ceda	ar Low	>20 feet	Pole	
						Bla	ck Spruce	Low	< 5 feet	Sapling	
						Bals	am Poplar	Low	< 5 feet	Sapling	
						W	hite Pine	Low	< 5 feet	Sapling	
						Ta	amarack	Low	< 5 feet	Sapling	
						Т.	ag Alder	Low	5 - 10 feet	Tall Shruk	