

# **Compartment Review Presentation**

**Cadillac Forest Management Unit** 

Compartment 63102 Entry Year 2025 Acreage: 2,217

**County Missaukee** 

Management Area: High Sand Plains

Stand Examiner: Matt Edison

**Legal Description:** 

T21N, R5W, Sections 25-28. Holland Township.

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

Continue to maintain cover types and age class diversity. Salvage areas of dead oak and convert to aspen where applicable.

#### Soil and topography:

Grayling association. Grayling and Rubicon sands. Montcalm-Gray calm complex. Various mucks and Manistee loamy sands.

Mostly level with a few rolling hills towards the east and the Muskegon River to the far east of the compartment.

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

Most of compartment is solid state ownership. Private holdings in west side of section 27. 80 Acres recommended for acquisition in NWSW, NESW of section 25. Land use in compartment is generally hunting, ORV trail use, mushrooming, firewood gathering, snowmobiles on two tracks.

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

Large diameter white pine stand in river plains area, section 25.

# Archeological, Historical, and Cultural Features:

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

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

#### Watershed and Fisheries Considerations:

#### Wildlife Habitat Considerations:

Far East end falls within a Eastern Massasauga Management Area.

This compartment falls within the Highplains Ecosystem, the east half into the Grayling Outwash Plain Subsection, LTA 5111 and the west half into the Cadillac Subsection, LTA 3111. In LTA 5111 the predominate soil is Grayling sand, a deep, excessively drained, acidic soil with low natural fertility. Pre-settlement vegetation was variable but dominated by fire-dependent conifer forest, e.g. jack pine, red/white pine, and pine or oak/pine barrens. In LTA 3111, soils are deep, excessively drained sands with relatively low fertility. Red pine, which occurred mixed with oak or white pine was a major component of forests. Wildlife habitat objectives for this compartment are to continue to maintain cover types and age-class diversity across the compartment. The eastern fifth of the compartment is part of a proposed eastern massasauga rattlesnake management area. Activities in this management area will follow Conservation Candidate Agreement with Assurances guidelines as approved by the U.S. Fish and Wildlife Service. Featured species of special interest are eastern massasauga rattlesnake, bear, deer, woodcock, ruffed grouse, and golden-winged warbler. (E. Victory, 8/21/13)

# Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of ice-contact and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 800 feet. Beneath the glacial drift are the Pennsylvanian Grand River and Saginaw Formations. The Saginaw is quarried for clay/shale in other parts of the State. A sand pit is located in Section 33 and a gravel pit is located one mile to the south. Gravel potential is considered good especially the upland areas. The compartment is located two miles northwest of Cranberry Lake Field. The field is a Stray Sandstone gas storage area (7.7 Bcf) and a Richfield secondary recovery operation (1.7 MBO). The entire Compartment is leased for oil and gas development. (T. Hoane, 3/6/2013).

#### **Vehicle Access:**

A forest road access plan is detailed on the compartment map. Identified are state and county roads as well as forest roads and trails under the jurisdiction of the DNR. Also indicated are forest roads and trails under the jurisdiction of the DNR that are proposed for closure. These roads were determined to be in excess of the access needs in the area, are a threat to the resources, or are a concern environmentally.

#### **Survey Needs:**

None needed at this time.

#### **Recreational Facilities and Opportunities:**

The Leota ORV Trail runs North and South, and East & West through this compartment. This ORV trail designed for vehicles 50 inches wide or less. Care should be taken to keep the 50" trail intact to reduce illegal opportunistic full size ORV's. Proposed timber management activities should include trail protection specifications to reduce impacts to users, as well as serve as an example of how silviculturally sound timber harvesting practices can co-exist, and often improve recreation and wildlife experiences for future generations. Hunting opportunities exist throughout the area also. (T.M.N. 7/2013)

#### **Fire Protection:**

The road system with in the compartment allows for suppression equipment access. The limiting factors would be the sandy soils and terrain issues. Recreational activates within the compartment would increase the chance of a fire. This area has fuel types that would support large fire growth and cause suppression concerns on Very High and Extreme days. (B. Tower, 2013).

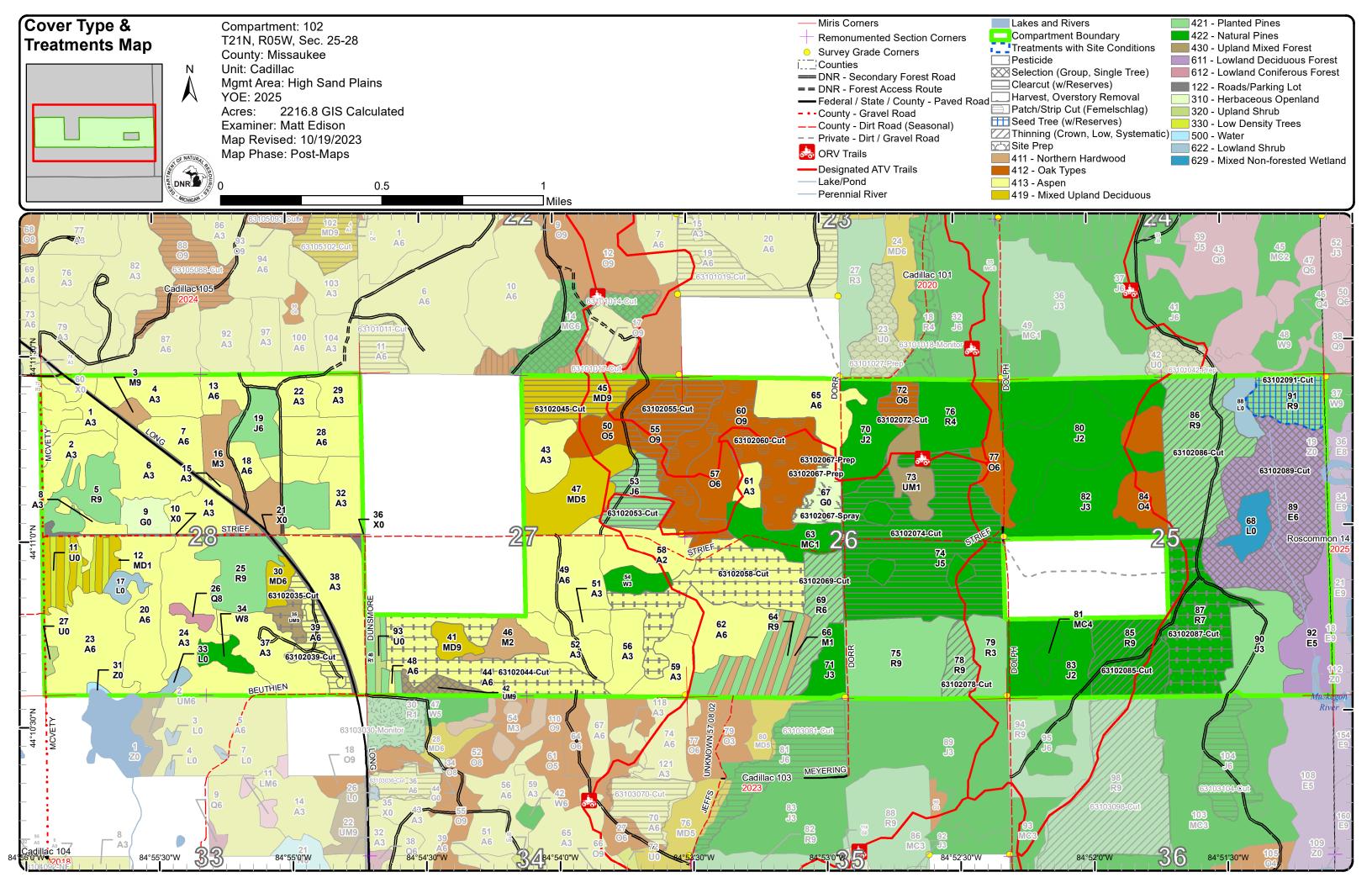
# **Additional Compartment Information:**

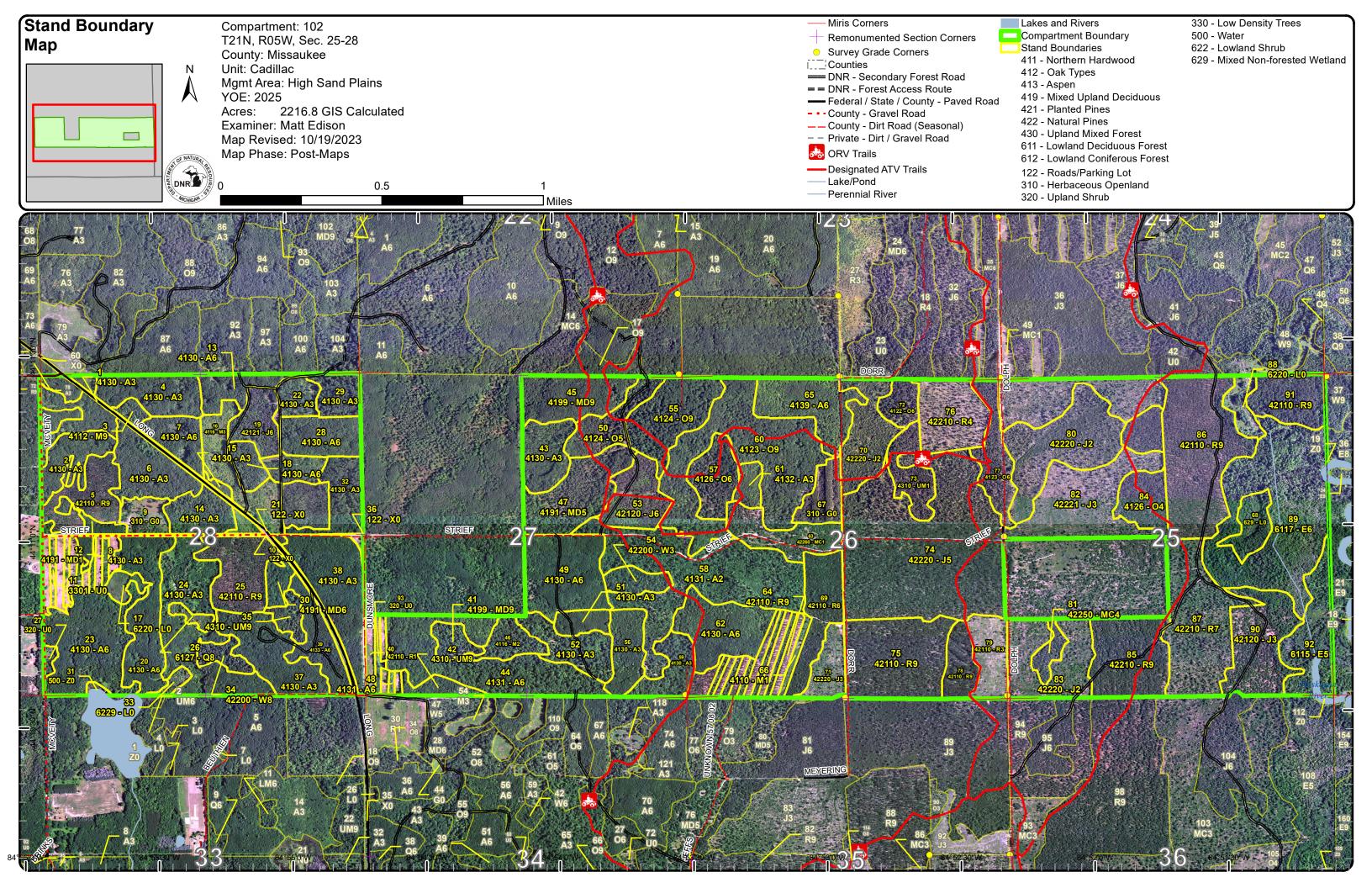
The following reports from the Inventory are attached:

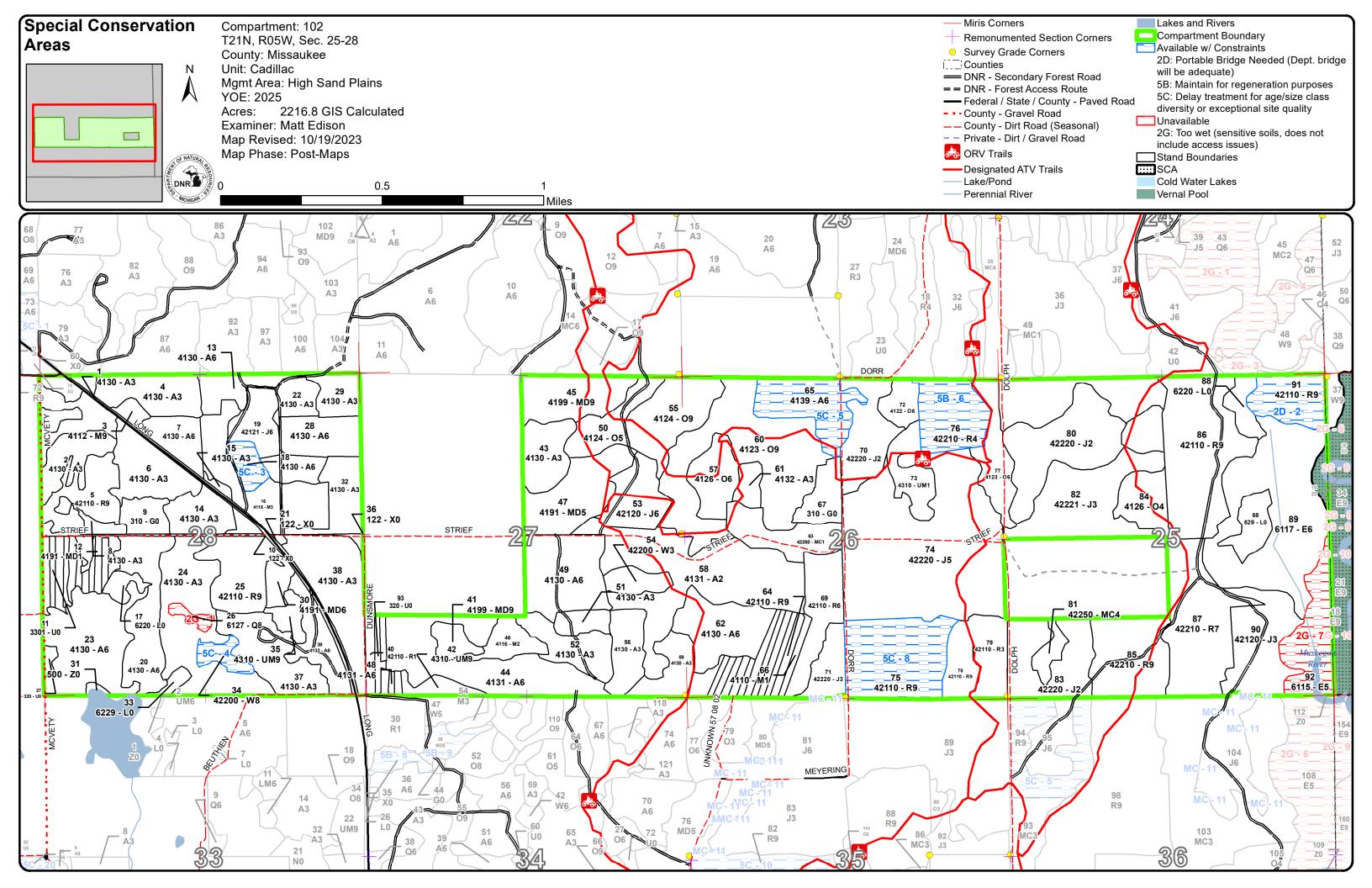
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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







Matt Edison : Examiner

Compartment 102 Year of Entry 2025



# Age Class

			7	/	/	/	/	/	<del>/                                    </del>	/	/	/	/	/	7	7	7	<del>/                                    </del>	/、/
	<b>¥</b> or	KO C	3 / 2		P S	3 / 6		3/8			8 8		S Z			\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	18 / E	St Sugar	TO TO
Aspen	0	84	190	203	258	0	19	8	0	0	0	0	0	0	0	0	0	0	761
Herbaceous Openland	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
Jack Pine	0	0	131	248	0	0	0	28	21	0	0	0	0	0	0	0	0	0	428
Low-Density Trees	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
Lowland Deciduous	0	0	0	0	0	0	0	31	91	0	0	0	0	0	0	0	0	0	121
Lowland Shrub	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
Mixed Upland Deciduous	0	16	34	0	0	0	7	8	0	28	0	0	0	0	0	0	0	0	92
Natural Mixed Pines	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	28
Northern Hardwood	0	27	15	11	0	0	0	0	0	4	0	0	0	0	0	0	0	0	57
Oak	0	0	0	46	0	18	0	18	0	80	41	0	0	0	0	0	0	0	203
Red Pine	0	17	9	0	25	0	0	71	28	243	0	0	0	0	0	0	0	0	393
Upland Mixed Forest	0	16	0	0	0	0	0	7	0	0	0	0	7	0	0	0	0	0	30
Upland Shrub	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Urban	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Water	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
White Pine	0	0	0	0	9	0	0	0	0	0	0	0	7	0	0	0	0	0	16
Total	84	160	379	508	320	18	26	171	140	355	44	0	14	0	0	0	0	0	2216



# **Report 2 – Treatment Summary**

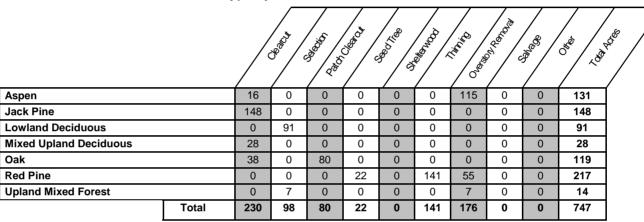
# Cadillac Mgt. Unit Year of Entry: 2025

#### **Acres of Harvest**

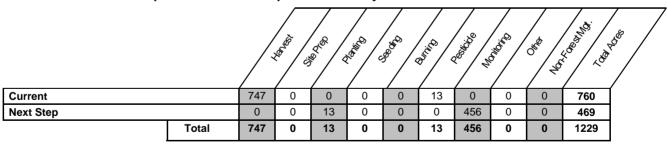
Compartment 102
Total Compartment Acres: 2,217

Commercial Harvest - 725 Harvests with Site Condition - 22 Next Step Harvest - 0 Habitat Cut - 0

# **Cover Type by Harvest Method**



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



Report 3 -- Treatments

Compartment: 102 Year of Entry: 2025

Habitat

Cut

S t а

n

d

**Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age Method Objective Name CoverType Density Age Range Type Structure

**Proposed Treatments:** 

63102035-Cut 6.8 4310 - Pine, Oak Sawtimber 110 1-50 Harvest Overstory 4319 - Mixed Even-Aged No Well Removal **Upland Forest** Mix

Prescription Remove all red oak. Leave white oak and some white pine. Actual treatment will reflect on the ground conditions and acreage may vary from original proposed treatment. Specs:

Next Step **Treatments:** 

Acceptable Acceptable regen will consist of any mix of Aspen, Oak, Maple, Birch, Beech, Cherry, White Pine, Red Pine, Balsam Fir, Spruce, or Cedar.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2024

63102039-Cut Harvest 15.8 4133 - Aspen, Poletimber 55 111-Clearcut with 4133 - Aspen, Even-Aged No Well Mixed Pine Mixed Pine 140 Retention

Prescription Clear-Cut with pocket retention 3-6% of treatment area. Actual treatment will reflect on the ground conditions and acreage may vary from original proposed treatment. Harvest Aspen and maple. Retain large White Pine and mark other desirable. Protect areas with heavy WP Specs: regen as retention pockets.

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable Acceptable regen will consist of any mix of Aspen, Oak, Maple, Birch, Beech, Cherry, White Pine, Red Pine, Balsam Fir, Spruce, or Cedar.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2024

7.2 4310 - Pine, Oak Single Tree 63102042-Cut 4319 - Mixed Sawtimber 141-Uneven-Nο Harvest Mix Well 170 Selection **Upland Forest** Aged

Prescription Cut out all aspen and select cut all other species by spec or marking to thin appropriately for mixed species.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Acceptable regen will consist of any mix of Aspen, Oak, Maple, Birch, Beech, Cherry, White Pine, Red Pine, Balsam Fir, Spruce, or Cedar.

Regen:

Other Monitor for regen.

Comment:

Site Condition

Proposed Start Date: 10/1 /2024

Report 3 -- Treatments

OF NATURAL PRODURCE
- MICHIGAN

Compartment: 102 S Year of Entry: 2025 t а **Treatment** Stand Size Stand BA **Treatment Treatment** Cover Type Acres Age Habitat n Density Method Name CoverType Age Range Type Objective Structure Cut d 63102044-Cut 57.0 4131 - Aspen, Oak Poletimber 51-80 Harvest Overstory 4319 - Mixed Even-Aged Nο Well Removal Upland Forest Prescription Remove oak and maple overstory with the exception of a few scattered as residual. Harvest any merchantable size aspen and protect the smaller regeneration as best as possible. Sale area will reflect actual on the ground conditions and may vary from original treatment acres. Specs: Next Step **Treatments:** Acceptable Acceptable regen will consist of any mix of Aspen, Oak, Maple, Birch, Beech, Cherry, White Pine, Red Pine, Balsam Fir, Spruce, or Cedar. Regen: <u>Other</u> Comment: Site Condition Proposed Start Date: 10/1 /2024 63102045-Cut 27.9 4199 - Other Mixed Sawtimber 141-Harvest Clearcut with 4319 - Mixed Two-Aged No **Upland Deciduous** Well 170 Retention **Upland Forest** Prescription Clear-Cut with pocket retention 3-6% of treatment area. Cut all aspen, oak, red maple, and jack pine. Cut only red pine greater than 10 Specs: inches. Actual treatment will reflect on the ground conditions and acreage may vary from original proposed treatment. Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable Acceptable regen will consist of any mix of Aspen, Oak, Maple, Birch, Beech, Cherry, White Pine, Red Pine, Balsam Fir, Spruce, or Cedar. Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2024 63102053-Cut 4319 - Mixed 21.4 42120 - Planted Poletimber 70 81-110 Harvest Clearcut Even-Aged No Jack Pine **Upland Forest** Well Prescription Clear-Cut all down to 2" Cut asap as jack pine is already deteriorating and falling down. Specs: Actual treatment will reflect on the ground conditions and acreage may vary from original proposed treatment. Next Step Monitoring, Natural Regen (Re-Inventory) **Treatments:** Acceptable Acceptable regen will consist of any mix of Aspen, Oak, Maple, Birch, Beech, Cherry, White Pine, Red Pine, Balsam Fir, Spruce, or Cedar. Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2022 63102055-Cut 29.0 4124 - Red with Sawtimber 90 81-110 Harvest Clearcut with 4319 - Mixed Even-Aged No White Oak Retention **Upland Forest** Prescription Clear-Cut with pocket retention 3-6% of treatment area. Retain some white pine and white oak less than 10" dia. Actual treatment will reflect on the ground conditions and acreage may vary from original proposed treatment. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) Treatments Acceptable Acceptable regen will consist of any mix of Aspen, Oak, Maple, Birch, Beech, Cherry, White Pine, Red Pine, Balsam Fir, Spruce, or Cedar. Regen: Other Cut as sson as possible as oak wilt has been in stand for a while. Comment:

Proposed Start Date: 10/1 /2022

Site Condition

Cadillac Mgt. Unit Report 3 -- Treatments Compartment: 102 S Year of Entry: 2025 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age Habitat n Method Objective Name CoverType Density Age Range Type Structure Cut d 58 63102058-Cut 57.8 4131 - Aspen, Oak Sapling Immatu Harvest Overstory 4199 - Other Even-Aged Nο Removal Mixed Upland Medium re Deciduous Prescription Cut all merchantable trees except for white oak. Leave any red pine under 8 inches dia. Harvest overstory oak asap... chapter 7 to current year harvest 2023. Exclude areas of mostly pure aspen on and above the ridge to west. Specs: Actual treatment will reflect on the ground conditions and acreage may vary from original proposed treatment. Next Step **Treatments:** Acceptable Acceptable regen will consist of any mix of Aspen, Oak, Maple, Birch, Beech, Cherry, White Pine, Red Pine, Balsam Fir, Spruce, or Cedar. Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2022 63102060-Cut 80.4 4123 - Red Oak Sawtimber 85 111-Harvest Strip/Patch/Gap 4199 - Other Even-Aged No Mixed Upland Well 140 Cut (Femelschlag) Deciduous Prescription Clear-Cut with patches within treatment area. Cut about a third this year and more later in current entry if more decline. Cut all trees down to 2", except do not cut white pine or white oak. Actual treatment will reflect on the ground conditions and acreage may vary from original Specs: proposed treatment. Monitoring, Natural Regen (Intermediate) Next Step Treatments: Acceptable Acceptable regen will consist of any mix of Aspen, Oak, Maple, Birch, Beech, Cherry, White Pine, Red Pine, Balsam Fir, Spruce, or Cedar. Regen: Other Comment:

Site Condition

Proposed Start Date: 10/1 /2022

Systematic Even-Aged 63102069-Cut 24.8 42110 - Planted Poletimber 30 141-Harvest 4211 - Planted No Red Pine Well 170 Thinning Red Pine

Prescription Third row thin Red Pine.

Specs:

Next Step

**Treatments:** 

<u>Acceptable</u>

Regen:

<u>Other</u>

Comment:

Site Condition

Proposed Start Date: 10/1 /2024



Compartment: 102

S t									Year of Entr	y: 2025	DNR
a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habita Cut
72	63102072-Cut	9.2	4122 - Oak, Pine	Poletimbe Well	r 97	81-110	Harvest	Clearcut with Retention	4319 - Mixed Upland Forest	Even-Aged	No
Spec Next	may va	y from o	ome retention of sca riginal proposed trea ral Regen (Re-Inver	atment.	oine. Do	o not cut v	white oak. Actua	al treatment will ref	ect on the ground	d conditions an	d acreag
Acce Rege Othe	en:	able rege	n will consist of any	mix of Aspe	en, Oak	x, Maple, I	Birch, Beech, Cl	herry, White Pine, I	Red Pine, Balsam	Fir, Spruce, c	or Cedar.
	ment:										
	Condition										
	osed Start Date:										
74	63102074-Cut	126.6	42220 - Natural Jack Pine	Poletimbe Medium		141- 170	Harvest	Clearcut with Retention	4222 - Natural Jack Pine	Even-Aged	No
Pres Spec			ocket retention 3-6% lect on the ground o							on pockets. Ac	tual
	<u>Step</u> ; Monit tments:	oring, Na	tural Regen (Interm	ediate)							
Acce Rege		able rege	n will consist of any	mix of Aspo	en, Oak	, Maple, I	Birch, Beech, Cl	herry, White Pine, I	Red Pine, Balsam	Fir, Spruce, c	r Cedar.
Othe											
Site	Condition										
-	osed Start Date:	10/1 /20	024								
78	63102078-Cut	13.0	42110 - Planted Red Pine	Sawtimbe Well	r 81	81-110	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	No
Pres Spec			approximately 120 E	3A. Actual t	reatmei	nt will refl	ect on the groun	d conditions and a	creage may vary	from original p	roposed
	Step tments:										
Acce Rege	e <u>ptable</u> Planted en:	Red Pin	е								
Othe Com	er ment:										
Site	<u>Condition</u>										
Prop	osed Start Date:	10/1 /20	024								
85	63102085-Cut	37.3	42210 - Natural Red Pine	Sawtimbe Well	r 83	81-110	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	No
Pres Spec			to release crowns. le Sale Specs need						age may vary from	n original propo	osed
	Step tments:										
Acce Rege	e <u>ptable</u> Planted en:	Red pine	Э								
Othe Com	e <u>r</u> ment:										
Site	<u>Condition</u>										

Report 3 -- Treatments

Compartment: 102 Year of Entry: 2025

S t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age Habitat n Method Objective Density Name CoverType Age Range Type Structure Cut d 86 63102086-Cut 65.7 42110 - Planted Sawtimber 141-Harvest Crown Thinning 4211 - Planted Even-Aged Red Pine Red Pine Well 170 Prescription Thin red pine to residual of 100-120 b.a. Focus on removing largest diameter trees. Include Sale Specs needed for protections of Massasauga Rattle Snake Specs: Next Step Treatments: <u>Acceptable</u> Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2024 Even-Aged 63102087-Cut 54.7 42210 - Natural Sawtimber 83 1-50 Harvest Overstory 4319 - Mixed No Red Pine Poor Removal **Upland Forest** Prescription Clear-Cut with pocket retention 3-6% of treatment area to save a representation of red pine. Actual treatment will reflect on the ground Specs: conditions and acreage may vary from original proposed treatment. Include Sale Specs needed for protections of Massasauga Rattle Snake Next Step Treatments: Acceptable Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2024 63102089-Cut 90.7 6117 - Lowland Poletimber 77 111-Harvest Group Selection 613 - Lowland Uneven-No Deciduous, Mixed Well 140 Mixed Forest Aged Coniferous Prescription The ground is quite variable with lots of included low open wetlands. There is very nice white pine regen throughout that could benefit from being released. Some white pine that is entering pole size as well. Find a diameter range to remove the overstory while retaining under 6" Specs: and super large white pine. Allow for acreage limits for treatment due to wet areas. Eastern portion gradiates to riparian influence and eventually Muskegon river. Any treatment possible is these areas should consider River guidelines. Actual treatment will reflect on the ground conditions and acreage may vary from original proposed treatment. Include Sale Specs needed for protections of Massasauga Rattle Snake Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable Acceptable regen will consist of any mix of Aspen, Oak, Maple, Birch, Beech, Cherry, White Pine, Red Pine, Balsam Fir, Spruce, or Cedar. Regen: Other Comment: Site Condition

Proposed Start Date: 10/1 /2024



Compartment: 102

Year of Entry: 2025

n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
91	63102091-Cut	21.8	42110 - Planted Red Pine	Sawtimbe Well	r 80	171- 200	Harvest	Seed Tree with Retention	4319 - Mixed Upland Forest	Uneven- Aged	No
Pres	cription Cut all	merchant	able trees, except for	or a residua	l of 50-7	70 ba of r	ed pine. Let sta	nd convert to natura	al state following h	narvest due to	difficult

Specs:

access. Access challenges create need to find suitable access across lower area and a crossing area for stream.

Actual treatment will reflect on the ground conditions and acreage may vary from original proposed treatment. Include Sale Specs needed for

protections of Massasauga Rattle Snake Monitoring, Natural Regen (Re-Inventory)

Next Step **Treatments:** 

Acceptable Acceptable regen will consist of any mix of Aspen, Oak, Maple, Birch, Beech, Cherry, White Pine, Red Pine, Balsam Fir, Spruce, or Cedar.

Regen:

Other Comment:

Site Condition Portable Bridge Needed

Proposed Start Date: 10/1 /2024

#### **Approved Treatments:**

67 63102067-0.0 310 - Herbaceous Nonstocked 2022 SitePrep Trenching 4211 - Planted Even-Aged No Openland Red Pine Prep

**Prescription** Specs:

; Pesticide, Skidder - Site Prep; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr) Next Step

**Treatments:** 

Acceptable Red pine and oak.

Regen:

Other Percent to Treat = 100%

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

63102067-12.9 310 - Herbaceous Nonstocked 2022 Pesticide **ERROR** 4211 - Planted Even-Aged No 67 Red Pine Openland

Spray

Prescription Site Prep Spray Specs:

Next Step ; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

**Treatments:** 

Acceptable Red Pine

Regen:

**Other** Percent to Treat = 100%

Comment: Site Condition

Proposed Start Date: 10/1 /2022

**Total Treatment** 760 Acreage Proposed:

Matt Edison : Examiner

Compartment: 102 Year of Entry: 2025

Availa	ability for	Managemer	nt					
Total	Acres	Acres Avail	Acres		Domina	nt Site	e Con	ditions
Acres	Available	With Condition	Not Available		2D	5B	5C	2G
761	723	38	0	Aspen			38	
23	23	0	0	Herbaceous Openland				
429	429	0	0	Jack Pine				
9	9	0	0	Low-Density Trees				
3	0	0	3	Lowland Conifers				3
121	91	0	30	Lowland Deciduous				30
29	29	0	0	Lowland Shrub				
92	92	0	0	Mixed Upland Deciduous				
28	28	0	0	Natural Mixed Pines				
57	57	0	0	Northern Hardwood			0	
203	203	0	0	Oak				
393	292	100	0	Red Pine	22	28	50	
30	30	0	0	Upland Mixed Forest				
5	5	0	0	Upland Shrub				
16	16	0	0	Urban				
1	1	0	0	Water				
16	9	7	0	White Pine			7	
2,217	2,037	146	34	Total Forested Acres	22	28	96	34
	92%	7%	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.

Condition
ecified

# Report 4 – Site Conditions

Cadillac Mgt. Unit
Matt Edison : Examiner

2	Available	2D: Portable Bridge Needed (Dept. bridge will be adequate)	22	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	8	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Hold due to amour	nt of adjacent cutting					
4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	7	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	30	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Available	5B: Maintain for regeneration purposes	28	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	31	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

# Report 4 – Site Conditions

Cadillac Mgt. Unit

Compartment: 102 Year of Entry: 2025 Matt Edison : Examiner

8	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	50	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						

10/17/2023 4:47:56 PM - Page 3 of 3 **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				

Cadillac Mgt. Unit Compartment: 102
Year of Entry 2025





\* 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	n Туре	Description	HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA C	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions stocked trout populations and those of other coldwater fish speconditions 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	cies to persist from year to year. Suitable ney are relatively deep, have substantial f the state. Such lakes are established by



Stand	d Level 4 Co	over Type	;	Size De	nsity	Acres	Stand Age	BA Range	Managed S	ite	General Comments
1	4130 -	- Aspen		Sapling	y Well	16.6	13	Immature	N/A		Aspen stand was harvested last entry. #63-016-05 "Long Divide". Pretty
	Canopy Species	% Cover	Size Class	DBH	l Age						good looking aspen.
	Bigtooth Aspen	90	Sapling	2	13						
Bla	ck/Red (Hybrid) Oak	3	Sapling	2							
	Red Maple	7	Sapling	2							
2	4130 -	- Aspen		Sapling	y Well	24.6	25	Immature	N/A		Aspen stand with scattered overstory oaks left following previous harvest.
	Canopy Species	% Cover	Size Class	DBH	l Age						Some White Pine in understory.
	Red Maple	5	Sapling	4							
Bla	ck/Red (Hybrid) Oak	5	Pole/Log	9							
	Bigtooth Aspen	90	Sapling	4	25						
3	4112 - Maple, Beecl	h, Cherry A	Association S	Sawtimb	er Well	3.6	86	51-80	N/A		Mixed mature stand. Harvest oak and aspen. Retain maple.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	
	Red Maple	25	Log/Pole	11			Beech	Low	5 - 10 feet	Sapling	
	Beech	25	Log	10				1	'		•
	Red Oak	10	Log	13							
	Sugar Maple	40	Log	14	86						
4	4130 -	Aspen		Sapling	y Well	22.8	25	Immature	N/A		Good looking A3.
	Canopy Species	% Cover	Size Class	DBH	l Age						
	Red Maple	10	Sapling/Pole	4							
	Bigtooth Aspen	90	Sapling/Pole	4	25						
5	42110 - Plar	nted Red P	ine S	Sawtimb	er Well	23.2	67	81-110	N/A		Stand was thinned last entry. #63-059-05 "MSL Red Pine". Hold and
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	evaluate next entry.
	Red Pine	100	Log/Pole	12	67	Re	ed Maple	Low	5 - 10 feet	Sapling	
				•		R	ed Oak	Low	Variable	Sapling	
						Asp	en (spp.)	Low	5 - 10 feet	Sapling	
6	4130 -	- Aspen		Sapling	y Well	25.2	36	141-170	N/A	_	Mixed Aspen of variable size. Check next entry for harvest. Thin very
	Canopy Species	% Cover	Size Class	DBH	l Age						small Sugar Maple patch with stand on opposite side of readjust to north.
	Green Ash	5	Sapling	4							
	Paper Birch	5	Sapling	4							
	Red Maple	15	Sapling	4							
	Bigtooth Aspen		Sapling/Pole	3	36						



Stand	d Level 4 C	over Type		Size Density	Acres	Stand Age	BA Range	Managed S	Site	General Comments
7		- Aspen		Poletimber Well	14.0	35	141-170	N/A		Stand has a wet area in the NE portion of the stand. This is the concenteration of Quaking Aspen. Variable size diameter, 3-6".
	Canopy Species		Size Class	DBH Age						
	Quaking Aspen	30	Pole	5						
	Green Ash	5	Pole	5						
	Red Maple	5	Pole Pole	5						
	Bigtooth Aspen	60	Pole	6 35						
8		- Aspen		Sapling Well	7.5	25	Immature	N/A		A3 along both sides of the road. Some wet pockets. Not the greatest stand.
	Canopy Species	% Cover	Size Class	DBH Age						Starta.
	Red Maple	5	Sapling	4						
	Bigtooth Aspen	90	Sapling	4 25						
	White Oak	5	Sapling	4						
9	310 - Herbac	eous Open	land	Nonstocked	9.9			No		Few scattered trees in grassy opening. Previous landing site for adjacent timber sales.
10	122 - Road	d/Parking L	ot	Nonstocked	3.9			No		
11	3301 - Low Densi	ty Deciduo	us Trees	Nonstocked	9.2			No		Stand was JP harvested 63-059-05 "MSL Red Pine"and jack pine
					Sub-Ca	nopy Specie	s Density	Avg. Height	Size	removed. Oak coming in.
					R	ed Oak	Low	5 - 10 feet	Sapling	
					Bla	ck Cherry	Low	10 - 20 feet	Tall Shrub	
12	4191 - Mixed Upla Co	and Decidu	ous with	Sapling Poor	16.2	7	Immature	N/A		Stand was JP harvested 63-059-05 "MSL Red Pine". Red Pine planted after harvest. Mostly sparse oak and maple. Red Pine struggling
	Canopy Species	% Cover	Size Class	DBH Age						underneath. Oak actually coming in pretty well.  10/21/2021- Mixed upland site, with planted red pine seedlings.
	Black Cherry	10	Sapling	1 7						10/21/2021- Winked upland site, with planted red pine seedings.  10/21/2021- We should not pursue FTG red pine on this site at this time.
	Red Pine	25	Sapling	1 7						Seedling levels appear to be lower than ideal. Mixed stand. (B.
	Red Maple	10	Sapling	2 7						Tweedale).
13	4130	- Aspen		Poletimber Well	13.3	35	141-170	N/A		Same sale as stand 5 but no wet areas. Aspen is growing well, check in
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	10 years.
	Balsam Poplar	2	Sapling/Pole			ern Pin Oak	Low	< 5 feet	Sapling	
	Bigtooth Aspen	92	Pole/Sapling	g 5 35				1		
	Red Maple	6	Pole/Sapling	_						
				Sapling Well	15.7	5	Immature	N/A		Treated with #63-034-15
14	4130	- Aspen		- 1 3						
14	Canopy Species	- Aspen % Cover	Size Class	DBH Age						
14		-	Size Class Sapling							



Stand	Level 4 Co	over Type		Size De	ensity	Acres	Stand Age	BA Range	Managed Sit	e	General Comments
15	4130	- Aspen		Sapling	g Well	1.5	13	Immature	N/A		
	<b>Canopy Species</b>	% Cover	Size Class	DBH	l Age						
	Red Maple	15	Sapling	2							
	Quaking Aspen	85	Sapling	2	13						
16	4116 - Mixed N.	Hardwood	- Aspen	Sapling	g Well	27.3	9	Immature	N/A		Stand is a mix of aspen, oak, and red maple brush with scattered red
	Canopy Species	% Cover	Size Class	DBH	l Age						pine 5-8' tall throughout. Previous notes indicate trenching and potential planting, but stand was never planted and trenches are iffy. This stand
	Red Maple	35	Sapling	1	9						will be a mix in 30 years.
	Bigtooth Aspen	30	Sapling	2							
	Black Cherry	25	Sapling	3	9						1\16\13. This stand has been updated from a field evaluation for a
	Northern Pin Oak	10	Sapling	2							project on free to grow red pine.
17	6220 - A	lder/willow		Nonst	ocked	5.1		Unspecified	No		
18	4130	- Aspen		Poletimb	er Well	8.3	67	111-140	N/A		Hold due to amount of adjacent cutting
	Canopy Species	% Cover	Size Class	DBH	l Age						
	Sugar Maple	5	Pole	8							
	Red Maple	10	Pole	7							
	Quaking Aspen	85	Pole	7	67						
19	42121 - Planted Deci	Jack Pine,	Mixed	Poletimb	er Well	28.4	65	111-140	N/A		Jack Pine with scattered pole pin oak. Surrounding pine was cut last entry. Lots of dying JP harvest and consider a short contract. Decided at
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	pre-review to let this stand go due to a good amount of oak regeneration established in stand.
	Bigtooth Aspen	15	Pole	7		Northe	rn Pin Oak	Low	< 5 feet	Sapling	established in stand.
	Northern Pin Oak	10	Pole	6				1	1		
20	4130	- Aspen		Poletimb	er Well	33.2	37	141-170	N/A		Below average quality aspen showing some mortality already. Good
	Canopy Species	% Cover	Size Class	DBH	l Age						amount of paper birch as well. 8 -9 inch diameter. Hold 10 years for age class considerations.
	Red Oak	5	Pole	7							class considerations.
	Paper Birch	15	Pole	8							
	Quaking Aspen	80	Pole	8	37						
21	122 - Road	d/Parking L	ot	Nonsto	ocked	11.0			No		
				0 1	r Wall	19.1	16	Immature	N/A		Stand was cut in 2007 #63-016-05 "Long Divide". Currebtly, aspen with
22	4130	- Aspen		Sapling	y vven						
22	4130 Canopy Species		Size Class		l Age						residual overstory oaks. some scattered oaks in the sapling size class.
22			Size Class Sapling								residual overstory oaks. some scattered oaks in the sapling size class.
	Canopy Species	% Cover		DBH							residual overstory oaks. some scattered oaks in the sapling size class.



Stand	d Level 4 C	over Type		Size Density	Acres	Stand Age	BA Range	Managed S	ite	General Comments
23	4130	- Aspen	ļ	Poletimber Well	47.5	32	141-170	N/A		Pole stand emerging into harvest time. Good quality that will hold compared to other stands in compartment.
	Canopy Species		Size Class	DBH Age						compared to other stands in compartment.
	Quaking Aspen	90	Pole	8 32						
	Red Maple	10	Pole	8						
24	4130	- Aspen		Sapling Well	50.0	15	Immature	N/A		Wet pockets in stand. A3 with red maple and residual oak about 6" diameter. Stand was harvested in 2008 #63-016-05 "Long Divide".
	Canopy Species	% Cover	Size Class	DBH Age						diameter. Stand was nativested in 2000 #00 010 00 Long Divide .
	Red Maple	10	Sapling	4						Previous: stand was very wet when harvest occurred.
	Red Oak	10	Pole	6						
	White Pine	5	Pole	6						
	Quaking Aspen	75	Sapling	2 15						
25	42110 - Pla	nted Red P	ine	Sawtimber Well	28.2	67	111-140	N/A		Thinned in 2005 #63-059-05 "MSL Red Pine". 120-140 avg. BA overall. Hold and evaluate next entry. Tall trees can add a little more diameter if
	Canopy Species	% Cover	Size Class	DBH Age						held.
	Red Pine	100	Log	14 67						
26	6127 - Lo	wland Pine	e Sa	awtimber Medium	3.3	93	1-50	N/A		Very wet stand of spruce with some large scattered white pine. Pretty much inoperable.
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	тпист порегавле.
	Balsam Fir	15	Pole	5	Ta	ag Alder	Low	5 - 10 feet	Tall Shrub	
	Quaking Aspen	10	Pole	6	Ва	lsam Fir	Low	5 - 10 feet	Sapling	
	Black Spruce	10	Pole	7	W	nite Pine	Low	5 - 10 feet	Sapling	
	Red Maple	15	Pole/Log	7						
	White Pine	50	Log/Pole	10 93						
27	320 - Up	land Shrub		Nonstocked	2.1			No		Filling in with white pine scrub.
28	4130	- Aspen		Poletimber Well	19.5	36	141-170	N/A		Few scattered oaks in a pole sized aspen stand. Check in 10 years.
	Canopy Species	% Cover	Size Class	DBH Age						
	Quaking Aspen	80	Pole	8 36						
Blac	ck/Red (Hybrid) Oak	5	Pole/Log/Sa	p 9						
	Red Maple	15	Pole	6						
29	4130	- Aspen		Sapling Well	11.9	26	Immature	N/A		Stand was cut last entry. Some residual oaks left.
	Canopy Species	% Cover	Size Class	DBH Age						Previous: Some of the residual oaks are dying. Does not appear to be
	Red Maple	10	Sapling	2 25						oak wilt.
	Quaking Aspen	80	Sapling	3 26						
	Red Oak	5	Log	14						
1	Northern Pin Oak	5	Sapling	1						

# Report 7 - Stands



Stand	d Level 4 C	Level 4 Cover Type			Acres	Stand Age B	A Range	Range Managed Site		General Comments
30	4191 - Mixed Upla Co	and Decidu onifer	ous with	Poletimber Well	6.5	58	1-50	N/A		Stand is a mix of oaks maple and white pine with aspen scattered throughout.
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	55	Pole	6 58	Ir	onwood	Low	10 - 20 feet	Sapling	
	Bigtooth Aspen	20	Pole	6	Re	ed Maple	Low	10 - 20 feet	Sapling	
	White Pine	20	Log	15						
	Hemlock	5	Pole	8						
31	500 -	- Water		Nonstocked	1.5			No		
32	4130	- Aspen		Sapling Well	18.6	26 I	mmature	N/A		Stand was cut last entry. Some residual oaks were left.
	Canopy Species	% Cover	Size Class	DBH Age						
	Northern Pin Oak	5	Pole/Log	9						
	White Oak	5	Log	13						
	Quaking Aspen	90	Sapling	2 26						
33	Quaking Aspen 6229 - Mixed		· -	Nonstocked	3.0			No		
33 34	6229 - Mixed 42200 - Natu	d lowland sh	nrub Pine Sa	Nonstocked	7.2	112	51-80	N/A		Large White Pine with some mixed understory. Nice mature stand. Lea
	6229 - Mixed 42200 - Natu Canopy Species	d lowland sh ural White F % Cover	Pine Size Class	Nonstocked awtimber Medium DBH Age	7.2 <b>Sub-C</b> a	nopy Species	Density	N/A Avg. Height	Size	Large White Pine with some mixed understory. Nice mature stand. Leafor diversity.
	6229 - Mixed 42200 - Natu Canopy Species White Pine	d lowland shural White F  Cover  80	Pine Size Class Log/XLog	Nonstocked  awtimber Medium  DBH Age  16 112	7.2 Sub-Ca	anopy Species ed Maple	<b>Density</b> Low	N/A  Avg. Height 5 - 10 feet	Sapling	
	6229 - Mixed 42200 - Natu Canopy Species White Pine Red Pine	ural White F  Cover  80  7	Pine Sa Size Class Log/XLog Log/XLog	Nonstocked  awtimber Medium  DBH Age  16 112  14	7.2 Sub-Ca	nopy Species	Density	N/A Avg. Height		
	6229 - Mixed 42200 - Natu Canopy Species White Pine	d lowland shural White F  Cover  80	Pine Size Class Log/XLog	Nonstocked  awtimber Medium  DBH Age  16 112	7.2 Sub-Ca	anopy Species ed Maple	<b>Density</b> Low	N/A  Avg. Height 5 - 10 feet	Sapling	
	6229 - Mixed 42200 - Natu Canopy Species White Pine Red Pine Red Oak	ural White F  Cover  80  7	Pine Size Class Log/XLog Log/XLog Log	Nonstocked  Bawtimber Medium  DBH Age  16 112  14 13  Sawtimber Well	7.2 Sub-Ca	anopy Species ed Maple	<b>Density</b> Low	N/A  Avg. Height 5 - 10 feet	Sapling	for diversity.  Stand was cut 2 entries ago, red maple regen throughout. heavy brown
34	6229 - Mixed 42200 - Natu Canopy Species White Pine Red Pine Red Oak	d lowland stural White F % Cover 80 7 13	Pine Size Class Log/XLog Log/XLog Log	Nonstocked  awtimber Medium  DBH Age  16 112  14  13	7.2 Sub-Ca Re Asp	enopy Species ed Maple pen (spp.)	Density Low Low	N/A  Avg. Height 5 - 10 feet 5 - 10 feet	Sapling Sapling	for diversity.
34	6229 - Mixed  42200 - Natu  Canopy Species  White Pine  Red Pine  Red Oak  4310 - Pin  Canopy Species  Red Oak	d lowland stural White F % Cover 80 7 13	Pine Si Size Class Log/XLog Log/XLog Log	Nonstocked  Bawtimber Medium  DBH Age  16 112  14 13  Sawtimber Well	7.2 Sub-Ca Re Asp 6.8 Sub-Ca	ennopy Species ed Maple pen (spp.)	Low Low	N/A  Avg. Height 5 - 10 feet 5 - 10 feet  N/A	Sapling Sapling	for diversity.  Stand was cut 2 entries ago, red maple regen throughout. heavy brow
34	6229 - Mixed  42200 - Natu  Canopy Species  White Pine  Red Pine  Red Oak  4310 - Pine  Canopy Species  Red Oak  White Oak	d lowland shural White F % Cover 80 7 13 ne, Oak Mi: % Cover	Pine Sa Size Class Log/XLog Log/XLog Log	Nonstocked  Buttimber Medium  DBH Age  16 112  14  13  Sawtimber Well  DBH Age  17 110  14	7.2 Sub-Ca Re Asp 6.8 Sub-Ca	anopy Species ed Maple pen (spp.)  110  anopy Species	Low Low 1-50 Density	N/A  Avg. Height 5 - 10 feet 5 - 10 feet  N/A  Avg. Height	Sapling Sapling	for diversity.  Stand was cut 2 entries ago, red maple regen throughout. heavy brow
34	6229 - Mixed  42200 - Natu  Canopy Species  White Pine  Red Pine  Red Oak  4310 - Pin  Canopy Species  Red Oak	d lowland si wral White F Cover 80 7 13 ne, Oak Mix Cover 45	Pine Size Class Log/XLog Log/XLog Log  X  Size Class Log	Nonstocked  Buttimber Medium  DBH Age  16 112  14 13  Sawtimber Well  DBH Age  17 110	7.2 Sub-Ca Re Asp 6.8 Sub-Ca	anopy Species ed Maple pen (spp.)  110  anopy Species	Low Low 1-50 Density	N/A  Avg. Height 5 - 10 feet 5 - 10 feet  N/A  Avg. Height	Sapling Sapling	for diversity.  Stand was cut 2 entries ago, red maple regen throughout. heavy brow



Stand	Level 4 Cover Type			Size De	nsity	Acres	Stand Age	Managed Site		General Comments	
37	4130	- Aspen		Sapling	y Well	30.0	6	Immature	N/A		A3 stand, Cut in 2017 sale #63-034-15 "Long Aspen"
	Canopy Species	% Cover	Size Class	DBF	l Age	Sub-Canopy Species		s Density	Avg. Height	Size	
	Red Maple	10	Sapling	1		Re	d Maple	Low	< 5 feet	Sapling	
	Red Oak	5	Log/Pole	12		WI	hite Oak	Low	< 5 feet	Sapling	
	Bigtooth Aspen	70	Sapling	1	6	Asp	en (spp.)	Low	< 5 feet	Sapling	
	White Pine	5	Log	13							
	White Oak	10	Log/Pole	11							
38	4130	- Aspen		Sapling	y Well	38.6	6	Immature	N/A		Treated with sale 63-034-15-01. Large White Oak residual scattered.
	Canopy Species	% Cover	Size Class	DBH	l Age						
	White Pine	10	Pole	6							
	Bigtooth Aspen	70	Sapling	1	6						
	White Oak	10	Log	12							
	Red Maple	10	Sapling	1							
39	4133 - Aspe	n, Mixed P	ine F	Poletimb	er Well	18.5	55	111-140	N/A		Stand bordering Long rd. Nice white pine understory. Harvest Aspen
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	and maple. Retain large White Pine and mark other desirable. Protect areas with heavy WP regen as retention pockets.
	White Pine	20	Log	10		WI	nite Pine	Medium	10 - 20 feet	Sapling	
	Quaking Aspen	60	Pole	9	55	Black/Re	d (Hybrid) Oa	k Low	10 - 20 feet	Sapling	
	Black Cherry	5	Pole	7							_
	Northern Pin Oak	15	Pole	6							
40	42110 - Plar	nted Red P	ine	Sapling	Poor	8.6	10	Immature	N/A		Inconsistent RP plantation. RP is 5-7 feet tall and healthy where prese
	Canopy Species	% Cover	Size Class	DBH	l Age						The rest is pretty much open.  Replanted in 2015 look to stand to south for more details should be
	Red Pine	100	Sapling	2	10						merged in future.
41	4199 - Other Mixed	d Upland D	eciduous S	Sawtimb	er Well	7.7	66	81-110	N/A		Mixed stand to leave for next entry.
	Canopy Species	% Cover	Size Class	DBF	l Age						
	White Pine	15	Log	12							
	Red Oak	30	Log	12	66						
	Red Maple	20	Pole	6							
	Bigtooth Aspen	20	Pole/Sapling	5							
	White Oak	15	Log	11							
42	4310 - Pir	ne, Oak Mix	( ;	Sawtimb	er Well	7.2	67	141-170	N/A		Stand is on ridge along rd. Mix of oak and white pine. Harvest oak and aspen, mark white pine where thick.
	Canopy Species	% Cover	Size Class		l Age						aspen, main white pine where thick.
	Quaking Aspen	15	Pole	8	25						
	Red Pine	10	Log/Pole	11							
Bla	ck/Red (Hybrid) Oak	40	Log	12	67						
	White Pine	35	Pole	9							



Stand	Level 4 Cover Type		\$	Size Density		Acres Stand Age BA		BA Range	Managed S	ite	General Comments
43	4130 -	- Aspen		Sapling	g Well	18.8	15	Immature	N/A		Stand was final harvested in 2008. All oak under 6" was left.
	Canopy Species	% Cover	Size Class	DBH	l Age						
1	Northern Pin Oak	15	Sapling/Pole	4							
	Bigtooth Aspen	85	Sapling	2	15						
44	4131 - A	spen, Oak	Р	oletimb	er Well	57.0	26	51-80	N/A		Large volume of Oak mix overstory. Consider overstory removal. Thick
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	red maple whips in spots. This stand was mis-typed as 3" A3 last entry.
	White Oak	10	Pole	9		Re	ed Maple	Medium	Variable	Sapling	
	Red Oak	30	Log	14	90			'	'		
	Red Maple	10	Log	11							
	Bigtooth Aspen	50	Sapling/Pole	4	26						
45	4199 - Other Mixed	d Upland D	eciduous S	awtimb	er Well	27.9	88	141-170	N/A		Tall mature aspen with lots of dying oak. Pocket of red pine in the S/SW.
	Canopy Species	% Cover	Size Class	DBH	l Age						Recommend cutting sooner than later.
	Red Oak	50	Log	14	88						
	Jack Pine	5	Pole	8							
	Red Pine	10	Log/Pole	10							
	Bigtooth Aspen	35	Log/Pole	10	52						
46	4116 - Mixed N. I	Hardwood -	- Aspen S	apling I	Medium	11.4	20	1-50	N/A		Scattered white pine in old opening filling in with red maple and aspen.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	
	White Pine	15	Log	14		Bigto	oth Aspen	Medium	5 - 10 feet	Sapling	
	Bigtooth Aspen	25	Sapling	2							
	Red Maple	60	Sapling	2	20						
47	4191 - Mixed Upla Co	ınd Decidu nifer	ous with Pol	etimbe	r Medium	33.9	16	51-80	N/A		Cut during a previous entry. Good looking white pine overstory. Red Maple and oak mix understory
	Canopy Species	% Cover	Size Class	DBH	l Age						
	White Pine	30	Log	12							
	Red Pine	5	Log/Pole	11							
	Red Oak	15	Pole	6							
	Bigtooth Aspen	15	Pole	6							
	Red Maple	35	Pole/Sapling	5	16						
48	4131 - A	spen, Oak	Р	oletimb	er Well	0.8	26	51-80	N/A		Large volume of Oak mix overstory. Consider overstory removal. Thick
	Canopy Species	% Cover	Size Class	DBH	l Age						red maple whips in spots. This stand was mis-typed as 3" A3 last entry.
	Bigtooth Aspen	50	Sapling/Pole	4	26						
	Red Oak	30	Log	14	90						
	Red Maple	10	Log	11							



Stanc	d Level 4 Co	over Type		Size Density	Acres	Stand Age	BA Range	Managed S	ite	General Comments
49		- Aspen		Poletimber Well	38.1	36	111-140	N/A		Stand is mostly aspen with scattered oaks and maple. growing well, 6-8" dia. Check next entry
	Canopy Species	% Cover	Size Class	DBH Age		nopy Specie		Avg. Height	Size	and Grissian starty
	Bigtooth Aspen	90	Pole	6 36	Re	d Maple	Low	5 - 10 feet	Sapling	
l	Northern Pin Oak	5	Pole	5						
	Red Maple	5	Pole	6						
50	4124 - Red v	vith White (	Dak P	oletimber Mediur	m 18.0	40	1-50	N/A		Stand is more open following previous harvest. A mix of oak with aspen
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	undersrtory.
	Red Oak	80	Pole/Log	9 40	Bigto	oth Aspen	Medium	5 - 10 feet	Sapling	
	White Oak	20	Pole	8						
51		- Aspen		Sapling Well	7.7	26	Immature	N/A		stand is a sapling size with overstory oaks concentrated in the southern portion of stand. some scattered oak saplings mixed in.
	Canopy Species	% Cover		DBH Age		nopy Specie		Avg. Height	Size	
	Bigtooth Aspen	85	Sapling	3 26	Black/Red	d (Hybrid) Oa	k Low	5 - 10 feet	Sapling	Stand was cut in 1997. 2" spec on sale.
Bla	ck/Red (Hybrid) Oak	5	Log/Pole	11						
	White Oak	10	Log/Pole	11						
52	4130	- Aspen		Sapling Well	19.5	26	Immature	N/A		Stand should be checked i ten years for regeneration. Aspen is pretty good diameter already and some seems to be of poorer quality and may
	Canopy Species	% Cover	Size Class	DBH Age						want to cut earlier than later. There is a patch of planted white pine on
	White Pine	5	Log/Pole	10						the south edge of the stand.
	Bigtooth Aspen	95	Sapling/Pole	e 2 26						
53	42120 - Plar	nted Jack P	ine	Poletimber Well	21.4	70	81-110	N/A		Planted jack pine with red maple/oak understory. Stand is deteriorating fast. Should have been harvested previously. Cut all trees. Harvest asap
	Canopy Species		Size Class	DBH Age						chapter 7. Harvest in 2023.
	Red Maple	15	Pole	6						
	Jack Pine	85	Pole	8 70						
54	42200 - Natu	ıral White F	Pine	Sapling Well	8.9	32	111-140	N/A		Stand of young WP with a few overstory oak.
	Canopy Species		Size Class	DBH Age						
	White Oak	10	Pole/Log	9						
	White Pine	90	Pole/Sapling	g 5 32						
55	4124 - Red v	vith White (	Dak	Sawtimber Well	31.6	90	81-110	N/A		Stand was site conditioned last entry to let regeneration grow. Final
	Canopy Species	% Cover	Size Class	DBH Age		nopy Specie	s Density	Avg. Height	Size	harvest this entry. chapter 7 and harvest in 2023 as oak decline is in effect as stated in previous notes.
	Red Oak	65	Log	13 90	Bigto	oth Aspen	Medium	10 - 20 feet	Sapling	-Previous notes
	White Oak	35	Log	12						A mix of red and white oak over an understory of aspen. Oak decline in effect. Harvest and restart
56	4130	- Aspen		Sapling Well	16.7	26	Immature	N/A		
	Canopy Species	% Cover	Size Class	DBH Age						
	White Oak	15	Pole/Log	9						
	Bigtooth Aspen	85	Sapling	2 26						



Stand	Level 4 Cover Type		Size Density	Acres	Stand Age	e BA Range 1-50	Managed S	ite	General Comments	
57	4126 - White, E	Black, N. Pi	n Oak F	Poletimber Well	18.3	63	1-50	N/A		Oak with scattered white pines. ORV trail through stand.
	Canopy Species White Pine White Oak	% Cover 20 80	Size Class Log Pole/Log	DBH Age           13           7         63						
58	4131 - A	spen, Oak	S	Sapling Medium	83.5	18	Immature	N/A		Stand was cut last entry. Overstory of large Oak remains. Losing some of
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	the large oak. Area was hit hard with Spongy moth over last few years. Signs of oak decline also. HArvest overstory oak asap chapter 7 to
	Northern Pin Oak	15	Pole/Log	8	North	ern Pin Oak	Low	< 5 feet	Sapling	current year harvest 2023. Exclude areas of more pure aspen on and
	Bigtooth Aspen	50	Sapling	1 18						above the ridge to west.
	Red Maple	20	Sapling	1						
	Red Oak	15	Log	13 80						
59	4130	- Aspen		Sapling Well	15.3	26	Immature	N/A		Aspen with a few scattered oak left following previous harvest.
	Canopy Species	% Cover	Size Class	DBH Age						
	Bigtooth Aspen	95	Sapling	3 26						
	White Oak	5	Pole	7						
60	4123 -	Red Oak	S	Sawtimber Well	80.4	85	111-140	N/A		Stand is mix of oak with red maple. Some scattered white pine. West
	Canopy Species	% Cover	Size Class	DBH Age						side of stand is atop steep ridge at south end. There is oak decline present in the stand, but not as prevalent as in the surrounding stands. in
	White Oak	15	Log/Pole	12						the compartment. Conduct a partial removal this year and remainder
	Red Oak	55	Log	12 85						later this entry or next entry.
	Red Maple	20	Log/Pole	10						
Bla	ck/Red (Hybrid) Oak	10	Log/Pole	12						
61	4132 - Asp	en, Jack Pir	ne	Sapling Well	6.4	36	111-140	N/A		Hillside along ORV trail. Filling in with aspen and pine. Watch for further damage due to hill climb in area.
	Canopy Species	% Cover	Size Class	DBH Age						damage due to mili cilmb in area.
	Jack Pine	20	Sapling/Pole							
	Bigtooth Aspen	80	Sapling	3 36						
62	4130	- Aspen	F	Poletimber Well	30.6	38	81-110	N/A		Transitioning to pole size.
	Canopy Species	% Cover	Size Class	DBH Age						
	Bigtooth Aspen	100	Pole/Sapling	5 38						
63	42260 - Natural Pi	ne, Mixed D	eciduous	Sapling Poor	22.1	30	81-110	N/A		Strieff Rd runs through stand. Stand is a mix with red pine to the west and young oak to the east with aspen and jack pine throughout. Stand
	Canopy Species		Size Class	DBH Age		nopy Species		Avg. Height	Size	was supposed to naturally regenerate to JP following previous harvest.
	Bigtooth Aspen	30	Sapling	3 30	Bigto	ooth Aspen	Low	5 - 10 feet	Sapling	Stand is natural mix.
	White Oak	10	Pole/Sapling							
	Red Pine	25	Sapling	3 30						
	Jack Pine	35	Sapling	4 30						



Stand	Level 4 C		Size Density	Acres Stand Age BA Range		Managed Site	General Comments		
64	42110 - Pla	nted Red P	ine	Sawtimber Well	19.4	68	81-110	N/A	Stand was thinned last entry as sale #63-005-15 "102 Pine". Rows were
	Canopy Species	% Cover	Size Class		Sub-Ca	anopy Species	Density	Avg. Height Size	cut from the western most portion due to close spacing of the residuals, trees still have orange marks. Final harvest next entry with adjaent 3rd
	Red Pine	100	Log	12 68	North	ern Pin Oak	Low	< 5 feet Sapling	row thin.
65	4139 - Aspen,		duous Size Class	Poletimber Well	29.9	38	111-140	N/A	Mixed regen of relatively poor shape. Crooked stems, etc. Let it go until merchantable size and analyze.
	Canopy Species Red Oak	% Cover	Sapling	4					
	Bigtooth Aspen	45	Pole	6 38					
	Red Maple	50	Pole	6					
66	4110 - Sugar N	Maple Assoc	ciation	Sapling Poor	14.6	17	Immature	N/A	Mixed brush between plantation strips.
	Canopy Species	% Cover	Size Class	B DBH Age					
	Bigtooth Aspen	20	Sapling	2					
	Black Cherry	80	Sapling	2 17					
67	310 - Herbad	ceous Open	land	Nonstocked	13.0	2022		4211 - Planted Red Pine	Clearcut awaiting RP regeneration. Trenched August 2022.
68	629 - Mixed no	n-forested w	vetland	Nonstocked	12.0	0		No	Open wetland in center surrounded by flooded area with dead and dying fir and some ash.
69	42110 - Pla	nted Red P	ine	Poletimber Well	24.8	30	141-170	N/A	Third row thin
03	Canopy Species	% Cover	Size Class						
	Red Pine	100	Pole	6 30					-Previous Notes Stand was hand planted in 1993. Growing well and about to transition into the pole size class.
70	42220 - Nat	tural Jack P	ine	Sapling Medium	26.5	28	1-50	N/A	Regenerating jack pine stand.
	Canopy Species	% Cover	Size Class	B DBH Age					
	Jack Pine	85	Sapling	4 28					
	Bigtooth Aspen	15	Sapling	4					
71	42220 - Nat			Sapling Well	13.5	15	Immature	N/A	Well established, good quality jack pine with oak mixed. Stand was clear cut in 2008. #63-033-05 "SE Mix".
	Canopy Species		Size Class						CAC III 2000. 1100 000 00 OE WIIA .
	Red Oak	10	Sapling	2					

90

Sapling

3 15

Jack Pine



Stan	Level 4 Cover Type		Size Density		y Acres Stand Age BA Range		Managed Site		General Comments		
72	4122 -	Oak, Pine		Poletimb		9.2	97	81-110	N/A		Oak and Jack Pine mix. Stand is old and held last time for age class diversity. Final harvest this entry.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	diversity. I mai marvest this entry.
	White Oak	45	Pole/Log	8	97	W	hite Oak	Low	< 5 feet	Sapling	
	Red Oak	20	Pole	8							
	Jack Pine	35	Pole	9							
73	4310 - Pi	ne, Oak Mix	(	Sapling	g Poor	16.0	3	1-50	N/A		Stand was cut previous entry.
	Canopy Species	% Cover	Size Class	DBH	l Age						
	White Oak	15	Sapling	1	3						
	Red Oak	30	Sapling	1							
	Jack Pine	55	Sapling	1	3						
74	42220 - Nat	ural Jack P	ine P	oletimbe	r Medium	n 136.9	25	141-170	N/A		Sale was cut with a 6" diameter limit in 1997. The residual from the last daimeter cut is mature and starting to show signs of decline. Either do
	Canopy Species	% Cover	Size Class	DBH	H Age						another diameter cut to get the mature trees or leave for smaller diameter
	Jack Pine	80	Pole	6	25						to reach maturity and lose the larger trees. Possibly split out areas that
	Northern Pin Oak	20	Pole/Sapling	g 5							need treatment more than others
75	42110 - Pla			Sawtimb		50.1	82	51-80	N/A		All trees, but RP cut last entry. Hold this stand until adjacent stand 78 is final harvested in the future for age class considerations in the
	Canopy Species	% Cover	Size Class	DBH	l Age						compartment.
	Red Pine	100	Log	12	82						
76	42210 - Na			Poletimb		28.4	78	1-50	N/A		Stand was seed tree cut in 2009 as sale #63-018-08 Leave for now for smaller regen to grow.
	Canopy Species		Size Class		H Age		anopy Species	Density	Avg. Height	Size	- Sindanon regent to grown
	Red Pine	75	Pole/Log	8	78	Ja	ack Pine	Low	< 5 feet	Sapling	
	Jack Pine	25	Pole	6							
77	4123 -	Red Oak		Poletimb	er Well	20.1	22	1-50	N/A		Harvested in 2020. Strief Jack. Some scattered overstory oak left. Heavy regeneration of jack pine and natural red pine. Stand was originally to be
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	interplanted, but natural regen is very good, no need.
	Northern Pin Oak	25	Pole	5		North	ern Pin Oak	Low	< 5 feet	Sapling	
	Red Oak	75	Pole	6	22	Ja	ack Pine	Low	< 5 feet	Sapling	
						R	Red Pine	Low	< 5 feet	Sapling	
78	42110 - Pla			Sawtimb		13.0	81	81-110	N/A		Very nice red pine that is tall, but can use more diameter. Thin basal area down to 120.
	Canopy Species	% Cover	Size Class	DBH	l Age						area dominito 120.
	Red Pine	100	Log/Pole	12	81						
79	42110 - Pla			Sapling		17.4	7	Immature	N/A		Stand was harvested and re-planted last entry. Looks good.
	Canopy Species	% Cover	Size Class	DBH	l Age						
	Red Oak	5	Sapling	1	7						
	Red Pine	80	Sapling	1	7						
		00									



Stand	d Level 4 Co	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
80	42220 - Nati	ural Jack Pi	ine	Sapling M	1edium	47.5	21	Immature	N/A		Relatively small diameter JP.
	Canopy Species	% Cover	Size Class	DBH	Age						
	Jack Pine	80	Sapling	3	21						
	Red Oak	10	Sapling	2							
	Bigtooth Aspen	10	Sapling	2							
81	42250 -	Pine, Oak		Poletimbe	er Poor	6.3	35	81-110	N/A		Smaller jack pine that is kind of sparse mixed with oak. Hold for now and
	Canopy Species	% Cover	Size Class	DBH	Age						consider harvest next entry.
Bla	ck/Red (Hybrid) Oak	35	Log/Pole								
	Jack Pine	65	Pole	7	35						
82	42221 - Natural Deci	Jack Pine, duous	Mixed	Sapling	Well	82.6	17	Immature	N/A		Stand was cut in 2006 sale #63021-05 "East Side Jack"
	Canopy Species	% Cover	Size Class	DBH	Age						
	Jack Pine	65	Sapling	3	17						
	Northern Pin Oak	15	Sapling	2							
	Quaking Aspen	20	Sapling	2							
83	42220 - Nati	ural Jack Pi	ine	Sapling M	1edium	34.9	19	Immature	N/A		J3 regen that is patchy in spots, but overall pretty good.
	Canopy Species	% Cover	Size Class	DBH	Age						
	Jack Pine	100	Sapling	2	19						
84	4126 - White, E	Black, N. Pi	n Oak	Poletimbe	er Poor	25.5	22	1-50	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age						
	Northern Pin Oak	15	Pole/Saplin	ng 5							
	White Oak	65	Pole	6	22						
	Red Oak	20	Pole	7							
85	42210 - Nat	ural Red Pi	ne	Sawtimbe	er Well	37.3	83	81-110	N/A		Stand was thinned last entry. Could stand a little more diameter despite age. Age class considerations to hold for now. Looks very good. Look
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Specie	s Density	Avg. Height	Size	over next entry.
	Red Pine	100	Pole/Log	9	83	Oak	(spp.)	Low	< 5 feet	Sapling	over now one).
86	42110 - Plar	nted Red Pi	ine	Sawtimbe	er Well	65.7	80	141-170	N/A		Very nice and open RP stand. Consider thinning one more time to delay
	Canopy Species	% Cover	Size Class	DBH	Age						final harvest one more entry for age class considerations within surrounding area.
	Red Pine	100	Log	13	80						surrounding area.
87	42210 - Nat	ural Red Pi	ne	Sawtimbe	er Poor	54.7	83	1-50	N/A		Stand appears to have been seed tree harvest last entry. Overstory red
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Specie	s Density	Avg. Height	Size	pine with jack pine and an understory of mixed oak and jack pine. Time to remove RP overstory or the understory will be too big in the future.
	Jack Pine	40	Pole	7		Oak	(spp.)	High	10 - 20 feet	Sapling	Lots of oak coming in.



Stand	Level 4 C	Level 4 Cover Type		Size De	nsity	Acres	Stand Age B	A Range	Managed S	Site	General Comments
88	6220 - A	Alder/willow		Nonsto	ocked	8.6			No		
89	6117 - Lowland Con	Deciduous,	Mixed Po	oletimb	er Well	90.7	77	111-140	N/A		Stand is mature mixed deciduous and white pine. The ground is quite variable with lots of included low open wetlands. There is very nice white
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	pine regen throughout that could benefit from being released. Some
	Red Maple	40	Log	14	77		ed Maple	Low	< 5 feet	Sapling	white pine that is entering pole size as well. Find a diameter range to remove the overstory while retaining under 6" and super large white pine.
	Bigtooth Aspen	15	Log	12		W	hite Pine	Medium	Variable	Sapling	Allow for acreage limits for treatment due to wet areas. Eastern portion
	Black Ash	10	Pole/Sapling	5		Ва	alsam Fir	Low	5 - 10 feet	Sapling	gradiates to riparian influence and eventually Muskegon river. Any
	White Pine	15	Log/XLog	16						1	treatment possible is these areas should consider River guidelines.
90	42120 - Pla	nted Jack P	Pine	Sapling	y Well	37.3	28 l	mmature	N/A		Stand appears to have been planted, as rows evident in places. Mostly
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	jack pine with some slightly larger red pine in overstory. Mixed oak in understory.
	Red Pine	30	Pole/Sapling	5		0	ak (spp.)	Low	5 - 10 feet	Sapling	understory.
	Jack Pine	70	Sapling	4	28						•
91	42110 - Pla	nted Red P	ine S	awtimb	er Well	21.8	80	171-200	N/A		Consider CC. Access challenges. WIII need to find suitable access
	Canopy Species	% Cover	Size Class	DBH	Age						across lower area and a crossing area for stream.
	Red Pine	100	Log	13	80						
92	6115 - L	owland Ash	Pole	etimber	· Medium	30.5	62		N/A		Stand is lowland black ash that is underwater at times of the year. Tag
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	alder and a few spruce/balsam. Most of the ash is dead/dying due to EAB
	Balsam Fir	5	Sapling/Pole	3		Т	ag Alder	Low	10 - 20 feet	Tall Shrub	
	Black Ash	85	Pole	4	62			'		•	•
	Black Spruce	10	Pole/Sapling	5							
93	320 - Up	oland Shrub		Nonsto	ocked	3.0	0		4319 - Mixed Upl	and Forest	Results of old strip cut. Mixed upland brush at this point. See what develops in time.