

## **Compartment Review Presentation**

**Escanaba Forest Management Unit** 

Compartment 61
Entry Year 2016
Acreage: 2,515

**County Menominee** 

Management Area: Green Bay Lake Plain

Revision Date: 06/20/2014

Stand Examiner: Dustin Salter

**Legal Description:** 

T34N R26W Section's 1-4, 9-15

## **Identified Planning Goals:**

The primary forest cover types in this compartment are low quality hardwood, aspen, cedar, and lowland conifer. The majority of the low quality hardwood stands are mature and are in need of a regeneration harvest. We will be relying on stump sprouts to maintain the hardwood component in these stands. The stands regeneration will also include white pine, spruce, and balsam fir. There are a number of lowland ash/hardwood stands prescribed for a regeneration cut, due to the high percentage of mature ash in the compartment as well as the the proximity of the Emerald Ash Borer. There is a substantial amount of beech present in a few of the better quality hardwood stands that are prescribed for a selection cut. In these stands the percentage of beech will be lowered significantly, due to the presence of Beech Bark Disease within 2 to 3 miles. No beech scale was detected at time of inventory. A couple of aspen stands will also be harvested to help maintain an even age distribution within the compartment. A mature lowland conifer stand is being prescribed for a regeneration harvest. Within this stand and the surrounding area the Eastern Larch Beetle has caused significant mortality. The tamarack needs to be harvested before we lose a seed source and while the products are still merchantable.

## Soil and topography:

This compartment contains the Lupton-Cathro association, Loxley-Dawson association, Lupton-Tawas association, Deford-Wainola-Rousseau complex, and Onaway fine sandy loam. This compartment contains large amounts of poorly drained black muck and muckey peat over sandy loam and brown sand. There are also areas of well drained fine sandy loam over gravelly fine sandy loam mixed throughout the lower areas. The comp. overall is level with some areas of gently rolling hills.

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

This compartment is on the East half of the county and it is located on the southern tip of a block of state land that is approximately 8 miles wide and 20 miles long. This block of state land extends into Delta County. This compartment is broken up with many private in-holdings and is surrounded by private property. The area is used primarily for outdoor recreational activities. There are some private agricultural lands within a mile of this compartment on the West and South sides.

## **Unique Natural Features:**

Hayward Lake Wetland Complex

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

No Archeological, Historical, or Cultural Features known.

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

The Hayward Lake Wetland Complex has a master plan that was prepared in July of 2003. The purpose of the plan is to ensure that legal obligations pertaining to the Federal Aid in Wildlife Restoration Act of 1937 (Pittman – Robertson Program) are fulfilled. This complex is managed and maintained by this act.

#### **Watershed and Fisheries Considerations:**

This compartment contains 3 lakes which are fully or partially within state ownership. The three lakes are Hayward, Little, and Myers. The Big Brook and Fowler Creek flow through this compartment.

#### Wildlife Habitat Considerations:

The Hayward Lake Wetland Complex Strategic Plan provides a detailed documentation of the wildlife management plan for Hayward Lake and associated wetlands that dominate the west half of this compartment. Much of the lowland habitat surrounding Hayward Lake is dominated by swamps of cedar, black spruce, tamarack, and lowland brush. These areas are inaccessible, lack merchantability, and will be retained to benefit the unique plant and animal biodiversity they contain. The shorelines of Hayward Lake contain marsh habitat important to waterfowl including mallards, teal, and wood ducks as well as other wetland species like the American bittern and marsh wren. The forested land in the east half of the

compartment is a mix of upland hardwood stands within a matrix of cedar swamp and lowland hardwoods. Several upland hardwood stands will be cut and regenerated, and some mature mast producing trees will be retained to provide food for deer, bear, wild turkey, and other wildlife species. Additional lowland mixed conifer and swamp hardwood stands will be cut and regenerated providing good early successional wildlife habitat.

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

There is a small gravel pit in section 10 in the NESE forty.

#### **Vehicle Access:**

The main access into this compartment is off of the Hayward Lake Road, North Bay De Noc Road, and the Schuster Lane. There are also "2 track" roads branching off of these roads that run into other parts of the compartment. The Hayward Lake Road runs through the middle of the compartment, the North Bay De Noc runs on the southern edge, and the Schuster Lane runs through the northeastern portion of the compartment. Access is limited in many parts of the compartment. The only vehicular access to parts of the compartment is through private property. The state does not have any easements with any of the landowners, so permission must be obtained prior to any management activities.

#### **Survey Needs:**

About 10 registered corners will need to be set.

## **Recreational Facilities and Opportunities:**

The Hayward Lake access site is within this compartment. Hayward Lake is used heavily for waterfowl hunting. The primary uses are hunting, fishing, and riding ORV's.

#### **Fire Protection:**

The majority of the compartment contains cover types that are not prone to large fires. Lowland conifer and hardwood stands along with northern hardwood stands make-up a substantial portion of the compartment. There is an abundant amount of water available for fire suppression. Vehicle access is very limited in portion of the compartment.

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

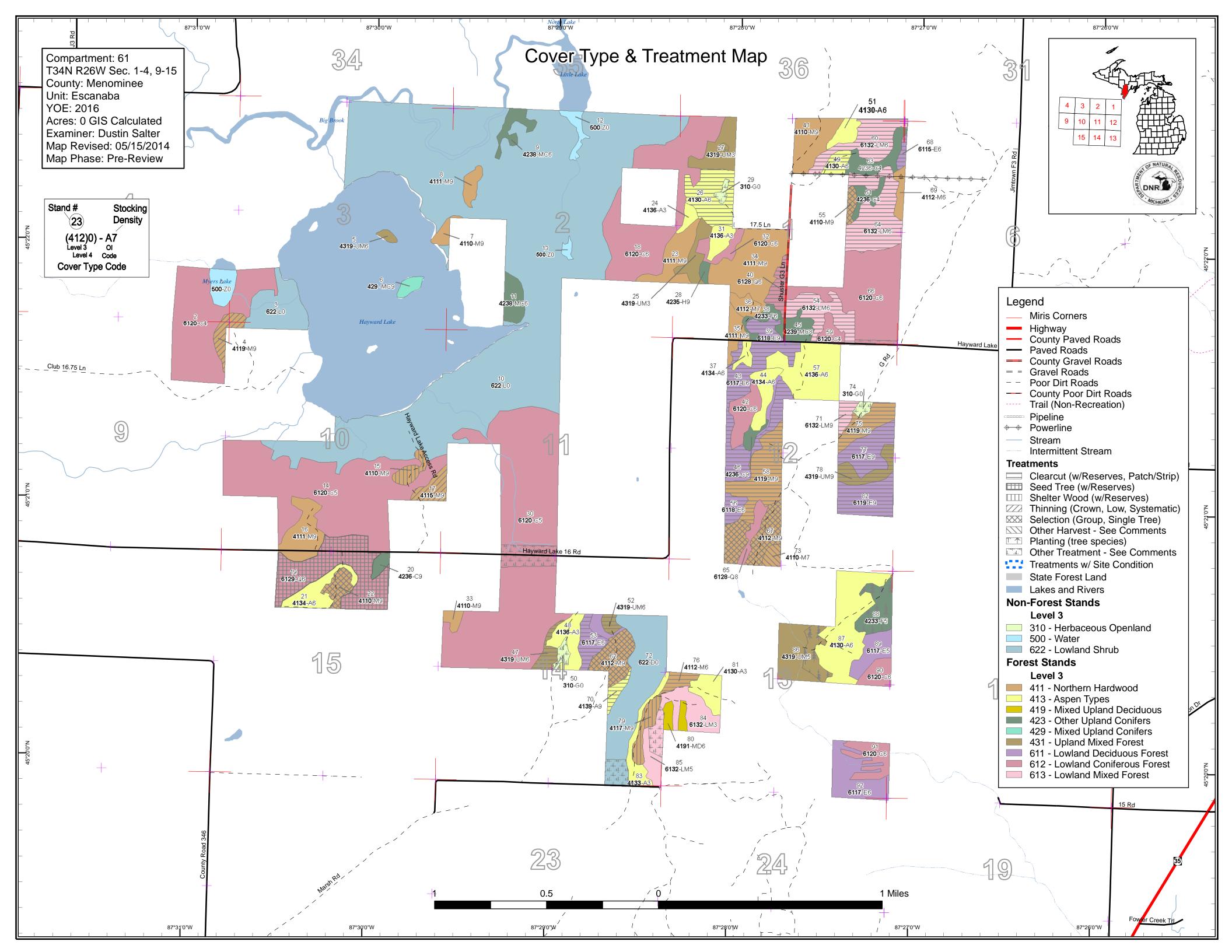
This stand has significant mortality from the Eastern Larch Beetle in the tamarack, invasive Phragmites is prevelant throughout the compartment, Beech Bark Disease is in very close proximity and portions of this compartment contain a high percentage of beech, and this compartment contains a high percentage of ash that should be harvested with the proximity of the Emerald Ash Borer. Many discussions will have to take place to obtain permission for a logging contractor to cut many of the prescribed stands.

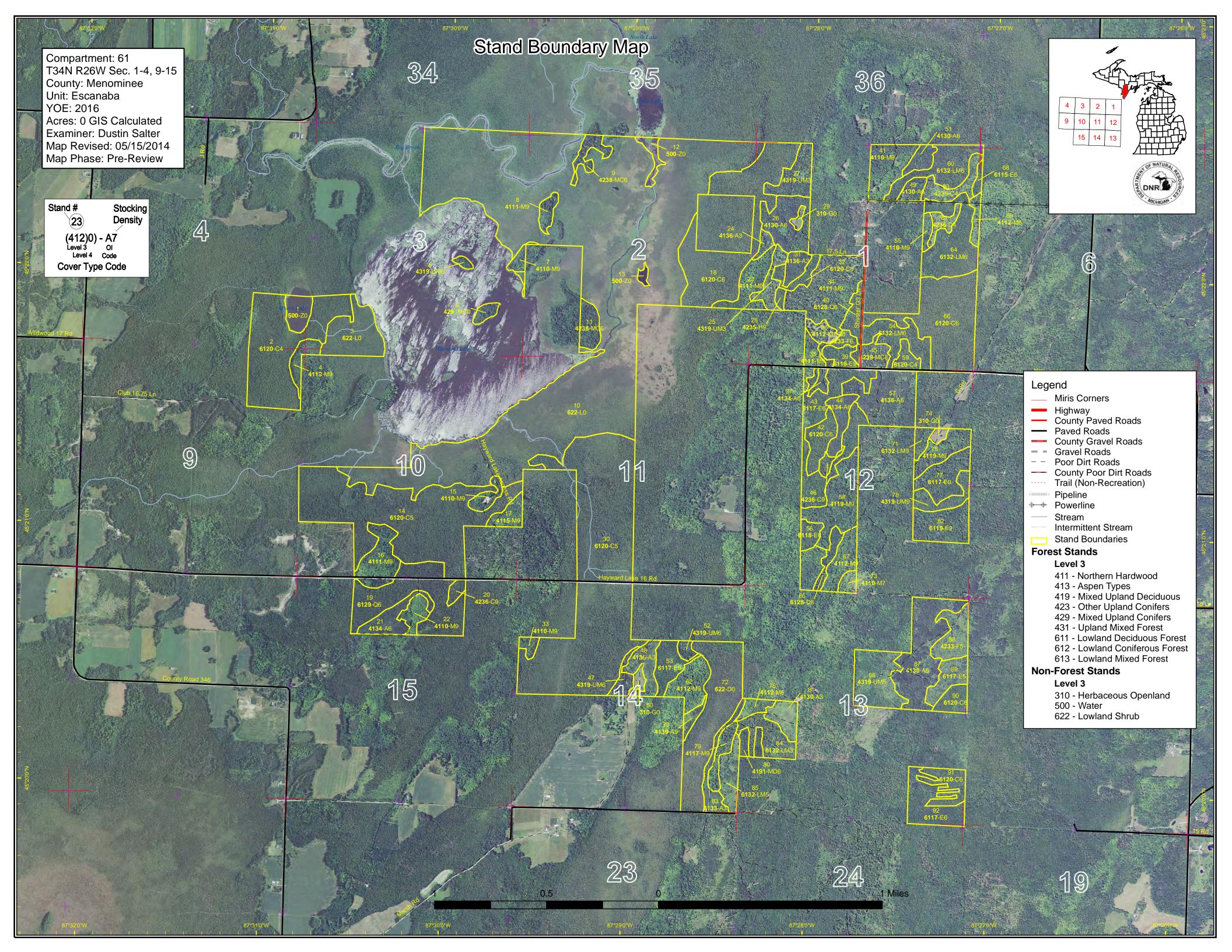
## The following reports from the Inventory are attached:

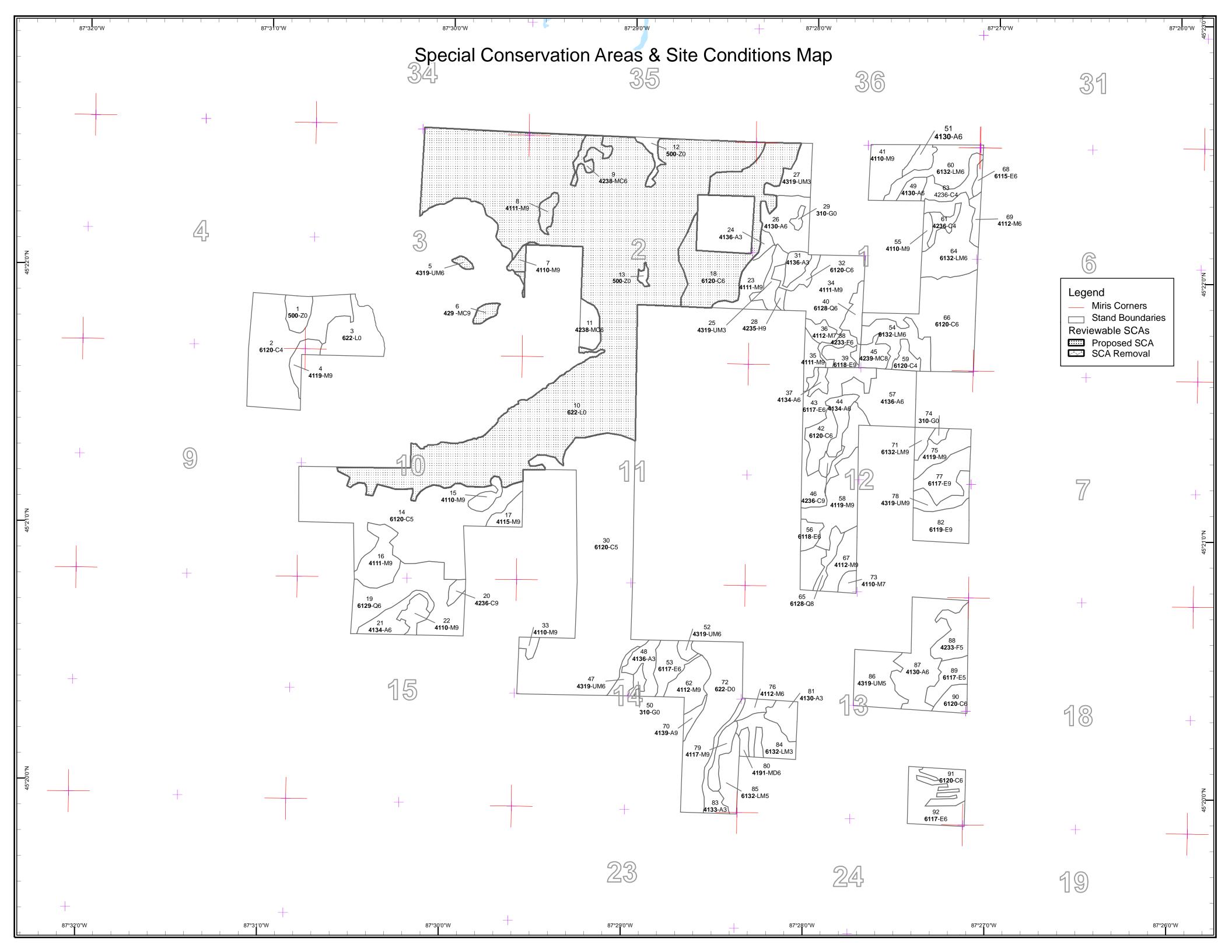
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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







Compartment 061 Year of Entry 2016

Escanaba Mgt. Unit
Dustin Salter: Examiner



## Age Class

Age Class																
		6.0	0,0	Parks /	,	D. C.	\$ 50.00	80.00	10.1°	\$ 8 P	85.00	on on one	, Q, Z, Z, Q, Z,	70 <sup>×</sup> 30°	S /	, do
Aspen	37	11	105	15	7	33	4	0	0	0	0	0	0	0	212	
Cedar	0	0	0	0	0	0	0	0	0	557	47	95	0	0	699	
Hemlock	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	
Herbaceous Openland	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
Lowland Conifers	0	0	0	0	0	0	0	0	59	0	16	0	0	0	75	
Lowland Deciduous	0	0	14	0	27	0	0	0	18	101	8	0	0	0	166	
Lowland Mixed Forest	0	34	0	0	0	0	0	0	5	26	40	23	0	0	129	
Lowland Shrub	690	0	0	0	0	0	0	0	0	0	0	0	0	0	690	
Mixed Upland Deciduous	0	0	0	6	0	0	0	0	0	0	0	0	0	0	6	
Northern Hardwood	0	0	0	0	0	0	0	27	19	253	0	0	0	0	298	
Treed Bog	68	0	0	0	0	0	0	0	0	0	0	0	0	0	68	
Upland Conifers	0	0	0	0	0	0	0	0	0	34	0	0	0	0	34	
Upland Mixed Forest	0	10	32	0	0	6	4	0	0	2	12	0	0	18	84	
Upland Spruce/Fir	0	0	17	0	7	0	0	0	0	0	0	0	0	0	25	
Water	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18	
Total	821	56	167	21	41	39	8	27	100	975	124	118	0	18	2515	



## **Report 2 – Proposed Treatment Summaries**

## Escanaba Mgt. Unit Year of Entry 2016

Compartment 061 **Total Compartment Acres: 2,515** 

## **Acres by Treatment Type**

Commercial Harvest - 493

Tree Planting - 28

Other - 33

Habitat Cut - 0

Opening Maintenance - 8

## Cover Type by Harvest Method

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		/	C. C. C. C.	Solo of	N. S. S.	Strong	Cindino Sec		A CONTRACTOR OF THE PROPERTY O
Aspen Types		37	0	0	0	0	0	37	[
Lowland Coniferous Forest		9	0	59	0	0	0	68	
Lowland Deciduous Forest		119	0	0	0	0	0	119	
Lowland Mixed Forest		95	0	0	0	0	0	95	
Northern Hardwood		56	57	0	16	18	4	152	
Upland Mixed Forest		22	0	0	0	0	0	22	
	Total	339	57	59	16	18	4	493	

## Report 3 -- Treatments Prescribed

Compartment: 061

DEPARTME	DNR DNR	
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S t			•		with	No Limi	ting Factor		Year of Entry 2016	DNR
a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
4	33061004-Cut	8.8	4119 - Mixed Northern Hardwoods	High Density Log	92 I	141-170	Harvest	Crown Thinning	411 - Northern Hardwood	Cmpt. Review Proposal
Preso Spec			e basal area to 80 to 9	90. This is t	he stand	ds first thin	ning, so no reger	neration is expected	. Manage this stand f	or mixed
Other Comr	Good qu	,	ood stand with dense	balsam fir re	egenera	tion throug	hout most of the	stand. The only ac	cess into this stand is	through private
Next Steps	•	ration surve	ey next inventory cycle	١.						
Propos Start D		15								
15	33061015-Cut	6.9	4110 - Sugar Maple Association	High Density Log	91 I	111-140	Harvest	Shelterwood	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal
Preso Spec	s: Along th	e road and aspen. Re	all trees greater than 4 parking lot, do not lea move the overstory in	ive any over	story, so	they do n	ot snap off and f	all into road. Also, o	lo not leave any overs	story where
Other Comr	ments: There is	also some	ned in 1991 on contract cedar and hemlock rest within this stand. Th	egeneration.	There	is a gravel	pit in the center	of this stand. The ro		
<u>Next</u> Steps	•	ation surve	ey next inventory cycle							

Steps:

**Proposed** Start Date: 10/01/2015

33061017-Cut 9.0 4115 - Y.Birch, High 141-170 Harvest Crown Thinning 4110 - Sugar Maple Cmpt. Review Hemlock NH Association Density Log Proposal

Prescription Crown Thinning - Reduce the Basal Area down to 80 to 90. Focus on lowering the percentage of beech, but retain where possible 2 - 3 mast producing beech per acre. Also release the crop trees. Only cut those hemlock and cedar needed to harvest the mature hardwood. This stand Specs: is being managed for high quality hardwood.

Other High quality hardwood stand that doesn't look like it has been thinned in a long time, if ever. There is a high percentage of beech, but no beech

Comments: scale present. There is a steep slope in the stand.

<u>Next</u>

Regeneration survey next inventory cycle.

Steps:

**Proposed** 

Start Date: 10/01/2015

33061019-Cut 58.7 6129 - Mixed High 81 Harvest Seed Tree with 612 - Lowland Cmpt. Review Coniferous Lowland Reserves Coniferous Forest Proposal Density Forest Pole

Prescription Seed Tree with Reserves - Cut all trees greater than 4 inches; except leave seed tree clumps every 200 feet apart. The seed tree clumps should Specs: consist of tamarack, spruce, and cedar. Manage the stand for mixed lowland conifer.

Good quality lowland mixed conifer stand. Overall the tamarack and spruce is high quality and the cedar is very poor quality. There is some <u>Other</u> cedar regeneration present within some of the open areas. Comments:

Regeneration survey next inventory cycle. <u>Next</u> Steps:

Proposed

Start Date: 10/01/2015

## Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 061 Year of Entry 2016

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
22	33061022-Cut	8.9	4110 - Sugar Maple Association	High Density Log	86	111-140	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal

Prescription Selection - Reduce the Basal Area down to 80 to 90, focusing on releasing the crop trees. This stand is being managed for northern hardwoods. Specs:

<u>Other</u> Stand was last thinned in 1988 on contract 08-87. High quality sugar maple stand that is in need of a thinning.

Comments:

Regeneration survey next inventory cycle. Next

Steps:

**Proposed** 

10/01/2015 Start Date:

26.5 High 53 Cmpt. Review 26 33061026-Cut 4130 - Aspen Harvest Clearcut with 413 - Aspen Density Reserves Proposal Pole

Prescription Clearcut with Reserves - Cut all trees greater than 3 inches; except leave enough retention pockets to have 3% retention. This stand is being

Specs: managed for aspen.

<u>Other</u> Mature aspen stand, with some older stems that are dying out.

Comments:

Regeneration survey next inventory cycle.

<u>Next</u> Steps:

<u>Proposed</u>

Start Date: 10/01/2015

33061039-Cut 7.6 6118 - Lowland 106 Harvest Clearcut with 611 - Lowland Cmpt. Review 39 High **Deciduous Forest** Deciduous with Density Log Reserves Proposal

Cedar

Prescription Clearcut with Reserves - Cut all trees greater than 4 inches; except exclude three dense pockets of cedar within the stand and retain all hemlock Specs: and white pine. All species within the excluded cedar pockets will also be retained. The stand will be managed for lowland hardwood and

<u>Other</u> Mature lowland deciduous stand with some cedar.

Comments:

**Next** Regeneration survey next inventory cycle.

Steps:

Proposed

Start Date: 10/01/2015

33061040-Cut 9.5 6128 - Lowland High 106 Harvest Clearcut with 613 - Lowland Cmpt. Review 40 Coniferous, Mixed Density Reserves Mixed Forest Proposal

Prescription Clearcut with Reserves - Cut all trees greater than 3 inches; except red line out three pockets of upland cedar within the stand. All species will

Deciduous Pole

end. This stand is being managed for a mix of lowland species, both deciduous and coniferous.

Other

Specs:

Stand is a mix of lowland conifer and deciduous with cedar. There are a couple of upland pockets of cedar within the stand.

Comments:

Regeneration survey next inventory cycle. Wildlife Division will create an FTP for planting Red Osier Dogwood and other soft mast species.

be retained within these pockets. There is a large one on the north end, one in the middle on the west edge, and than retain one on the south

Next Steps:

Proposed 10/01/2015 Start Date:

Compartment: 061 Escanaba Mgt. Unit Report 3 -- Treatments Prescribed Year of Entry 2016 with No Limiting Factor s t а **Treatment** Acres CoverType Size BA **Treatment Treatment Cover Type** Approval n Density Method Objective d Name Age Range Type **Status** 46.2 6117 - Lowland Clearcut with Cmpt. Review 33061043-Cut High 91 Harvest 611 - Lowland 43 Deciduous, Mixed Density Reserves **Deciduous Forest** Proposal Coniferous Pole Prescription Clearcut with Reserves - Cut all trees greater than 4 inches; except mark to retain a mix of seed tree clumps throughout the stand. Leave a seed tree clump every 200 feet apart. The clumps should consist of a mix of species. Also, delineate out a couple of denser pockets of cedar to Specs: retain, focus leaving some of the cedar in the transition zone to stand 43. Manage this stand for lowland deciduous. <u>Other</u> Mature lowland deciduous stand with some cedar. Comments: Regeneration survey next inventory cycle. <u>Next</u> Steps: **Proposed** Start Date: 10/01/2015 33061047-Cut 6.5 4319 - Mixed 55 Harvest Clearcut with 4134 - Aspen, Cmpt. Review High **Upland Forest** Density Reserves Spruce/Fir Proposal Pole Prescription Clearcut with Reserves - Cut all trees greater than 3 inches; except retain all cedar and apple trees. This stand will be managed for aspen and balsam fir. Specs: Stand is a mix of aspen and balsam fir. There are some apple trees in the southeast part of the stand that should be protected. **Other** Comments: <u>Next</u> Regeneration survey next inventory cycle. Steps: 10/01/2015 Start Date:

**Proposed** 

56 Harvest Clearcut Cmpt. Review 49 33061049-Cut 6 1 4130 - Aspen High 413 - Aspen Density Proposal Pole

Prescription Clearcut - Cut all trees greater than 3 inches. Noe retention will be left due to small stand size. Manage this stand for aspen.

Specs:

Other Mature aspen with some maple and balsam fir.

Comments:

Regeneration survey next inventory cycle.

Steps:

Next

Proposed

10/01/2015 Start Date:

52 33061052-Cut 3.6 4319 - Mixed High 65 Harvest Clearcut 4134 - Aspen, Cmpt. Review **Upland Forest** Density Spruce/Fir Proposal

Pole

Prescription Clearcut - Cut all trees greater than 3 inches; except mark a few balsam fir to retain where there is no aspen. No retention will be left due to the

small stand size. Stand will be managed for a mix of aspen and balsam fir. Specs:

Other\_ Comments: Mature aspen and two-aged balsam fir.

Regeneration survey next inventory cycle.

<u>Next</u> Steps:

Proposed

Start Date: 10/01/2015

## Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 061 Year of Entry 2016

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a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
53	33061053-Cut	10.8	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	84		Harvest	Clearcut with Reserves	611 - Lowland Deciduous Forest	Cmpt. Review Proposal

Prescription Clearcut with Reserves - Cut all trees greater than 4 inches; except mark some dense clumps of cedar to retain. But, the main portion of the Specs: reserves will be the portion of the stand not being cut. Manage this stand for lowland hardwood and balsam fir.

Other Mature lowland hardwood stand, with areas that don't have much merchantable volume.

Comments:

Regeneration survey next inventory cycle.

<u>Next</u> Steps:

S

<u>Proposed</u>

Start Date: 10/01/2015

33061054-Cut 23.4 6132 - Mixed High 112 Harvest Clearcut with 613 - Lowland Cmpt. Review Lowland Forest with Reserves Mixed Forest Proposal Density Cedar

Prescription Clearcut with Reserves - Cut all trees greater than 4 inches; except leave some patches of dense cedar. Leave some along the Schuster Road and in the middle of the stand to create a corridor for deer to travel through the stand. Manage this stand for lowland hardwood and balsam fir. Specs:

<u>Other</u> Mature low quality lowland hardwood and conifer. Alot of cedar near the Hayward Lake Road have dead tops. After the harvest this area would be a good location for wildlife to plant Red Osier. Comments:

Regeneration survey next inventory cycle. Wildlife Division will create an FTP for planting Red Osier Dogwood and other soft mast species. Next

Steps:

Proposed 10/01/2015 Start Date:

33061055-Cut 3.7 4110 - Sugar Maple 76 111-140 Harvest Single Tree 4111 - S.Maple. Cmpt. Review 55 High Association Density Log Selection Hard Mast Proposal Association

Prescription Selection harvest - reduce the basal area down to 70 to 80. Thi is the stands first thinning so no regeneration is expected.

Specs:

Other\_ Nice quality hardwood stand.

Comments:

Regeneration survey next inventory cycle. Next

Steps:

**Proposed** 

10/01/2015 Start Date:

33061056-Cut 6.6 6118 - Lowland 91 Harvest Clearcut with 613 - Lowland Cmpt. Review 56 High Deciduous with Density Reserves Mixed Forest Proposal Cedar Pole

Prescription Clearcut with Reserves - Cut all trees greater than 4 inches; except retain all hemlock and white pine. In addition mark some nice quality cedar

and yellow birch to retain. This stand is being managed for a mix of lowland hardwood and conifer. Specs:

Other Mature lowland hardwood and conifer stand.

Comments:

Regeneration survey next inventory cycle.

Steps:

Next

Proposed Start Date: 10/01/2015

## Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 061 Year of Entry 2016

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
58	33061058-Cut	34.4 1	4119 - Mixed Northern Hardwoods	High Density Log	91	81-110	Harvest	Clearcut with Reserves	4113 - R.Maple, Conifer	Cmpt. Review Proposal

Specs:

S

Prescription Clearcut with Reserves - Cut all trees greater than 5 inches; except cedar, hemlock and mark some maple, yellow birch, and beech to retain. Leave some big maple and beech cavity trees, along with some beech and yellow birch seed trees. Manage this stand for a mix of maple,

beech, balsam fir, and white pine.

Other Comments: Stand was thinned between 1993 - 95 on contract 050-92-01. Mature red maple stand with a dense understory of beech and balsam fir regeneration. The maple should be cut before the regeneration becomes too dense to regenerate the maple. The maple does not have enough

quality stems to continue thinning it.

<u>Next</u> Steps: Regeneration survey next inventory cycle.

**Proposed** 

Start Date: 10/01/2015

33061060-Cut 26.1 6132 - Mixed 92 Harvest Clearcut with 6117 - Lowland Cmpt. Review High Deciduous, Mixed Lowland Forest with Density Reserves Proposal Cedar Pole Coniferous

Prescription Clearcut with Reserves - Cut all trees greater than 4 inches; except retain some dense patches of cedar. Within these patches all other species will also be retained. Retain enough patches to have 5% retention overall. Manage this stand for lowland hardwood with some conifer. Specs:

Other Property Mature lowland hardwood stand with some cedar.

Comments:

Next Regeneration survey next inventory cycle.

Steps:

<u>Proposed</u>

10/01/2015 Start Date:

33061062-Cut 18.6 81-110 Cmpt. Review 62 4112 - Maple, High 91 Harvest Single Tree 4112 - Maple, Beech, Cherry Selection Beech, Cherry Proposal Density Log Association Association

Prescription Single Tree Selection - Reduce basal area down to 70 to 80. Focus on lowering the percentage of beech, but retain where possible 2 - 3 mast producing beech per acre. Manage this stand for a mix of northern hardwoods. Specs:

Other Comments:

Stand was thinned in 1979 and than again in 2002 on contract 027-01-01. The stand is not real dense, but with as high of percentage of beech that is present the amount should be reduced. Beech Bark Disease is present only a few miles away and with other stands prescribed in the adjacent area this stand should be thinned again. There is a dense understory of beech regeneration following the last harvest. The beech trees left will continue to produce hard mast to benefit for deer, bear, and other wildlife, and will later become good cavity nesting habitat.

Regeneration survey next inventory cycle. <u>Next</u>

Steps:

Proposed 10/01/2015 Start Date:

101 6117 - Lowland 40 4 6132 - Mixed Hiah Harvest Clearcut with Cmpt. Review 64 33061064-Cut Lowland Forest with Deciduous, Mixed Proposal Density Reserves Pole Cedar Coniferous

Prescription Clearcut with Reserves - Cut all trees greater than 4 inches; except retain some dense cedar patches. In the patches all species will be retained. Manage this stand for lowland hardwoods and balsam fir.

Specs:

Other Comments:

Regeneration survey next inventory cycle.

Next Steps:

Mature lowland ash stand with cedar.

Proposed

10/01/2015 Start Date:

## Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 061 Year of Entry 2016

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a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
67	33061067-Cut	26.0	4112 - Maple, Beech, Cherry Association	High Density Log	91	111-140	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal

Prescription Selection Harvest - Reduce the basal area down to 80 to 90. Focus on lowering the percentage of beech, but retain where possible 2 - 3 mast Specs: producing beech per acre. Allso remove some of the mature sawlogs. Manage this stand for mixed upland deciduous hardwoods.

Other Stand was last thinned in 1993 to 95 on contract 050-92-01. Good quality hardwood stand with a dense understory of beech regeneration. There is beech present, but there is beech scale present. The beech trees left will continue to produce hard mast to benefit for deer, bear, and Comments: other wildlife, and will later become good cavity nesting habitat.

<u>Next</u> Regeneration survey next inventory cycle.

Steps:

S

Proposed Start Date: 10/01/2015

33061068-Cut 2.8 6115 - Lowland Ash High 83 Harvest Clearcut with 6115 - Lowland Ash Cmpt. Review 68 Density Reserves Proposal

Prescription Clearcut with Reserves - Cut all trees greater than 4 inches; except retain all cedar. Manage this stand for lowland hardwood and balsam fir. Specs:

<u>Other</u> Mature lowland ash stand.

Comments:

Regeneration survey next inventory cycle. **Next** 

Steps:

Proposed 10/01/2015 Start Date:

4.3 Clearcut with Cmpt. Review 70 33061070-Cut 4139 - Aspen. High 65 Harvest 413 - Aspen Mixed Deciduous Proposal Density Log

Prescription Clearcut with Reserves - Cut all trees greater than 4 inches; except retain all cedar. Manage this stand for aspen.

Pole

Specs:

Other\_ Overmature aspen stand, in which quite a bit of the aspen has already died out. There is some lowland pockets within the stand.

Comments:

Regeneration survey next inventory cycle. <u>Next</u>

Steps:

**Proposed** 

10/01/2015 Start Date:

33061071-Cut 5.2 6132 - Mixed High 88 Harvest Clearcut with 611 - Lowland Cmpt. Review Lowland Forest with Density Log **Deciduous Forest** Proposal Reserves

Cedar

Prescription Overmature aspen stand, in which quite a bit of the aspen has already died out. There is some lowland pockets within the stand. Specs:

Other

Stand was thinned in 2000 on contract 055-96-01. This stand contains mostly low quality hardwood that should be regenerated. Comments:

Next Regeneration survey next inventory cycle.

Steps:

**Proposed** 

10/01/2015 Start Date:

## Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 061
Year of Entry 2016

DEPARTME	DNR MICHIGAN
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a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
73	33061073-Cut	4.4	4110 - Sugar Maple Association	Low Density Log	88 I	1-50	Harvest	Other - Specify in Comments	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal

Prescription Clearcut - Cut all merchantable trees to try and salvage them. No retention will be left due to significant mortality/die back present. This stand Specs: will be managed for beech and spruce/fir primarily. Treat the phragmites when there is funding available.

Other Stand was cut in 1994 on contract 050-92-01. I am not sure what has occured, but most of the residual has died or the tops have significant die back. There is some beech and balsam fir regenerating, but overall the stand is open. There is some phragmites in this stand.

Next Treat the phragmites when there is funding available. Regeneration survey next inventory cycle.

Steps:

Proposed Start Date: 10/01/2015

**75 33061075-Cut** 15.8 4119 - Mixed High 94 81-110 Harvest Clearcut with 4191 - Mixed Cmpt. Review Northern Hardwoods Density Log Reserves Upland Deciduous Proposal with Conifer

<u>Prescription</u> Clearcut with Reserves - Cut all trees greater than 4 inches; except retain all hemlock. In the higher quality maple area do a Selection Harvest - Specs:

Reducing the basal area down to 70 to 80. The retention for this stand will be the hemlock and residual hardwood in the selection area. Manage this stand for upland hardwood and balsam fir.

Other Stand was thinned in 2000-01 on contract 055-96-01. This stand contains mostly low quality hardwood that should be regenerated, but there is a Comments: few acre area of higher quality maple in the north part of the stand.

Next Regeneration survey next inventory cycle.

Steps:

Proposed Start Date: 10/01/2015

81-110 4319 - Mixed Cmpt. Review 76 33061076-Cut 5.7 4112 - Maple, High 91 Harvest Clearcut Beech, Cherry Upland Forest Proposal Density Association Pole

Prescription Clearcut - Cut all trees greater than 4 inches. No retention will be left; except for the advanced regeneration due to the small stand size.

Specs: Manage this stand for a mix of upland conifer and hardwood.

Other This stand was shelterwood cut about 20 years ago and now there is a fully stocked understory of balsam fir, white pine, and beech regeneration. The regeneration needs to be released so the overstory needs to be removed. Overall the overstory contains low quality

hardwood

Next Regeneration survey next inventory cycle.

Steps:

<u>Proposed</u>

Start Date: 10/01/2015

33061077-Cut Cmpt. Review 21.5 6117 - Lowland High 111-140 Harvest Clearcut with 6117 - Lowland Deciduous, Mixed Density Log Reserves Deciduous, Mixed Proposal Coniferous Coniferous

<u>Prescription</u> Clearcut with Reserves - Cut all trees greater than 4 inche; except retain all hemlock and mark out some retention pockets centered on some <u>Specs</u>: dense cedar areas, reserving all species within them. Manage this stand for a mix of hardwood and spruce/fir.

Other Stand was thinned in 2000-01 on contract 055-96-01. Stand is a mix of upland and lowland, but both contain red maple and ash. There is

Comments: phragmites on the East side of this stand, by the corner.

Next Treat Phragmites when funding becomes available. Regeneration survey next inventory cycle. Steps:

Proposed

Start Date: 10/01/2015

## Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 061 Year of Entry 2016

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a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
78	33061078-Cut	11.9	4319 - Mixed Upland Forest	High Density Log	107 J	141-170	Harvest	Clearcut with Reserves	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal

Prescription Clearcut with Reserves - Cut all trees greater than 4 inches; except hemlock and cedar. In addition leave a few white pine for seed and Specs

diversity. Manage this stand for a mix of hemlock, white pine, and upland hardwood.

Other Stand was thinned in 2000-01 on contract 055-96-01. Upland hardwood stand with dense areas of hemlock.

Comments:

Next Regeneration survey next inventory cycle.

Steps:

<u>Proposed</u>

Start Date: 10/01/2015

33061079-Cut 9.5 4117 - Mixed N. High 91 81-110 Harvest Shelterwood 4191 - Mixed Cmpt. Review Hardwood - Pine **Upland Deciduous** Proposal Density Log with Conifer

Prescription Shelterwood - Cut all trees greater than 4 inches; except mark to leave 20 to 30 basal area to provide partial shade for conifer regeneration. All hemlock will be retained and also focus on retaining more white pine and maple poles. Manage this stand for a mix of upland conifer and Specs:

hardwood.

Stand was thinned in 2006-07 on contract 030-06-01. The southern end of the stand has higher quality hardwood, but overall the quality is Other moderate. The stand is pushing towards conifer, in parts of the stand there is a high amount of white pine regeneration. There is also some Comments: balsam fir and hemlock getting established. The overstory should be lowered to release the advanced regen.

Next Regeneration survey next inventory cycle.

Steps:

Proposed

10/01/2015 Start Date:

24.0 6119 - Mixed High 111-140 6117 - Lowland Cmpt. Review 82 33061082-Cut Harvest Clearcut with Lowland Deciduous Density Log Reserves Deciduous, Mixed Proposal Forest Coniferous

Prescription Clearcut with Reserves - Cut all trees greater than 4 inches; except leave all hemlock and mark out some retention areas where there is a dense pocket of cedar, retaining all species. Also, leave a buffer along the creek on the east side of the stand. Manage this stand for mixed hardwood Specs: and balsam fir. Treat Phragmites when funding is available.

<u>Other</u> Stand was thinned in 2000-01 on contract 055-96-01. The stand is a mix of lowland ash with ridges of red maple. The stand does not contain enough high quality stems to thin anymore. There is phragmites in the center of this stand. Comments:

Treat Phragmites when funding is available. Regeneration survey next inventory cycle. <u>Next</u>

Steps:

**Proposed** 

Start Date: 10/01/2015

33061086-86 10.6 4319 - Mixed Medium 23 Tree Planting Hand Plant 4319 - Mixed Cmpt. Review Plant\_small **Upland Forest** Density **Upland Forest** Proposal Pole

Prescription Hand plant white spruce seedlings, per TMS recommendations. Was approved during the last inventory cycle.

Specs:

Other Stand was clearcut in 1991 on contract 019-86-01. This stand is on FTP 33-590 to hand plant white spruce. The FTP was sent in, in 2005, but has not been planted. Now there is only about 10 acres that are open that need to be planted. Comments:

Regeneration survey following planting. <u>Next</u>

Steps:

Proposed

10/01/2014 Start Date:

#### Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 061 Year of Entry 2016

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
88	33061088- Plant	17.5	42330 - Upland Fir	Medium Density Pole	23		Tree Planting	Hand Plant	42330 - Upland Fir	Cmpt. Review Proposal

Prescription Hand plant white spruce in open areas of the stand. Less than half of the stand will need to be planted. This treatment was approved at the last Specs:

review in 2004 and is on FTP 33-590 to plant.

Other Stand was clearcut in 1991 on contract 019-86-01. The stand is on FTP 33-590 to hand plant white spruce. The FTP was sent in, in 2005 but Comments:

still hasn't been planted.

<u>Next</u> Regeneration survey following planting.

Steps:

S

<u>Proposed</u> Start Date: 10/01/2014

29 NF 33061029-3105 - Mixed Non-Forest Other - Specify 310 - Herbaceous Cmpt. Review NonFor Upland Herbaceous Openland Proposal Management

Prescription Opening enhancement. Cut brush and encroaching tree species, mow, herbicide, lime, fertilize, plant both annual and perennial herbaceous Specs: plants as well as hard/soft mast producers within the opening boundaries for the benefit of both game and non-game species.

Other Comments:

**Next** Complete FTP and yearly maintanence

Steps:

**Proposed** 

Start Date: 10/01/2014

NF 33061050-3105 - Mixed Non-Forest Other - Specify 310 - Herbaceous Cmpt. Review 50 **Upland Herbaceous** Management Openland Proposal NonFor

Prescription Opening enhancement. Cut brush and encroaching tree species, mow, herbicide, lime, fertilize, plant both annual and perennial herbaceous

Specs: plants as well as hard/soft mast producers within the opening boundaries for the benefit of both game and non-game species.

Other

Comments:

Complete FTP and yearly maintanence <u>Next</u>

Steps:

Proposed

Start Date: 10/01/2014

NF 33061074-3105 - Mixed 2.6 Non-Forest Other - Specify 310 - Herbaceous Cmpt. Review 74 NonFor **Upland Herbaceous** Management Openland Proposal

Prescription Opening enhancement. Cut brush and encroaching tree species, mow, herbicide, lime, fertilize, plant both annual and perennial herbaceous plants as well as hard/soft mast producers within the opening boundaries for the benefit of both game and non-game species. Specs:

<u>Other</u> Comments:

Complete FTP and yearly maintanence **Next** 

Steps:

Proposed

Start Date: 10/01/2014

## Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 061 Year of Entry 2016

DEPARTME	DNR MICHIGAN	
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a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
30	33061030- Other_small	15.1	6120 - Lowland Cedar	Medium Density Pole	94		Other	Unspecified	6120 - Lowland Cedar	Cmpt. Review Proposal

Prescription Treat the phragmites when funding is available.

Specs

Other Very poor quality cedar stand, with a high percentage of the stand having mostly sub-merchantable stems. There is some cedar regeneration in Comments: the open areas. The tamarack is dying out of the stand from the Eastern Larch Beetle, but there is not enough volume to try and salvage it.

There is phragmites along the Hayward Lake Road, both sides.

<u>Next</u>

Follow up following Phragmites treatment.

Steps:

Proposed

Start Date: 10/01/2014

66 33061066-27 6120 - Lowland High 112 Other Unspecified 6120 - Lowland Cmpt. Review Other small Cedar Density Cedar Proposal Pole

Prescription Treat the phragmites as funding becomes available. This phragmites treatment was approved in 2013 as an out of entry treatment. The stand is

on FTP 33-705 to treat the phragmites. Specs:

<u>Other</u> Overall low quality cedar with some tamarack. There are numerous patches of phragmites along the Hayward Lake Road.

Comments:

Follow up following Phragmites treatment. **Next** 

Steps:

Proposed

10/01/2014 Start Date:

6132 - Mixed 19 Other 6132 - Mixed Cmpt. Review 85 33061085-6.6 Medium Unspecified Lowland Forest with Lowland Forest with Proposal Other\_small Density Cedar Pole Cedar

Prescription Treat Phragmites when funding is available.

Specs:

Other Stand was cut in 1995 on contract 036-92-01. All species were cut; except cedar, hemlock, pine, and spruce - some of these trees were marked to cut. This stand has not fully regenerated, there is a dense sedge/grass mat. There is a large patch of Phragmites on the East side of the Comments:

Follow up following phragmites treatment. <u>Next</u>

Steps:

Proposed

10/01/2014 Start Date:

35688 island 4319 - Mixed Other 27 0.8 Hiah 21 Unspecified 4134 - Aspen. Cmpt. Review **Upland Forest** Density Spruce/Fir Proposal

Sapling

Prescription Treat the phragmites when funds are available.

Specs:

Stand was clearcut in 1993 on contract 08-93-01; except all cedar, hemlock, pine, and beech were retained along with all balsam fir with less <u>Other</u> Comments: than two sticks. There is three distinct age classes 21 year old aspen and balsam fir, 40 to 50 year old balsam fir and maple, and 116 year old

cedar. There is a patch of phragmites in the northern half of the stand.

Follow up following Phragmites treatment. <u>Next</u>

Steps:

Proposed

10/01/2014 Start Date:

# Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 061
Year of Entry 2016

DNR DIRECTION OF THE PROPERTY OF THE PROPERTY

72 NF\_33061072-Other\_small

**Treatment** 

Name

7.7 6224 - Treed Bog

CoverType

Size

**Density** 

Stand

Age

**Type**Other

**Treatment** 

Treatment Method

Unspecified

Objective 6224 - Treed Bog

**Cover Type** 

Approval Status

Cmpt. Review

Proposal

Prescription Treat phragmites as funding becomes available.

Acres

Specs:

S t a

n

Other There is small patch of phragmites in the southwestern portion of the stand that needs to be treated. This treatment was approved in 2013 as an

ВА

Range

Comments: out of entry and is already on FTP 33-705.

Next Follow up following phragmites treatment.

Steps:

Proposed

Start Date: 10/01/2014

**Total Treatment** 

Acreage Proposed: 562.7

Escanaba Mgt. Unit Report 4 -- Treatments Prescribed with Compartment: 061 a Site Condition s Year of Entry 2016 t **Treatment** Acres CoverType Size Stand ВА **Treatment Treatment Cover Type Approval** n Objective Method Status Name Range Density Age Type #Type! #Type! **Prescription** Specs: Other Comment: <u>Next</u> Steps: <u>Proposed</u> #Type! Start Date:

Total Treatment

**Limiting Factor** 

Acreage Proposed: 0.0

**Dustin Salter: Examiner** 

Compartment 061 Year of Entry 2016

Availa	ability for I	<b>Management</b>				
Total	Acres	Acres		Domina	nt Site	Conditions
Acres	Available	Not Available		No	3J	
212	212		Aspen	212		
699	699		Cedar	699		
2	2		Hemlock	2		
75	68	7	Lowland Conifers	68	7	
166	166		Lowland Deciduous	166		
129	129		Lowland Mixed Forest	129		
6	6		Mixed Upland Deciduous	6		
298	298		Northern Hardwood	298		
34	34		Upland Conifers	34		
84	84		Upland Mixed Forest	84		
25	25		Upland Spruce/Fir	25		1
1,730	1,723	7	Total Forested Acres	1,723	7	1
-	100%	0%	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 Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition			
Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	4	3A: Potential old growth / biodiversity						
Comments: This stand is an island within Hayward Lake with mature forest on it.									
Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	2	3A: Potential old growth / biodiversity						
Comments: This stand is an island within Hayward Lake with mature forest on it.									
<u></u>	omments:  nis stand is an islar  Not Available  omments:	Not Available  Not Available  2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)  Domments:  Not Available  2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)  Not Available  2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)  Domments:	Not Available 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)  Domments:  Not Available 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)  Pomments:  Not Available 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)  Domments:	Not Available  Pominant Site Condition  Pominant Site Condition  Acres  Other Site Condition  Acres  Acres  Other Site Condition  Acres  Other Site Condition  Acres  Other Site Condition  Acres  Acres  Acres  Other Site Condition  Acres  Acres  Other Site Condition  Acres  Acres  Other Site Condition  Acres  Acres	Not Available 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)  Not Available 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)  Domments:  Not Available 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)  2 3A: Potential old growth / biodiversity  A: 3A: Potential old growth / biodiversity  3A: Potential old growth / biodiversity	Not Available 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)  Not Available 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)  Not Available 2H: Blocked by physical obstacle (e.g. upland stand is an island within Hayward Lake with mature forest on it.  Not Available 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)  2 3A: Potential old growth / biodiversity  3A: Potential old growth / biodiversity			

## Report 5 – Site Conditions

Escanaba Mgt. Unit

Dustin Salter: Examiner

Compartment 061 Year of Entry 2016

800	Not Available	3J: Water quality / BMPs (stream, river, or lake)	7	
	Comments: A drain flows throug	gh this stand and the remaining	stand	acts as a buffer.
009	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	4	3A: Potential old growth / biodiversity
	Comments:	and of motive forest within a ve	m. longs	lawland aware compley, adjacent to Hayward Lake. There is no access to this stand
I	nis stand is an isia	and of mature forest within a ve	ry large	e lowland swamp complex, adjacent to Hayward Lake. There is no access to this stand.
010	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	6	3A: Potential old growth / biodiversity
	Comments: This stand is an isla	and of mature forest within a ve	ry large	e lowland swamp complex, adjacent to Hayward Lake. There is no access to this stand.
011	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	9	3A: Potential old growth / biodiversity
C	Comments:			
Т	his stand is an isla	and of mature forest within a ve	ry large	e lowland swamp complex, adjacent to Hayward Lake. There is no access to this stand.
012	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	11	3A: Potential old growth / biodiversity
C	Comments:			
Т	his stand is an isla	and of mature forest within a ve	ry large	e lowland swamp complex, adjacent to Hayward Lake. There is no access to this stand.

Escanaba Mgt. Unit Con

Compartment: 061 Year of Entry: 2016



## Report 6 - PROPOSED SPECIAL CONSERVATION AREA\* (SCA) DETAILS

\* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				

Escanaba Mgt. Unit Compartment: 061
Year of Entry 2016



## Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS

\* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

SCA Archaeological Site  An aquatic or terrestrial area of the State that contains physical remains of human occupation. These are sites of cultural and historical significance that may occur upon terrestrial areas and Great Lakes bottomlands. They include thousands of Native American settlements and burial sites, as well as French and British outposts, nineteenth century logging camps, mines and homesteads. Beneath the waters of the Great Lakes, there are shipwrecks and other remains documenting the maritime trade. Such sites may be identified by Natural heritage data from the State Historic Preservation Office. Proposed treatments in this compartment will be implemented in such a manner as to maintain the integrity of these sites. Due to the sensitive nature of this information, no further detail about location is available.	Conservat Area	ion Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
	SCA	9	sites of cultural and historical significance th bottomlands. They include thousands of Nat and British outposts, nineteenth century logg the Great Lakes, there are shipwrecks and of be identified by Natural heritage data from the this compartment will be implemented in suc	at may occur upon terrestrial areas and Great Lakes ive American settlements and burial sites, as well as French ging camps, mines and homesteads. Beneath the waters of other remains documenting the maritime trade. Such sites may be State Historic Preservation Office. Proposed treatments in the a manner as to maintain the integrity of these sites. Due to

S t	Escanab	Escanaba Mgt. Unit			<ul><li>Forested</li></ul>	Stands Compartment: 061 Year of Entry: 2016
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	6120 - Lowland Cedar	Low Density Pole	81.9	94		Very poor quality stand. The stand has a low basal area of merchantable stems (mostly cedar), with some cedar regeneration present.
4	4119 - Mixed Northern Hardwoods	High Density Log	8.8	92	141-170	Good quality hardwood stand with dense balsam fir regeneration throughout most of the stand. The only access into this stand is through private property.
5	4319 - Mixed Upland Forest	High Density Pole	2.0	91	111-140	SCA - Island within Hayward Lake. Stand is primarily a mix of birch and cedar. There is lots of garbage on the island from duck hunters.
6	429 - Mixed Upland Conifers	High Density Log	4.4	91		SCA - Island within Hayward Lake. Stand is a mix of large white pine on the east side and a mix of cedar, birch, and aspen on the west side. There is lots of garbage on the island from duck hunters.
7	4110 - Sugar Maple Association	High Density Log	4.2	91	81-110	SCA - Mature upland forest within a large swamp complex. Good quality hardwood stand with heavy sedge.
8	4111 - S.Maple, Hard Mast Association	High Density Log	6.1	91	81-110	SCA - Mature upland forest within a large swamp complex. Very good quality hardwood stand with heavy sedge.
9	42380 - Non Pine Upland Conifer, Mixed Deciduous	High Density Pole	9.0	91		SCA - Mature upland forest within a large swamp complex. Stand is a mix of upland cedar, mixed hardwood, and balsam fir.
11	42380 - Non Pine Upland Conifer, Mixed Deciduous	High Density Pole	11.0	91		SCA - Mature upland forest within a large swamp complex.
14	6120 - Lowland Cedar	Medium Density Pole	152.0	94		Poor quality cedar stand with some pockets of other species mixed in.
15	4110 - Sugar Maple Association	High Density Log	6.9	91	111-140	Stand was last thinned in 1991 on contract 036-91-01. The majority of the stand has poor quality hardwood with dense balsam fir regeneration. There is also some cedar and hemlock regeneration. There is a gravel pit in the center of this stand. The road and parking lot for the Hayward Lake Access Site is within this stand. The road is growing in and needs to be opened up.
16	4111 - S.Maple, Hard Mast Association	High Density Log	23.1	94	81-110	Stand was last thinned in 1991 on contract 036-91-01. Good quality hardwood stand that should be thinned in 10 years.
17	4115 - Y.Birch, Hemlock NH	High Density Log	9.0	94	141-170	High quality hardwood stand that doesn't look like it has been thinned in a long time, if ever. There is a high percentage of beech, but no beech scale present. There is a steep slope in the stand.
18	6120 - Lowland Cedar	High Density Pole	86.8	94		SCA - Removal, this is not an unique stand. Very poor quality cedar stand with small isolated pockets of better quality trees.

s t	Escanaba	Escanaba Mgt. Unit			Forested	Stands Compartment: 061 Year of Entry: 2016
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
19	6129 - Mixed Coniferous Lowland Forest	High Density Pole	58.7	81		Good quality lowland mixed conifer stand. Overall the tamarack and spruce is high quality and the cedar is very poor quality. There is some cedar regeneration present within some open areas.
20	42360 - Upland Cedar	High Density Log	3.8	103		High quality upland cedar stand.
21	4134 - Aspen, Spruce/Fir	High Density Pole	15.1	26		Stand was clearcut in 1988 on contract 08-87. Fully stocked aspen stand. There are some steep ridges within the stand.
22	4110 - Sugar Maple Association	High Density Log	8.9	86	111-140	Stand was last thinned in 1988 on contract 08-87. High quality sugar maple stand that is in need of a thinning.
23	4111 - S.Maple, Hard Mast Association	High Density Log	18.7	94	81-110	Stand was last thinned in 2002-03 on contract 028-01-01. Good quality hardwood stand with a high percentage of beech. No beech scale was found here. The stand has a fully stocked understory of beech regeneration.
24	4136 - Aspen, Mixed Conifer	High Density Sapling	3.6	11		Stand was clearcut in 2003 on contract 028-01-01. All cedar, hemlock, yellow birch, and pine were retained. Fully stocked stand with mostly aspen and pockets of balsam fir.
25	4319 - Mixed Upland Forest	High Density Sapling	10.4	10		Stand was clearcut between 2003 and 2005 on contract 028-01- 01. All cedar, hemlock, yellow birch, and pine were retained. Stand is fully stocked with mostly aspen and balsam fir.
26	4130 - Aspen	High Density Pole	26.5	53		Mature aspen stand, with some older stems that are dying out.
27	4319 - Mixed Upland Forest	High Density Sapling	17.7	Uneven Age		Stand was clearcut in 1993 on contract 08-93-01; except all cedar, hemlock, pine, and beech were retained along with all balsam fir with less than two sticks. There is three distinct age classes 21 year old aspen and balsam fir, 40 to 50 year old balsam fir and maple, and 116 year old cedar. There is a patch of phragmites in the northern half of the stand.
28	42350 - Upland Hemlock	High Density Log	2.3	96	111-140	Dense upland hemlock stand.
30	6120 - Lowland Cedar	Medium Density Pole	228.2	94		Very poor quality cedar stand, with a high percentage of the stand having mostly sub-merchantable stems. There is some cedar regeneration in the open areas. The tamarack is dying out of the stand from the Eastern Larch Beetle, but there is not enough volume to try and salvage it. There is phragmites along the Hayward Lake Road, both sides.
31	4136 - Aspen, Mixed Conifer	High Density Sapling	7.7	17		Stand was clearcut in 1997 on contract 008-93-01. All cedar, hemlock, pine, and beech were retained. Fully stocked aspen stand.
32	6120 - Lowland Cedar	High Density Pole	7.8	96		Nice quality cedar on the west side and very poor quality on the east side.

S t	Escanab		Report 8	– Forested	Stands Compartment: 061 Year of Entry: 2016	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
33	4110 - Sugar Maple Association	High Density Log	3.9	91	81-110	Good quality hardwood stand,
34	4111 - S.Maple, Hard Mast Association	High Density Log	47.2	91	51-80	Stand was thinned between 2007 & 2009 on contract 032-06- 01. Good quality hardwood with a dense layer of sedge. There is beech present, but I didn't find any beech scale.
35	4111 - S.Maple, Hard Mast Association	High Density Log	8.5	91	81-110	Stand was thinned in 2006-07 on contract 032-06-01. Good quality hardwood stand, that has a full understory of beech and balsam fir. There is also a lot of hemlock seedlings greater than 1 foot tall. There is beech present, but no scale is present.
36	4112 - Maple, Beech, Cherry Association	Low Density Log	6.8	91	1-50	Stand was cut in 2006 on contract 032-06-01. Only the aspen and balm were cut. This stand has large wolfy sugar maple and beech with mostly grass understory except for patches of aspen and balm regeneration. Only about half of the stand is forested. There is beech present, but I din't see any scale.
37	4134 - Aspen, Spruce/Fir	High Density Pole	3.7	37		Fully stocked aspen and balsam fir stand.
38	42330 - Upland Fir	High Density Pole	7.0	41		Fully stocked balsam fir and aspen stand.
39	6118 - Lowland Deciduous with Cedar	High Density Log	7.6	106		Mature lowland deciduous stand with some cedar.
40	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	9.5	106		Stand is a mix of lowland conifer and deciduous with cedar. There are a couple of upland pockets of cedar within the stand.
41	4110 - Sugar Maple Association	High Density Log	23.0	76	81-110	Stand was last thinned in 2005 on contract 029-01-01. Good quality hardwood stand.
42	6120 - Lowland Cedar	High Density Pole	14.5	110		Low quality cedar stand with some lowland hardwoods within it.
43	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	48.7	91		Mature lowland deciduous stand with some cedar.
44	4134 - Aspen, Spruce/Fir	High Density Pole	11.5	37		Good quality aspen stand.
45	42390 - Mixed Non- Pine Upland Conifers	Medium Density Log	9.4	96		Stand was cut in 1995 on contract 017-93-01. All trees were cut, except cedar, hemlock, pine, and beech. The overstory is only partially stocked, but the understory is fully stocked.
46	42360 - Upland Cedar	High Density Log	3.4	110		High quality upland cedar stand.
47	4319 - Mixed Upland Forest	High Density Pole	6.5	55		Stand is a mix of aspen and balsam fir. There are some apple trees in the southeast part of the stand that should be protected.

S t	Escanaba Mgt. Unit			Report 8	– Forested	Stands Compartment: 061 Year of Entry: 2016
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
48	4136 - Aspen, Mixed Conifer	High Density Sapling	13.9	7		Stand was clearcut in the winter of 2006-07 on contract 030-06- 01. All of the cedar was retained. Very thick - good quality aspen.
49	4130 - Aspen	High Density Pole	6.1	56		Mature aspen with some maple and balsam fir.
51	4130 - Aspen	High Density Pole	7.3	46		Hold aspen stand for ten years and cut when hardwood stand to the west is cut.
52	4319 - Mixed Upland Forest	High Density Pole	3.6	65		Mature aspen and two-aged balsam fir.
53	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	14.8	84		Mature lowland hardwood stand, with areas that don't have much merchantable volume.
54	6132 - Mixed Lowland Forest with Cedar	High Density Pole	23.4	112		Mature low quality lowland hardwood and conifer. Alot of cedar near the Hayward Lake Road have dead tops. After the harvest this area would be a good location for wildlife to plant Red Osier.
55	4110 - Sugar Maple Association	High Density Log	3.7	76	111-140	Nice quality hardwood stand.
56	6118 - Lowland Deciduous with Cedar	High Density Pole	6.6	91		Mature lowland hardwood and conifer stand.
57	4136 - Aspen, Mixed Conifer	High Density Pole	39.5	27		Stand was clearcut in 1987 on contract 066-85-01. Fully stocked aspen and balm stand with some lowland pockets in the middle.
58	4119 - Mixed Northern Hardwoods	High Density Log	34.4	91	81-110	Stand was thinned between 1993 - 95 on contract 050-92-01. Mature red maple stand with a dense understory of beech and balsam fir regeneration. The maple should be cut before the regeneration becomes too dense to regenerate the maple. The maple does not have enough quality stems to continue thinning it.
59	6120 - Lowland Cedar	Low Density Pole	6.8	112		Stand was cut in 1995 on contract 017-93-01. All species were cut, except cedar, hemlock, pine, and beech. Very low quality stand that didn't regenerate very well following the last harvest. I think the drainage patterns have been affected by the county roads.
60	6132 - Mixed Lowland Forest with Cedar	High Density Pole	26.1	92		Mature lowland hardwood stand with some cedar.
61	42360 - Upland Cedar	Low Density Pole	6.4	101		Stand was cut in 2006 on contract 029-01-01. All trees were cut; except cedar, hemlock, and pine. Two-aged stand - mature cedar in the overstory and balsam fir and balm regeneration. This stand will be a balsam fir/balm stand next inventory cycle.

s t	Escanaba Mgt. Unit			Report 8	– Forested	Stands Compartment: 061 Year of Entry: 2016
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
62	4112 - Maple, Beech, Cherry Association	High Density Log	18.6	91	81-110	Stand was thinned in 1979 and than again in 2002 on contract 027-01-01. The stand is not real dense, but with as high of percentage of beech that is present the amount should be reduced. Beech Bark Disease is present only a few miles away and with other stands prescribed in the adjacent area this stand should be thinned again. There is a dense understory of beech regeneration following the last harvest.
63	42360 - Upland Cedar	Low Density Pole	13.1	101		Stand was clearcut in 2005 on contract 029-01-01, except the cedar, hemlock, pine, and beech were retained. Currently this stand types out as a cedar stand, but it is actually a two-aged stand. Mature cedar with balsam fir, balm, and maple regenerating. Some areas have such a high basal area, nothing has regenerated.
64	6132 - Mixed Lowland Forest with Cedar	High Density Pole	40.4	101		Mature lowland ash stand with cedar.
65	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Log	7.0	105		Mature lowland hardwood stand with a drain flowing through the center of it.
66	6120 - Lowland Cedar	High Density Pole	70.3	112		Overall low quality cedar with some tamarack.
67	4112 - Maple, Beech, Cherry Association	High Density Log	26.0	91	111-140	Stand was last thinned in 1993 to 95 on contract 050-92-01. Good quality hardwood stand with a dense understory of beech regeneration. There is beech present, but there is beech scale present.
68	6115 - Lowland Ash	High Density Pole	2.8	83		Mature lowland ash stand.
69	4112 - Maple, Beech, Cherry Association	High Density Pole	5.3	84	81-110	Stand was thinned in 2006 on contract 029-01-01.
70	4139 - Aspen, Mixed Deciduous	High Density Log	4.3	65		Overmature aspen stand, in which quite a bit of the aspen has already died out. There is some lowland pockets within the stand.
71	6132 - Mixed Lowland Forest with Cedar	High Density Log	5.2	88		Stand was thinned in 2000 on contract 055-96-01. This stand contains mostly low quality hardwood that should be regenerated.
73	4110 - Sugar Maple Association	Low Density Log	4.4	88	1-50	Stand was cut in 1994 on contract 050-92-01. I am not sure what has occured, but most of the residual has died or the tops have significant die back. There is some beech and balsam fir regenerating, but overall the stand is open. There is some phragmites in this stand.
75	4119 - Mixed Northern Hardwoods	High Density Log	15.8	94	81-110	Stand was thinned in 2000-01 on contract 055-96-01. This stand contains mostly low quality hardwood that should be regenerated, but there is a few acre area of higher quality maple in the north part of the stand.

s t	Escanaba Mgt. Unit			Report 8	– Forested	Stands Compartment: 061 Year of Entry: 2016
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
76	4112 - Maple, Beech, Cherry Association	High Density Pole	5.7	91	81-110	This stand was shelterwood cut about 20 years ago and now there is a fully stocked understory of balsam fir, white pine, and beech regeneration. The regeneration needs to be released so the overstory needs to be removed. Overall the overstory contains low quality hardwood.
77	6117 - Lowland Deciduous, Mixed Coniferous	High Density Log	21.5	94	111-140	Stand was thinned in 2000-01 on contract 055-96-01. Stand is a mix of upland and lowland, but both contain red maple and ash. There is phragmites on the East side of this stand, by the corner.
78	4319 - Mixed Upland Forest	High Density Log	11.9	107	141-170	Stand was thinned in 2000-01 on contract 055-96-01. Upland hardwood stand with dense areas of hemlock.
79	4117 - Mixed N. Hardwood - Pine	High Density Log	9.5	91	81-110	Stand was thinned in 2006-07 on contract 030-06-01. The southern end of the stand has higher quality hardwood, but overall the quality is moderate. The stand is pushing towards conifer, in parts of the stand there is a high amount of white pine regeneration. There is also some balsam fir and hemlock getting established. The overstory should be lowered to release the advanced regen.
80	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	6.0	39		Fully stocked stand of aspen and balsam fir.
81	4130 - Aspen	High Density Sapling	11.2	7		Stand was clearcut in 2006-07 on contract 030-06-01. Most of the stand has regenerated to aspen, but the more open areas are filling in with balsam fir and white pine. There are some scattered residual trees.
82	6119 - Mixed Lowland Deciduous Forest	High Density Log	24.0	94	111-140	Stand was thinned in 2000-01 on contract 055-96-01. The stand is a mix of lowland ash with ridges of red maple. The stand does not contain enough high quality stems to thin anymore. There is phragmites in the center of this stand.
83	4133 - Aspen, Mixed Pine	High Density Sapling	11.7	7		Stand was clearcut in 2006-07 on contract 030-06-01. Fully stocked aspen stand with a fair amount of advanced conifer regeneration.
84	6132 - Mixed Lowland Forest with Cedar	High Density Sapling	19.3	19		Stand was cut in 1995 on contract 036-92-01. All trees were cut; except cedar, hemlock, pine, and spruce. Some of these trees were marked to cut. A high percentage of the residual cedar has blown over. The open areas have regenerated to aspen/balm, the areas with partial shade are filling in with balsam fir, and the areas with dense cedar do not have any regeneration.
85	6132 - Mixed Lowland Forest with Cedar	Medium Density Pole	14.6	19		Stand was cut in 1995 on contract 036-92-01. All species were cut; except cedar, hemlock, pine, and spruce - some of these trees were marked to cut. This stand has not fully regenerated, there is a dense sedge/grass mat. There is a large patch of Phragmites on the East side of the stand.
86	4319 - Mixed Upland Forest	Medium Density Pole	31.5	23		Stand was clearcut in 1991 on contract 019-86-01. This stand is on FTp 33-590 to hand plant white spruce. The FTP was sent in, in 2005, but has not been planted. Now there is only about 10 acres that are open that need to be planted.

s t	Escanaba Mgt. Unit			Report 8	– Forested	Stands Compartment: 061 Year of Entry: 2016	DNR DURAL ASSOURCE
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	MICHIGAN S
87	4130 - Aspen	High Density Pole	50.0	23		Stand was clearcut in 1991 on contract 019-86-01. Fully aspen stand.	stocked
88	42330 - Upland Fir	Medium Density Pole	17.5	23		Stand was clearcut in 1991 on contract 019-86-01. The on FTP 33-590 to hand plant white spruce. The FTP win, in 2005 but still hasn't been planted.	
89	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	13.6	23		Stand was clearcut in 1991 on contract 019-86-01. Sta mix of aspen/balm and balsam fir. The open areas are with balsam fir.	
90	6120 - Lowland Cedar	High Density Pole	9.3	105			
91	6120 - Lowland Cedar	High Density Pole	14.7	105			
92	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	26.6	49		Stand was cut in 1965. Lowland hardwood stand	d.

## Report 9 - Nonforested Stands

Compartment: 061 Year of Entry: 2016



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
1	50 - Water	10.5	No	Unspecified	Myers Lake
3	6223 - Inundated Shrub Swamp	30.7	No	Unspecified	
10	6223 - Inundated Shrub Swamp	659.0	No	Unspecified	
12	50 - Water	5.8	No	Unspecified	South end of Little Lake
13	50 - Water	2.0	No	Unspecified	Small pond
29	3105 - Mixed Upland Herbaceous	2.1	No	Unspecified	
50	3105 - Mixed Upland Herbaceous	3.5	No	Unspecified	There are about 12 apples trees in this opening, they could use a pruning.
72	6224 - Treed Bog	68.0	No	Unspecified	
74	3105 - Mixed Upland Herbaceous	2.6	No	Unspecified	