

## **Compartment Review Presentation**

**Newberry Forest Management Unit** 

Compartment 42045 Entry Year 2022 Acreage: 934

County Luce

Management Area: Deer Park

Revision Date: 2020-07-10

Stand Examiner: Amy Livermore

**Legal Description:** 

Sections 19 & 30-31, T49N-R8W, Luce County

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

Timber, wildlife, recreation, and fisheries are the main uses of this area. The goal is to manage for all of these simultaneously and to provide, enhance and perpetuate their uses through proper management. Forest treatments prescribed will help ensure the sustainability of the forest resource and continue to enhance the quality of the wildlife habitat.

## Soil and topography:

Soil types include Wallace, Rubicon-Spot Mix, ponded Histols & Aquents, Rousseau fine sand; Carbondale, Lupton, Tawas; Spot-Dawson Peats, Rousseau-Dawson Complex, and a small pocket of Finch Sand. The topography in this compartment is steep to rolling with kettle lakes are pine ridges scattered throughout the area.

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

The entire compartment is state owned. There is a combination of private land and Forestland Group surrounding the compartment. Land use in this compartment include hunting, fishing, wildlife/nature viewing, dog sledding, ORVs, and hiking.

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

Michigan Natural Features Inventory (MNFI) lists the occurrence of high-quality muskeg and high quality dry northern forest. Potential for red-shouldered hawk, goshawk, merlin, great blue heron rookery, eagle, and osprey are also listed. There is potential for moose, wolf, incurvate emerald, frigga fritillary, freija fritillary, ebony boghunter in the boggy areas, and wood turtle. Other potential species in clued sweet coltsfoot, Wiegand's sedge, northern prostrate clubmoss, fir clubmoss, English sundew, meadow beauty, round-leaved orchis, black crowberry, yellow pitcher-plant, panicled screwstem in bogs and open wetlands. Potential for calypso orchis, Lapland buttercup, ram's head lady's slipper, round-leaved orchid, and limestone oak fern in cedar swamps.

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

None noted.

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

None.

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

The Little Two-Hearted River is a designated trout stream supporting native brook trout and receives runs of steelhead and salmon in the spring and fall, respectively. The riparian zone and valley walls are unstable due to the very sandy soils covering the area. Any treatments near the riparian zone should consider a buffer from the top of the valley walls for 100 ft plus 5 ft per 1% increase in slope. The sand substrate is highly erodible and furrows would produce a straight, instantaneous sand drop into the river.

#### Wildlife Habitat Considerations:

Compartment 45 lies in northeastern Luce county and is situated in the Seney Sand Lake Plain ecological subsubsection. The compartment has a good diversity of types with lowland forest types, mixed pine, and mixed upland deciduous types interspersed. Aspen is present in the compartment as well as non-forested wetlands throughout.

A single shelterwood harvest in mixed pine is scheduled to occur. It will retain mixed conifer and will strive to maintain the travel corridor that would be used by wildlife traversing the compartment. Wildlife using this compartment are expected to be diverse due to the varying forest types and their interspersion.

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

No known potential exists for commercial oil & gas production in this part of the state, and there is no known potential for

metallic minerals in this area. No active sand/gravel pits exist in the area. There appears to be some potential for sand within the compartment, but much of the compartment is covered by wetlands, which could inhibit any surface development. No current mineral leasing activity exists in the area.

#### **Vehicle Access:**

This east edge of the compartment can be accessed by County Road 500. There forest roads throughout the compartment that can be used to access the interior of the compartment during the dry times of the year.

#### **Survey Needs:**

Some private property lines will need to be confirmed in order for treatments to occur.

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

Recreational opportunities include ORV riding, hunting, fishing, wildlife/nature view, dog sledding, and hiking. The North Country Pathway runs through the compartment. Fishing opportunities exist in the Little Two Hearted River. Dog sledders use the forest roads all year to run their sled dogs.

#### Fire Protection:

This compartment is in the Two Hearted Zone Dispatch Area. There is a good fragmentation of the fuel types making the risk for large fire growth of this area moderate. Private property risk is high in this area because of the fuel type and locations.

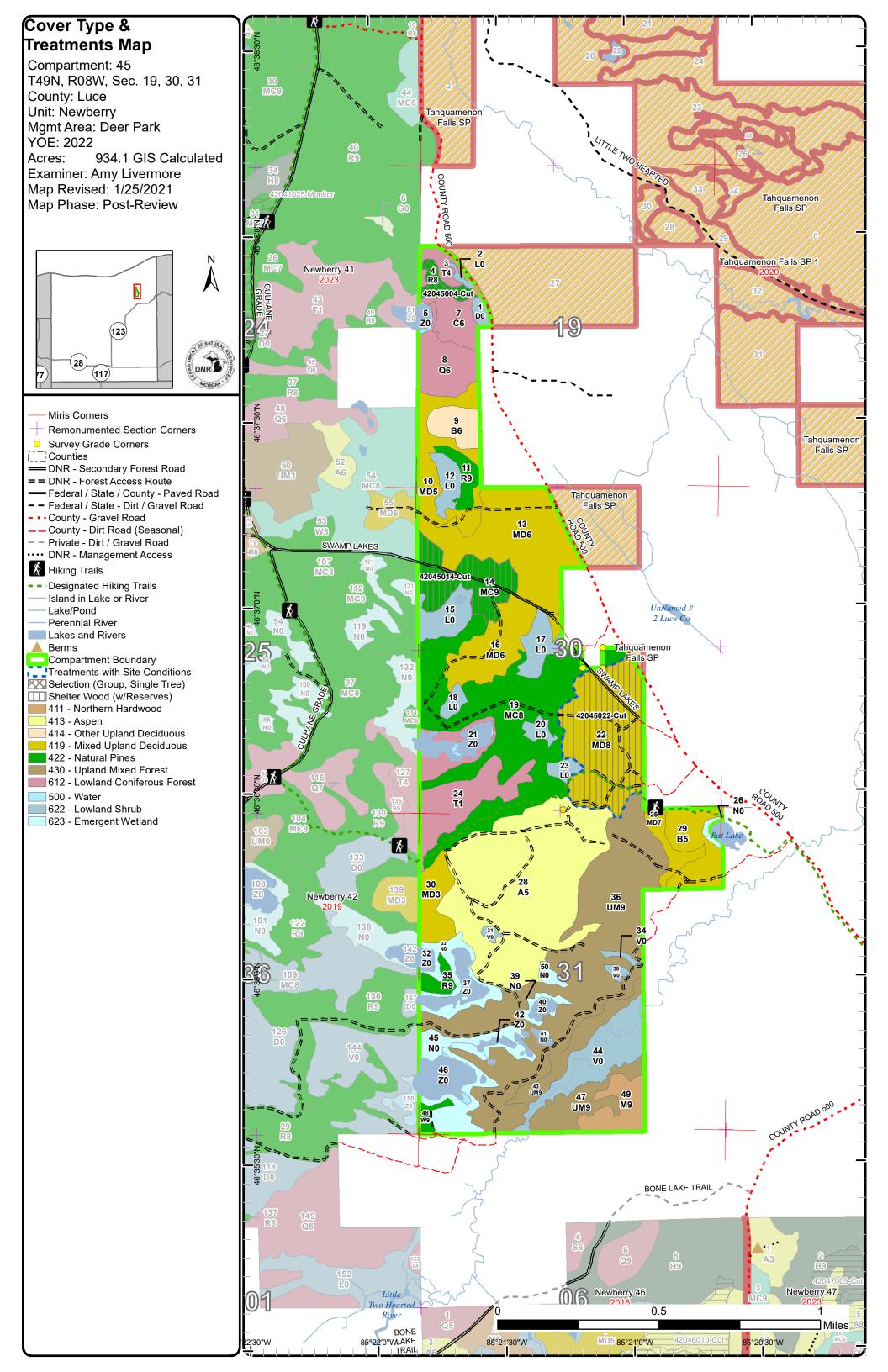
### **Additional Compartment Information:**

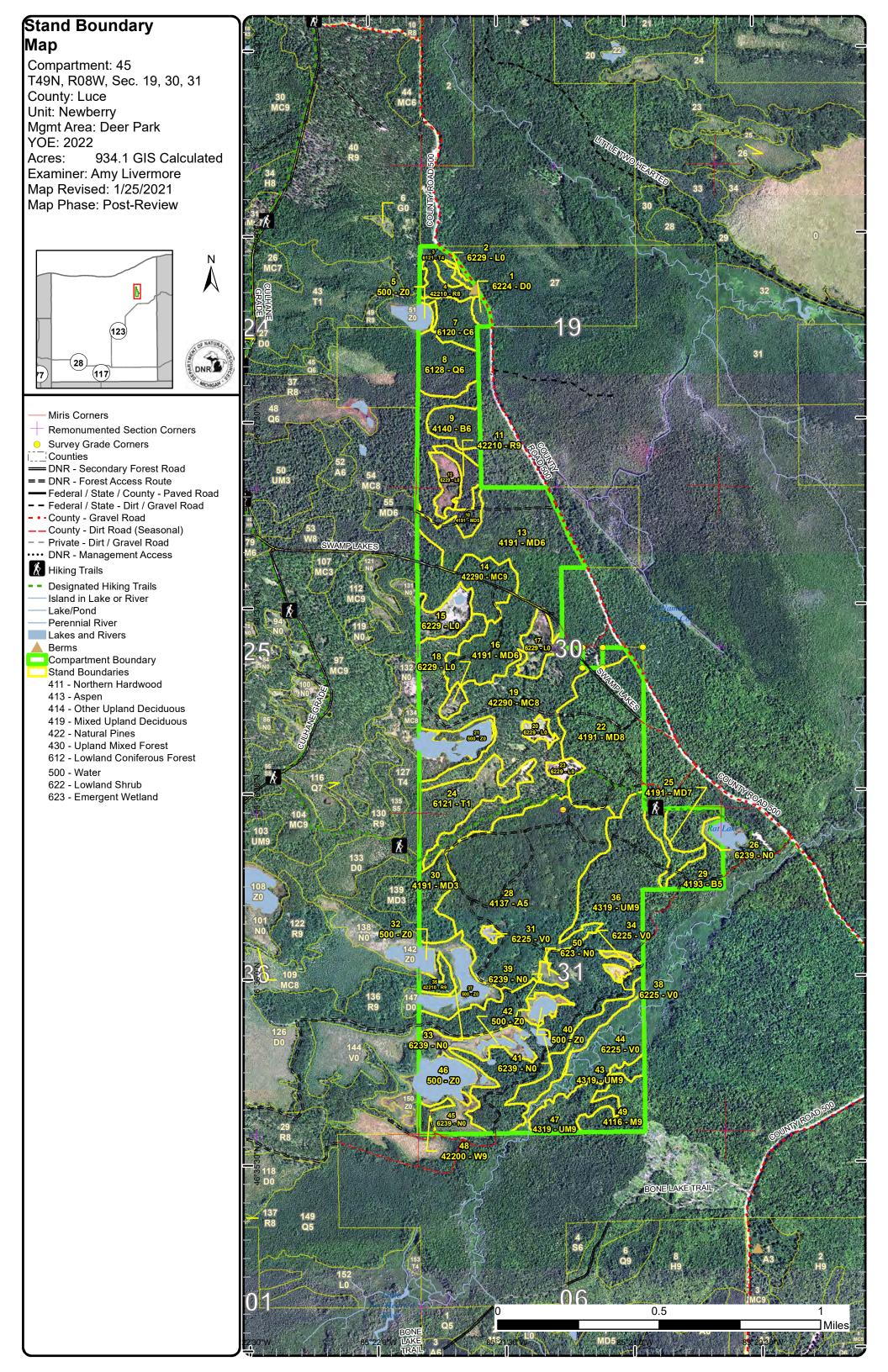
The following reports from the Inventory are attached:

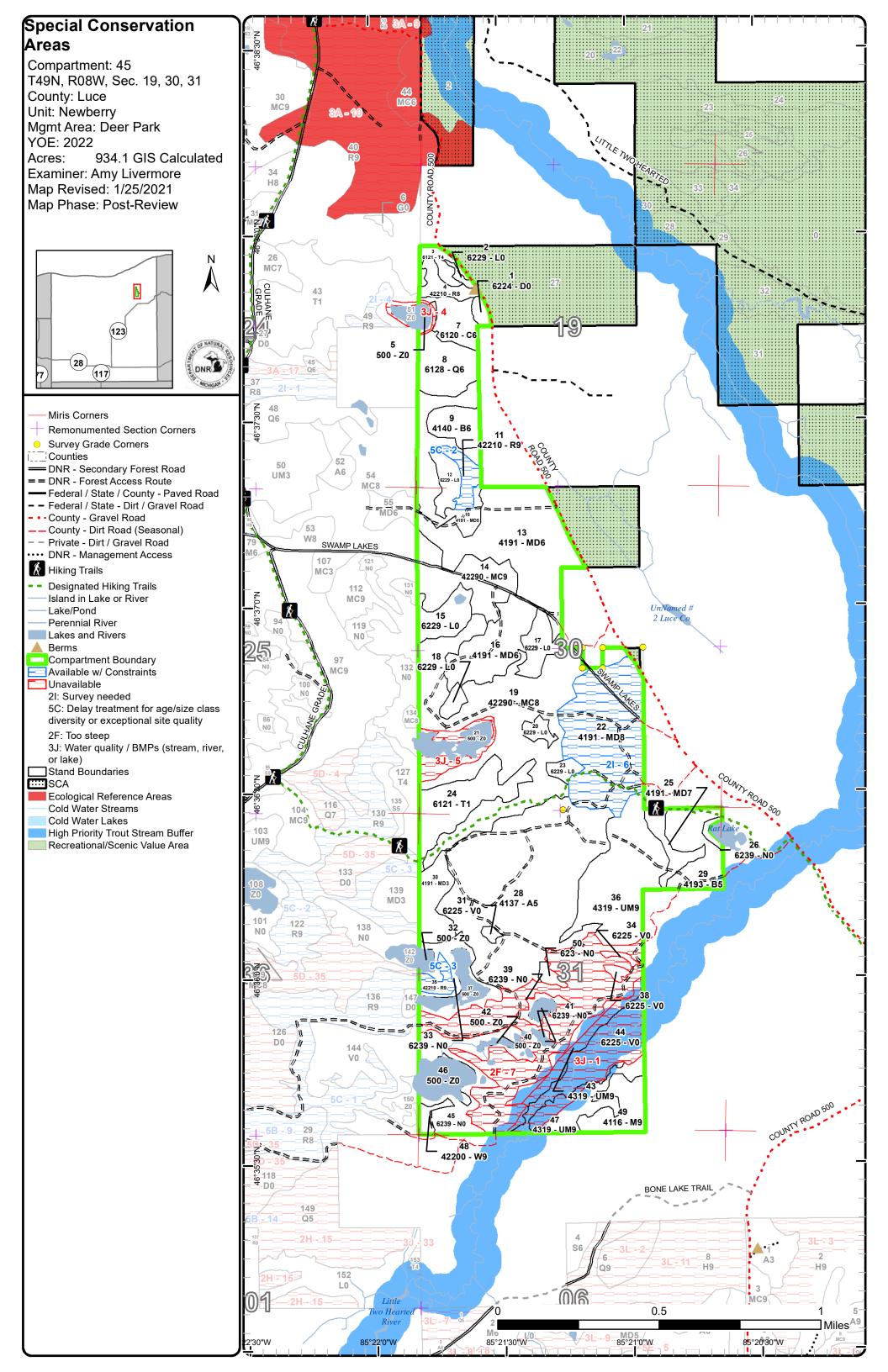
Total Acres by Cover Type and Age Class Cover Type by Harvest Method Proposed Treatments – No Limiting Factors Proposed Treatments – With Limiting Factors Stand Details (Forested and Nonforested) Dedicated and Proposed Special Conservation Areas Site Condition Details

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







Newberry Mgt. Unit

Compartment 45 Year of Entry 2022

**Amy Livermore : Examiner** 

Age Class

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Aspen	0	0	0	0	128	0	0	0	0	0	0	0	0	0	0	0	0	0	128
Bog	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
Cedar	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	12
Lowland Conifers	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	20
Lowland Shrub	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42
Marsh	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49
Mixed Upland Deciduous	0	0	0	0	0	67	0	0	72	0	0	0	0	0	0	0	0	64	203
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	0	100	29	0	0	0	0	0	0	129
Northern Hardwood	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	16
Paper Birch	0	0	0	0	21	11	0	0	0	0	0	0	0	0	0	0	0	0	32
Red Pine	0	0	0	0	0	0	0	0	0	7	5	7	0	0	0	0	0	0	19
Tamarack	0	0	0	0	0	0	44	0	0	0	0	0	0	0	0	0	0	0	44
Treed Bog	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	170	0	0	0	0	0	0	170
Water	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
White Pine	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
Total	160	0	0	0	149	78	44	16	104	7	105	209	0	0	0	0	0	64	936



## **Report 2 – Treatment Summary**

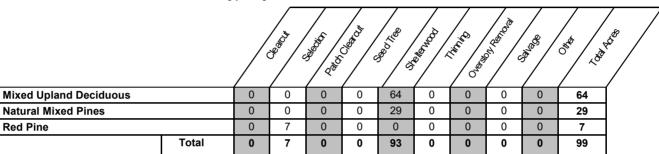
## Newberry Mgt. Unit Year of Entry: 2022

#### **Acres of Harvest**

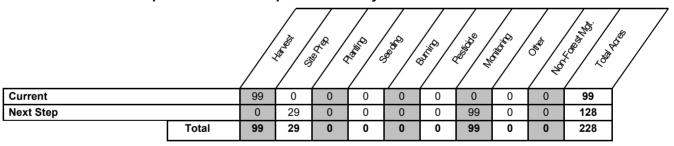
Compartment 45
Total Compartment Acres: 934

Commercial Harvest - 35 Harvests with Site Condition - 64 Next Step Harvest - 0 Habitat Cut - 0

## **Cover Type by Harvest Method**



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



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

**Approved Treatments:** 

42045004-Cut 6.6 42210 - Natural Sawtimber 86 81-110 Harvest Single Tree 4221 - Natural Even-Aged No Red Pine Medium Selection Red Pine

Prescription Thin 70-90 BA. Take care to leave diversity where present. Target trees for harvest that will be out of size class next YOE.

Specs:

; Monitoring, Natural Regen (Intermediate) Next Step

Treatments:

Acceptable red pine, white pine

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2021

42045014-Cut 42290 - Natural 28.8 Sawtimber 101 111-Harvest Shelterwood with 4221 - Natural Even-Aged No Mixed Pine Well 140 Retention Red Pine

Prescription Shelterwood 30-40 BA. 2 inch spec. Leave hemlock pockets where they exist. The remaining BA from the hemlock pockets must be factored into the 30-40 BA that will remain. Mark to leave. A buffer will be needed where there is open water present in stand 15 according to the BMP Specs: manual. Save any legacy trees that are present.

Next Step SitePrep, Scarification; Monitoring, Natural Regen (Intermediate)

**Treatments:** 

Acceptable red pine, white pine

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2021

42045022-Cut 64.0 4191 - Mixed Sawtimber 75 51-80 Harvest Shelterwood with 4199 - Other Even-Aged No **Upland Deciduous** Medium Retention Mixed Upland

with Conifer Deciduous

Prescription Thin to 30 BA. Leave wolfy trees of various deciduous species. Leave any healthy beech present. Leave hemlock and white pine. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

<u>Acceptable</u> Red maple, hemlock, white pine, paper birch, yellow birch, aspen, spruce

Regen:

**Other** Keep in contact with NCT personnel once the sale is sold.

Comment:

Site Condition Survey Needed Proposed Start Date: 10/1 /2021

Total Treatment 99.4 Acreage Proposed:

# **Report 4 – Site Conditions**

Newberry Mgt. Unit

**Amy Livermore : Examiner** 



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Availa	ability for	Managemer	nt					
Total	Acres	Acres Avail	Acres		Domina	nt Site	Con	ditions
Acres	Available	With Condition	Not Available		21	5C	2F	3J
128	128	0	0	Aspen				
33	5	0	28	Bog				28
12	12	0	0	Cedar				0
20	19	0	1	Lowland Conifers				1
42	42	0	0	Lowland Shrub				
49	49	0	0	Marsh				
203	139	64	0	Mixed Upland Deciduous	64			
128	128	0	0	Natural Mixed Pines				
16	16	0	0	Northern Hardwood				
32	32	0	0	Paper Birch				
18	7	12	0	Red Pine		12		
44	33	0	10	Tamarack				10
3	3	0	0	Treed Bog				
170	70	0	100	Upland Mixed Forest			85	15
34	34	0	0	Water				
3	3	0	0	White Pine				
934	719	76	139	Total Forested Acres	64	12	85	54
	77%	8%	15%	Relative Percent				

<sup>\*</sup>Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	43	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	7	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

# Report 4 – Site Conditions

Newberry Mgt. Unit
Amy Livermore : Examiner



3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	10	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Available	2l: Survey needed	64	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	2F: Too steep	85	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

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				

Newberry Mgt. Unit Compartment: 45
Year of Entry 2022



## Report 6 - EXISTING SPECIAL CONSERVATION AREA DETAILS

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

Conservatio Area	п Туре	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen cond stocked trout populations and those of other coldwater fish speci year to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	es (e.g., slimy sculpin) to persist from se conditions due to substantial
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high communities are ecologically and socially significant in their effects as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, liversity of plants and wildlife. Riparian cts on water quality and quantity, as well
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of identified as Element Occurrences (EOs) by the Michigan Natural context of their natural community classification system. Element (Excellent) or B (Good) and a Global (G) or State (S) element (rathreatened (2), or rare (3) serve as an initial base of ERAs. They the State. The system is comprised of individual or associations managed for restoration and maintenance of natural ecological psubmit recommendations for lands as ERAs using the DNR Constitutions.	al Features Inventory (MNFI) within the toccurrences with viability ranks of A urity) ranking of endangered (1), may be located upon any ownership in of natural community types that are processes and values. The public may



Stanc	Level 4 Cover Type  6224 - Treed Bog		Level 4 Cover Type		er Type Size Dens		Size Density		Stand Age E	BA Range	Managed	Site	General Comments
1				Nonstocked		2.6	2.6 0		No				
2	6229 - Mixed	Mixed lowland shrub		Nonstocked		1.4		Immature	No				
						Sub-Ca	nopy Species	Density	Avg. Height	Size			
						Lab	rador Tea	Full	< 5 feet	Tall Shrub			
						Pa	per Birch	Trace	>20 feet	Pole			
						Bigto	oth Aspen	Trace	10 - 20 feet	Sapling			
						Ta	marack	Low	10 - 20 feet	Sapling			
						Blad	ck Spruce	Trace	>20 feet	Pole			
						Re	d Maple	Trace	10 - 20 feet	Sapling			
						Leatherleaf		Full	< 5 feet Tall Shrub				
3	6121 - T	amarack	P	oletimb	er Poor	6.2	58	1-50	N/A		Ground cover species include leather leaf and horsetails. The WP in this		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	stand is supercanopy and scattered throughout. There are also some white birch, red maple, and black willow along the edge and a few		
	Black Spruce	10	Sapling/Pole	4		Blad	ck Spruce	Low	5 - 10 feet	Sapling	scattered though the stand.		
	Tamarack	80	Pole	5	58	Ta	marack	Low	5 - 10 feet	Sapling			
	White Pine	10	Pole/Log	8		Bla	ck Willow	Low	< 5 feet	Tall Shrub			
						Lea	atherleaf	High	< 5 feet	Tall Shrub			
4	42210 - Nati	ural Red F	ine Sa	wtimber	Mediur	m 6.6	86	81-110	N/A		Stand borders lake. The understory is fairly thick with black spruce, red maple and some cedar. There are some large log white and red pine		
	Canopy Species	% Cover	Size Class		Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	scattered in the stand.		
	Paper Birch	5	Log	12			d Maple	Medium	5 - 10 feet	Sapling			
	Black Spruce	5	Pole	6		Blad	ck Spruce	Medium	10 - 20 feet	Sapling			
	White Pine	10	Log	14		Northerr	White Cedar	Low	10 - 20 feet	Pole			
	Red Pine	80	Log	16	86								
5	500 -	Water		Nonsto	cked	2.2			No				
7	6120 - Low	vland Ced	ar F	Poletimb	er Well	11.8	76	1-50	N/A		stand is very wet. Maple tops are dying out.		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size			
	Red Maple	10	Pole	6		Re	d Maple	Medium	< 5 feet	Tall Shrub			
	rtca mapic		Dolo	5		Wi	llow spp.	Medium	5 - 10 feet	Tall Shrub			
	Paper Birch	5	Pole	3			1.1						
No	•	5 78	Pole	6	76								
No	Paper Birch				76								



_	Level 4 C	el 4 Cover Type Size Density Acres Stand Age BA Range Managed Site		Site	General Comments						
8	6128 - Lowland Dec	Coniferous, iduous	, Mixed	Poletimb	er Well	20.0	71 l	Unspecified	N/A		Transition zone between a more upland hardwood stand and lowland conifer stand.
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	
	Red Maple	10	Pole	6		Re	ed Maple	High	< 5 feet	Tall Shrub	
	Paper Birch	10	Pole	8		Bla	ck Spruce	High	< 5 feet	Tall Shrub	
I	Bigtooth Aspen	10	Pole	6		W	hite Pine	Low	< 5 feet	Tall Shrub	
	Black Spruce	10	Pole	6		Asp	en (spp.)	High	5 - 10 feet	Sapling	
Nor	thern White Cedar	10	Pole	5							
	Tamarack	20	Pole	6	71						
	White Pine	20	Log/Pole	10	71						
	Black Willow	10	Sapling	3							
9	4140 - Other U	Ipland Deci	duous	Poletimb	er Well	I 11.0	46	1-50	N/A		Young white birch stand with scattered hemlock/white pine through out. There are some white birch and red maple regeneration present as well.
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	Most of the canopy level regeneration is about 2 sticks tall.
	Red Maple	5	Pole	8		Re	ed Maple	High	< 5 feet	Tall Shrub	
	Paper Birch	60	Pole	6	46	Pa	per Birch	Medium	< 5 feet	Tall Shrub	
	White Pine	5	Pole	6		Ва	ılsam Fir	Medium	< 5 feet	Tall Shrub	
	Hemlock	20	Log	14		W	hite Pine	Low	< 5 feet	Tall Shrub	
	Homiook		3								
(	Quaking Aspen	5	Pole	6		F	lemlock	Medium	< 5 feet	Tall Shrub	
(				6 5		F	lemlock			Tall Shrub	
10	Quaking Aspen Balsam Fir 4191 - Mixed Upla	5	Pole Pole	5	r Mediu	m 25.7	lemlock 41			Tall Shrub	There is a ridge that separates stands 6 and 8. Ther is a heavier fir/hemlock component around the border of the stand. The fir understory
10	Quaking Aspen Balsam Fir 4191 - Mixed Upla	5 5 and Decidue	Pole Pole	5 Poletimbe	r Mediu	m 25.7		Medium 51-80	< 5 feet	Tall Shrub	There is a ridge that separates stands 6 and 8. Ther is a heavier
10	Quaking Aspen Balsam Fir 4191 - Mixed Upla Co	5 5 and Decidue	Pole Pole ous with	5 Poletimbe		m 25.7	41	Medium 51-80	< 5 feet		There is a ridge that separates stands 6 and 8. Ther is a heavier fir/hemlock component around the border of the stand. The fir understory is pretty thick.
10	Quaking Aspen Balsam Fir  4191 - Mixed Upla Co Canopy Species	5 5 and Decidue onifer % Cover	Pole Pole ous with F	Poletimbe	I Age	m 25.7 Sub-Ca	41 nopy Species	Medium 51-80 Density	< 5 feet  N/A  Avg. Height	Size	There is a ridge that separates stands 6 and 8. Ther is a heavier fir/hemlock component around the border of the stand. The fir understory is pretty thick.
10	Quaking Aspen  Balsam Fir  4191 - Mixed Upla Co  Canopy Species  Red Maple	5 5 sand Deciduonifer % Cover 30	Pole Pole Ous with F Size Class Pole	Poletimbe  DBH	I Age	m 25.7 Sub-Ca	41 nopy Species ed Maple	51-80  S Density  Medium	< 5 feet  N/A  Avg. Height < 5 feet	Size Tall Shrub	There is a ridge that separates stands 6 and 8. Ther is a heavier fir/hemlock component around the border of the stand. The fir understory is pretty thick.
10	Quaking Aspen  Balsam Fir  4191 - Mixed Upla Co  Canopy Species Red Maple Paper Birch	5 5 and Deciduonifer % Cover 30 25	Pole Pole  Size Class Pole Pole	Poletimbe  B DBH  8 8  8 6	I Age	Sub-Ca	41 Inopy Species and Maple Beech	51-80  S Density  Medium  Medium	< 5 feet  N/A  Avg. Height < 5 feet < 5 feet	Size Tall Shrub Tall Shrub	There is a ridge that separates stands 6 and 8. Ther is a heavier fir/hemlock component around the border of the stand. The fir understory is pretty thick.
10	Quaking Aspen Balsam Fir  4191 - Mixed Upla Co Canopy Species Red Maple Paper Birch Bigtooth Aspen	5 5 and Deciduonifer  **Cover 30 25 5 10	Pole Pole  Size Class Pole Pole Pole Log/XLog	Poletimbe  B DBH  8 8  8 6	41	m 25.7  Sub-Ca  Re	41 Inopy Species ad Maple Beech Ilsam Fir	51-80  S Density  Medium  Medium  High	< 5 feet  N/A  Avg. Height < 5 feet < 5 feet < 5 feet	Size Tall Shrub Tall Shrub Tall Shrub	There is a ridge that separates stands 6 and 8. Ther is a heavier fir/hemlock component around the border of the stand. The fir understory is pretty thick.  Black spruce is distributed around the perimeter. There are large log red
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10	Quaking Aspen Balsam Fir  4191 - Mixed Upla Co Canopy Species Red Maple Paper Birch Bigtooth Aspen White Pine  42210 - Nat	5 5 and Deciduonifer  **Cover* 30 25 5 10  tural Red Pi  **Cover*	Pole Pole  Size Class Pole Pole Pole Log/XLog  Size Class	Poletimbe  B DBH  8 8 6 14  Sawtimb  B DBH	41 er Well	Sub-Ca Re Ba H 7.0 Sub-Ca	41  nopy Species ed Maple Beech elsam Fir lemlock  101  nopy Species	51-80  S Density  Medium  Medium  High  Low  111-140  S Density	< 5 feet  N/A  Avg. Height < 5 feet < 5 feet < 5 feet < 5 feet  Avg. Height	Size Tall Shrub Tall Shrub Tall Shrub Tall Shrub	There is a ridge that separates stands 6 and 8. Ther is a heavier fir/hemlock component around the border of the stand. The fir understory is pretty thick.  Black spruce is distributed around the perimeter. There are large log red and white pine in the stand.
10	Quaking Aspen Balsam Fir  4191 - Mixed Upla Co  Canopy Species Red Maple Paper Birch Bigtooth Aspen White Pine  42210 - Nat  Canopy Species White Pine	5 5 sand Deciduonifer	Pole Pole  Size Class Pole Pole Pole Log/XLog  ine  Size Class Log	Poletimbe  B DBH  8 8 6 14  Sawtimbe  DBH  14	41 er Well	m 25.7  Sub-Ca  Re  Ba  F  7.0  Sub-Ca	41 Innopy Species and Maple Beech alsam Fir Idemlock  101 Innopy Species and Maple	51-80  S Density  Medium  Medium  High  Low  111-140  S Density  High	< 5 feet N/A Avg. Height < 5 feet < 5 feet < 5 feet < 5 feet N/A Avg. Height 10 - 20 feet	Size Tall Shrub Tall Shrub Tall Shrub Tall Shrub Size Sapling	There is a ridge that separates stands 6 and 8. Ther is a heavier fir/hemlock component around the border of the stand. The fir understory is pretty thick.  Black spruce is distributed around the perimeter. There are large log red and white pine in the stand.
10	Quaking Aspen Balsam Fir  4191 - Mixed Upla Co  Canopy Species Red Maple Paper Birch Bigtooth Aspen White Pine  42210 - Nat  Canopy Species White Pine	5 5 sand Deciduonifer	Pole Pole  Size Class Pole Pole Pole Log/XLog  ine  Size Class Log	Poletimbe  B DBH  8 8 6 14  Sawtimbe  DBH  14	41 er Well	m 25.7  Sub-Ca  Re  7.0  Sub-Ca  Re	41 Inopy Species and Maple Beech Idemlock  101 Inopy Species and Maple Beech	51-80  S Density  Medium  Medium  High  Low  111-140  S Density  High  Low	< 5 feet  N/A  Avg. Height  < 5 feet  < 5 feet  < 5 feet  N/A  Avg. Height  10 - 20 feet  5 - 10 feet	Size Tall Shrub Tall Shrub Tall Shrub Size Sapling Tall Shrub	There is a ridge that separates stands 6 and 8. Ther is a heavier fir/hemlock component around the border of the stand. The fir understory is pretty thick.  Black spruce is distributed around the perimeter. There are large log red and white pine in the stand.
10	Quaking Aspen Balsam Fir  4191 - Mixed Upla Co  Canopy Species Red Maple Paper Birch Bigtooth Aspen White Pine  42210 - Nat  Canopy Species White Pine	5 5 sand Deciduonifer	Pole Pole  Size Class Pole Pole Pole Log/XLog  ine  Size Class Log	Poletimbe  B DBH  8 8 6 14  Sawtimbe  DBH  14	41 er Well	m 25.7  Sub-Ca  Re  Ba  F  7.0  Sub-Ca  Re  Pa  Bigto	41 Inopy Species and Maple Beech alsam Fir Iemlock  101 Inopy Species and Maple Beech per Birch	51-80  S Density  Medium  Medium  High  Low  111-140  S Density  High  Low  Low	< 5 feet N/A Avg. Height < 5 feet < 5 feet < 5 feet N/A Avg. Height 10 - 20 feet 5 - 10 feet 10 - 20 feet	Size Tall Shrub Tall Shrub Tall Shrub Size Sapling Tall Shrub	There is a ridge that separates stands 6 and 8. Ther is a heavier fir/hemlock component around the border of the stand. The fir understory is pretty thick.  Black spruce is distributed around the perimeter. There are large log red and white pine in the stand.
10	Quaking Aspen Balsam Fir  4191 - Mixed Upla Co  Canopy Species Red Maple Paper Birch Bigtooth Aspen White Pine  42210 - Nat  Canopy Species White Pine	5 5 sand Deciduonifer	Pole Pole  Size Class Pole Pole Pole Log/XLog  ine  Size Class Log	Poletimbe  B DBH  8 8 6 14  Sawtimbe  DBH  14	41 er Well	m 25.7  Sub-Ca  Re  Ba  H  7.0  Sub-Ca  Re  Pa  Bigtte	41 Inopy Species and Maple Beech Islam Fir Iemlock  101 Inopy Species and Maple Beech per Birch poth Aspen	51-80  S Density  Medium  Medium  High  Low  111-140  S Density  High  Low  Low  Low	< 5 feet  N/A  Avg. Height < 5 feet < 5 feet < 5 feet	Size Tall Shrub Tall Shrub Tall Shrub Size Sapling Tall Shrub Sapling Sapling	There is a ridge that separates stands 6 and 8. Ther is a heavier fir/hemlock component around the border of the stand. The fir understory is pretty thick.  Black spruce is distributed around the perimeter. There are large log red and white pine in the stand.



Stand	Level 4 C	Level 4 Cover Type Size Density Acres Stand Age BA Range Managed Site		General Comments															
12	6229 - Mixed	l lowland sl	nrub l	Nonsto	cked	7.5			No		The stand was full of water in the 1997 aerial phots.								
						Sub-Cano	py Species	Density	Avg. Height	Size									
						Leath	nerleaf	Full		Tall Shrub									
						Red	Pine	Medium		Seeding									
						Labrad	dor Tea	High		Tall Shrub									
						Black Spruce		Trace		Seeding									
13	4191 - Mixed Upland Deciduous with P		ous with Po	Poletimber Well		Poletimber Well		Poletimber Well		Poletimber Well				64.3	41	1-50	N/A		
-	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Cano	py Species	Density	Avg. Height	Size									
	Red Maple	35	Pole/Log	8	41	Pape	r Birch	Medium	10 - 20 feet	Sapling									
	Paper Birch	35	Pole	6		White	e Pine	Low	< 5 feet	Tall Shrub									
	White Spruce	10	Log/Pole	10		Hen	nlock	Medium	10 - 20 feet	Sapling									
	White Pine	15	Log	14		Asper	ı (spp.)	Low	10 - 20 feet	Sapling									
	Hemlock	5	Log	14															
14	Canopy Species % Cover Size Class DBH Age		Sawtimber Wel				111-140	N/A		Stand looks like it has been thinnned before. There are a lot of sapling sized deciduous trees in the understory.									
(			Age	Sub-Cano	py Species	Density	Avg. Height	Size	sized decidaous frees in the understory.										
	Red Maple	5	Pole	8		Red	Maple	High	>20 feet	Sapling									
	White Pine	50	Log/Pole/XLog		101	Ве	ech	Medium	< 5 feet	Tall Shrub									
	Red Pine	40	Log/Pole/XLog		101	Pape	r Birch	High	>20 feet	Sapling									
	Hemlock	5	Log/Pole/XLog	12		Roles	am Fir	Medium	10 - 20 feet	Sapling									
						Daise		Medium		Sapility									
							g Aspen	Low	>20 feet	Sapling									
15	6229 - Mixed	l lowland sl	nrub I	Nonsto	cked		g Aspen												
15	6229 - Mixed	l lowland sl	nrub I	Nonsto	cked	Quakin	g Aspen		>20 feet										
15	6229 - Mixeo	l lowland sl	nrub I	Nonsto	cked	Quaking 12.1 Sub-Cano		Low	>20 feet	Sapling									
15	6229 - Mixed	l lowland sl	nrub I	Nonsto	cked	Quaking 12.1 <b>Sub-Cano</b> Black	ppy Species	Low	>20 feet	Sapling									
15	6229 - Mixec	l lowland sl	nrub l	Nonsto	cked	Quaking 12.1 Sub-Cano Black Leath	ppy Species Spruce	Density Trace	>20 feet	Sapling  Size  Seeding									
15	6229 - Mixed	l lowland sl	nrub I	Nonsto	cked	Quaking 12.1  Sub-Cano  Black  Leath  Labrace	ppy Species Spruce nerleaf	Density Trace High	>20 feet	Size Seeding Tall Shrub									
15	4191 - Mixed Upla			Nonsto		Quaking 12.1  Sub-Cano  Black  Leath  Labrace	opy Species Spruce herleaf dor Tea	Density Trace High High	>20 feet	Size Seeding Tall Shrub Tall Shrub	Stand is mostly red maple and aspen with some scattered pockets of hemlock and white birch. There is a small amount of yellow birch and								
16	4191 - Mixed Upla	and Decidu onifer			er Well	Quaking 12.1  Sub-Cano Black Leath Labrace Red  26.6	opy Species Spruce nerleaf dor Tea Pine	Density Trace High High Medium	>20 feet  No  Avg. Height	Size Seeding Tall Shrub Tall Shrub	hemlock and white birch. There is a small amount of yellow birch and supercanopy white pine scattered in the stand. The white pine are large								
16	4191 - Mixed Upla Cc	and Decidu onifer	ous with Pc	bletimbe	er Well	Quaking 12.1  Sub-Cano Black Leath Labrace Red  26.6  Sub-Cano	oppy Species Spruce nerleaf dor Tea Pine 42	Density Trace High High Medium	>20 feet  No  Avg. Height  N/A	Sapling  Size  Seeding  Tall Shrub  Tall Shrub  Seeding	hemlock and white birch. There is a small amount of yellow birch and								
16	4191 - Mixed Upla Co Canopy Species	and Decidu onifer <b>% Cover</b>	ous with Po	oletimbe DBH	er Well	Quaking 12.1  Sub-Cano Black Leath Labrace Red 26.6  Sub-Cano	opy Species Spruce nerleaf dor Tea Pine 42 opy Species	Density Trace High High Medium  1-50  Density	>20 feet  No Avg. Height  N/A  Avg. Height	Size Seeding Tall Shrub Seeding Seeding	hemlock and white birch. There is a small amount of yellow birch and supercanopy white pine scattered in the stand. The white pine are larged log diameters. Ground cover species include: star flower, club moss, a								
16	4191 - Mixed Upla Co <b>Canopy Species</b> White Pine	and Decidu onifer <b>% Cover</b> 2	ous with Po	DBH 20	er Well	Quaking 12.1  Sub-Cano Black Leath Labrace Red 26.6  Sub-Cano Red Be	opy Species Spruce nerleaf dor Tea Pine 42 opy Species Maple	Density Trace High High Medium  1-50  Density Medium	>20 feet  No  Avg. Height  N/A  Avg. Height  10 - 20 feet	Sapling  Size Seeding Tall Shrub Tall Shrub Seeding  Size Sapling	hemlock and white birch. There is a small amount of yellow birch and supercanopy white pine scattered in the stand. The white pine are larged log diameters. Ground cover species include: star flower, club moss, a								



Stand	Level 4 Cover Type Size Density		nsity	Acres Stand Age E	BA Range	Managed \$	Site	General Comments		
17	6229 - Mixed	d lowland s	hrub I	Nonsto	cked	10.4		No		
						Sub-Canopy Species	Density	Avg. Height	Size	
						Red Pine	Low	>20 feet	Log	
						White Pine	Low	>20 feet	Log	
						Leatherleaf	Medium	< 5 feet	Tall Shrub	
18	6229 - Mixed lowland shrub Nonsto			cked	3.3		No			
						Sub-Canopy Species	Density	Avg. Height	Size	
						Jack Pine	Low		Pole	
						Leatherleaf	High		Tall Shrub	
						White Pine	Low		Log	
19	42290 - Nati	ural Mixed	Pine Saw	/timber	Mediun	n 99.5 97	51-80	N/A		There is a small pocket of white birch and aspen in the middle of the
	Canopy Species	% Cove	r Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size	stand - not big enough to meet the mapping standards. Stand looks like it has been thinned before judging on the quality of the pine. Stand
	Red Maple	5	Pole	6		Red Maple	Medium	5 - 10 feet	Sapling	treated via shelterwood harvest as sale #047-12-01. Completed
	White Pine	45	Log	15	97	Paper Birch	Low	5 - 10 feet	Sapling	11/06/13. Regeneration work yet to be completed as of 01/14/2014.
	Red Pine	45	Log	15	97	Black Spruce	Low	5 - 10 feet	Sapling	
	Hemlock	5	Log/Pole	12		White Pine	Medium	>20 feet	Sapling	
20	6229 - Mixed	d lowland s	hrub I	Nonsto	cked	3.5		No		
						Sub-Canopy Species	Density	Avg. Height	Size	
						Leatherleaf	High		Tall Shrub	
21	500	- Water	1	Nonsto	cked	8.3		No		
						Sub-Canopy Species	Density	Avg. Height	Size	
						Leatherleaf	Medium		Tall Shrub	
22	4191 - Mixed Upl Co	and Decidu	uous with Saw	/timber	Mediun	n 64.0 75	51-80	N/A		In the southern part of the stand the diameters are smaller and the canopy is more open. The North Country Trail runs through the southern
	Canopy Species	% Cove	r Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size	part of the stand.
	Red Maple	30	Log	14	75	Red Maple	High	Variable	Tall Shrub	
	Beech	5	Log/Pole	12		Beech	High	< 5 feet	Tall Shrub	
	Paper Birch	15	Log/Pole	12		White Spruce	Medium	Variable	Tall Shrub	
	Bigtooth Aspen	25	Log/Pole	10	75	White Pine	Low	Variable	Tall Shrub	
	Hemlock	25	Log/Pole/XLog	16	75	Hemlock	Low	5 - 10 feet	Tall Shrub	
23	6229 - Mixed	d lowland s	hrub i	Nonsto	cked	3.5		No		
23					Γ	Sub-Canopy Species	Density	Avg. Height	Size	
						Leatherleaf	High	Avg. Height	Tall Shrub	
						Leatifelleal	riigii		Tall Office	

3

Sapling

Compartment: 45
Year of Entry: 2022



											DNR DNR		
Stand	Level 4 Co	vel 4 Cover Type Size Density Acres Stand Age BA Range Managed Site		Site	General Comments								
24	6121 - Tamarack			Sapling	Poor	37.6	51 l	Jnspecified	N/A		Not visited 2020 YOE. Stand data is from 2010.		
	Canopy Species	Species % Cover		DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size			
	Black Spruce	10	Sapling/Pole	4		Blad	ck Spruce	Low	5 - 10 feet Sapling				
	Tamarack	80	Sapling/Pole	4	51	Ta	amarack	Low	5 - 10 feet	Log			
	White Pine	10	Sapling/Pole	4		Wi	llow spp.	Low	< 5 feet	Tall Shrub			
25	4191 - Mixed Upla Co	and Decidu nifer	ious with S	awtimb	er Poc	or 8.1	75	1-50	N/A				
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size			
	Red Maple	25	Log/Pole	12	75	Re	ed Maple	High	Variable	Tall Shrub			
	Beech	15	Log/Pole	14			Beech	High	< 5 feet	Tall Shrub			
	Paper Birch	10	Log/Pole	12		Whi	te Spruce	Medium	Variable	Tall Shrub			
	Bigtooth Aspen	25	Log/Pole	10	75	WI	hite Pine	Low	Variable	Tall Shrub			
	Hemlock	25	Log/Pole/XLog	16	75	Н	lemlock	Low	5 - 10 feet	Tall Shrub			
28		spen, Birch				um 127.8	39		N/A		The diameters of the trees in this stand are at the very low end of the of the pole size class. The old OI mentions that the area was heavily burner		
	Canopy Species		Size Class		I Age		nopy Species		Avg. Height	Size	in 1982.		
	Red Maple Paper Birch	10 35	Pole/Sapling	6			ed Maple Beech	High Medium	10 - 20 feet 5 - 10 feet	Sapling Tall Shrub			
	Bigtooth Aspen	40	Pole/Sapling Pole/Sapling	6	39		per Birch	High	10 - 20 feet	Sapling			
	Balsam Fir	5	Log/Pole	12	39		alsam Fir	Medium	5 - 10 feet	Sapling			
	White Pine	5	Sapling/Pole	5			hite Pine	Low	5 - 10 feet	Sapling			
	Black Cherry	5	Sapling	3			erry (spp.)	Low	5 - 10 feet	Sapling			
29	4193 - Bi	rch, Aspen	n Pol	letimbe	r Medi	um 21.0	39 l	Jnspecified	N/A				
23	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species		Avg. Height	Size			
	Red Maple	20	Pole/Sapling	6			ed Maple	Low	5 - 10 feet	Sapling			
	Paper Birch	40	Pole/Sapling	5	39	Pa	per Birch	Low	5 - 10 feet	Pole			
	Bigtooth Aspen	25	Pole	6	39		hite Pine	Low	5 - 10 feet	Sapling			
	Balsam Fir	5	Pole/Sapling	5					o io iost oapg		1		
	White Pine	5	Log/Pole	12									

Black Cherry

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Stand	Level 4 C	Level 4 Cover Type Size Den:		nsity	Acres	Stand Age B	Managed S	Site	General Comments		
30	4191 - Mixed Upla Co	ious with	Sapling Well		14.3	41	81-110	N/A			
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	25	Sapling	3	41	Re	d Maple	Medium	< 5 feet	Tall Shrub	
	Yellow Birch	25	Sapling	3	41	E	Beech	Low	< 5 feet	Tall Shrub	
	Paper Birch	25	Sapling	3	41						
	White Pine	5	Log/Pole	15							
	Red Pine	5	Log/Pole	16							
	Hemlock	15	Log/XLog/Pole	16							
31	6225		Nonstocked		1.3	Uı	nspecified	No			
					Sub-Ca	nopy Species	Density	Avg. Height	Size		
						Lea	atherleaf	High		Tall Shrub	
32	500 - Water Nonstocked					1.8			No		
33	6239 - Mixed E	9 - Mixed Emergent Wetland Nor				14.1			No		
						Sub-Ca	nopy Species	Density	Avg. Height	Size	
						Lea	atherleaf	Low		Tall Shrub	
34	6225 - Bog Nonstocked					1.3			No		There are some small patches of standing water under the leatherelaf.  There are some scattered pitcher plant through the site.
						Sub-Canopy Species Tamarack		Density	Avg. Height	Size	There are some scattered pitcher plant through the site.
								Low		Sapling	
						Leatherleaf		Full		Tall Shrub	
_	<u>_</u>				Black Spruce Low		Sapling				
35		42210 - Natural Red Pine Sawtimber Well		4.7 97 81-110			N/A	This stand was part of the Swamp Lakes Pine Sale (#003-00-01) and was completed 8/19/04.			
	Canopy Species		Size Class		Age						Treat this stand when stand 136 in neighboring compartment is cut
	White Pine	30	Log/Pole	13							Stand was not visited in 2020 YOE. Data is from 2010.
	Red Pine	70	Log/Pole	14	97						Stand was not visited in 2020 FOE. Data is non 2010.
36		•			81-110	N/A		There are some very steep ridges in this stand and are untreatable with the terrain. This stand was part of the Swamp Lakes Pine Sale (#003-00-			
	Canopy Species		Size Class		Age		nopy Species	Density	Avg. Height	Size	01) and was completed 8/19/04.
	Red Maple	20	Pole/Sap/Log	8	L	Re	ed Maple	Medium	5 - 10 feet	Pole	
	Paper Birch	20	Pole/Sapling	6							
	Balsam Fir	15	Pole/Log	8	100						
	White Pine	20	Log/Pole/XLog		109						
	Red Pine	5	Log/Pole/XLog								
	Hemlock	10	Log/Pole/XLog	12							
	Quaking Aspen	10	Log	12							



tand	Level 4 Cover Type			Size Density		Acres Stand Age BA		A Range Managed Site		Site	General Comments
37	500 -	- Water	1	Vonst	ocked	6.7			No		
38	6225 - Bog Nonstoo				stocked	1.6			No		There are some small pathces of standing water under the leatherelaf.
						Sub-Canopy Species		Density	Avg. Height	Size	There are some scattered pitcher plant through the site.
						Leath	nerleaf	Full		Tall Shrub	
						Black	Spruce	Low		Sapling	
						Tam	arack	Low		Sapling	
39	6239 - Mixed Emergent Wetland Nonstocked										Other species include grass pink orchid, water lily, lily pads, and blue fla
						Sub-Cand	py Species	Density	Avg. Height	Size	iris.
							nerleaf	High		Tall Shrub	
40	500 - Water Nonstocked				2.3			No			
41	6239 - Mixed Emergent Wetland Non				ocked	1.0			No		Other species in this stand include blue flag irises, lily pads, and grass-
						Sub-Cano	py Species	Density	Avg. Height	Size	pink orchids.
							nerleaf	High		Tall Shrub	
12	500 -	500 - Water Nonstocked		1.2		No					
43	4319 - Mixed	l Upland Fo	orest Sa	wtimb	er Well	14.7	100	81-110	N/A		Stand was not visited in 2020 YOE. Data is from 2010.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Cand	py Species	Density	Avg. Height	Size	
	Bigtooth Aspen	10	Pole/Log	8		Red	Maple	Low	5 - 10 feet	Sapling	
	White Pine	25	Log/XLog/Pole	13	100	Pape	r Birch	Low	5 - 10 feet	Sapling	
	Red Pine	5	Log/XLog/Pole	12	100	Balsa	am Fir	Low	5 - 10 feet	Sapling	
	Red Maple	20	Pole	8		Black	Spruce	Low	5 - 10 feet	Sapling	
	Paper Birch	20	Pole	7		Whit	e Pine	Low	5 - 10 feet	Sapling	
	Balsam Fir	10	Pole	8							
	Hemlock	10	Log/Pole	12							
14	6225	1	Nonstocked		28.4		No		This stand includes the Little Two Hearted River. The river is surrounded		
						Sub-Cand	py Species	Density	Avg. Height	Size	by a bog-type. There are blue flag irises and pitcher plants scattered through the site also.
						Whit	e Pine	Trace		Sapling	amough the one dies.
						Leath	nerleaf	Low		Tall Shrub	
						Black	Spruce	Low		Sapling	
						Tam	arack	Low		Sapling	
		6239 - Mixed Emergent Wetland Nonstocked									
45	6239 - Mixed Er	mergent V	/etland	Nonst	ocked	26.9			No		
<b>45</b>	6239 - Mixed E	mergent V	/etland i	Vonst	ocked		ppy Species	Density	No Avg. Height	Size	

Newberry Mgt. Unit

## Report 7 - Stands



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age BA Ra	nge Managed Site	General Comments	MICHIGAN .
46	500 - Water	Nonstocked			No		
47	4319 - Mixed Upland Forest	Sawtimber Well	18.4	100	N/A		
48	42200 - Natural White Pine           Canopy Species         % Cover Mover         Size Class           White Pine         60 Log/XLog/           Red Pine         40 Log/XLog/	Pole 14 100	3.0	100 51-8	0 N/A	Stand was not visited in 2020.	
49	4116 - Mixed N. Hardwood - Aspen	Sawtimber Well	15.8	61	N/A		
50	623 - Emergent Wetland	Nonstocked	2.4	0	No		