

# **Compartment Review Presentation**

**Newberry Forest Management Unit** 

Compartment 42048
Entry Year 2019
Acreage: 2,115
County Luce

Management Area: Charcoal Grade

Revision Date: 2017-09-07

Stand Examiner: Rankin Smith

**Legal Description:** 

T48N R08W Section(s) 17-20

## **Identified Planning Goals:**

To maintain forest health and sustainability while enhancing diversity, with emphasis on wildlife, recreation, and fisheries needs. Cover types include ~ 75% hardwoods (mainly upland, but does include some lowland), 13% spruce and swamp conifers, 8% aspen and 4% misc. brush, grass, water, bog.

## Soil and topography:

Primarily Kalkaska loamy sand, with some silt loams (Bodi, Auger, Zandi, Annanias), on rolling upland hardwoods, and muck/peat (Carbondale/Lupton/Tawas, Dawson/Greenwood/Loxley, Spot-Finch, Caffey, and Hendrie) on lowland sites.

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

Private land development is increasing along the west boundary, and there is also a tract of private land in the SE corner (Halifax Club). Isolated private 40 along highway has been managed for timber.

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

MNFI has identified the potential for red-shouldered hawk, great blue heron rookery, spruce grouse, eagle, osprey, and goshawk. Potential for moose and wolf. Potential for wood turtle.

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

Bureau of History has identified a site. Area does contain large blocks of second growth hardwoods which resulted from clearcutting by the Charcoal Company from 1918 -1926. Old logging camps also exist in the compartment, if any visible features (foundations, depressions, artifact scatters) observed within any stands need to be avoided with a buffer during treatment.

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

None

## **Watershed and Fisheries Considerations:**

Fisheries Values: Good

Fisheries Concerns: This compartment lies in the Tahquamenon River watershed and the Linton Creek subwatershed. Linton Creek and South Branch Linton Creek are designated trout streams, while the north and middle branches (and tributaries) are nondesignated trout streams. Native Brook Trout are present in Linton Creek as this is a coldwater stream with good groundwater input. Stands along South Branch Linton Creek are already factor limited for water quality/BMP's. Stand 34 should have a minimum of a 200 ft buffer placed along the stream as the current buffer is only about 100 ft in many places.

## Wildlife Habitat Considerations:

Compartment 48 lies in the northern portion of Luce county and is in the Grand Marais Sandy End Moraine and Outwash ecological sub-subsection. The compartment lies in the northern part of the Charcoal Grade Management Area with American marten, black bear, moose, ruffed grouse, and spruce grouse as featured species. Upland hardwood dominates the compartment and swamp conifer, aspen and swamp hardwood stands are scattered throughout. Several creeks run through the compartment and provide excellent wildlife travel corridors. Species diversity of most stands is quite good.

Species diversity will be achieved in thinned hardwoods by retaining hard mast and conifer components to provide food sources, nest and den trees and cover for wildlife species. Treatments in a few stands will be enhanced to benefit snowshoe hare as well as provide moose browse. Buffer zones along streams and rivers will be preserved as travel corridors and to provide wetland wildlife values and habitats. Species of special interest potentially using this compartment include white-tailed deer, moose, black bear, gray wolf, coyote, marten, fisher, and snowshoe hare.

# Mineral Resource and Development Concerns and/or Restrictions

Sand/gravel pits are located in sections 18 & 20 and there is good potential for additional sand and gravel on the uplands. There is no known metallic mineral potential in this area, and there is no known potential for economic oil and gas production in the UP.

Camp 7 gravel pit (more sand than gravel composition)

#### **Vehicle Access:**

~ 21 miles north of Newberry on M-123. The Camp 7 Road, which is a State-maintained, good gravel road, provides main access into large hardwood blocks through the center of the compartment. Needs periodic grading and maintenance. There are numerous two-track and abandoned roads connecting with it. Along the east side of the compartment, the Halifax Road, a poor quality gravel road, provides access to lower ground and private club lands.

#### **Survey Needs:**

# **Recreational Facilities and Opportunities:**

The Camp 7 Road doubles as the snowmobile trail during the winter months, and also provides access for numerous landowners and hunters.

#### **Fire Protection:**

Large fire potential will be minimal with the absence of pine fuel types. The two track and abandoned roads will require substantial work for suppression equipment access to some areas. Linton Creek drainages will restrict access by heavy equipment to some areas because of soft ground. Private property risk surrounding compartment should be low.

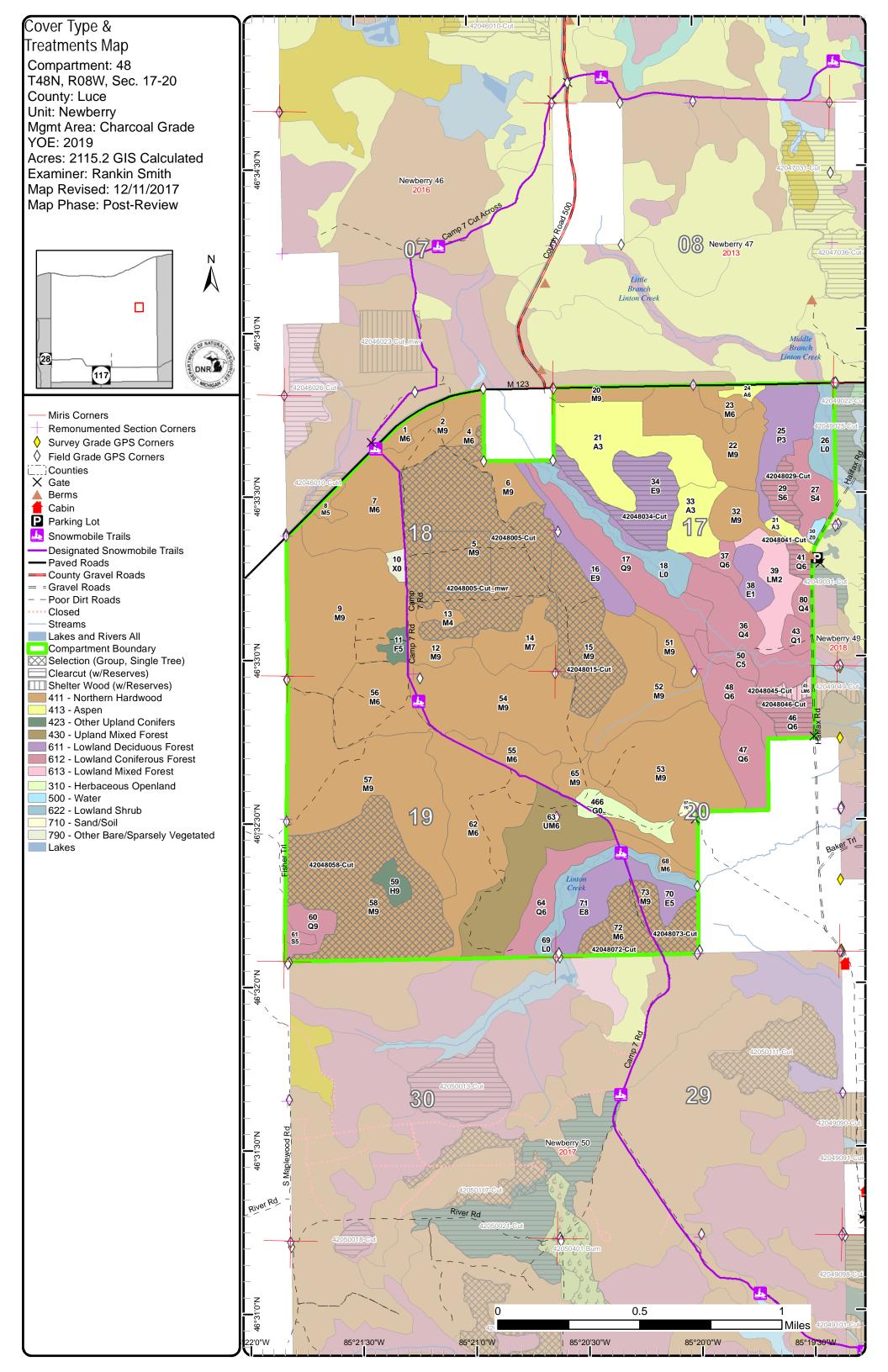
## **Additional Compartment Information:**

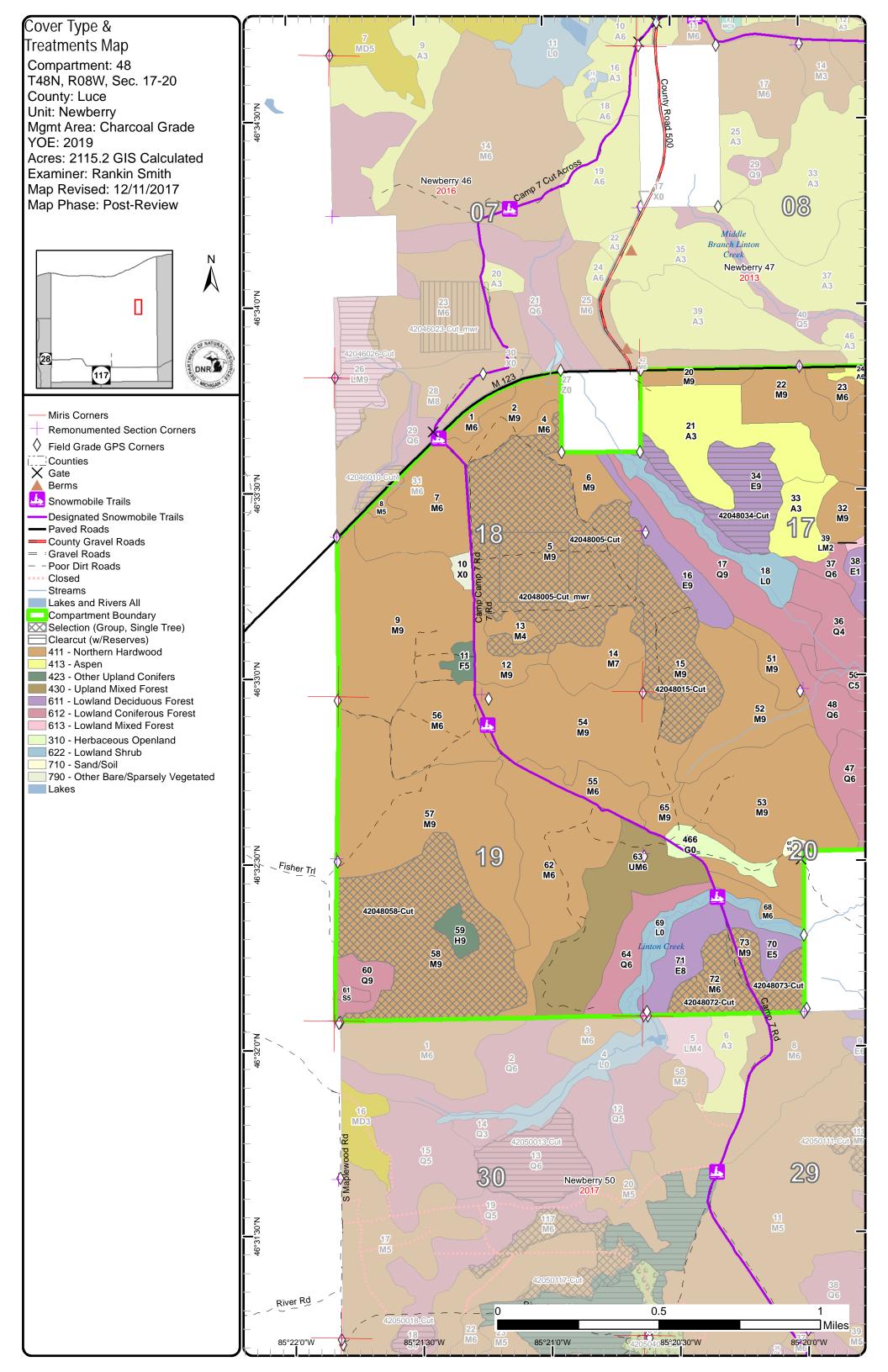
The following reports from the Inventory are attached:

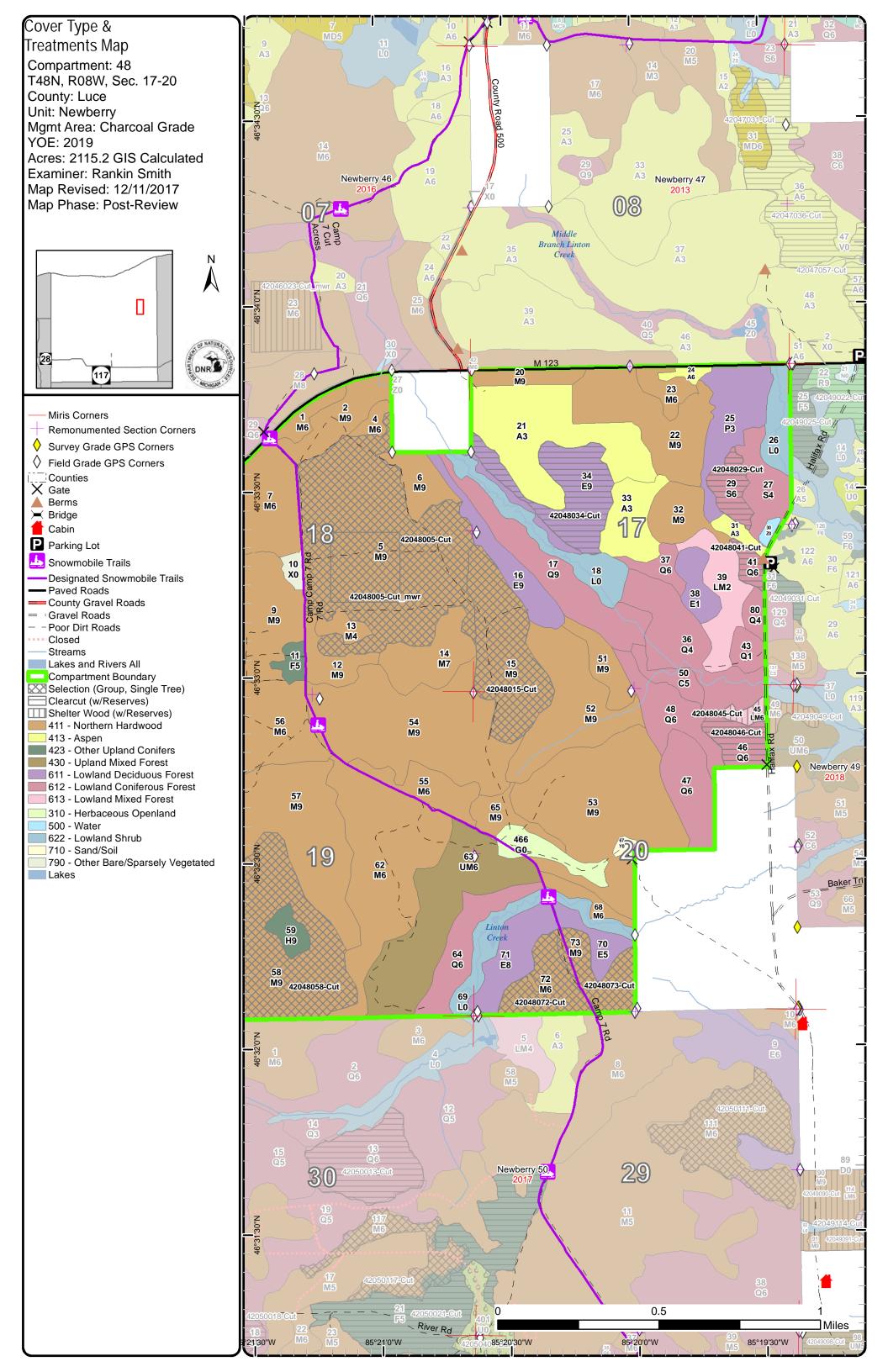
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

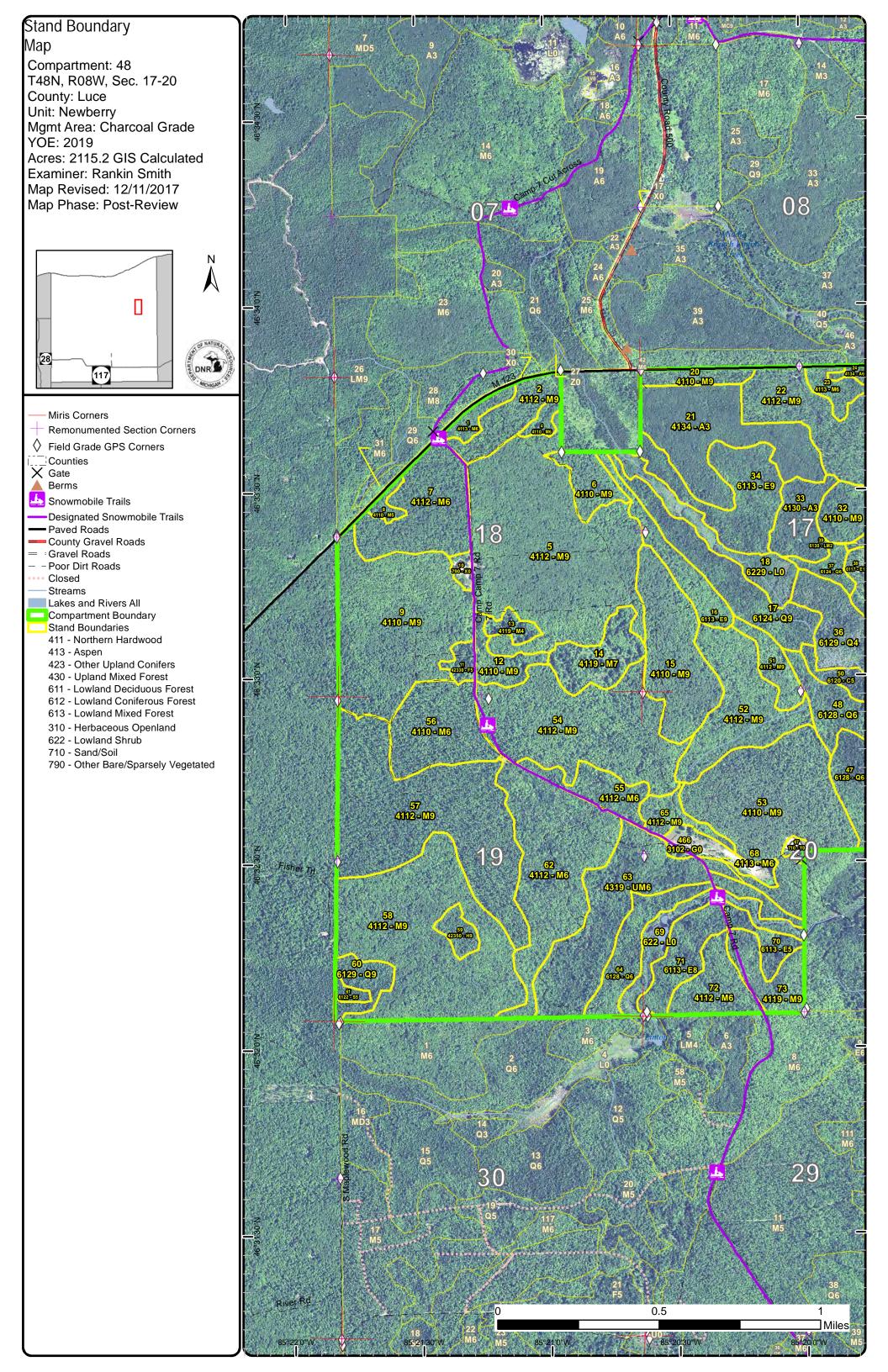
The following information is displayed, where pertinent, on the attached compartment maps:

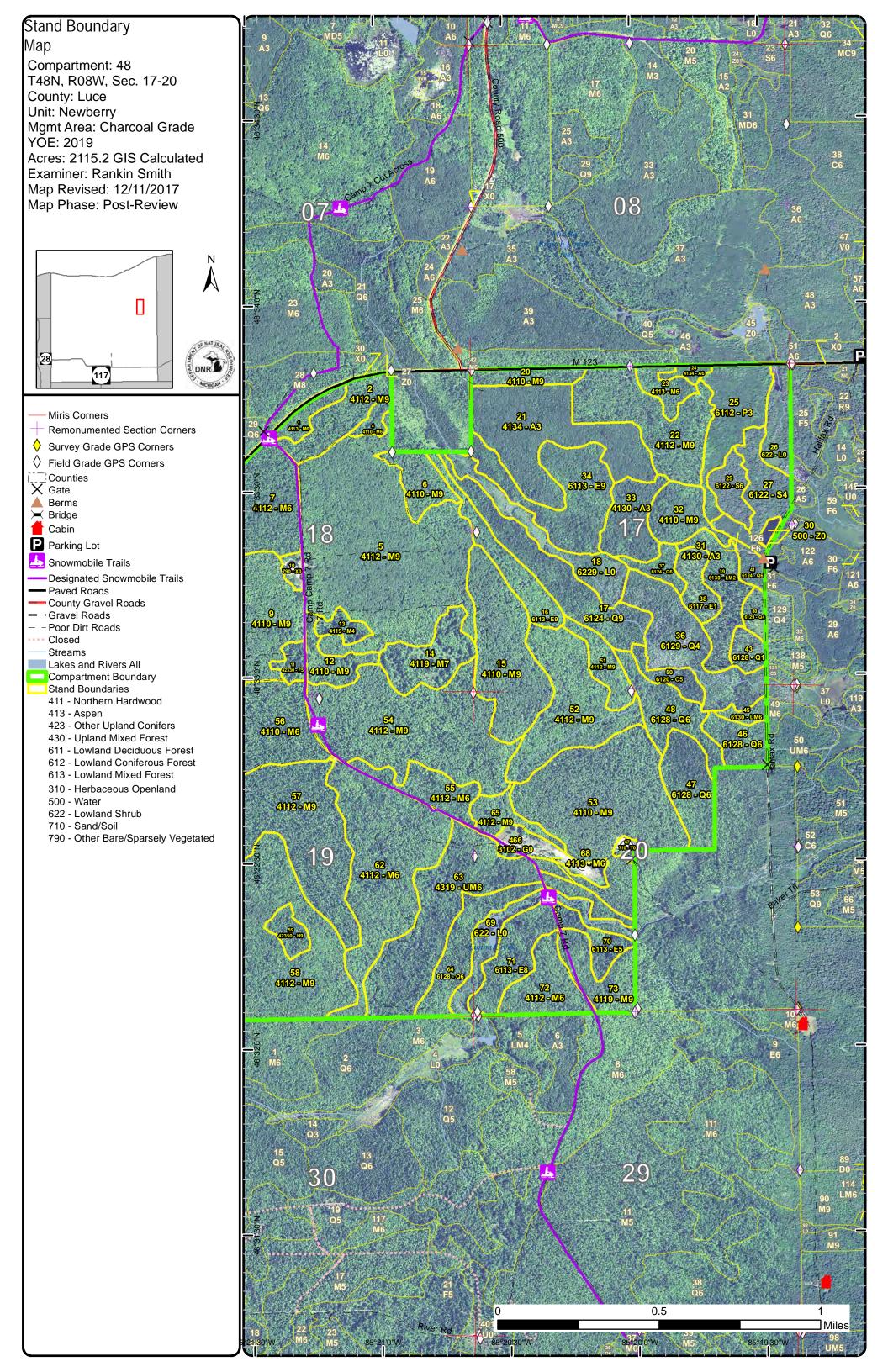
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

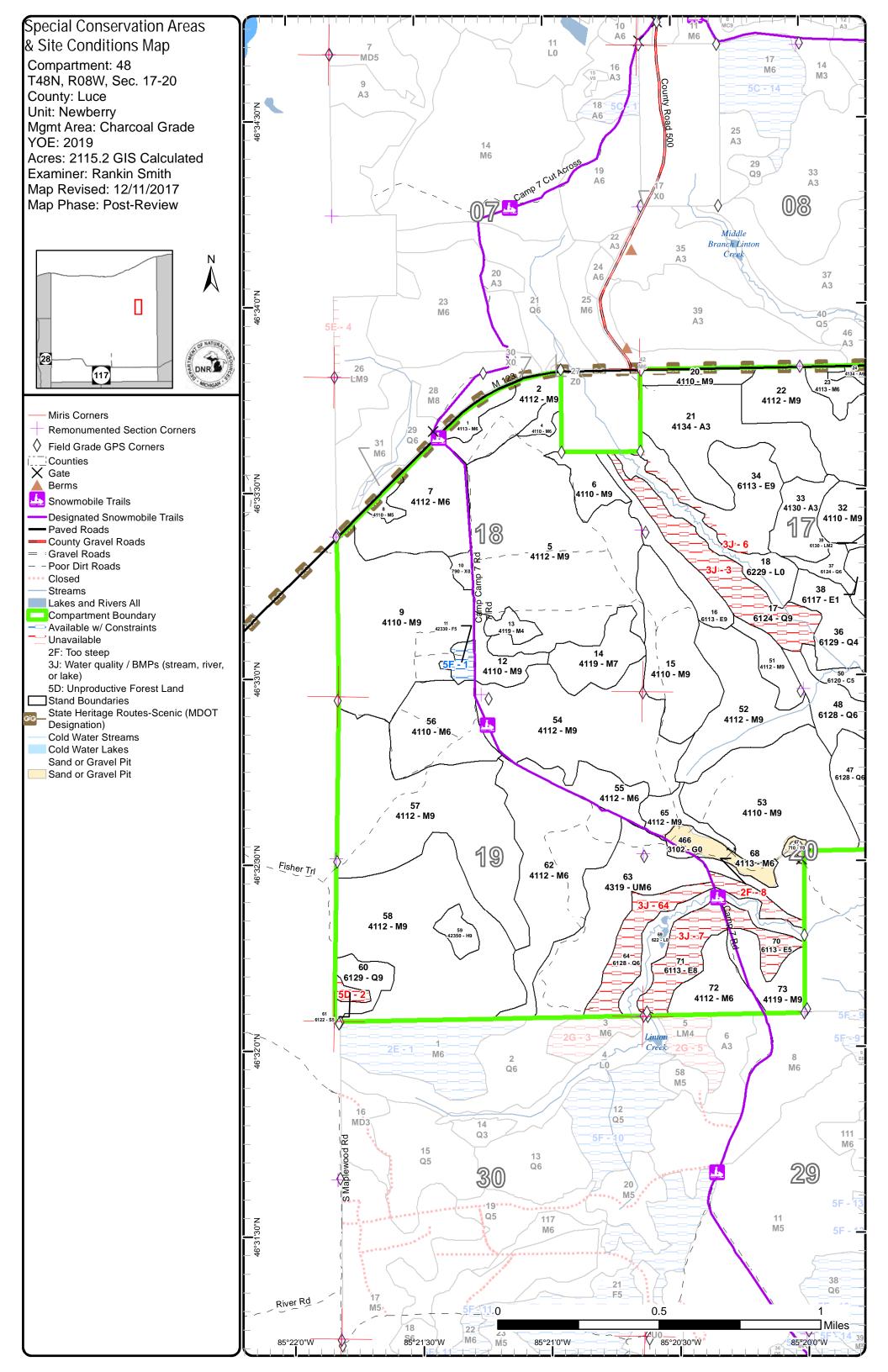


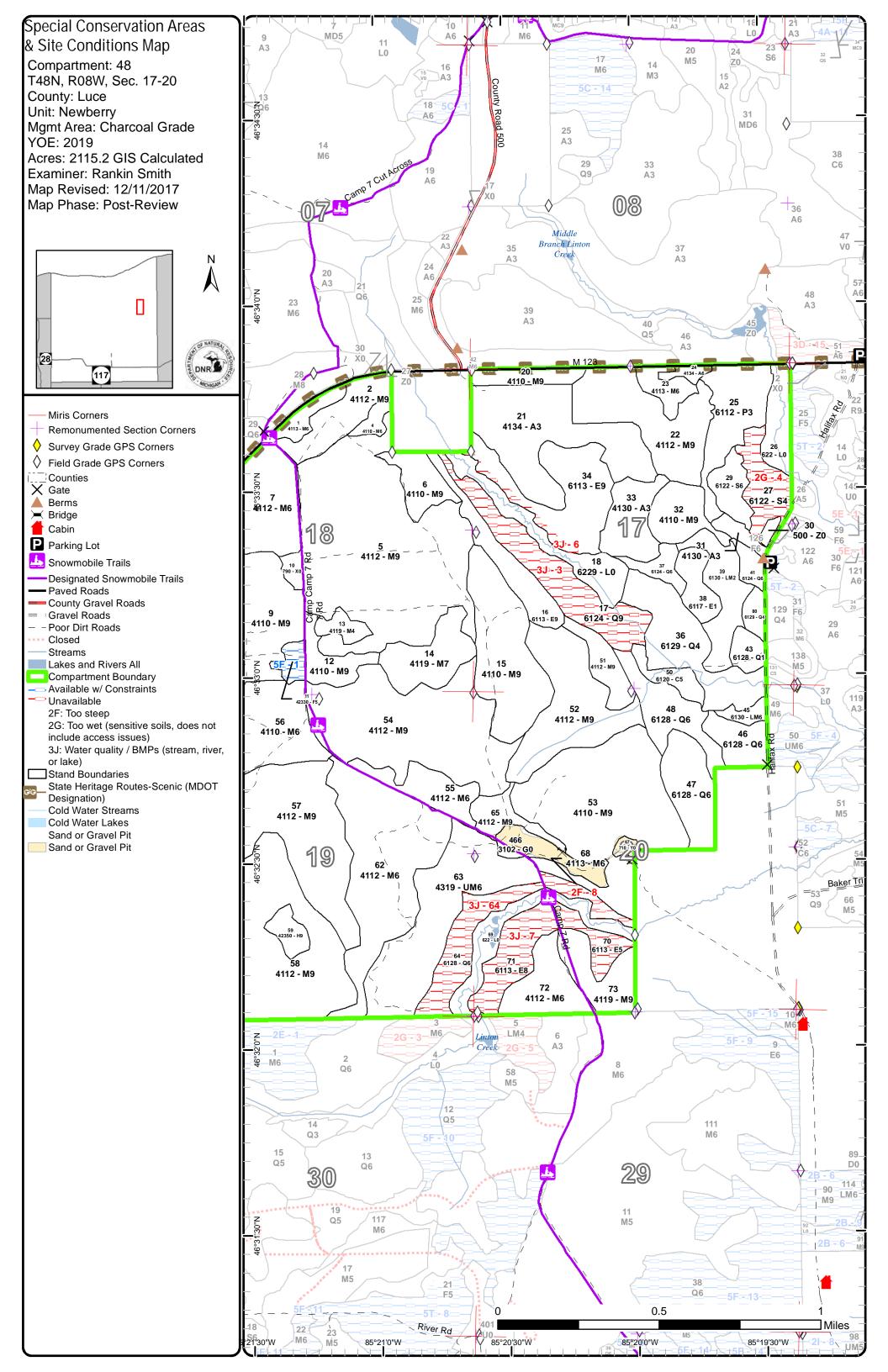












Compartment 48

Year of Entry 2019

# .. ..

Newberry Mgt. Unit
Rankin Smith: Examiner

# Age Class

	No.	Le de la companya de	3 / 2	\$\ \$\ \$\	\$ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	§ /v	100 V	\$ /s	\$ / K	,	80,00	\$ /6/	00,00,000	\$\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \	Z. S. S.	S. L.	Lis Li	g* Jue	000 100
Aspen	0	0	100	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	104
Bare/Sparsely Vegetated	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Cedar	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	9
Hemlock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8
Herbaceous Openland	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Lowland Aspen/Balsam Poplar	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
Lowland Conifers	0	8	0	0	0	0	6	0	0	0	45	0	27	0	0	0	0	143	229
Lowland Deciduous	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110	123
Lowland Mixed Forest	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	31
Lowland Shrub	66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66
Lowland Spruce/Fir	0	0	0	0	0	0	0	3	0	0	13	0	0	0	0	0	0	21	36
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	716	0	0	0	0	0	0	657	1373
Sand, Soil	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	0	0	0	0	0	0	73	73
Upland Spruce/Fir	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	6
Water	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	90	47	134	4	0	0	6	3	6	0	783	0	27	0	0	0	0	1017	2116



# **Report 2 – Treatment Summary**

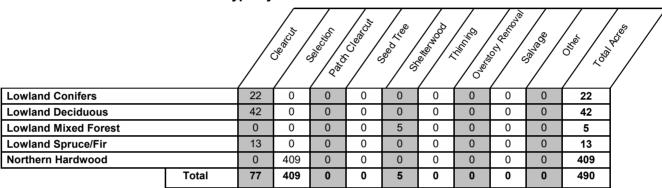
# Newberry Mgt. Unit Year of Entry: 2019

#### **Acres of Harvest**

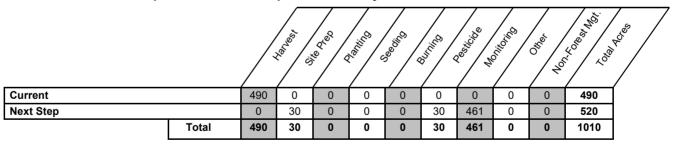
Compartment 48
Total Compartment Acres: 2,115

Commercial Harvest - 490 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

# **Cover Type by Harvest Method**



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



Newberry Mgt. Unit Report 3 -- Treatments Compartment: 48 s Year of Entry: 2019 t а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age **Approval** n Method Name CoverType Density Age Range Type Objective Structure Status d 5 42048005-Cut 139.1 4112 - Maple, Single Tree 411 - Northern Draft Field Sawtimber 85 111-Harvest Two-Aged Beech, Cherry Well 140 Selection Hardwood Boundary Association **Habitat Cut: No Site Condition:** Prescription Thin stand to 70-90BA, Leave 1 large aspen per 2 acres where present or mark to leave. Specs: Retain conifer species throughout the treatment. Monitoring, Natural Regen (Intermediate) Next Step Treatments: Acceptable Mixed northern hardwoods. Regen: Other Camp 7 MWR is within the treatment. Comment: **Proposed Start Date:** 10/01/2018 5 42048005-29.7 4112 - Maple, Sawtimber 85 111-Harvest **Group Selection** 411 - Northern Uneven-Field Boundary Beech, Cherry Well 140 Hardwood Aged Cut\_mwr Association **Habitat Cut: No Site Condition:** Prescription Group Selection harvest marked to the specifications of the Mike Walter's Research team. Stand will have a follow up treatments herbicide and Specs: scarification. Pesticide, Hand Application; SitePrep, Scarification Next Step Treatments: Acceptable northern hardwoods Regen: Other Comment: 10/01/2016 **Proposed Start Date:** 42048015-Cut 58.4 4110 - Sugar Maple Sawtimber 90 111-Harvest Single Tree 411 - Northern Two-Aged **Draft Field** Association Well 140 Selection Hardwood Boundary **Habitat Cut: No Site Condition:** Prescription Thin stand to 70-90BA, leave 1 large aspen per 2 acres where present, or mark them to be left. Specs: Stand may change in size after sale prep. Retain conifer species throughout the treatment. Monitoring, Natural Regen (Intermediate) Next Step **Treatments:** Acceptable northern hardwoods Regen: Other Comment: 10/01/2018 **Proposed Start Date:** 

42048029-Cut 12.5 6122 - Black Spruce Poletimber 111-Harvest Clearcut 6122 - Black Draft Field Even-Aged Well 140 Spruce Boundary

**Habitat Cut: No Site Condition:** 

Prescription Cut all species present, stand may become smaller during sale set up.

Specs:

This stand is state game fund and the clearcut will regenerate the stand to young conifer that will be beneficial to snowshoe hare. Drop some spruce along the edge of stand 25 to increase cover for snowshoe hare. One per 100 ft.

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable mixed lowland conifers.

Regen: **Other** 

Comment:

**Proposed Start Date:** 10/01/2018

Newberry Mgt. Unit Report 3 -- Treatments Compartment: 48 s Year of Entry: 2019 t а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age **Approval** n Method Name CoverType Density Age Range Type Objective Structure **Status** d 34 42048034-Cut 6113 - Lowland Sawtimber 51-80 Clearcut with 613 - Lowland Draft Field 423 90 Harvest Even-Aged Maple Well Retention Mixed Forest Boundary **Habitat Cut: No Site Condition:** Prescription Cut all species except yellow birch, cedar, and hemlock. Specs: Treatment may become smaller/larger after buffering the stream to the west. Retain some large aspen in the red line along stand 21. Also make sure to retain large conifers along the creek buffer. Buffer Creek 200'. (Treatment Shape Reflects 200') Monitoring, Natural Regen (Intermediate) Next Step Treatments: Acceptable mixed species is acceptable for this stand. Regen: Other Comment: Proposed Start Date: 10/01/2018 42048041-Cut 6124 - Lowland Poletimber 55 81-110 Harvest Clearcut 613 - Lowland Even-Aged Draft Field Boundary Well Mixed Forest Spruce-Fir Site Condition: **Habitat Cut: No** Prescription Cut all species present withing stand Specs: This stand is state game fund land. The proposed harvest will benefit snowshoe hare with the young conifer regeneration. Leave the white pine in the stand for bear escape trees. The GEM parking lot may not be used for decking and if damaged in anyway will need to be fixed. Monitoring, Natural Regen (Intermediate) Next Step Acceptable mixed conifers conifers. Regen:

Treatments:

Other Comment:

**Proposed Start Date:** 10/01/2018

42048045-Cut 4.6 6130 - Fir, Aspen, Poletimber 80 81-110 Harvest Shelterwood with 611 - Lowland Two-Aged Draft Field Well Deciduous Maple Retention Boundary Forest

**Habitat Cut: No Site Condition:** 

Prescription Shelterwood with retention. Reduce BA to 40-50. Remove large diameter low quality red maple. Leave hemlock and a few large white pine for Specs: bear refuge trees and moose cover as well as marten habitat.

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Northern Hardwoods.

Regen:

Other Comment:

**Proposed Start Date:** 10/01/2018

Newberry Mgt. Unit Report 3 -- Treatments Compartment: 48 s Year of Entry: 2019 t а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age **Approval** n Method Name CoverType Density Age Range Type Objective Structure **Status** d 42048046-Cut 6128 - Lowland 81-110 Clearcut with 612 - Lowland Draft Field 46 15 7 Poletimber 97 Harvest Even-Aged Coniferous, Mixed Well Retention Coniferous Boundary Deciduous Forest **Habitat Cut: No Site Condition:** Prescription Clear cut all species. Leave all hemlock, yellow birch, cedar, and any large white pine over 18". Specs: This stand is state game fund land. The prescribed harvest will benefit snowshoe hare by creating cover and food in proximity and Moose by browse creation Next Step Monitoring, Natural Regen (Intermediate) Treatments: Acceptable mixed lowland species. Regen: Other Comment: **Proposed Start Date:** 10/01/2018 90 42048058-Cut 133.9 4112 - Maple, Sawtimber 111-Harvest Single Tree 411 - Northern Two-Aged Draft Field Beech, Cherry Well 140 Selection Hardwood Boundary Association **Habitat Cut: No Site Condition:** Prescription Thin stand 70-90BA, leave all hemlock, white pine, and yellow birch. Specs: Next Step Monitoring, Natural Regen (Intermediate) Treatments: Acceptable northern hardwoods Regen: Other Comment: Proposed Start Date: 10/01/2018 42048072-Cut 24.9 4112 - Maple, Poletimber 90 111-Single Tree 411 - Northern Draft Field Harvest Two-Aged Beech, Cherry Well 140 Selection Hardwood Boundary Association **Habitat Cut: No Site Condition:** Prescription Thin stand 70-90BA, leave all hemlock and yellow birch. Leave white pine along north and west edge. Specs: Monitoring, Natural Regen (Intermediate) Next Step Acceptable Northern Hardwoods Regen:

**Treatments:** 

Other

Comment:

**Proposed Start Date:** 10/01/2018

Draft Field 42048073-Cut 23.1 4119 - Mixed Sawtimber 90 111-Harvest Single Tree 411 - Northern Two-Aged Northern Hardwoods Well 140 Selection Hardwood Boundary

**Habitat Cut: No Site Condition:** 

Prescription Thin stand 70-90BA, leave all hemlock and yellow birch. Leave white pine along northern stand edge.

Specs:

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Northern Hardwoods

Regen:

Other Comment:

**Proposed Start Date:** 10/01/2018 Newberry Mgt. Unit

Stand

CoverType

Size

Density Age

Stand

ВА

Range

Report 3 -- Treatments

**Treatment** 

Type

**Treatment** 

Method

Compartment: 48
Year of Entry: 2019

Age Structure

Cover Type Objective DNR DROWN APPROVAL

Status

Total Treatment Acreage Proposed:

Treatment

Name

s

t a

n

490.3

Acres

Compartment: 48

Newberry Mgt. Unit

Rankin Smith : Examiner Year of Entry: 2019

Availa	bility for	Managemer	nt						
Total	Acres	Acres Avail	Acres	D	omina	nt Site	e Con	ditions	S
Acres	Available	With Condition	Not Available		5F	2F	2G	3J	5D
104	104	0	0	Aspen					
4	4	0	0	Bare/Sparsely Vegetated					
9	9	0	0	Cedar					
8	8	0	0	Hemlock					
15	15	0	0	Herbaceous Openland					
34	34	0	0	Lowland Aspen/Balsam Poplar					
229	157	0	72	Lowland Conifers				72	
122	78	0	44	Lowland Deciduous				44	
31	31	0	0	Lowland Mixed Forest					
66	66	0	0	Lowland Shrub					
37	12	0	24	Lowland Spruce/Fir			21		3
1373	1365	0	8	Northern Hardwood	0	8			
3	3	0	0	Sand, Soil					
73	73	0	0	Upland Mixed Forest					
6	0	6	0	Upland Spruce/Fir	6				
2	2	0	0	Water					
2,115	1,961	6	148	Total Forested Acres	6	8	21	116	3
	93%	0%	7%	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.

Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
Available	5F: Evaluated for Forest Health Considerations	6	Unspecified	Unspecified	Unspecified	Unspecified
Unavailable	5D: Unproductive Forest Land	3	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
Comments:						
	Available Comments: Evaluated for SBW.	Available  SF: Evaluated for Forest Health Considerations  Comments: Evaluated for SBW.  Unavailable  5D: Unproductive Forest Land	Available 5F: Evaluated for Forest Health Considerations  Comments: Evaluated for SBW.  Unavailable 5D: Unproductive Forest Land	Cond Availability Dominant Site Condition Acres Other Site Condition  Available 5F: Evaluated for Forest Health Considerations  Comments: Evaluated for SBW.  Unavailable 5D: Unproductive Forest Land 2G: Too wet (sensitive soils, does not include access issues)	Cond Availability Dominant Site Condition Acres Other Site Condition Other Site Condition  Available 5F: Evaluated for Forest Health Considerations  Comments: Evaluated for SBW.  Unavailable 5D: Unproductive Forest Land  2 G: Too wet (sensitive soils, does not include access issues)  Unspecified  Unspecified  Unspecified	Cond Availability         Dominant Site Condition         Acres         Other Site Condition         Other Site Condition

# Report 4 – Site Conditions

Newberry Mgt. Unit Rankin Smith: Examiner

Compartment: 48
Year of Entry: 2019

3	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	45	5F: Evaluated for Forest Health Considerations	Unspecified	Unspecified	Unspecified
	<b>Comments:</b> Evaluated for SBW.						
4	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	20	5F: Evaluated for Forest Health Considerations	Unspecified	Unspecified	Unspecified
	<b>Comments:</b> Evaluated for SBW.						
6	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	6	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	38	5F: Evaluated for Forest Health Considerations	Unspecified	Unspecified	Unspecified
	Comments: Numerous seeps int	o Linton Creek. Evaluated for	SBW.				
8	Unavailable	2F: Too steep	8	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
	Comments:						
64	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	27	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: BMP water quality is	sues. Ridge as well that drop	s dowr	to stream bottom.			

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: 48
Year of Entry 2019



# Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

Conservation Type Area		Description	HCVA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions stocked trout populations and those of other coldwater fish spec conditions for coldwater fishes may occur in Michigan lakes if the groundwater inflows, or are located in colder (northern) areas of Director's action and designated as trout resources by Fisheries	ies to persist from year to year. Suitable ey are relatively deep, have substantial the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen cond stocked trout populations and those of other coldwater fish spec year to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	ies (e.g., slimy sculpin) to persist from ese conditions due to substantial
SCA	Visual Management Area	An area of general social appreciation that is managed to recogn Examples of these areas include scenic vistas, scenic or natural	

S t	Newberry Mgt. Unit			Report 7	– Forested	Stands Compartment: 48 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4113 - R.Maple, Conifer	Poletimber Well	8.5	90	81-110	OPIC - FMD: Stand falls along M-123 influence. Quite a bit of A,B with fir in the understory. Some spruce, beech, yellow birch, and hemlock within. Soils are Bodi-Chesbrough. 1999: stand 3
2	4112 - Maple, Beech, Cherry Association	Sawtimber Well	23.9	90	51-80	OPIC - FMD: Several commercial t. sales and firewood cutting areas within from 1981-84. Residual stand contains lots of fork, crook, stain; beech scale, borer damage and nectria present. Regeneration is primarily beech. Next thinning will probably need to be fairly heavy to remove risk trees and protect advanced regeneration. 1999: stand 4
4	4110 - Sugar Maple Association	Poletimber Well	4.8	90	81-110	OPIC - FMD: Several commercial t. sales and firewood cutting areas within from 1981-84. Residual stand contains lots of fork, crook, stain; beech scale, borer damage and nectria present. Regeneration is primarily beech. Next thinning will probably need to be fairly heavy to remove risk trees and protect advanced regeneration. 1999: stand 4
5	4112 - Maple, Beech, Cherry Association	Sawtimber Well	168.7	85	111-140	OPIC - FMD: Several commercial t. sales and firewood cutting areas within from 1981-84. Residual stand contains lots of fork, crook, stain; beech scale, borer damage and nectria present. Regeneration is primarily beech. Next thinning will probably need to be fairly heavy to remove risk trees and protect advanced regeneration. 1999: stand 4
6	4110 - Sugar Maple Association	Sawtimber Well	16.1	90	51-80	OPIC - FMD: Stand harvested with "123/Camp 7 Hardwoods" (#005-99) sale - unit 1. Sale was not completed - closed on 12/10/03. Some marked trees still visible. Quite a few snapped off trees, snags within; residual trees could not withstand opening of the crown canopy with the amount of defect still present within the stand. Heavy beech regeneration. Combine with adjacent stand for treatment next entry. Private stand was harvested in the fall, 2006. 1999: stand 5
7	4112 - Maple, Beech, Cherry Association	Poletimber Well	53.3	90	51-80	OPIC - FMD: Low quality stand - nearly all pulp (twisted, borer damage, nectria). Overmature A,B within; would be relatively easy to identify small retention areas to leave within stand (M5 with F), as well as mark a few large A,B to leave. Beech with heavy scale. Patches of smaller diameter maple within. Soils are Bodi - Chesbrough. 1999: stand 2, part of 1  Stand harvested via thinning as sale #046-09-01, Sand Pit Hardwoods. Completed 10/20/10.
8	4110 - Sugar Maple Association	Poletimber Medium	4.3	90	1-50	OPIC - FMD: Old grass opening filling in with mixed spps (including B,RM,YB,A,cherry, J,R). Beech contains heavy scale. 1999: stand 1
9	4110 - Sugar Maple Association	Sawtimber Well	112.4	90	51-80	OPIC - FMD: Stand was treated as "123/Camp 7 Hardwoods" (#005-99). Sale closed 12/10/03 - stand was not completely harvested (some old orange paint still visible). Low quality hardwood. Purchaser was given numerous extensions and never finished the sale. Sale was closed and taken from purchaser. Most of the cutting occurred in 2000. Some previous thinning in 1982 (#21-82). Beech with scale. 1999: stand 8 Bottom portion of stand has better stocking than top portion.
11	42330 - Upland Fir	Poletimber Medium	6.1	70	1-50	OPIC - FMD: Stand is an old grass type, filling in with mixed spps.1999: stand 7

s t	Newberry		Report 7	– Forested	Stands Compartment: 48 Year of Entry: 2019	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
12	4110 - Sugar Maple Association	Sawtimber Well	13.9	90	51-80	OPIC - FMD: Stand is an old opening, filling in. Some areas included with high B5/B3 component, as well as areas with thick fir understory. Hardwood in clumps - low quality. 1999: stand 7
13	4119 - Mixed Northern Hardwoods	Poletimber Poor	6.7	80	1-50	OPIC - FMD: Primarily an old grass opening, with spruce/fir, cherry, paper birch and beech present. 1999: stand 6
14	4119 - Mixed Northern Hardwoods	Sawtimber Poor	27.4	90	1-50	Stand large amount of open area. Few Red Maple and Sugar Maple with some Cherry and White Pine in the understory.
15	4110 - Sugar Maple Association	Sawtimber Well	58.4	90	111-140	OPIC - FMD: Stand was thinned in the fall of 1997 (t. sale #2-94). Heavy beech scale, as well as fork, crook, sweep, borer damage, and multiple stems. Heavy beech understory. Mixed hardwood = beech, red maple. 1999: stand 39
16	6113 - Lowland Maple	Sawtimber Well	23.3	90	81-110	OPIC - FMD: Portion of stand was part of sale #5-99, which was not cut completely (lower ground became too wet to access). Stand contains some steeper topography which slopes toward lower Q type. Low quality hardwood - larger trees are twisted, forked, heavy black stain. Some W,WS,H within stand. Club moss ground cover noted. 1999: stand 26
17	6124 - Lowland Spruce- Fir	Sawtimber Well	44.6	90	81-110	OPIC - FMD: Stand contains quite a bit of smaller BF, as well as tagalder. YB regeneration is good quality. Mixed hardwood includes: RM,SM. Soils are Carbondale-Lupton-Tawas. 1999: stand 28
20	4110 - Sugar Maple Association	Sawtimber Well	11.4	90	51-80	OPIC - FMD: T. sale #08-89 - cut in 1992 (aspen only removed). Stand falls along M-123 Heritage Route. Lots of dead/down log material on the ground - heavy defects within stand. Heavy beech scale present - beech is all pulp quality. Some WS,WP within. Soils are Bodi silt loam. 1999: stand 9
						Stand harvested via selection harvest as sale #42-032-09-01, "Heritage Hardwoods". Completed 10/17/12. Regeneration check needed as per work instructions.
21	4134 - Aspen, Spruce/Fir	Sapling Well	71.2	15	Immature	OPIC - FMD: T. sale #08-89 - cut in 1992. Residual low-quality maple within, esp. at the south end. Aspen with hypoxylon. Regeneration noted includes: PB,RM,SM,cherry,BF,S. Aspen heights = 30-35 feet. Soils are Bodi silt loam. 1999: stand 10
22	4112 - Maple, Beech, Cherry Association	Sawtimber Well	53.1	90	51-80	OPIC - FMD: A lot of poor quality (crook, fork, stain) trees that originated from stump sprouts in stand. There are a few sawlog sized trees of quality. Patch of hemlock along A2 cut. Mixed spps include: H, beech, A, PB, YB; beech with heavy scale. Old red paint noted, in places - sale unknown. Leave most YB. Soils are Bodi and Zandi silt loam. Sugar Maple dominant on West side and Red Maple dominant on east side low area.
						Stand harvested via selection harvest as sale #42-032-09-01, "Heritage Hardwoods". Completed 10/17/12. Regeneration check needed as per work instructions.

s t	Newberry	Mgt. Unit		Report 7	– Forested	Stands Compartment: 48 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
23	4113 - R.Maple, Conifer	Poletimber Well	10.4	90	1-50	OPIC - FMD: T. sale #39-82, cut summer, 1983 (M-DOT road access permit #NE-19-83). Diameter cut was prescribed, cutting all SM,YB,beech,RM > 12" dbh. Most regeneration is now 1 - 4" dbh, with a mix of YB,cherry, RM, BF, S and H. Soils are Chesbrough silt loam. 1999: stand 17
24	4134 - Aspen, Spruce/Fir	Poletimber Well	3.7	23	51-80	OPIC - FMD: T. sale #39-82, cut summer 1983. Stand also contains S,H,W,RM,SM,YB, PB. Soils are Chesbrough silt loam. 1999: stand 18
25	6112 - Lowland Aspen	Sapling Well	33.8	13	Immature	OPIC - FMD: Stand was harvested as part of "Heritage Aspen" sale - unit 1 (016-99-01). Cutting completed summer, 2003. Pine, cedar, and hemlock left as residual; some PB and maple patches also left. Along M-123, small conifers and paper birch were left in a 100' strip along R.O.W. Ground cover of grasses, tagalder, some cattails. Stump sprout maple. Soils are Chesbrough silt loam, with some Carbondale-Lupton-Tawas. 1999: stand 19
27	6122 - Black Spruce	Poletimber Poor	20.8	50	51-80	OPIC - FMD: Stand is mostly full of tagalder, but does contain some A,S/F, and PB. Campsite w/fire ring found on slightly higher ground just on the north side of stand 30. Soils are Hendrie mucky peat - no code. 1999: stand 21
29	6122 - Black Spruce	Poletimber Well	12.5	90	111-140	OPIC - FMD: Stand is a mix of black, white spruce, and balsam fir primarily; some WP, A, H within. Spruce is fairly limby; some open-grown patches included with tagalder understory. Some RM, H regeneration noted. Soils are Carbondale-Lupton-Tawas. 1999: stand 24
31	4130 - Aspen	Sapling Well	5.2	13	Immature	OPIC - FMD: Connects with stand 25 to the north; thicker aspen. Part of "Heritage Aspen" sale #16-99 cut summer, 2003. Saplings are 7 - 14' height. Soils are Auger-Annanias. 1999: stand 19
32	4110 - Sugar Maple Association	Sawtimber Well	19.1	90	81-110	OPIC - FMD: Stand was thinned by removing dying aspen as part of "Heritage Aspen" sale #16-99 (unit 2). Completed summer, 2000. Maple regeneration is ~ 4 - 6 ' in height now. Soils are Zandi silt loam. 1999: stand 25
33	4130 - Aspen	Sapling Well	23.4	16	Immature	OPIC - FMD: Stand harvested as part of "Heritage Aspen" sale #16-99 (unit 2). Cutting completed summer, 2000. Residual maple clumps/stems, and PB within. M5/M6 patch left along north end of cut (low quality - stained, forked, sprout timber). Soils are Zandi silt loam and Auger/Annanias. 1999: stand(s) 16,27
34	6113 - Lowland Maple	Sawtimber Well	48.2	90	51-80	OPIC - FMD: Stand has some large, old aspen. Maple is pole sized and of poor quality. Good patch of H/C through portion of stand - intermittent wet area. Southern end of stand is of smaller diameter, and includes more F in understory. Aspen could be removed now, but remainder of stand is mostly submerchantable. Beech (with scale) and YB within, and mixed softwood includes BF,C,H, and WS. Soils are Zandi silt and Auger/Annanias. 1999: stand 13

s t	Newberry Mgt. Unit			Report 7	– Forested	Stands Compartment: 48 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
36	6129 - Mixed Coniferous Lowland Forest	Poletimber Poor	46.5	100	1-50	Stand contains S. Branch Linton Creek; some cedar, spruce, lots of dead snags. Also thicker Q areas, which have been flooded. North side of old trail road contains dead, standing C6 stand; not sure if this is because of high beaver pressure, or the old roadbed changing the hydrology pattern, or a combination of both.
37	6124 - Lowland Spruce- Fir	Poletimber Well	8.1	110	51-80	Wet site; lots of cinammon fern, starflower - some iris, horsetails. Mixed softwood includes S/F,C,YB,Rm.
38	6117 - Lowland Deciduous, Mixed Coniferous	Sapling Poor	12.8	5	1-50	Overstory of hemlock and white pine with some scattered cedar. Aspen and red maple coming in nicely underneath to become the new dominant canopy. Balsam fir and some paper birch also coming in nicely.
						Stand harvested via shelterwood as sale #008-09-01, Halifax Leave Mix. Closed 07/15/13. Regeneration check needed per work instructions.
39	6130 - Fir, Aspen, Maple	Sapling Medium	26.0	5	1-50	Two aged stand after the last harvest. Red maple and aspen are making up the dominant canopy now with some overstory white pine and hemlock. Some scattered cedar in the stand as well.
						Area was partially clearcut from 1976 (#15-73A), so stand is very variable. North end contains more PB, small red and sugar maple; south end, more cedar, H and thicker BF regeneration.
						Stand harvested via shelterwood as sale #008-09-01, Halifax Leave Mix. Closed 07/15/13.
41	6124 - Lowland Spruce- Fir	Poletimber Well	6.2	55	81-110	Some PB,A overstory; WP, C regeneration noted.
43	6128 - Lowland Coniferous, Mixed Deciduous	Sapling Poor	7.7	5	1-50	Lots of lower areas with depressions of water during the spring - extremely saturated soils. Thinned maple hard, left the best crop trees possible, and left all H,WS,C.
						Stand harvested via thinning as sale #008-09-01, Halifax Leave Mix. Closed 07/15/13.
45	6130 - Fir, Aspen, Maple	Poletimber Well	4.6	80	81-110	Maple is forked, twisted, in clumps - very defective and low quality. Clearcut may be best, with a few reserve trees. Connects with C. 49 stand 49. Mixed softwood includes: C,WS,WP. Club moss ground cover noted.
46	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	15.7	97	81-110	Fairly heavy component of hemlock, in places. Regeneration of F,H,C,PB,RM all noted. Intermittent drainage runs through a portion of the stand in the SE corner. Mixed hardwood includes YB,HM and softwood includes H,WP,BS. Stand is considerably wet and harvest operations should take place in the winter.
47	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	27.6	90	51-80	OPIC - FMD: Low ground - extremely wet spring soils. WP,YB also present within stand. Hemlock and pine mostly growing in patches. Ground cover noted includes club moss and princess pine. Soils are Caffey muck - no code. 1999: stand 42,43

S t	Newberry		Report 7	– Forested	I Stands Compartment: 48 Year of Entry: 2019	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
48	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	25.9	105	51-80	Low, wet ground. Mixed softwoods include: C,H,BF. YB,H regeneration noted; some black ash. Low quality timber.
50	6120 - Lowland Cedar	Poletimber Medium	9.0	93	51-80	Thick cedar area, with occasional spruce noted. Stand is extremely wet on the southern end with some standing dead.
51	4112 - Maple, Beech, Cherry Association	Sawtimber Well	14.3	95	81-110	Stand is on slightly higher ground than adjacent stand. Low quality stems; crook, fork, epicormic branches - site appears to have potential to grow good timber, though. Maple regeneration is ~ 1 - 2" dbh. Aspen within is dead/dying.
52	4112 - Maple, Beech, Cherry Association	Sawtimber Well	57.4	105	81-110	Lower swale of timber with some H,F and low quality hardwood - more RM,HM and areas of smaller timber (8-10" dbh) around stand edge with heavy regeneration. Lots of defect (stain, borer damage, beech scale); sawlog-sized timber, but pulp quality. Dead RM, beech; lots of snags already. Beech will continue to die out. Heavy hardwood regeneration (mostly beech). Intermittent drainage within. Harvest with stand 51 to the east.
						T. sale #25-76A and non-commercial TSI (FTP163/I-15) completed summer of 1977.
53	4110 - Sugar Maple Association	Sawtimber Well	107.8	90	51-80	OPIC - FMD: Lots of defect still within stand even after commercial and non-commercial treatements (t.sale #25-76A and FTP163/I-15 completed summer, 1977). Heavy forking, clumps, stain to sawlogs, sweep, crook, nectria, eutypella and beech scale. Mixed hardwood includes: YB, RM, A, beech, cherry. South end contains more poles versus remainder of stand - nice HM. 1999: stand 44
						Stand harvested via thinning as sale #027-09-01. Complete 01/04/11.
						Regen 2014: Passed.
54	4112 - Maple, Beech, Cherry Association	Sawtimber Well	105.1	90	51-80	OPIC - FMD: Stand has previously been thinned w/firewood permits and Title X crews (FTP C-167/I-15 completed Sp/Su 1977). Mixed hardwood includes: YB, BC. Soils are Kalkaska and Auger-Annanias. 1999: stand 63
						Stand harvested via thinning as sale #046-09-01, Sand Pit Hardwoods. Completed 10/20/10.
55	4112 - Maple, Beech, Cherry Association	Poletimber Well	20.1	90	51-80	OPIC - FMD: Area was partially cutover in the late 1970's - stand provides good wildlife cover for now. Mixed hardwood includes: RM, beech, cherry. H, W present within stand also. 1999: stand 57
56	4110 - Sugar Maple Association	Poletimber Well	46.4	90	1-50	OPIC - FMD: Stand was marked (orange) and prepared as part of "123/Camp 7 Hardwoods" sale #5-99. Unit (4) was never cut. Some red maple, beech, YB, cherry within - occasional WP,H. 1999: stand 8
						Stand harvested via thinning as sale #038-09-0, Camp 7 Experiment Hardwoods. Completed 10/20/10. Red Maple thinned out with high Red Maple regeneration.

s t	Newberry	Newberry Mgt. Unit			- Forested	Stands Compartment: 48 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
57	4112 - Maple, Beech, Cherry Association	Sawtimber Well	136.4	90	51-80	OPIC - FMD: Lots of defective maple (borer damage, fork, crook) left from earlier harvests. Heavy maple top dieback. Beech within contains heavy scale, twisted; yellow birch with large crowns, and mostly pulp-quality. Some W,F/S and scattered H within. BA can fluctuate anywhere from 50-120 sq ft, esp with dead/dying trees within. Ground pine and club moss ground cover noted. Adjacent private property has been thinned, and is starting to be developed. 1999: stand 58
						Stand harvested via thinning as sale #038-09-0, Camp 7 Experiment Hardwoods. Completed 10/20/10.
58	4112 - Maple, Beech, Cherry Association	Sawtimber Well	133.9	90	111-140	OPIC - FMD: Poor quality hardwood - lots of defects. Mixed hardwood includes: beech, yellow birch. More softwood mixed within. 1999: stand 59
59	42350 - Upland Hemlock	Sawtimber Well	8.1	90	141-170	OPIC - FMD: Slightly lower, wetter ground than surrounding type. 1999: stand 60
60	6129 - Mixed Coniferous Lowland Forest	Sawtimber Well	13.7	90	81-110	OPIC - FMD: Isolated patch of nearly pure hemlock within hardwoods. Mixed hardwood includes: YB, beech. Most of the hardwood is large diameter of pulp quality. A few spruce/fir mixed within. Ground cover noted includes sphagnum moss, wintergreen. Soils are Carbondale-Lupton-Tawas. 1999: stand
61	6122 - Black Spruce	Poletimber Medium	3.3	65	Unspecified	OPIC - FMD: Cedar, spruce and tamarack. Ground cover noted: leatherleaf, snowberry. Soils are Dawson-Greenwood-Loxley. 1999: stand 61
62	4112 - Maple, Beech, Cherry Association	Poletimber Well	90.2	90	81-110	OPIC - FMD: Partially thinned under t.sale #14-73A (1974-1978). Mixed softwood includes: WS,H,W. WP has seeded in around residual trees. PB present in more open areas (where thinned). Some juneberry noted. Some thicker BF regeneration in places, also. 1999: stand 62
63	4319 - Mixed Upland Forest	Poletimber Well	73.3	81	81-110	OPIC - FMD: Area harvested in the late 1970's (#14-73A, from 1974-78) - some areas within primarily clearcut. Mixed softwood includes: S,F,H,W. Maple mostly in clumps; sprout origin. Soils are Kalkaska and Wallace-Spot. Some supercanopy WP interspersed as well. 1999: stands 54,56,57
64	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	27.3	110	51-80	Many springs within stand - very wet. Within riparian zone of Linton Creek. S
65	4112 - Maple, Beech, Cherry Association	Sawtimber Well	12.4	90	51-80	OPIC - FMD: Some old, twisted maple left from previous harvest. Multiple stem regen. Some nice HM developing on the north side of the Camp 7 Road (almost M6); has future potential quality. Mixed spps include: W,YB, A. 1999: stand 51
68	4113 - R.Maple, Conifer	Poletimber Well	8.0	90	51-80	OPIC - FMD: Poor quality stand; steep topography. Within riparian zone of Linton Creek. Mixed hardwood includes: YB,HM,A,PB,beech. Beech is cull: mast only. Mixed softwood includes: H,W,BF. Club moss ground cover. 1999: stand 48

S t a n d	Newberry Mgt. Unit			Report 7	– Forested	Stands Compartment: 48 Year of Entry: 2019
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
70	6113 - Lowland Maple	Poletimber Medium	12.0	88	81-110	OPIC - FMD: Fairly steep and rolling topography with drainages. Blowdown A, S. Younger S/F patches mixed within. Weeviled WP. Soils are Bodi silt loam. 1999: stand 49
71	6113 - Lowland Maple	Sawtimber Medium	26.1	88	111-140	OPIC - FMD: Fairly steep and rolling topography with drainages. Sugar maple is low quality; blowdown A. Maple regen ~ 2 - 4" dbh. Soils are Zandi silt and Auger silt loams. 1999: stand 49
72	4112 - Maple, Beech, Cherry Association	Poletimber Well	25.5	90	111-140	OPIC - FMD: Small area of aspen was removed from stand (along comp't bdry - with C. 50). Could treat stand with adjacent M stand within C. 50 (stand 8). Some H,W,BF,YB within. Soils are Auger silt loam. 1999: stand 50,52
73	4119 - Mixed Northern Hardwoods	Sawtimber Well	23.1	90	111-140	OPIC - FMD: Could treat stand with adjacent stand in C. 50 (stand 8). Stems with crook, fork, stain. Soils are Bodi silt loam. 1999: stand 50
80	6129 - Mixed Coniferous Lowland Forest	Poletimber Poor	5.8	96	1-50	Partially clearcut in 1976 (#15-73A).  2017: Stand harvested via seed tree as sale #008-09-01, Halifax Leave Mix. Closed 07/15/13. Retained cedar, white pine, spruce, and hemlock. Good maple regeneration coming in. Some balsam and spruce as well. Soils are Hendrie mucky peat.

Compartment: 48
Year of Entry: 2019



Stand	Cover Type	Acres	Managed Site	General Comments:
10	790 - Other Bare/Sparsely Vegetate	4.0	No	OPIC - FMD: Sand /dredge spoils pit. Includes fringe of timber, and a few clumps of PB. Both ORV's and snowmobiles use this as a scramble area (illegally) - no good way to keep them out of here. 1999: stand 6
18	6229 - Mixed lowland shrub	26.2	No	S. Branch Linton Creek w/buffer; old beaver floodings within stand also. Some cedar regeneration on stand edges (12 - 16' height), and cedar snags within.  Tagalder from 2 - 5 feet in height.
26	622 - Lowland Shrub	15.7	No	OPIC - FMD: Middle Branch Linton Creek flows through stand. Conifers within buffer zone. Soils are histosols and aquents, ponded. 1999: stand 20
30	500 - Water	2.0	No	OPIC - FMD: Old walleye rearing pond. 1999: stand 22
67	710 - Sand, Soil	2.7	No	OPIC - FMD: Camp 7 gravel pit - created under timber sale #20-87-02 - 3.6 acres. 1999: stand 47
69	622 - Lowland Shrub	24.2	No	OPIC - FMD: Linton Creek flows through stand. Grasses and tagalder; some spruce, cedar. Soils are histosols and aquents. 1999: stand 53
466	3102 - Grass	14.7	No	OPIC - FMD: More grasses on extreme west end. From there on towards the east, knapweed is present - less grasses. Gravel stockpiled within. 1999: stand 46