



# Compartment Review Presentation

Newberry Forest Management Unit

Compartment 42019

Entry Year 2020

Acreage: 3,483

County Luce

Management Area: Deer Park

---

**Revision Date:** 2018-08-22

**Stand Examiner:** Matt Payment

**Legal Description:**

T49N R11W Sections 22 - 28

T49N R10W Sections 19, 30

**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:**

The topography throughout the compartment is mostly level to rolling with the dominate soil type being Rubicon Sand.

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

The compartment is completely State land and is entirely surrounded by State land. Predominate land use in the area mostly involves recreation (camping, ORV and snowmobile riding, hunting, fishing, dog sledding, hiking, berry picking, wildlife/nature viewing) and timber production.

**Unique Natural Features:**

Michigan Natural Features Inventory (MNFI) identified the compartment as a having the potential for eagle, osprey, merlin, and goshawk as well as having the potential for moose and wolf. They also list the potential for climbing fumitory, pine-drops, and false violet in pines and Canada rice-grass possible in jack pine openings and the potential for small yellow pond lily and American shore grass in inland lakes within the compartment.

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

The Bureau of History does not list any historical features but it is worth mentioning the old fire tower location near Holland Lake. This area once had an active fire tower called the "West Tower". The tower was taken down when not used any longer but the concrete footings still remain where the tower once stood.

HAL shows within the compartment there are also records of old Logging Camps.

**Special Management Designations or Considerations:**

This compartment contains two campgrounds, Holland Lake Campground and Headquarters Lake Campground. Special consideration will be needed when making land management decisions such as forest treatments in and around these campgrounds.

**Watershed and Fisheries Considerations:**

Fisheries Values: Excellent

Holland Lake is a designated trout lake carrying a population of stocked Brook Trout. Headquarters Lake is shallow and is likely subject to frequent winter-kills, resulting in no viable sports fishery. All prescribed treatments have appropriate buffers identified.

**Wildlife Habitat Considerations:**

Compartment 19 lies in northern Luce county in the Grand Marais Sandy End Moraine and Outwash ecological sub-subsection subsection and the Deer Park Management Area with Kirtland's warbler, American marten, piping plover and red crossbill as featured species. Almost the entire compartment is comprised of jack, red and white pine stands with some residual scotch pine plantings on the east end. It is heavily used for various types of recreation. Species diversity of stands

is generally low but is enhanced by the presence of occasional spruce, hemlock, oak, birch and other hardwoods.

In a predominantly pine forested ecosystem, maintaining a variety of age and size classes and maintaining as much structural diversity as possible in managed stands will be important to achieving wildlife objectives. For example, retaining soft and hard mast producing species in harvested stands will help provide food sources, nest and den trees, and improve structural diversity. Leaving understory spruce and hemlock when it occurs will likewise increase structural diversity. Non-native scotch pine will continue to be removed from the stands where it occurs. Wildlife species potentially using this compartment include white-tailed deer, black bear, coyote, bobcat, and fisher.

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

Sections 19 & 30, T49N-R10W and sections 22-28, T49N-R11W & Luce County

An active sand/gravel pit is located less than one mile to the east, and there may be some sand potential within the compartment. There is no known metallic mineral potential in this area, and there is no potential for economical production oil and gas in the UP.

### **Vehicle Access:**

The compartment can be accessed via several County Roads (407, 410, 416, 375), North Holland Lake Road, Pratt Lake road as well as several two tracks and fire lanes.

### **Survey Needs:**

None needed at this time.

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

: Recreational opportunities include camping, ORV and snowmobile riding, hiking, hunting, fishing, dog sledding, berry picking and wildlife/nature viewing. Holland Lake Campground and Headquarter Lake Campground are located within the compartment. The Pine Ridge ORV trail traverses across the compartment as well as the Grand Marais snowmobile trail (County Road 416). Dog sledders use many of the fire lanes within the compartment area during the winter months. Headquarters Lake Equestrian Campground is also located within the compartment on the eastern side.

### **Fire Protection:**

The entire compartment falls under the Two Hearted Zone Dispatch fire response plan. Large fire potential is very good in this compartment because of the continuous Pine types and response travel times are long. Risk of State facilities in this and adjacent compartments would be high. Access for suppression activities by heavy equipment is good.

### **Additional Compartment Information:**

The following reports from the Inventory are attached:

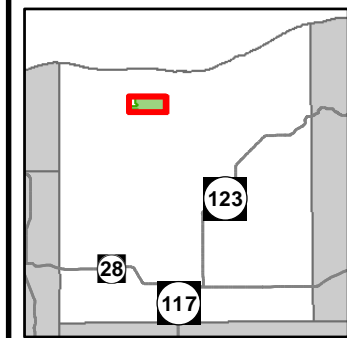
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

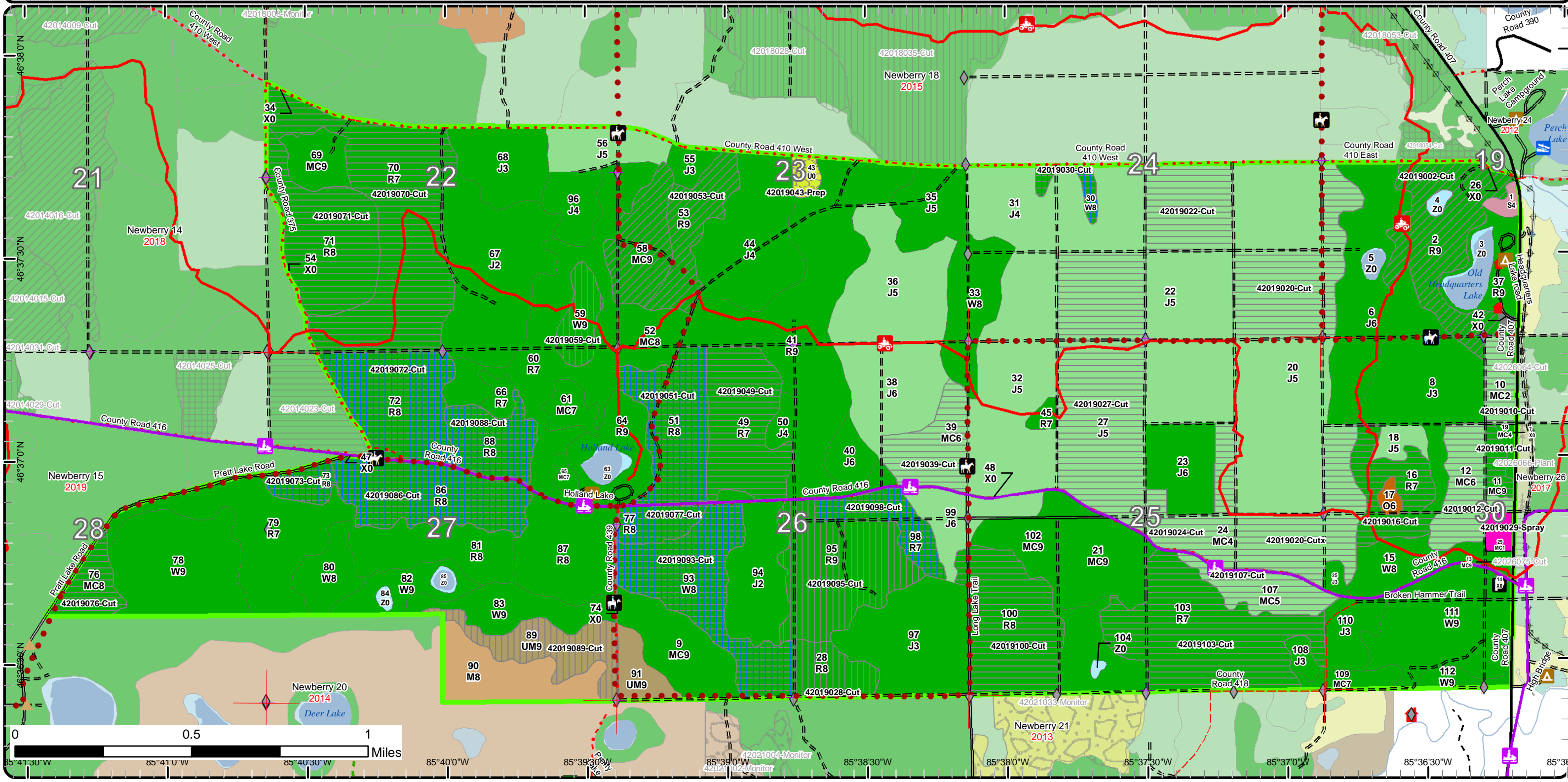
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Cover Type & Treatments Map

Compartment: 19  
 T49N, R11W, Sec. 22-28  
 T49N, R10W, Sec. 19, 30  
 County: Luce  
 Unit: Newberry  
 Mgmt Area: Deer Park  
 YOE: 2020  
 Acres: 3,484 GIS Calculated  
 Examiner: Matt Payment  
 Map Revised: 4/23/2019  
 Map Phase: Post-Review

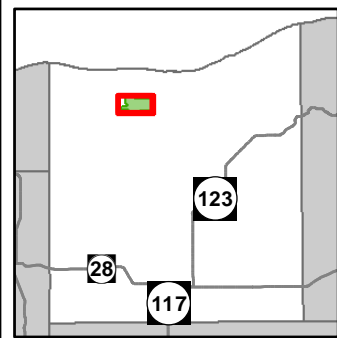


- Miris Corners
- Remonumented Section Corners
- Field Grade Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- Federal / State - Dirt / Gravel Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Horse Trails
- ORV Trails
- Snowmobile Trails
- Designated Equestrian Trails
- Designated ATV
- Designated Snowmobile Trails
- Cabin
- Berms
- Boating Access Site
- Campground
- Parking Lot
- Structures
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Powerline
- Compartment Boundary
- \*\*INCORRECT ATTRIBUTES\*\*
- Clearcut (w/Reserves)
- Seed Tree (w/Reserves)
- Thinning (Crown, Low, Systematic)
- Shelter Wood (w/Reserves)
- Site Prep
- 411 - Northern Hardwood
- 412 - Oak Types
- 421 - Planted Pines
- 422 - Natural Pines
- 430 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest
- 122 - Roads/Parking Lot
- 330 - Low Density Trees
- 500 - Water
- Lakes

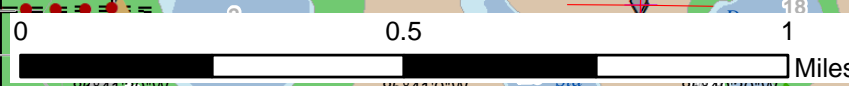
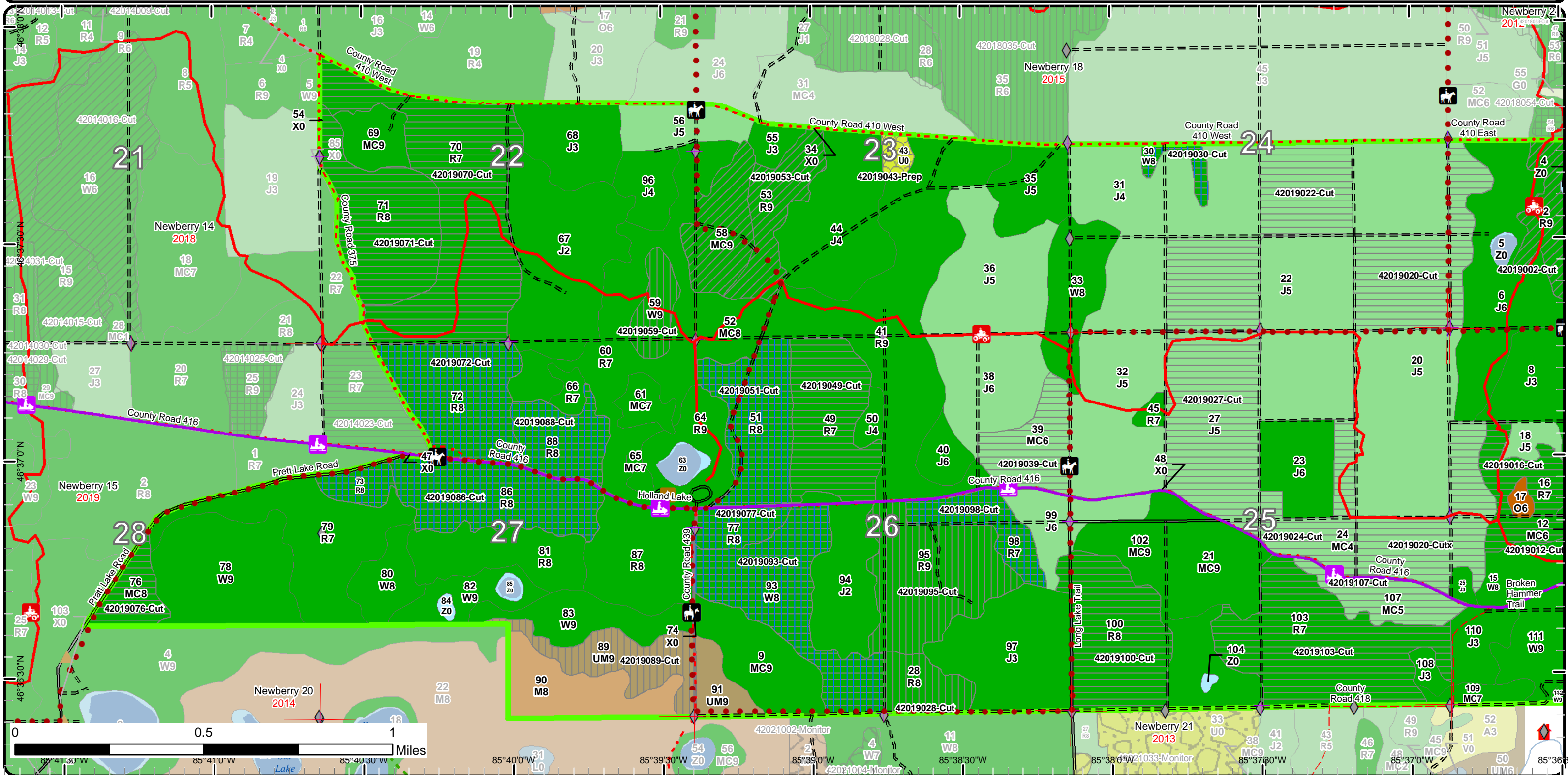


# Cover Type & Treatments Map

Compartment: 19  
 T49N, R11W, Sec. 22-28  
 T49N, R10W, Sec. 19, 30  
 County: Luce  
 Unit: Newberry  
 Mgmt Area: Deer Park  
 YOE: 2020  
 Acres: 3,484 GIS Calculated  
 Examiner: Matt Payment  
 Map Revised: 4/23/2019  
 Map Phase: Post-Review



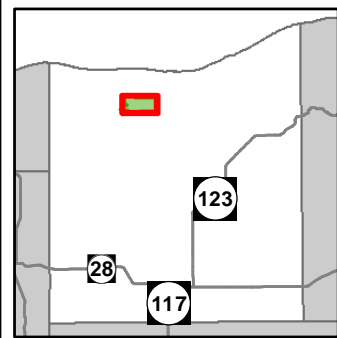
- Miris Corners
- Remonumented Section Corners
- Field Grade Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Horse Trails
- ORV Trails
- Snowmobile Trails
- Designated Hiking Trails
- Designated Equestrian Trails
- Designated ATV
- Designated Snowmobile Trails
- Cabin
- Berms
- Campground
- Structures
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Powerline
- Compartment Boundary
- Clearcut (w/Reserves)
- Seed Tree (w/Reserves)
- Thinning (Crown, Low, Systematic)
- Shelter Wood (w/Reserves)
- Site Prep
- 411 - Northern Hardwood
- 412 - Oak Types
- 421 - Planted Pines
- 422 - Natural Pines
- 430 - Upland Mixed Forest
- 122 - Roads/Parking Lot
- 330 - Low Density Trees
- 500 - Water
- Lakes



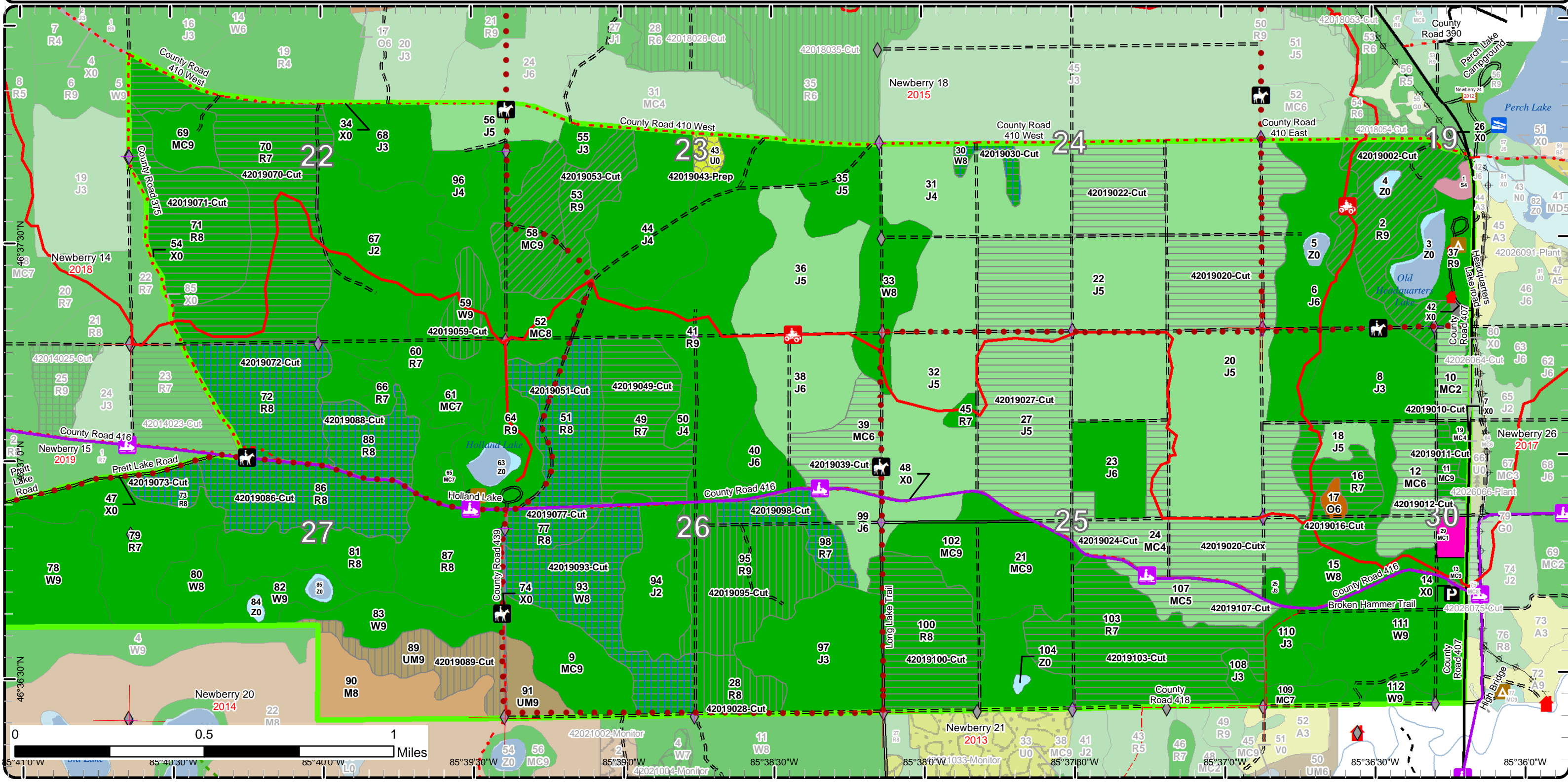
85°41'30" W 85°41'0" W 85°40'30" W 85°40'0" W 85°39'30" W 85°39'0" W 85°38'30" W 85°38'0" W 85°37'30" W 85°37'0" W

# Cover Type & Treatments Map

Compartment: 19  
 T49N, R11W, Sec. 22-28  
 T49N, R10W, Sec. 19, 30  
 County: Luce  
 Unit: Newberry  
 Mgmt Area: Deer Park  
 YOE: 2020  
 Acres: 3,484 GIS Calculated  
 Examiner: Matt Payment  
 Map Revised: 4/23/2019  
 Map Phase: Post-Review

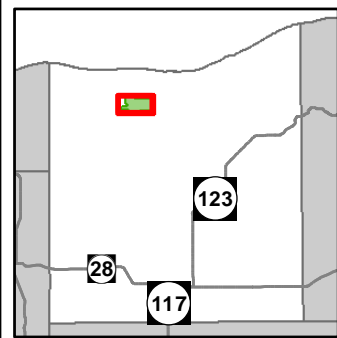


- Miris Corners
- Remonumented Section Corners
- Field Grade Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- Federal / State - Dirt / Gravel Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Horse Trails
- ORV Trails
- Snowmobile Trails
- Designated Hiking Trails
- Designated Equestrian Trails
- Designated ATV
- Cabin
- Boating Access Site
- Campground
- Parking Lot
- Structures
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Powerline
- Compartment Boundary
- \*\*INCORRECT ATTRIBUTES\*\*
- Clearcut (w/Reserves)
- Seed Tree (w/Reserves)
- Thinning (Crown, Low, Systematic)
- Shelter Wood (w/Reserves)
- Site Prep
- 411 - Northern Hardwood
- 412 - Oak Types
- 421 - Planted Pines
- 422 - Natural Pines
- 430 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest
- 122 - Roads/Parking Lot
- 330 - Low Density Trees
- 500 - Water
- Lakes

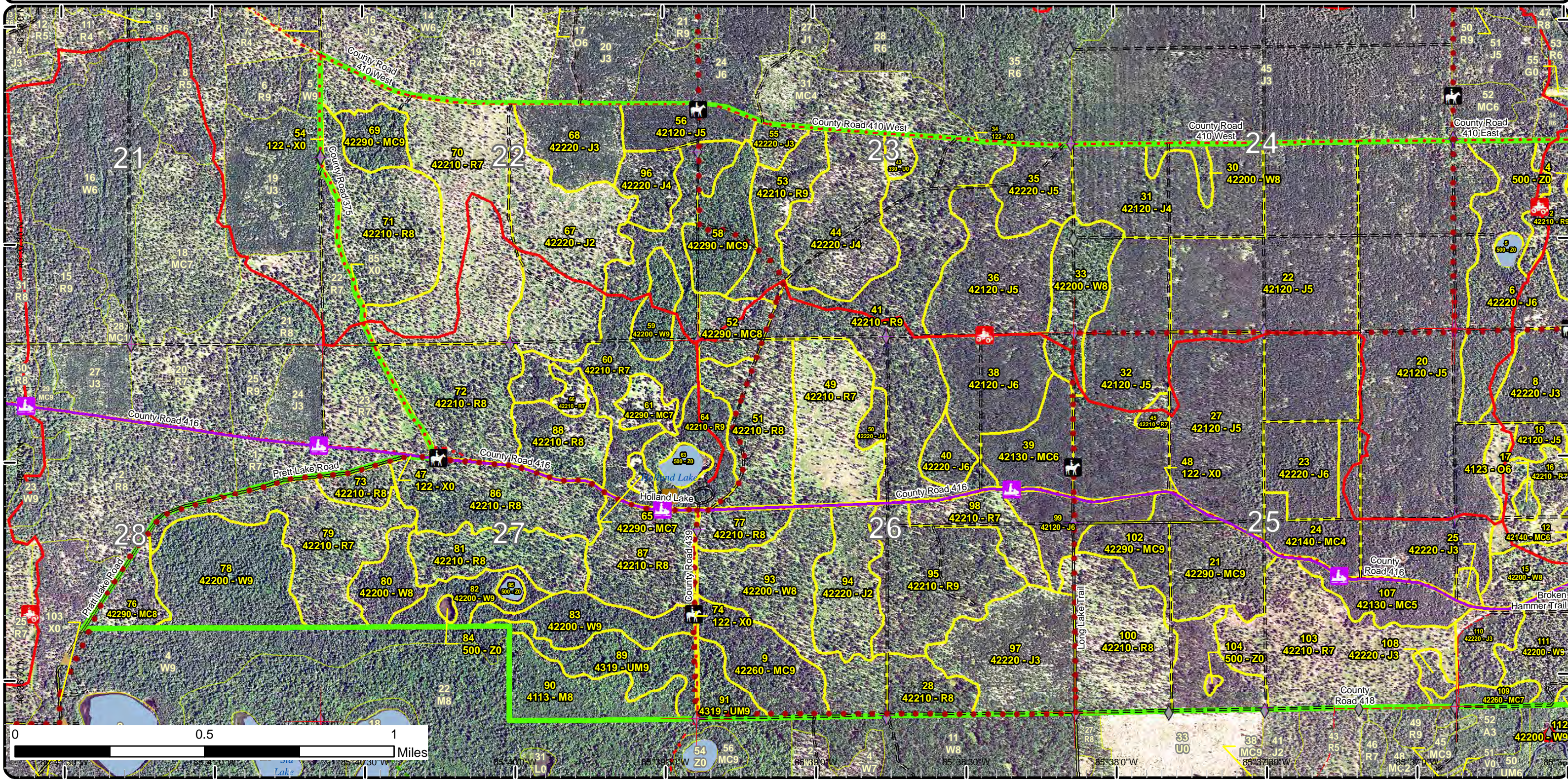


# Stand Boundary Map

Compartment: 19  
 T49N, R11W, Sec. 22-28  
 T49N, R10W, Sec. 19, 30  
 County: Luce  
 Unit: Newberry  
 Mgmt Area: Deer Park  
 YOE: 2020  
 Acres: 3,484 GIS Calculated  
 Examiner: Matt Payment  
 Map Revised: 4/23/2019  
 Map Phase: Post-Review

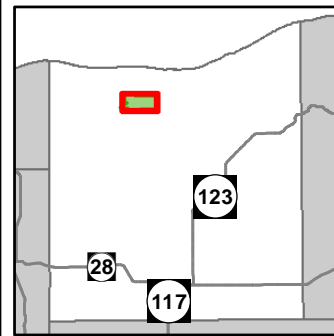


- Miris Corners
- + Remonumented Section Corners
- ◆ Field Grade Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- County - Gravel Road
- County - Dirt Road (Seasonal)
- 🐎 Horse Trails
- 🚲 ORV Trails
- 🚲 Snowmobile Trails
- Designated Hiking Trails
- Designated Equestrian Trails
- Designated ATV
- Designated Snowmobile Trails
- 🏠 Cabin
- ▲ Berms
- ▲ Campground
- 🏠 Structures
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- ⚡ Powerline
- Compartment Boundary
- Stand Boundaries
- 412 - Oak Types
- 421 - Planted Pines
- 422 - Natural Pines
- 430 - Upland Mixed Forest
- 122 - Roads/Parking Lot
- 330 - Low Density Trees
- 500 - Water
- 411 - Northern Hardwood

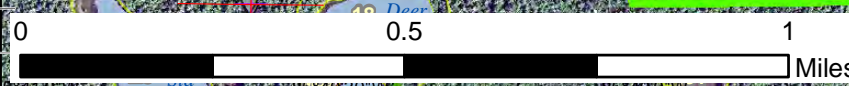
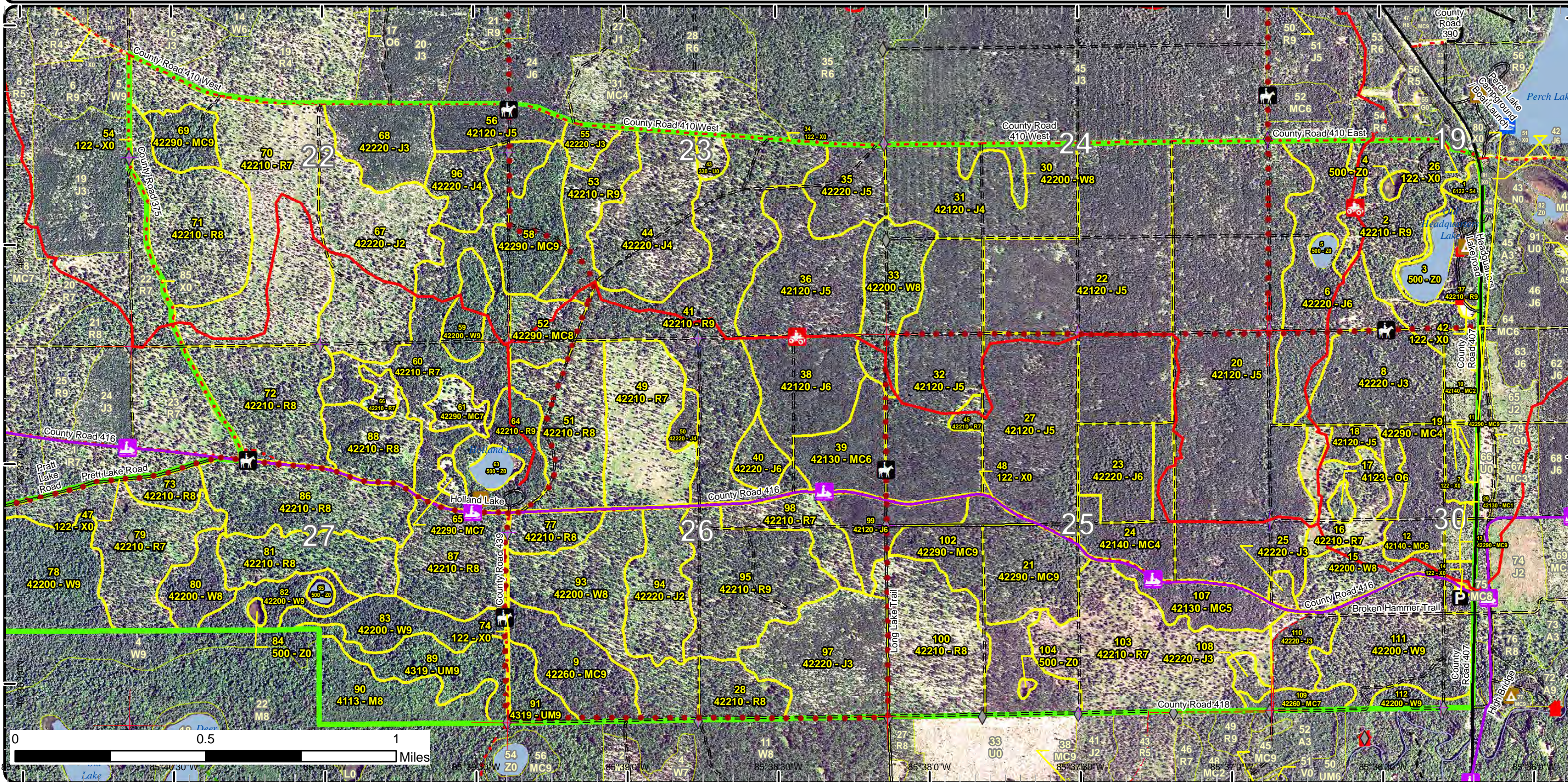


# Stand Boundary Map

Compartment: 19  
 T49N, R11W, Sec. 22-28  
 T49N, R10W, Sec. 19, 30  
 County: Luce  
 Unit: Newberry  
 Mgmt Area: Deer Park  
 YOE: 2020  
 Acres: 3,484 GIS Calculated  
 Examiner: Matt Payment  
 Map Revised: 4/23/2019  
 Map Phase: Post-Review

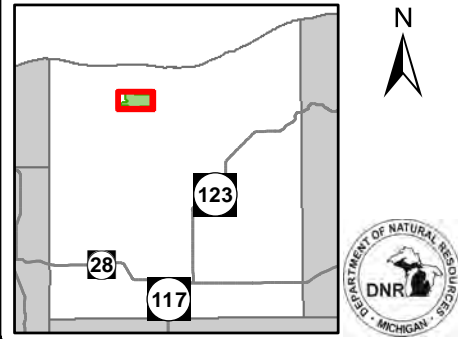


- Miris Corners
- Remonumented Section Corners
- Field Grade Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- Federal / State - Dirt / Gravel Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Horse Trails
- ORV Trails
- Snowmobile Trails
- Designated Hiking Trails
- Designated Equestrian Trails
- Designated ATV
- Cabin
- Boating Access Site
- Campground
- Parking Lot
- Structures
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Powerline
- Compartment Boundary
- Stand Boundaries
- 411 - Northern Hardwood
- 412 - Oak Types
- 421 - Planted Pines
- 422 - Natural Pines
- 430 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest
- 122 - Roads/Parking Lot
- 330 - Low Density Trees
- 500 - Water

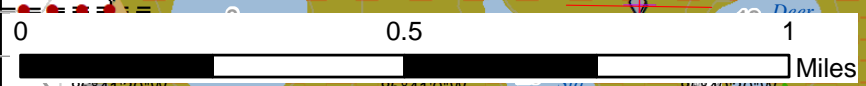
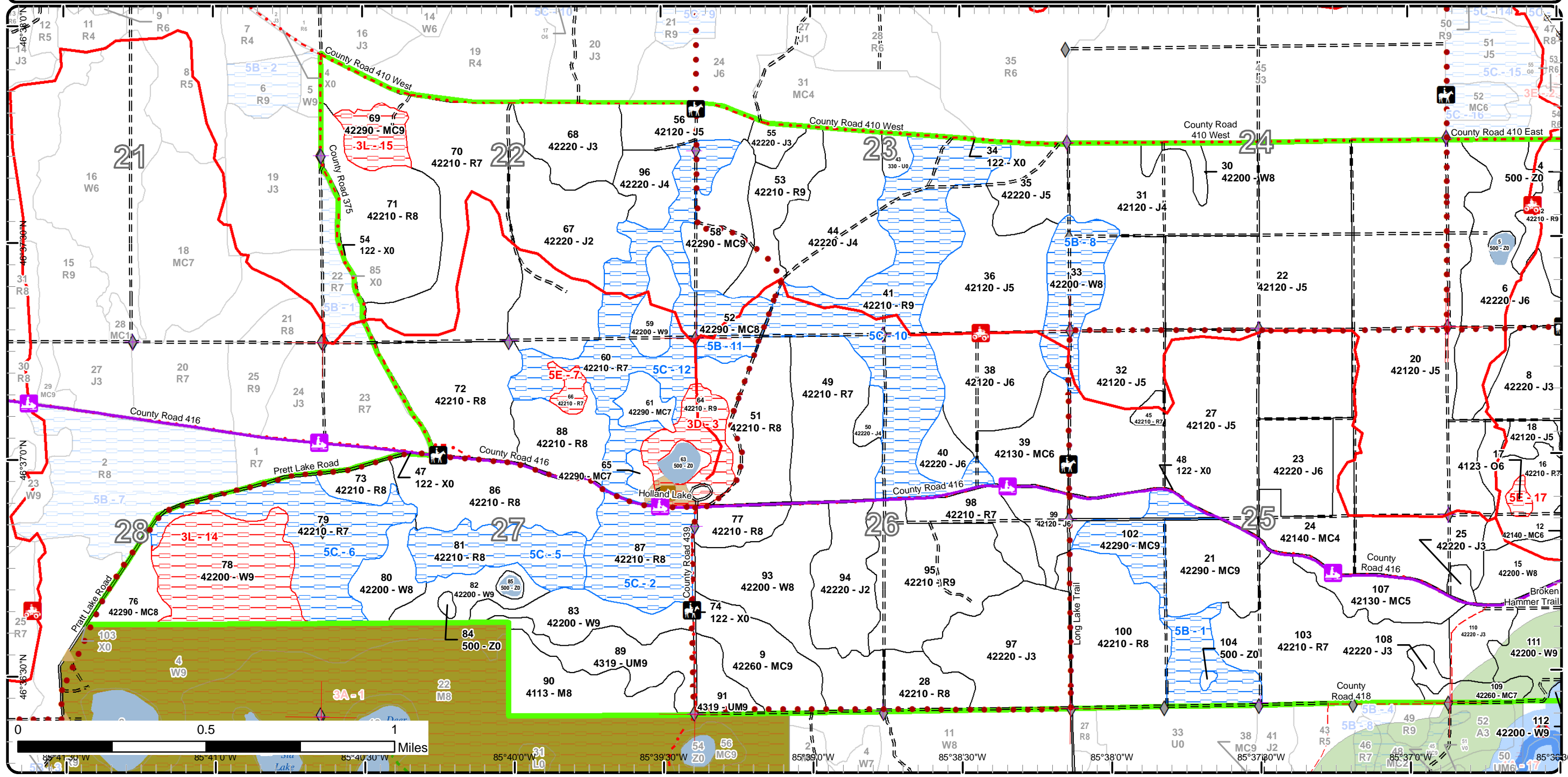


# Special Conservation Areas & Site Conditions Map

Compartment: 19  
 T49N, R11W, Sec. 22-28  
 T49N, R10W, Sec. 19, 30  
 County: Luce  
 Unit: Newberry  
 Mgmt Area: Deer Park  
 YOE: 2020  
 Acres: 3,484 GIS Calculated  
 Examiner: Matt Payment  
 Map Revised: 4/23/2019  
 Map Phase: Post-Review



- Miris Corners
- Remonumented Section Corners
- ◆ Field Grade Corners
- ▭ Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- County - Gravel Road
- County - Dirt Road (Seasonal)
- 🐎 Horse Trails
- 🛵 ORV Trails
- 🛷 Snowmobile Trails
- Designated Hiking Trails
- Designated Equestrian Trails
- Designated ATV
- Designated Snowmobile Trails
- 🏠 Cabin
- 🏕️ Berms
- 🏕️ Campground
- 🏠 Structures
- 🌊 Lake/Pond
- 🌊 Perennial River
- 🌊 Lakes and Rivers All
- ⚡ Powerline
- 🟩 Compartment Boundary
- 🟦 Available w/ Constraints
- 🔴 Unavailable
- 5B: Maintain for regeneration purposes
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 3D: Recreational / Scenic values
- 3L: Other wildlife concerns
- 5E: Long-Term Retention
- ▭ Stand Boundaries
- 🟦 Natural Rivers Vegetative Buffer
- 🟦 Natural Rivers Zoning District
- 🟤 Forest Habitat Core Interior
- 🟦 Cold Water Streams
- 🟦 Cold Water Lakes
- 🟩 Verified Type 2 Old Growth
- 🟤 State Forest Campground
- 🟩 Recreational/Scenic Value Area

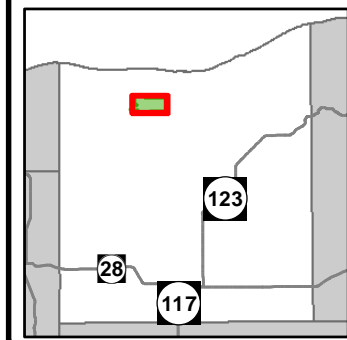


85°41'30"W 85°41'00"W 85°40'30"W 85°40'00"W 85°39'30"W 85°39'00"W 85°38'30"W 85°38'00"W 85°37'30"W 85°37'00"W 85°36'30"W

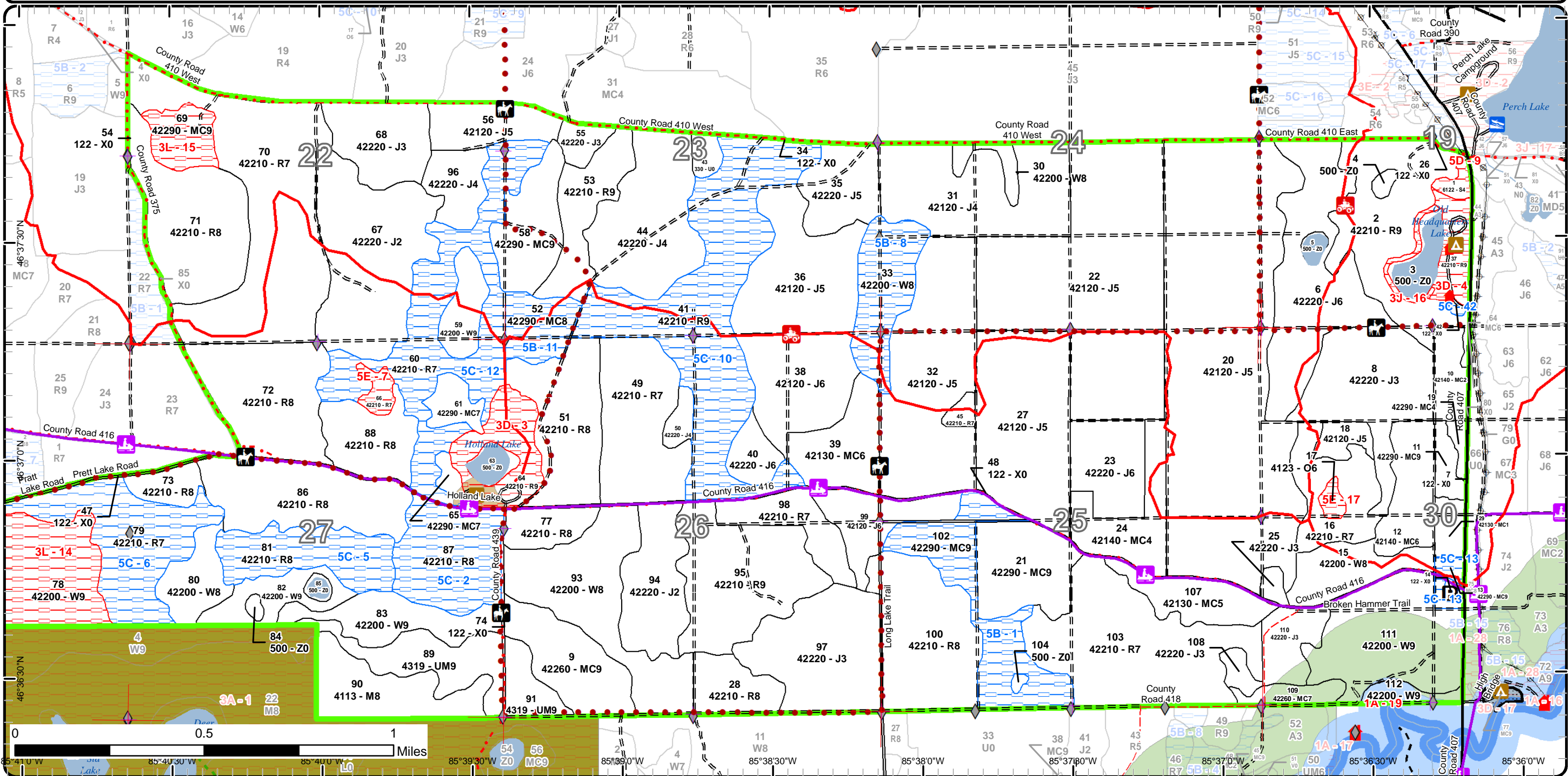


# Special Conservation Areas & Site Conditions Map

Compartment: 19  
 T49N, R11W, Sec. 22-28  
 T49N, R10W, Sec. 19, 30  
 County: Luce  
 Unit: Newberry  
 Mgmt Area: Deer Park  
 YOE: 2020  
 Acres: 3,484 GIS Calculated  
 Examiner: Matt Payment  
 Map Revised: 4/23/2019  
 Map Phase: Post-Review



- Miris Corners
  - + Remonumented Section Corners
  - Field Grade Corners
  - Counties
  - DNR - Secondary Forest Road
  - DNR - Forest Access Route
  - Federal / State / County - Paved Road
  - Federal / State - Dirt / Gravel Road
  - County - Gravel Road
  - County - Dirt Road (Seasonal)
  - Private - Dirt / Gravel Road
  - Horse Trails
  - ORV Trails
  - Snowmobile Trails
  - Designated Hiking Trails
  - Designated Equestrian Trails
  - Designated ATV
  - Designated Snowmobile Trails
  - ▲ Cabin
  - ▲ Boating Access Site
  - Campground
  - Parking Lot
  - Structures
  - Lake/Pond
  - Perennial River
  - Lakes and Rivers All
  - Powerline
  - Compartment Boundary
  - Available w/ Constraints
  - Unavailable
  - SCA
  - Natural Rivers Vegetative Buffer
  - Natural Rivers Zoning District
  - Forest Habitat Core Interior
  - Cold Water Streams
  - Cold Water Lakes
  - Verified Type 2 Old Growth
  - State Forest Campground
  - Recreational/Scenic Value Area
- 5B: Maintain for regeneration purposes  
 5C: Delay treatment for age/size class diversity or exceptional site quality  
 1A: Federal/State/Local Law  
 3D: Recreational / Scenic values  
 3J: Water quality / BMPs (stream, river, or lake)  
 3L: Other wildlife concerns  
 5D: Unproductive Forest Land  
 5E: Long-Term Retention  
 Stand Boundaries



Report 1 – Total Acres by Cover Type and Age Class



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Jack Pine	0	0	118	185	109	822	87	0	0	0	0	0	0	0	0	0	0	0	1320
Low-Density Trees	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4
Natural Mixed Pines	0	0	0	0	0	3	0	0	4	138	43	64	0	0	0	0	0	0	251
Northern Hardwood	0	0	0	0	0	0	0	0	37	0	0	0	0	0	0	0	0	0	37
Oak	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
Planted Mixed Pines	0	0	19	0	0	113	0	0	0	0	0	0	0	0	0	0	0	0	132
Red Pine	0	0	0	0	0	0	0	0	261	181	628	198	0	0	0	0	0	0	1267
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46	46
Urban	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
Water	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
White Pine	0	0	0	0	0	0	0	0	25	20	0	148	42	0	0	0	0	120	355
<b>Total</b>	<b>66</b>	<b>0</b>	<b>137</b>	<b>185</b>	<b>109</b>	<b>938</b>	<b>87</b>	<b>0</b>	<b>331</b>	<b>339</b>	<b>674</b>	<b>410</b>	<b>42</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>166</b>	<b>3480</b>



## Report 2 – Treatment Summary

Newberry Mgt. Unit

Year of Entry: 2020

Acres of Harvest

Compartment 19

Total Compartment Acres: 3,483

Commercial Harvest - 1416  
 Harvests with Site Condition - 0  
 Next Step Harvest - 5  
 Habitat Cut - 6

### Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Jack Pine	269	0	0	0	0	0	0	0	0	269
Natural Mixed Pines	25	0	0	0	0	32	0	0	0	57
Planted Mixed Pines	127	0	0	0	0	0	0	0	0	127
Red Pine	422	0	0	239	87	94	0	0	0	842
Upland Mixed Forest	0	0	0	0	32	0	0	0	0	32
White Pine	0	0	0	74	16	0	0	0	0	89
<b>Total</b>	<b>843</b>	<b>0</b>	<b>0</b>	<b>313</b>	<b>134</b>	<b>127</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1416</b>

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	1416	5	0	0	6	0	0	0	0	1427
Next Step	6	1100	870	0	167	662	1112	0	0	3916
<b>Total</b>	<b>1421</b>	<b>1105</b>	<b>870</b>	<b>0</b>	<b>167</b>	<b>667</b>	<b>1112</b>	<b>0</b>	<b>0</b>	<b>5343</b>



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
2	42019002-Cut	63.4	42210 - Natural Red Pine	Sawtimber Well	101	111- 140	Harvest	Crown Thinning	42210 - Natural Red Pine	Two-Aged	Draft Field Boundary

**Habitat Cut: No****Site Condition:**

Prescription Thin red and white pine in the stand 80-100 BA.

Specs: Remove and jack pine and aspen that is left in the stand. There will be areas of lower BA within the stand.

Normal ATV trail protections.

Next Step

Treatments:

Acceptable red pine.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

10	42019010-Cut	13.2	42140 - Planted Mixed Pine	Sapling Medium	10	Immatu re	Harvest	Clearcut	4212 - Planted Jack Pine	Even-Aged	Draft Field Boundary
----	--------------	------	-------------------------------	-------------------	----	--------------	---------	----------	-----------------------------	-----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Clearcut stand of all merchantable timber. Burn or site prep spray then burn to remove slash and then trench and plant.

Specs: Leave oak in the red line if present.

Next Step Burn, Slash; Pesticide, (Inactive)Skidder/Mechanical; SitePrep, Trenching; Planting, Initial Plant

Treatments:

Acceptable jack pine

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

11	42019011-Cut	7.6	42290 - Natural Mixed Pine	Sawtimber Well	102	81-110	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
----	--------------	-----	-------------------------------	-------------------	-----	--------	---------	----------	----------------------------	-----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription clearcut stand to remove scotch pine. Site prep spray stand, trench and plant back to Red pine. No retention in order to facilitate cultivation operations, and small acreage.

Leave oak in the red line if present.

Next Step Pesticide, (Inactive)Aerial; SitePrep, Trenching; Planting, Initial Plant

Treatments:

Acceptable red pine

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

12	42019012-Cut	29.5	42140 - Planted Mixed Pine	Poletimber Well	43	81-110	Harvest	Clearcut	4212 - Planted Jack Pine	Even-Aged	Draft Field Boundary
----	--------------	------	-------------------------------	--------------------	----	--------	---------	----------	-----------------------------	-----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Clearcut stand, site prep spray, trench and plant back to jack pine. No retention in order to facilitate cultivation operations.

Specs: Leave oak in the red line if present.

Next Step Pesticide, (Inactive)Aerial; SitePrep, Trenching; Planting, Initial Plant

Treatments:

Acceptable jack pine

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
16	42019016-Cut	31.5	42210 - Natural Red Pine	Sawtimber Poor	73	1-50	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary

**Habitat Cut: No****Site Condition:**

Prescription Clearcut with retention. Retention in the form of 2-3 pockets being 3-5% of total acreage.

Specs:

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

Treatments:

Acceptable jack pine

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

20	42019020-Cut	60.0	42120 - Planted Jack Pine	Poletimber Medium	47	81-110	Harvest	Clearcut with Retention	4212 - Planted Jack Pine	Even-Aged	Draft Field Boundary
----	--------------	------	------------------------------	----------------------	----	--------	---------	----------------------------	-----------------------------	-----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Clearcur stand. This was part of a larger age class of JP in the surrounding stands. This cut is to facilitate age class diversity in the

Specs: compartment of jack pine. Retention in form of pockets (2-3) being 3-5%. Leave all oak if present.

See HAL comments.

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

Treatments:

Acceptable jack pine

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

20	42019020- Cutx	52.1	42120 - Planted Jack Pine	Poletimber Medium	47	81-110	Harvest	Clearcut with Retention	4212 - Planted Jack Pine	Even-Aged	Draft Field Boundary
----	-------------------	------	------------------------------	----------------------	----	--------	---------	----------------------------	-----------------------------	-----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Clearcur stand. This was part of a larger age class of JP in the surrounding stands. This cut is to facilitate age class diversity in the

Specs: compartment of jack pine. Retention in form of pockets 3-5%.

Leave all oak if present.

Next Step SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Burn, Slash

Treatments:

Acceptable jack pine

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

22	42019022-Cut	78.8	42120 - Planted Jack Pine	Poletimber Medium	49	51-80	Harvest	Clearcut with Retention	4212 - Planted Jack Pine	Even-Aged	Draft Field Boundary
----	--------------	------	------------------------------	----------------------	----	-------	---------	----------------------------	-----------------------------	-----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Clearcur stand. This was part of a larger age class of JP in the surrounding stands. This cut is to facilitate age class diversity in the

Specs: compartment of jack pine. Retention in form of pockets 3-5%. Burn stand, trench and plant back to Jack Pine..

Leave all oak if present.

Next Step Burn, Slash; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr)

Treatments:

Acceptable jack pine

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
24	42019024-Cut	30.3	42140 - Planted Mixed Pine	Poletimber Poor	42	51-80	Harvest	Clearcut	4212 - Planted Jack Pine	Even-Aged	Draft Field Boundary

**Habitat Cut: No****Site Condition:**

Prescription Clearcut stand. No retention because stand is to be sprayed in order to effectively remove scotch pine from the site. Treatment areas may vary  
Specs: due to the difficulty of separating where the plantations mixed together.

Leave oak in the red line if present.

Normal ATV trail protections.

Next Step Pesticide, Aerial - Site Prep; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr)  
Treatments:

Acceptable jack pine  
Regen:

Other  
Comment:

Proposed Start Date: 10/1 /2019

27	42019027-Cut	77.9	42120 - Planted Jack Pine	Poletimber Medium	47	81-110	Harvest	Clearcut with Retention	4212 - Planted Jack Pine	Even-Aged	Draft Field Boundary
----	--------------	------	------------------------------	----------------------	----	--------	---------	----------------------------	-----------------------------	-----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Clearcur stand. This was part of a larger age class of JP in the surrounding stands. This cut is to facilitate age class diversity in the  
Specs: compartment of jack pine. Retention in form of 2-3 pockets being 3-5% of total acreage.

Normal ATV trail protections

Next Step SitePrep, Trenching; Planting, Initial Plant; Pesticide, (Inactive)Aerial  
Treatments:

Acceptable jack pine  
Regen:

Other  
Comment:

Proposed Start Date: 10/1 /2019

28	42019028-Cut	20.0	42210 - Natural Red Pine	Sawtimber Medium	99	51-80	Harvest	Shelterwood with Retention	42290 - Natural Mixed Pine	Two-Aged	Draft Field Boundary
----	--------------	------	-----------------------------	---------------------	----	-------	---------	-------------------------------	-------------------------------	----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Shelterwood stand 30-50BA to promote and release regeneration  
Specs: Cut any aspen and leave all oak and birch.

Next Step Monitoring, Natural Regen (Intermediate)  
Treatments:

Acceptable mixed pine  
Regen:

Other  
Comment:

Proposed Start Date: 10/1 /2019

29	42019029- Spray	5.5	42130 - Planted Scotch Pine	Sapling Poor	12	1-50	Pesticide	ERROR	4212 - Planted Jack Pine	Even-Aged	Draft Field Boundary
----	--------------------	-----	--------------------------------	-----------------	----	------	-----------	-------	-----------------------------	-----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription site prep spray stand to kill scotch pine, or burn stand and then spray. Trench and plant to jack pine.

Specs: Leave oak in the red line if present.

Next Step SitePrep, Trenching; SitePrep, Roller Chopping; Burn, Slash; Pesticide, (Inactive)Skidder/Mechanical; Harvest, Clearcut; SitePrep,  
Treatments: Trenching; Planting, Initial Plant; Planting, Initial Plant; Planting, Initial Plant; Planting, Initial PI

Acceptable jack pine  
Regen:

Other  
Comment:

Proposed Start Date: 10/1 /2019



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
30	42019030-Cut	6.9	42200 - Natural White Pine	Sawtimber Medium	113	51-80	Harvest	Seed Tree with Retention	42290 - Natural Mixed Pine	Uneven- Aged	Draft Field Boundary

**Habitat Cut: No****Site Condition:**

Prescription Seed tree stand to release regen. Leave no more than 10-20BA. Scarify stand if necessary after harvest. Remove all Jack Pine. Stand size after prep work may change.

Mark leave trees in / and around sub merchantable spruce pockets. Leave all oak.

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

Treatments:

Acceptable Mixed conifers

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

39	42019039-Cut	29.9	42130 - Planted Scotch Pine	Poetimber Well	42	81-110	Harvest	Clearcut	4212 - Planted Jack Pine	Even-Aged	Draft Field Boundary
----	--------------	------	--------------------------------	-------------------	----	--------	---------	----------	-----------------------------	-----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Clearcut all species in order to effectively remove scotch pine from the stand. Site prep spray, trench, plant to jack pine, release spray.

Specs:

Next Step Pesticide, (Inactive)Aerial; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr);

Treatments: Pesticide, (Inactive)Aerial

Acceptable jack pine

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

43	42019043- Prep	5.1	330 - Low-Density Trees	Nonstocked	0	Unspec ified	SitePrep	Trenching	4212 - Planted Jack Pine	Even-Aged	Draft Field Boundary
----	-------------------	-----	----------------------------	------------	---	-----------------	----------	-----------	-----------------------------	-----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription planted jack pine.

Specs:

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

Treatments:

Acceptable jack pine

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2018

49	42019049-Cut	54.6	42210 - Natural Red Pine	Sawtimber Poor	88	1-50	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
----	--------------	------	-----------------------------	-------------------	----	------	---------	----------------------------	----------------------------	-----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Clearcut stand of remaining overstory. Trench and plant to red pine. Site prep spray may be needed in order to effectively have free to grow red pine. Leave retention pocket on the south end of the stand along CR 416.

Leave pockets if possible around oak and areas with diversity.

Next Step SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Pesticide, (Inactive)Aerial

Treatments:

Acceptable red pine

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
51	42019051-Cut	49.3	42210 - Natural Red Pine	Sawtimber Medium	99	51-80	Harvest	Seed Tree with Retention	4222 - Natural Jack Pine	Even-Aged	Draft Field Boundary

**Habitat Cut: No****Site Condition:**

Prescription Seed tree stand leaving no more than 10BA of RP/WP overstory to promote pine regeneration. Remove all other overstory species present.

Specs: Leave all oak.

Next Step SitePrep, Scarification; Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable jack and red pine

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

53	42019053-Cut	30.9	42210 - Natural Red Pine	Sawtimber Well	97	81-110	Harvest	Crown Thinning	42210 - Natural Red Pine	Even-Aged	Draft Field Boundary
----	--------------	------	-----------------------------	-------------------	----	--------	---------	----------------	-----------------------------	-----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Thin stand 70-90 BA targeting red and white pine. Leave any oak and paper birch if present in stand.

Specs:

Next Step

Treatments:

Acceptable red pine

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

58	42019058-Cut	32.2	42290 - Natural Mixed Pine	Sawtimber Well	102	81-110	Harvest	Crown Thinning	42290 - Natural Mixed Pine	Two-Aged	Draft Field Boundary
----	--------------	------	-------------------------------	-------------------	-----	--------	---------	----------------	-------------------------------	----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Thin stand 70-90 BA targeting red and white pine. Leave all oak and paper birch. Remove all Jack Pine.

Specs:

Next Step

Treatments:

Acceptable mixed pine species

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

59	42019059-Cut	15.6	42200 - Natural White Pine	Sawtimber Well	103	81-110	Harvest	Shelterwood with Retention	42290 - Natural Mixed Pine	Two-Aged	Draft Field Boundary
----	--------------	------	-------------------------------	-------------------	-----	--------	---------	-------------------------------	-------------------------------	----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Shelterwood stand 30-50BA to promote regeneration. Remove all jack pine, aspen, and red maple in the stand.

Specs: Leave any oak.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable pine species

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019





S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
70	42019070-Cut	117.6	42210 - Natural Red Pine	Sawtimber Poor	78	1-50	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary

**Habitat Cut: No****Site Condition:**

Prescription Clearcut stand leave patch retention 3-5% in order to facilitate planting and trenching operations.

Specs:

Next Step SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Pesticide, (Inactive)Aerial  
Treatments:

Acceptable red pine.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

71	42019071-Cut	61.2	42210 - Natural Red Pine	Sawtimber Medium	99	51-80	Harvest	Clearcut with Retention	4212 - Planted Jack Pine	Even-Aged	Draft Field Boundary
----	--------------	------	-----------------------------	---------------------	----	-------	---------	----------------------------	-----------------------------	-----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Clear cut stand by removing all species but designate retention pockets along road SW corner of the stand. 3-5% retention to be left.

Specs:

Pockets of retention n the form of fire skips.

Next Step SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Pesticide, (Inactive)Aerial  
Treatments:

Acceptable jack pine with component of red pine.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

72	42019072-Cut	56.8	42210 - Natural Red Pine	Sawtimber Medium	99	51-80	Harvest	Seed Tree with Retention	4222 - Natural Jack Pine	Two-Aged	Draft Field Boundary
----	--------------	------	-----------------------------	---------------------	----	-------	---------	-----------------------------	-----------------------------	----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Seed tree stand removing overstory trees leave no more than 10-20 BA. Take care to not damage residual regeneration coming in.

Specs:

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable jack pine

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

73	42019073-Cut	10.6	42210 - Natural Red Pine	Sawtimber Medium	97	1-50	Harvest	Seed Tree with Retention	4222 - Natural Jack Pine	Even-Aged	Draft Field Boundary
----	--------------	------	-----------------------------	---------------------	----	------	---------	-----------------------------	-----------------------------	-----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Seed tree stand to release the regen underneath. no more than 20BA should be left.

Specs:

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

Treatments:

Acceptable Jack pine with mixed red and white pine.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
76	42019076-Cut	17.4	42290 - Natural Mixed Pine	Sawtimber Medium	98	51-80	Harvest	Clearcut	4212 - Planted Jack Pine	Even-Aged	Draft Field Boundary

**Habitat Cut: No****Site Condition:**

Prescription Clearcut stand removing all species. Burn, trench and plant back to Jack Pine. No retention in order to facilitate cultivation operations.

Specs: Diversity in the red line.

Next Step SitePrep, Trenching; Planting, Initial Plant; Burn, Slash

Treatments:

Acceptable Jack pine

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

77	42019077-Cut	14.5	42210 - Natural Red Pine	Sawtimber Medium	99	1-50	Harvest	Seed Tree with Retention	4222 - Natural Jack Pine	Even-Aged	Draft Field Boundary
----	--------------	------	-----------------------------	---------------------	----	------	---------	-----------------------------	-----------------------------	-----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Seed tree 10-20 BA to release Jack Pine regeneration from underneath overstory.

Specs:

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Jack Pine with red pine.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

86	42019086-Cut	56.4	42210 - Natural Red Pine	Sawtimber Medium	99	51-80	Harvest	Seed Tree with Retention	429 - Mixed Upland Conifers	Two-Aged	Draft Field Boundary
----	--------------	------	-----------------------------	---------------------	----	-------	---------	-----------------------------	--------------------------------	----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Seed tree stand leaving 10-20 BA no more, this is to promote regen of mixed species in the stand.

Specs:

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

Treatments:

Acceptable Mixed conifers.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

88	42019088-Cut	28.3	42210 - Natural Red Pine	Sawtimber Medium	99	1-50	Harvest	Seed Tree with Retention	42120 - Planted Jack Pine	Even-Aged	Draft Field Boundary
----	--------------	------	-----------------------------	---------------------	----	------	---------	-----------------------------	------------------------------	-----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Seed tree stand leaving no more than 10-20 BA to facilitate regeneration of Jack and Red pine.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory); SitePrep, Scarification

Treatments:

Acceptable Jack pine with component of red pine.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
89	42019089-Cut	31.9	4319 - Mixed Upland Forest	Sawtimber Well	102	81-110	Harvest	Shelterwood with Retention	4319 - Mixed Upland Forest	Uneven- Aged	Draft Field Boundary

**Habitat Cut: No****Site Condition:**

Prescription Shelterwood stand 30-50BA. Leave any hemlock if present. Some areas may have lower BA from top die back in the stand, these areas will serve as canopy gaps and help promote regeneration.  
Specs: Leave oak.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable mixed upland conifers and mixed deciduous species.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

93	42019093-Cut	66.8	42200 - Natural White Pine	Sawtimber Medium	108	51-80	Harvest	Seed Tree with Retention	42290 - Natural Mixed Pine	Two-Aged	Draft Field Boundary
----	--------------	------	-------------------------------	---------------------	-----	-------	---------	-----------------------------	-------------------------------	----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Seed tree stand leaving 10-20BA, no more. This is in order to effectively scarify the stand to promote regeneration.

Specs:

Next Step SitePrep, Scarification

Treatments:

Acceptable mixed pine

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

95	42019095-Cut	66.9	42210 - Natural Red Pine	Sawtimber Well	100	81-110	Harvest	Shelterwood with Retention	42210 - Natural Red Pine	Two-Aged	Draft Field Boundary
----	--------------	------	-----------------------------	-------------------	-----	--------	---------	-------------------------------	-----------------------------	----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Shelterwood stand 30-50 BA to promote red pine regeneration.

Specs:

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable red pine

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

98	42019098-Cut	22.9	42210 - Natural Red Pine	Sawtimber Poor	99	51-80	Harvest	Seed Tree with Retention	42210 - Natural Red Pine	Two-Aged	Draft Field Boundary
----	--------------	------	-----------------------------	-------------------	----	-------	---------	-----------------------------	-----------------------------	----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Seed tree stand 10-20BA, then scarify it to promote red pine regeneration.

Specs:

Next Step SitePrep, Scarification; Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable red pine

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
100	42019100-Cut	63.2	42210 - Natural Red Pine	Sawtimber Medium	91	1-50	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary

**Habitat Cut: No****Site Condition:**

Prescription Clearcut stand of all species present. Retention pockets only 3-5%. This is in order to facilitate cultivation operations.

Specs:

Leave mixed species in retention pockets.

Next Step SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Pesticide, (Inactive)Aerial

Treatments:

Acceptable red pine

Regen:OtherComment:

Proposed Start Date: 10/1 /2019

103	42019103-Cut	94.1	42210 - Natural Red Pine	Sawtimber Poor	78	1-50	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
-----	--------------	------	-----------------------------	-------------------	----	------	---------	----------------------------	----------------------------	-----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Clearcut stand to effectively trench and plant jack pine back. If retention is left it will be in pockets 3-5%. This is in order to facilitate cultivation

Specs: operations. Try to retain pockets where the large oak are present. Leave mixed species in retention pockets.

Leave oak.

Next Step SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Pesticide, (Inactive)Aerial

Treatments:

Acceptable red pine

Regen:OtherComment:

Proposed Start Date: 10/1 /2019

107	42019107-Cut	23.6	42130 - Planted Scotch Pine	Poletimber Medium	42	111- 140	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
-----	--------------	------	--------------------------------	----------------------	----	-------------	---------	----------	----------------------------	-----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Clearcut no retention. Site prep spray, trench, plant, release spray. This is to effectively remove scotch pine and promote native tree species.

Specs:

See HAL comments.

Next Step Pesticide, (Inactive)Aerial; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Pesticide, (Inactive)Aerial

Treatments:

Acceptable red pine

Regen:OtherComment:

Proposed Start Date: 10/1 /2019

**Total Treatment  
Acreage Proposed: 1426.5**

## Report 4 – Site Conditions

Newberry Mgt. Unit  
Matt Payment : Examiner

Compartment: 19  
Year of Entry: 2020

### Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions											
		With Condition	Not Available		5B	5C	1A	3A	3D	3J	3L	5D	5E			
1320	1320	0	0	Jack Pine	0	0										
5	5	0	0	Low-Density Trees		0										
4	0	0	4	Lowland Spruce/Fir					0				4			
253	159	77	17	Natural Mixed Pines	72	5		0				17				
37	37	0	0	Northern Hardwood				0								
3	0	0	3	Oak												3
132	132	0	0	Planted Mixed Pines		0										
1268	848	368	52	Red Pine	0	368			43	3	0	0	0	6		
46	46	0	0	Upland Mixed Forest												
33	31	1	0	Urban	0	1			0				0			
28	28	0	0	Water	0				0	0						
354	254	35	66	White Pine	35	0	0					65				
3,483	2,860	482	141	Total Forested Acres	107	375	0	0	43	3	82	4	9			
	82%	14%	4%	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.*

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Available	<b>5B: Maintain for regeneration purposes</b>	52	5C: Delay treatment for age/size class diversity or exceptional site quality	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
2	Available	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	47	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

## Report 4 – Site Conditions

Newberry Mgt. Unit  
 Matt Payment : Examiner

Compartment: 19  
 Year of Entry: 2020

3	<b>Unavailable</b>	<b>3D: Recreational / Scenic values</b>	29	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
4	<b>Unavailable</b>	<b>3D: Recreational / Scenic values</b>	15	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Headquarters Lake Campground							
5	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	38	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
6	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	64	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
7	<b>Unavailable</b>	<b>5E: Long-Term Retention</b>	6	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Small stand, old stumps and frost pocket. Limby bushy pines. Hold for long term retention.							
8	<b>Available</b>	<b>5B: Maintain for regeneration purposes</b>	35	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Regeneration coming in nicely hold 10-20 years then remove the overstory.							

## Report 4 – Site Conditions

Newberry Mgt. Unit  
 Matt Payment : Examiner

Compartment: 19  
 Year of Entry: 2020

9	Unavailable	5D: Unproductive Forest Land	4	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
10	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	129	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
11	Available	5B: Maintain for regeneration purposes	19	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> stand regenerating nicely hold for 10 years.							
12	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	90	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
13	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

## Report 4 – Site Conditions

Newberry Mgt. Unit  
Matt Payment : Examiner

Compartment: 19  
Year of Entry: 2020

14	<b>Unavailable</b>	<b>3L: Other wildlife concerns</b>	65	5C: Delay treatment for age/size class diversity or exceptional site quality	Unspecified	Unspecified	Unspecified
<b>Comments:</b> wildlife purposes. WLD asked to have treatment delayed for 10 years.							
15	<b>Unavailable</b>	<b>3L: Other wildlife concerns</b>	17	5C: Delay treatment for age/size class diversity or exceptional site quality	Unspecified	Unspecified	Unspecified
<b>Comments:</b> wildlife purposes. WLD asked to have treatment delayed for 10 years.							
16	<b>Unavailable</b>	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	3	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Headquarters Lake Campground							
17	<b>Unavailable</b>	<b>5E: Long-Term Retention</b>	3	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
19	<b>Unavailable</b>	<b>1A: Federal/State/Local Law</b>	0	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Two Hearted Natural River Plan 100' Buffer							
42	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							



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
<b>Comments</b>				



## 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.

ERA = Ecological Reference Area  
 HCVA = High Conservation Value Area  
 SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Type 1 and Type 2 Old Growth	Old-Growth forest (also termed primary forest, ancient forest, virgin forest, or primeval forest) is an area of forest that has few or no signs of human disturbance and that exhibits unique ecological features related to age, composition and associated structure. Old growth forests are of natural origin. They may be dominated by late successional forest species (i.e. sugar maple and American beech), or may be a very old example of a stand dominated by long-lived early- or mid-seral species (i.e. oak, or red pine).
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6122 - Black Spruce	Poletimber Poor	3.7	78	1-50	Some live spruce, tamarack, white pine and paper birch, most sapling sized. Stand is seasonally wet. Trees are suppressed.
2	42210 - Natural Red Pine	Sawtimber Well	63.4	101	111-140	Stand has variability. Most of timber lies to the south and west sides of Old Headquarters Lake. Campground is across the lake to the east. Headquarters Lake Pine, sale #42-034-00-1 cut 8/01. FTP #42-534 completed July, 2002. Aspen, WP, RP, JP, oak, red maple regen present. Most JP was removed in harvest. Standing w. birch present, not harvested. Nice pine stand. Some red pine is of utility pole quality.
6	42220 - Natural Jack Pine	Poletimber Well	72.5	49	111-140	Stand consists of thick plantation J. Pine approx. 6-8" diameter and 30-45' tall. Jack pine is beginning to self prune itself. Scattered red and white pine trees are throughout stand in overstory.
8	42220 - Natural Jack Pine	Sapling Well	57.3	35	51-80	Stand was cut in 1984; Tsale #12-80. Stand is now thick jack pine regen ranging from 10-30' tall 3-5" DBH. Some scotch pine growing amongst the jack pine, mostly on the east side of the stand, but not a significant amount. Scattered WP/RP saw/pole sized trees throughout stand.
9	42260 - Natural Pine, Mixed Deciduous	Sawtimber Well	37.3	89	81-110	A variable stand with mixed pine transitioning into hardwoods. Mainly white pine with some red and jack pine mixed throughout. Hardwood is composed of red maple, and dying beech. Some merchantable balsam in the stand as well. The understory is made up of white pine, balsam fir, red maple, and beech.
10	42140 - Planted Mixed Pine	Sapling Medium	13.2	10	Immature	Superior Scotch Pine, sale #30-01. Sale completed 05/10/02. FTP work still has to be done. Original note: 'Superior' seed source (scotch pine) from old DAV plantation. Original plantation trees have seeded in producing younger pole and seedling sized trees. Site was scarified 7/2002. FTP42-554: hand planted 5/23/2007 with 2-0 JP (MI seedlot 0239) - 12,000 seedlings. Check regeneration in 2008. 8/2008 - OI - Stand is now a mixed bag of regen - white pine, red maple stump sprouts and scotch pine - thicker in some places than others. Some open grown areas in stand that is mostly ferns and grass. Did not see a lot of the planted jack pine, may be that the ferns were too tall to see amongst. May need another regen check and possibly replant. Treat stand to remove scotch pine regen with some sort of TSI. Plant to native pine species RP/WP/JP. Scattered overstory of oak, RP/WP now present. 5/17/2009: Superior Scotch Pine, trenched and replanted after planting without trenching failed. Planted at 1000/acre.
11	42290 - Natural Mixed Pine	Sawtimber Well	7.6	102	81-110	Superior Scotch Pine, sale #30-01. Sale completed on 05/10/02. Original note: Stand has some nice sized sawlogs ranging from 12-18". Scotch pine planted in understory in the fall of 76 is small and suppressed in places - still alive though. 8/2008- OI Notes: Overstory of RP/WP sawlog sized. Understory of planted scotch pine, thick in places. If it is desired to remove scotch pine, most would have to be chipped due to it's mostly submerchantable size. May have to plant native pine species JP/WP/RP to help native pine along post treatment.  Stand was part of sale #013-10-01, "Trailer Thief Pine". Sale was canceled.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
12	42140 - Planted Mixed Pine	Poletimber Well	29.5	43	81-110	Stand is sapling/pole sized scotch pine with a sap/pole jack pine mix. Scattered oak and sawlog sized RP/WP. If it is desired to eliminate scotch pine, prescribe for treatment now. It would have to be a chip job, a lot of sub merchantable size class. Cut all of scotch pine and jack pine, it is too tightly planted to not cut all of it.  Stand was part of sale #013-10-01, "Trailer Thief Pine". Sale was canceled.
13	42290 - Natural Mixed Pine	Sawtimber Well	5.3	100	51-80	Superior Scotch Pine, sale #30-01. Sale completed on 05/10/02. This scotch pine was left as a visual buffer around the ORV parking lot. Possibly under plant stand back to native pine species, RP/JP/WP.  Stand was part of sale #013-10-01, "Trailer Thief Pine". Sale was canceled.
15	42200 - Natural White Pine	Sawtimber Medium	24.8	70	1-50	White pine and red pine mainly with all aspen, oak and p.birch left after last harvest. Stand harvested as sale #007-10-01, "Nomad Pine". Completed 07/06/11.  Regen 2015: White pine 337, oak 476, red maple 506. Surveyed with stand 111 and 16. 29 TPA of scotch pine.
16	42210 - Natural Red Pine	Sawtimber Poor	31.5	73	1-50	Stand has little to no regeneration coming back. Recommend clear cut and trench and plant back to jack pine. Stand harvested as sale #007-10-01, "Nomad Pine". Completed 07/06/11. Scarification yet to be done as of 11/02/11. Regeneration check needed in 2015. Regen 2015: White pine 337, oak 476, red maple 506. Surveyed with Stand 15 and 111. No jack pine in survey. 29 TPA of scotch pine.
17	4123 - Red Oak	Poletimber Well	3.3	94	51-80	Stand of oak that falls on a knob. Some jack pine is stand but it is beginning to die out. Leave stand as a retention stand.
18	42120 - Planted Jack Pine	Poletimber Medium	7.8	47	51-80	Nice stand of plantation jack pine. Minor component of WP/RP in overstory. JP is now 4-8" DBH and 30-50' tall.
19	42290 - Natural Mixed Pine	Poletimber Poor	3.2	43	1-50	Stand is sapling/pole sized scotch pine with a sap/pole jack pine mix. Scattered oak and sawlog sized RP/WP. Stand was part of sale #013-10-01, "Trailer Thief Pine". Sale was canceled.
20	42120 - Planted Jack Pine	Poletimber Medium	235.2	47	81-110	Nice stand of plantation jack pine. Minor component of WP/RP in overstory. JP is now 4-8" DBH and ~30-45' tall.
21	42290 - Natural Mixed Pine	Sawtimber Well	38.1	86	51-80	Stand was cut in 2001. Thinned the red and white and removed the jack pine from the stand. Nice quality red pine left BA ranges from 50 - 100 in most places. Decent white pine as well with some paper birch left in the stand.
22	42120 - Planted Jack Pine	Poletimber Medium	155.8	49	51-80	Stand is similar to surrounding plantation JP. This stand was planted in 1970. Occasional WP/RP in stand overstory. JP is 4-7" dbh and 30-45' tall.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
23	42220 - Natural Jack Pine	Poletimber Well	29.9	43	51-80	Stand has a few scattered sawlog sized red and white pine in overstory. Nice JP coming in throughout the stand. 4-7" dbh 3-4 sticks tall.
24	42140 - Planted Mixed Pine	Poletimber Poor	30.3	42	51-80	Stand has sawlog sized red and white pine scattered throughout overstory. Stand was planted in 1977. Some scotch pine is in merchantable size class, some still sub merchantable. Boundaries of stand were tough to define in because the plantations were mixed together when planted. Acreage and boundary lines may change slightly if treated to match whats exactly on the ground.  Stand was part of sale #013-10-01, "Trailer Thief Pine". Sale was canceled.
25	42220 - Natural Jack Pine	Sapling Well	3.6	20	Immature	Stand was burned in 1999. Overstory now is JP 10-20' tall. Second age source is the red pine left. Stands long term MO is JP.
27	42120 - Planted Jack Pine	Poletimber Medium	77.9	47	81-110	Stand was planted with jack pine in 1972 that is now coming into pole sized class. The southern half of stand has a pocket of sawlog sized RP and pole sized WP/RP that was underplanted as well. There is also a scattering of old (~70 years old) jack pine in places that was underplanted as well with jack pine.
28	42210 - Natural Red Pine	Sawtimber Medium	20.0	99	51-80	Stand was treated in 2001; T.Sale 026-00. Mostly a RP/WP sawlog/pole overstory with a thick aspen regen understory. Aspen is 15-25' tall and 2-3" DBH. R.maple, WP/RP regen as well. possibly remove some of the overstory.
29	42130 - Planted Scotch Pine	Sapling Poor	5.5	12	1-50	Original note:"Superior" seed source (scotch pine) from old DAV plantation. Original plantation trees have seeded in producing younger pole and seedling sized trees. Site was scarified 7/2002. Superior Scotch Pine, sale #30-01. Sale completed on 05/10/02. FTP 42-554: hand planting completed 5/23/2007 with 2-0 JP (MI seedlot 0239) - 6,000 seedlings. Stand is now a mixed bag of regen - white pine, red maple stump sprouts and scotch pine - thicker in some places than others. Did not see a lot of the planted jack pine, may be that the ferns were too tall to see amongst. May need another regen check and possibly replant. Plant to native pine species RP/WP/JP. Some open grown areas in stand that is mostly ferns and grass. Scattered overstory of oak, RP/WP now present. 5/17/2009: Superior Scotch Pine, trenched and replanted after planting without trenching failed. Planted at 1000/acre.
30	42200 - Natural White Pine	Sawtimber Medium	6.9	113	51-80	Stand has some nice sawlog sized red and white pine approx. 100 years old. Stand also has some pole sized white pine approx. 75 years old. Stand was treated in 2001; Cabin White Pine, sale #42-032-01-2. White pine regeneration present as well as some jack pine on the edges and throughout the rest of the stand. Some jack pine present along edges of the stand.
31	42120 - Planted Jack Pine	Poletimber Poor	69.4	43	51-80	Jack pine strip planting with some natural regen. Diameters range from 2-7" DBH. Older strips have 2-3 stick JP and the younger strips are not yet merchantable. Evaluate in 10 years to determine what to do with older strips.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
32	42120 - Planted Jack Pine	Poletimber Medium	91.0	47	51-80	Nice stand of plantation jack pine. Minor component of WP/RP in overstory. JP is now 3-7" DBH and ~25-45' tall. Possibly harvest this entry or hold for 10 years for age class diversity.
33	42200 - Natural White Pine	Sawtimber Medium	35.3	110	81-110	Stand was treated in 2001; Tsale# 032-01. Some new white pine regen as a result of treatment. Some red pine sawlog sized trees present in stand. There is evidence of red pine underplanting in some portions of stand. Red pine is suppressed.
35	42220 - Natural Jack Pine	Poletimber Medium	27.1	58	51-80	Stand is mixed pine. Jack pine is mixed with older RP/WP. Regen varies with JP/RP/WP and is thick in places. Some regen/understory is planted, some is natural. Some open grown limby JP areas in the SE corner of stand along with some old signs of planted red pine that is stunted and has poor form class. Hold for 10 years then treat.
36	42120 - Planted Jack Pine	Poletimber Medium	59.9	58	1-50	Planted RP and JP. Jack pine is limby and beginning to self prune. RP is suppressed. Open grown areas in stand. Some scattered old jack pine in stand as well as a few RP/WP sawlog sized trees.
37	42210 - Natural Red Pine	Sawtimber Well	17.8	79	81-110	Headquarters Lake Campground fall in this stand. Nice stand of RP, sawlog sized. Aspen throughout. Occasional W.birch, oak and jack pine. Site conditioned for the campground and a buffer around the lake.
38	42120 - Planted Jack Pine	Poletimber Well	45.3	42	81-110	Scattered RP and WP in overstory, sawlog and pole sized. Appears to be planted JP evidence of rows in places. Healthy stand 5-7" DBH and 30-45ft tall.
39	42130 - Planted Scotch Pine	Poletimber Well	29.9	42	81-110	Stand is a mixed plantation of scotch and jack pine. If is desired to eliminate scotch pine, prescribe for treatment now. Cut all of scotch pine and jack pine, it is too tightly planted to not cut all of it.  Stand was part of sale #013-10-01, "Trailer Thief Pine". Sale was canceled.
40	42220 - Natural Jack Pine	Poletimber Well	11.4	40	51-80	Jack pine will be coming into pole size class in the next decade. Stand was treated in 1979. Some larger RP/WP scattered around the stand.
41	42210 - Natural Red Pine	Sawtimber Well	128.8	98	81-110	Area was thinned in late 70's, early 80's. Red pine stand now that is mostly sawlog sized 12-20" DBH. Not much for utility poles. Nice WP/RP regen throughout. R. maple regen throughout as well. P.birch is a minor component of stand although it is dying out. Jack pine is also a minor component to stand. Stand is variable with BA's, some areas thicker than others. Open grown areas are thicker with regen. Hold for 10 years and re-evaluate stand for shelterwood.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
44	42220 - Natural Jack Pine	Poletimber Poor	61.0	28	51-80	Stand was cut and scarified in 1991. Overstory of RP/WP, sawlogs mostly RP. Regen is predominately JP with some areas heavier to WP. P.birch in stand although it is dying out. Long term MO will change to J once it is more established. In the future, possibly remove some RP overstory. Hold for 10 years remove overstory next entry to release regen.
45	42210 - Natural Red Pine	Sawtimber Poor	3.7	103	51-80	Nice pocket of thicker mature red pine with a white pine mix. Some utility pole quality in here. Heavy to red maple regen with some rp/wp/jp coming in throughout.  (2015) - Stand was treated with TSale#420031001 - Holland Norway Pine. TCR 10/6/2015.
49	42210 - Natural Red Pine	Sawtimber Poor	56.4	88	1-50	Stand was harvested as sale #42-028-10-01, "Afterthought Jack Pine". Sale completed on 05/30/2013.  Regen 2016: 236 TPA of jack pine, 99 TPA of red maple. Residual BA of about 30.
50	42220 - Natural Jack Pine	Poletimber Poor	5.6	37	1-50	Scattered RP in overstory. Jack pine is growing nicely, still a bit limby though. Stand is just coming into pole size.
51	42210 - Natural Red Pine	Sawtimber Medium	49.3	99	51-80	Stand was treated in 2001, Holland Lake Jack Pine, sale #42-025-00-1. There is now an overstory of red pine with some white pine. Overstory is mostly sawlog sized. Aspen regen came in moderate to thick in some places, mostly in the south end of stand. Jack pine is just coming in as well, just took longer to get going. Long term MO will be JP. It is just breaking 5' in most place. RP residual varies from 20-60 BA.
52	42290 - Natural Mixed Pine	Sawtimber Medium	19.4	109	51-80	Most of area was thinned of jack pine, aspen and some red and white pine in 1991; tsale 036-91. It is now a fairly even mix of red and white pine. Regen of white pine throughout. Some of RP overstory is utility pole quality. Birch and oak in stand on the north end. Shelterwood stand to encourage the regen. Leave the birch and oak as residual.  (2015) -Stand was treated with TSale# 420031001 - Holland Norway Pine. TCR 10/6/2015. 5/16.  Regen 2016: 214 TPA of red maple and 214 TPA of white pine.
53	42210 - Natural Red Pine	Sawtimber Well	30.9	97	81-110	Stand was treated in 2001; Quota Pine, sale #42-033-00-1. P.birch is a minor component of stand. Large diameter RP/WP remaining, some regen of rp/wp/jp present in the stand.
55	42220 - Natural Jack Pine	Sapling Well	7.4	28	Immature	Area was cut & scarified in 1991, tsale#017-91. Overstory of RP sawlogs scattered throughout. JP regen is thick and 1-3"DBH, 10-15' tall.
56	42120 - Planted Jack Pine	Poletimber Medium	22.9	38	51-80	Stand has some varying ages of jack pine, with areas that were both planted and scarified for regen. The strips alternate between J6/J4. Younger strips may have seeded in naturally, they are thick and no evidence of rows. Older strips were planted. Some larger rp present as well in the stand.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
58	42290 - Natural Mixed Pine	Sawtimber Well	32.2	102	81-110	Stand was treated in 2001; Quota Pine, sale #42-033-00-1. Stand is mostly white pine with a mix of red pine, paper birch and some oak. Some old white pine in here. Diameters range from 6-20".
59	42200 - Natural White Pine	Sawtimber Well	15.6	103	81-110	Some of area was thinned in the early 80's. Sawlog white pine stand. R.maple and white pine understory. R.pine scattered in stand but white pine dominates. Some old white pine in here.
60	42210 - Natural Red Pine	Sawtimber Poor	90.3	88	51-80	Stand is variable throughout. Stand is mostly red and white pine with a small amount of J.pine. Abundant white pine regen in many places over topped by sawlog WP and RP that is older. BA's in overstory ranges from 20-100. Regen is filling in the areas that were once more open.
61	42290 - Natural Mixed Pine	Sawtimber Poor	10.2	88	1-50	Stand has some old WP stumps from the distant past. Frost pockets and rolling topography. Stand is open grown and filling in with a mix of pine RP/WP/JP. Sizes vary. Most trees are wolfy from growing in an open grown setting.
64	42210 - Natural Red Pine	Sawtimber Well	28.5	84	81-110	Holland Lake campground occurs in stand. Stand is variable with densities and age classes. Stand has some older large diameter RP/Wp with a lot of regen that has naturally seeded in through the years to WP and RP. Jack pine scattered throughout, some areas are minimal and some areas its more significant. Poor quality aspen throughout.
65	42290 - Natural Mixed Pine	Sawtimber Poor	3.6	79	1-50	Stand was the location of the old DNR "West Tower" fire tower site. Cement foundations for the tower is still here. Old road leading to the tower. Stand area is still relatively open but over time has begun to fill in with trees. Mainly red and white pine, white pine are limby.
66	42210 - Natural Red Pine	Sawtimber Poor	5.7	87	1-50	Stand has some old WP stumps from the distant past. Frost pockets and rolling topography. Stand is open grown and filling in with a mix of pine RP/WP/JP. Sizes vary. Most trees are wolfy from growing in an open grown setting.  Hold for long term retention.
67	42220 - Natural Jack Pine	Sapling Medium	80.5	16	Immature	Regen is just coming in 10-15' tall. Jack pine appears to be doing well throughout the stand. Some RP coming in as well. Long term MO is JP. Stand was harvested in 2001; Wandering Plow Jack Pine, sale #42-021-00-1. Overstory of RP was left as residual, mostly sawlog sized. Next entry consider removing the overstory to release the jack pine.
68	42220 - Natural Jack Pine	Sapling Well	32.9	28	Immature	Area was cut and scarified in 1991, T.sale# 006-90. Scattered RP that is saw/pole sized in overstory. Oak in overstory as well.
69	42290 - Natural Mixed Pine	Sawtimber Well	16.7	99	81-110	Stand was treated in the past. The center of the stand was cut harder than the edges, there are some bushy white pine saplings/poles that are taking this area over and seeding in. The edges of stand have some nice sawlog sized WP. Some older JP scattered in stand, mostly on the outer edges. JP is beginning to die out.





	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
70	42210 - Natural Red Pine	Sawtimber Poor	117.9	78	1-50	Regen 2016: 233 TPA of red maple, 116 TPA of white pine, 43 TPA of red pine, and 14 TPA of jack pine. Residual BA of 40. Stand harvested as sale #42-002-10-01, "First Red Line Pine". Completed 11/05/12. Scarification yet to be done as of 02/28/2013. Regeneration check needed according to work instructions. Plantation JP/RP stand. Cut JP, may have to mark some RP where it is thicker for operability as well as opening it up enough to encourage regeneration.
71	42210 - Natural Red Pine	Sawtimber Medium	61.2	99	51-80	Overstory of sawlog/pole sized RP. Some WP, p.birch and oak scattered as well. J.Pine regen is 5-15' tall. Long term MO will be change to JP.  Stand was harvested in 2001. 375 Jack Pine, sale #42-016-00-1. FTP #42-525. Scarification completed 8/01. Survey was done 05/03/2003; stocking is 179 tpa. Residual BA = 35.
72	42210 - Natural Red Pine	Sawtimber Medium	56.8	99	51-80	Stand was treated in 1994 T.sale#024-90. Machine planted with 2-0 JP in May, 2000 (FTP #42-348: 64 acres) Regeneration survey done 10/22/01 on planting; stand is fully stocked with 805 trees/ac (435 trees/ac planted jp + 370 trees/ac "volunteer" trees, which includes JP,WP). Average tree seedling height = 1.06 feet.  Overstory of RP overtopping naturally regenerated and planted jack pine. Long term MO is jack pine. Jack pine regen is thick in some places and more sparse in others. Most regen is 10-20' tall. Overstory of red pine may hinder the growth of the jack pine regen.
73	42210 - Natural Red Pine	Sawtimber Medium	10.6	97	1-50	2018 Stand has nice overstory Red pine and white pine with good Jack pine regen coming in underneath that was planted and some is naturally occurring.  Area was cut in 1994. Long term MO is Jack Pine. Part of FTP#42-348; area was machine planted in May, 2000 with 2-0 JP; regeneration count done on 10/22/01 shows stand to be fully stocked now with 805 trees/ac (includes 435 trees/ac planted jp + 370 "volunteer" trees/ac, which are jp, wp). Average seedling height = 1.06 feet. 8/2008 OI Notes: Overstory of RP poles/sawlog sized overtopping JP regen that is now 5-20' tall. Some of the jack pine understory was planted amongst natural regen.
76	42290 - Natural Mixed Pine	Sawtimber Medium	17.4	98	51-80	Open grown mixed pine, mostly white pine and red pine. Most trees are wolfy from being in an open grown setting. Some poor quality aspen as well. Trees regenerating throughout, opening is gradually filling in with WP/RP/JP.
77	42210 - Natural Red Pine	Sawtimber Medium	14.5	99	1-50	Stand was treated in 2001, Holland Lake Jack Pine, sale #42-025-00-1. There is now an overstory of red pine with some white pine. Overstory is mostly sawlog sized. Long term MO will be jack pine. Aspen regen came in moderate to thick in some places. Jack pine is just coming in as well, just took longer to get going. It is just breaking fern height. RP residual varies from 20-60 BA. May want treat overstory in future to release the J.pine regen.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
78	42200 - Natural White Pine	Sawtimber Well	65.1	102	81-110	Stand was treated in 1981, Tsale#6-81A. Stand is variable in density, BA's range from 40-130. Some very thick understory in most places, mostly paper birch, red maple, b.fir with some WP, hemlock and beech. Pine in the overstory is tall and straight.
79	42210 - Natural Red Pine	Sawtimber Poor	64.4	104	51-80	Most of stand was treated in 1981; Tsale#6-81A. The stand has some large sawlog sized red pine and white pine. Many trees are tall and relatively straight, some utility pole quality. Some variability in BA's as well as some variability in regen. Paper birch, red maple, beech, and aspen also a component of stand, more on the south end. Left P.birch, aspen, red maple and beech.  2016: sale completed. 42-019-10-01, Kilp Lake Pine. TCR 08/20/15.
80	42200 - Natural White Pine	Sawtimber Medium	19.6	82	51-80	Stand is a mixed bag of mostly pine species, WP/RP/JP. Area has been logged in the past and is now filling in with trees. Larger/older RP/WP scattered throughout stand with regen throughout, pockets of jack pine as well. Varying degrees of regen in understory, WP/RP/JP, aspen, red maple - thick in some areas. Some small relatively open areas in the center of the stand that are also filling in. Aspen in portions of stand.
81	42210 - Natural Red Pine	Sawtimber Medium	38.2	97	51-80	Stand is a variable with trees species. Large diameter RP/WP scattered throughout. Stand density is variable with areas of higher BA's and other areas lower BA's with thicker regen, mostly white pine with some red pine, red maple, aspen, jack pine and balsam fir. Paper birch present throughout, some beech and hemlock in south end.  2016: sale completed. 42-019-15-01, Kilp Lake Pine. TCR 08/20/15.
82	42200 - Natural White Pine	Sawtimber Well	19.4	99	51-80	Area was treated in the past. Stand is now a mixed bag. Some areas have heavy white pine regen mixed with b.fir, red maple, and aspen. Overstory of larger pine throughout. Hemlock present.
83	42200 - Natural White Pine	Sawtimber Well	29.6	108	81-110	Stand has some large diameter white pine that is tall and straight overtopping a thick understory of r.maple, b.fir, and beech saplings, some beginning to reach pole sized (3-5" DBH). There are few scattered red pine in the overstory as well, tall and straight. There is a scattering of red maple, beech and p.birch in overstory as well. Hold for 10 years then shelterwood stand.
86	42210 - Natural Red Pine	Sawtimber Medium	56.4	99	51-80	Stand treated in 2001; Kilp Lake Jack Pine, sale #42-020-00-1. Now mostly an overstory of saw/pole RP and WP with aspen and jack pine regen. Mixed pine will be the long term MO. Variable density in regeneration. Some WP and RP regen as well as red maple stump sprouts. May want to harvest some of the residual overstory on red pine this entry if not next entry.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
87	42210 - Natural Red Pine	Sawtimber Medium	46.7	91	51-80	Stand is variable. RP/WP stand for the most part, mostly sawlog sized. Also a mix of RP/WP poles and saps. Aspen in stand as well. A minor component of Jack pine, red maple and p.birch as well. 2016: sale completed. 42-019-15-01, Kilp Lake Pine. TCR 08/20/15.  Stand should be seed treed then scarified for regeneration purposes. If not this entry then the next for sure.
88	42210 - Natural Red Pine	Sawtimber Medium	28.3	99	1-50	Stand treated in 2001; Kilp Lake Jack Pine, sale #42-020-00-1. Now mostly an overstory of saw/pole RP and WP with aspen and jack pine regen. The long term MO will be jack pine. Variable density in regeneration. Some WP and RP regen as well as red maple stump sprouts. May want to harvest some of the residual overstory this entry or next entry.
89	4319 - Mixed Upland Forest	Sawtimber Well	31.9	102	81-110	Stand was treated in the late 70's early 80's. Stand is a mixed bag of tree species. Large diameter tall WP overtopping poor quality hardwood, most red maple and dying/dead beech (beech bark disease). Balsam fir and hemlock throughout, poles and saps. P.birch and aspen present as well as an occasional RP.
90	4113 - R.Maple, Conifer	Sawtimber Medium	37.4	73	81-110	Stand has very thick hardwood regen resulting from a harvest in early 80's. Beech in stand has BBD and is dying or dead already. Most hardwood is poor quality. Some large diameter and tall WP scattered in the overstory. Hemlock present. Residual basal area for harvest is patchy and variable.
91	4319 - Mixed Upland Forest	Sawtimber Well	13.7	78	111-140	Stand is a mixed bag of tree species. Large diameter, tall WP overtopping poor quality hardwood, most red maple and dying/dead beech (beech bark disease). Balsam fir and hemlock throughout, poles and saps. P.birch and aspen present as well. Heavy understory of maple, beech, balsam fir. Stand has multiple age class from large white pine, log/pole red maple, and thick areas of S/P regen.
93	42200 - Natural White Pine	Sawtimber Medium	66.8	108	51-80	All aged pine stand; very large red and white pine over a younger pole/seedling/sapling sized understory. Aspen, p.birch, some oak, and red maple mixed throughout. If not treated again this entry should be heavy seed tree or clear cut and then scarified to promote pine regen.  (2015) - Stand was treated with TSale#420031001 - Holland Norway Pine. TCR 10/6/2015.
94	42220 - Natural Jack Pine	Sapling Medium	37.2	18	Immature	Stand treated in 2001; Holland Lake Jack Pine, sale #42-025-00-1. RP/WP was left as residual and is scattered in the overstory. Jack pine is starting to regenerate and is 10-20" tall with some WP regen as well.
95	42210 - Natural Red Pine	Sawtimber Well	66.9	100	81-110	Stand was treated in 2001, Three Stand Pine, sale #42-026-00-1. Nice stand of RP/WP. Basal area is variable across stand, 50-100 BA. Some nice utility pole quality stems remain. WP regen getting started as well as r.maple, spruce seedlings/saplings.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
96	42220 - Natural Jack Pine	Poletimber Poor	17.9	35	1-50	: Stand was harvested in 1984; Tsale 011-80. Stand regenerated nicely to jack pine that is mostly sapling sized beginning to go to pole size. Scattered RP/WP sawlogs/poles in overstory.
97	42220 - Natural Jack Pine	Sapling Well	61.6	26	Immature	Stand was cut & scarified in 1993. Jack pine regen is now 15-30 feet tall and 3-5"DBH. Aspen regen as well in places. WP regen scattered about as well.
98	42210 - Natural Red Pine	Sawtimber Poor	22.9	99	51-80	Stand is a mix of old RP/WP, RP/WP is sawlog sized and has some utility pole quality. Scarified stand after harvest in the areas that were heavier to jack pine.  (2015) - Stand was treated with TSale#420031001 - Holland Norway Pine. TCR 10/6/2015. Average residual basal area is 50.
99	42120 - Planted Jack Pine	Poletimber Well	25.8	47	51-80	Planted JP. Now 3-6"DBH, 25-40' tall. Some old jack pine trees scattered in portions of stand. Some older RP as well.
100	42210 - Natural Red Pine	Sawtimber Medium	63.2	91	1-50	Sparse regeneration throughout the stand for pine, Has substantial amount of maple coming in with some aspen. Recommendation would be to remove the overstory completely and trench and plant the stand.  Stand harvested as Veteran's Day Jack Pine (007-04-01). Sale completed 06/08/05. Scarification completed (FTP42-541) 10/25/2006. Some residual red pine left after harvest - blowdown within stand now. . Regen check in 2009. R/J/W Pine/Acre: 159; All spp/acre: 287; BA 36; Crown 20; not much pine, scattered aspen to south, plant if pine is desired.
102	42290 - Natural Mixed Pine	Sawtimber Well	52.4	82	111-140	Stand is of mixed ages and size classes. Older sized red pine with under planted red pine and jack pine that is now 5-8"DBH and 2-3 sticks tall. Most planted red pine in still suppressed. Some mature jack pine throughout as well. Birch, aspen and oak present. The older timber is ready for treatment now, the younger stuff is borderline ready to cut. It could be held for another 10 years.
103	42210 - Natural Red Pine	Sawtimber Poor	94.1	78	1-50	Older RP/WP sawlogs as well. Jack Pine was removed. Larger red and white pine left in the stand. Some aspen and birch present, can leave if desired.  Stand harvested via clearcut as sale #020-10-01, False Hunter Jack Pine. Completed 05/22/13.
107	42130 - Planted Scotch Pine	Poletimber Medium	23.6	42	111-140	Stand is sapling/pole sized scotch pine with a sap/pole jack pine mix. Scattered oak and sawlog sized RP/WP. Cut all of scotch pine and jack pine, along with rp/wp, it is too tightly planted to not cut all of it. Stand will be site prep sprayed to remove scotch pine so leaving residual species is not an option.  Stand was part of sale #013-10-01, "Trailer Thief Pine". Sale was canceled.
108	42220 - Natural Jack Pine	Sapling Well	5.2	37	1-50	Area was cut in 1982. Jack pine regen is now 15-30' tall, 2-5"DBH. Just coming into pole size. Trees are limby yet.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
109	42260 - Natural Pine, Mixed Deciduous	Sawtimber Poor	9.4	90	1-50	Stand has a few scattered sawlog sized red pine, white pine in overstory, more dense in some places than others. Aspen is both trembling and bigtooth is thick in understory, 10'-25' tall. R. maple, white pine, p.birch, JP, RP regen also present.
110	42220 - Natural Jack Pine	Sapling Well	17.8	26	Immature	Area was cut 1992 and scarified in 1993. T.sale#004-90. Jack pine regen is now 10-20' tall. Scattered red pine in the overstory.
111	42200 - Natural White Pine	Sawtimber Well	64.2	96	81-110	<p>Stand is a mixed species and mixed age classes. Large white and red pine with some aspen, jack pine, spruce, red maple, and balsam fir. Stand has some aspen regeneration and a scattering of Scotch pine in the northern edges. Falls in the Two Hearted River Plan.</p> <p>Stand harvested as sale #007-10-01, "Nomad Pine". Completed 07/06/11. Regeneration check needed in 2015.</p> <p>Regen 2015: White pine 337, oak 476 TPA, red maple 506 TPA. Surveyed with stand 15 and 16. 29 TPA of scotch pine.</p>
112	42200 - Natural White Pine	Sawtimber Well	7.1	104	81-110	Stand is a mix of WP, p.birch, red pine, aspen and spruce/balsam. Some oak and red maple present. Aspen is dominant in understory, 10-20' tall. WP dominates the overstory, some large RP sawlog trees throughout. Follow Two Heart Natural River Plan. Steep bank immediately adjacent to river edge.



Stand	Cover Type	Acres	Managed Site	General Comments:
3	500 - Water	11.5	No	Headquarters Lake
4	500 - Water	2.3	No	Pothole stand that seasonally fills with water. Mostly dry now and more of a marsh type. Soil= Aquents/Histosols
5	500 - Water	2.7	No	Pothole lake where water levels seasonally fluctuate.
7	122 - Road/Parking Lot	3.7	No	County Road 407
14	122 - Road/Parking Lot	0.9	No	ORV Staging Area in summer, Snowmobile Trail parking lot in winter.
26	122 - Road/Parking Lot	0.2	No	County Road 410 West
34	122 - Road/Parking Lot	4.8	No	County Road 410 W
42	122 - Road/Parking Lot	1.1	No	Parking lot for users of the Headquarters Lake campground.
43	330 - Low-Density Trees	5.1		Small stand with some red and white pine left. Regen check fails stand needs to be trenched and planted to jack pine. Stand was harvested as sale #42-028-10-01, "Afterthought Jack Pine". Sale completed on 05/30/2013. Regen 2016: 137 TPA of red oak and 137 TPA of red maple. No jack pine within sample plots. Residual BA of 20.
47	122 - Road/Parking Lot	1.9	No	Pratt Lake Road
48	122 - Road/Parking Lot	13.4	No	County Road 416 and it's R.O.W.
54	122 - Road/Parking Lot	4.1	No	County Road 378 and it's R.O.W.
63	500 - Water	6.4	No	Holland Lake
74	122 - Road/Parking Lot	2.4	No	County Road 439 and it's R.O.W.
84	500 - Water	1.6	No	Water hole where water levels seasonally fluctuate.
85	500 - Water	2.7	No	Kilp Lake. Water levels seasonally fluctuate. Edges of lake are choked with lily pads and vegetaion in the water, the center of the lake is the only place with some open water.



Stand	Cover Type	Acres	Managed Site	General Comments:
104	500 - Water	1.0	No	