

Compartment Review Presentation

Newberry Forest Management Unit

Compartment 42002 Entry Year 2022 Acreage: 2,108

County Luce

Management Area: Deer Park

Revision Date: 2020-08-21

Stand Examiner: Jacob Kriehn

Legal Description:

T49N R12W Sec. 5-9, 16-17

Identified Planning Goals:

Compartment 002 is located within the Deer Park Management Area. For further description of this management area, go to the following web site: http://www.midnr.com/publications/pdfs/forestslandwater/Ecosystem/EUP/final-MAsummaries/09 Deer Park MA summary.pdf

Maintain or enhance the forest health, productivity, and diversity of the area through proper management. Enhance age class diversity in the forest cover types through continued timber harvest treatments.

Soil and topography:

The compartment consists of a mixture of lowland and upland soil types. The mixture consists of Carbondale, Lupton and Tawas Mucks, Dawson, Greenwood& Loxley peats, Histosols &

Aquents, Kinross-AuGres, Croswell-AuGres, Paquin-Finch, and Hiawatha sand. Cover types supported on the lowland soils include cedar, lowland hardwoods, and treed bog. Cover types associated with the upland soils are aspen, northern hardwoods, red pine, white pine, and jack pine. The topography is predominantly level ground throughout the compartment. There is a steep escarpment which runs the entire length of the southern boundary of the compartment which gives way to generally flat, low ground.

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

This compartment is made up of solid state ownership with no private inholdings. However, private land does adjoin the compartment along its southern boundary with state land surrounding the compartment on the remaining three sides. The compartment includes the western reaches of the Blind Sucker Flooding which is designated as a State Wildlife Flooding. Land Use in and around the compartment is generally low with recreational activities being the main use of the area. These activities include fishing, waterfowl hunting, deer hunting, trapping, canoeing and kayaking, snowmobiling, ORV riding and berry picking.

Unique Natural Features:

MNFI lists numerous rare lakeshore associates to the north of the compartment. Within the compartment, MNFI lists the potential for sweet coltsfoot, Wiegand's sedge, northern prostrate clubmoss, fir clubmoss, English sundew, meadow beauty, round-leaved orchis, black crowberry, yellow pitcher-plant, and panicled screwstem in bogs and open wetlands. Potential for red-shouldered hawk, goshawk, merlin, great blue heron rookery, eagle, and osprey. Potential for moose and wolf. Potential for incurvate emerald, frigga fritillary, freija fritillary, and ebony boghaunter in boggy areas.

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

: The Blind Sucker Flooding is a designated Wildlife Flooding. Normal BMP guidelines will be followed as well as any special considerations that may be defined in the Master Plan for the Operation and Maintenance for the Blind Sucker Wildlife Flooding.

Watershed and Fisheries Considerations:

Three rivers are located in this compartment; the Sucker River, Dead Sucker River, and Blind Sucker River. The Sucker River intersects the far southwest corner of the compartment. This stream is a Type-4 designated trout stream and it's riparian zone and valley walls are unstable due to the very sandy soils covering the area. Any treatments near the riparian zone should consider a buffer from the top of the valley walls (bluff or ridge) for 100 ft plus 5 ft per 1% increase in slope. The Dead Sucker and Blind Sucker rivers feed Blind Sucker Flooding. Northern pike and yellow perch fisheries are very popular in the flooding and both species use the upper reaches of these rivers for spawning activities. Both are warmwater streams and the standard buffer of 100 ft plus 5 ft per 1% increase in slope is recommended for all treatments near these streams.

Wildlife Habitat Considerations:

Compartment 2 lies in far northern Luce county and is in the Grand Marais Sandy End Moraine and Outwash ecological sub-subsection as well as the Deer Park Management Area with Kirtland's warbler, piping plover, red crossbill and American marten as featured species. The western portion of the compartment is dominated by upland and lowland aspen and northern hardwoods while the eastern two thirds are comprised of a variety of conifers and treed bogs north of the blind sucker flooding.

Wildlife objectives will be achieved by retaining by leaving a component of non-pine species to provide food sources, nest and den trees, and improve stand diversity. Conifer components of aspen stands are commonly retained during harvest to increase stand diversity, provide nesting, denning and forage sites and cover. Mature aspen will be retained in the border of stands to provide food sources and later snags and den trees for wildlife. Wildlife species potentially using this compartment include white-tailed deer, black bear, fisher, marten, snowshoe hare, ruffed grouse, gray wolves, coyote and bobcat.

Mineral Resource and Development Concerns and/or Restrictions

Sections 5 - 9, 16 & 17, T49N-R12W, Luce County

No known potential exists for commercial oil & gas production in this part of the state, and there is no known potential for metallic minerals in this area. The nearest active sand/gravel pit is more than five miles to the west, but there appears to be some potential for sand & gravel within the compartment on the uplands. Much of the compartment is covered by wetlands, however, which could inhibit development. No current mineral leasing activity exists in the area. The state does not own all mineral rights within the compartment. Because the mineral estate is the dominant estate, reasonable access to the surface must be provided to private owners if they choose to explore or develop their mineral rights.

Vehicle Access:

Access to the compartment is good. County Road 407/H37 runs along the northern border of the compartment while County Road 416 follows the southern boundary of the compartment. A network of non maintained state forest roads transects the compartment providing additional, ample access to most areas. The "main" forest road which provides access into the Blind Sucker "Hole", as it is affectionately referred to by locals, runs down the steep escarpment and can be difficult to climb for logging equipment at times.

Survey Needs:

None at this time.

Recreational Facilities and Opportunities:

Recreational facilities within the compartment would include the Grand Marais Snowmobile Trail as well as the Blind Sucker Wildlife Flooding. The snowmobile trail follows County Road 416 and experiences heavy snowmobile traffic. The Blind Sucker Wildlife Flooding provides a multitude of recreational opportunities including fishing, waterfowl hunting, trapping, canoeing and kayaking, and general wildlife and bird watching. Other recreational opportunities within the area include deer, bear and grouse hunting, ORV riding and berry picking.

Fire Protection:

Wildfire response for this compartment is covered by the Seney Field Office. It is adjacent to the Two Hearted Zone Dispatch area. The large fire potential is moderate in the upland Pine types because of fragmented Pine types, limited access by heavy equipment and long response time. The risk of damage to neighboring facilities and private land would be low because of the fragmented fuel types.

Additional Compartment Information:

The following reports from the Inventory are attached:

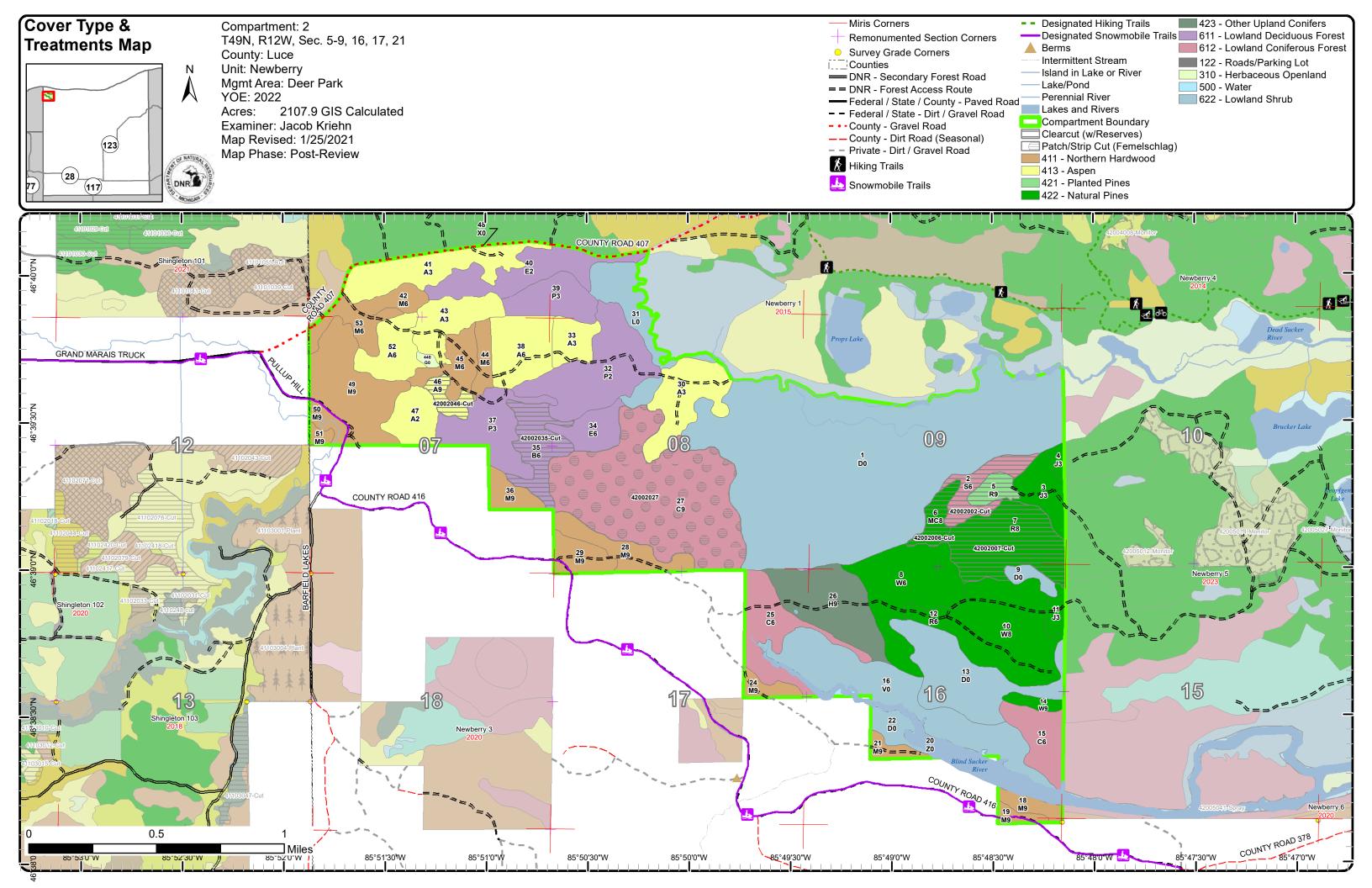
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

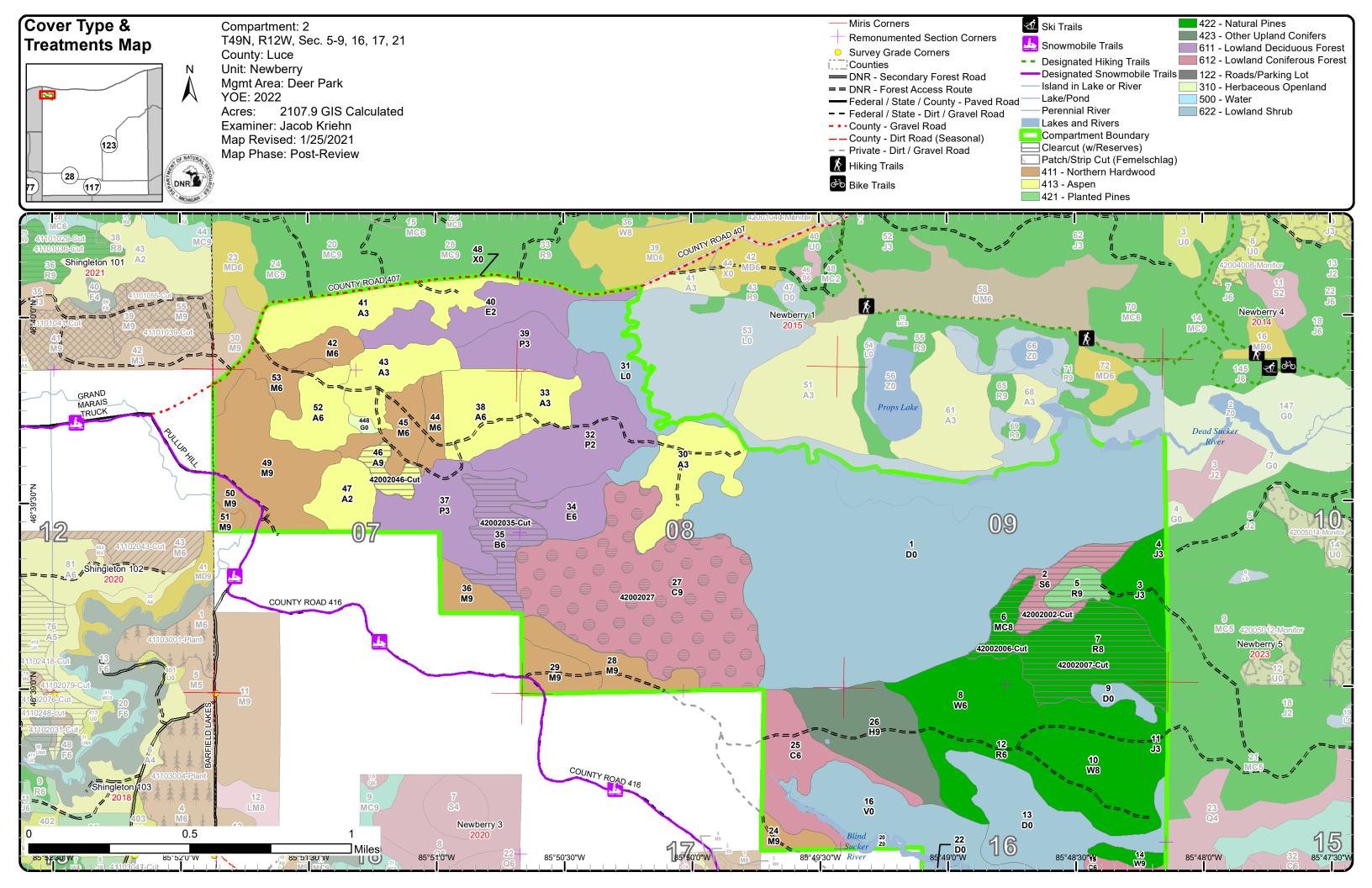
The following information is displayed, where pertinent, on the attached compartment maps:

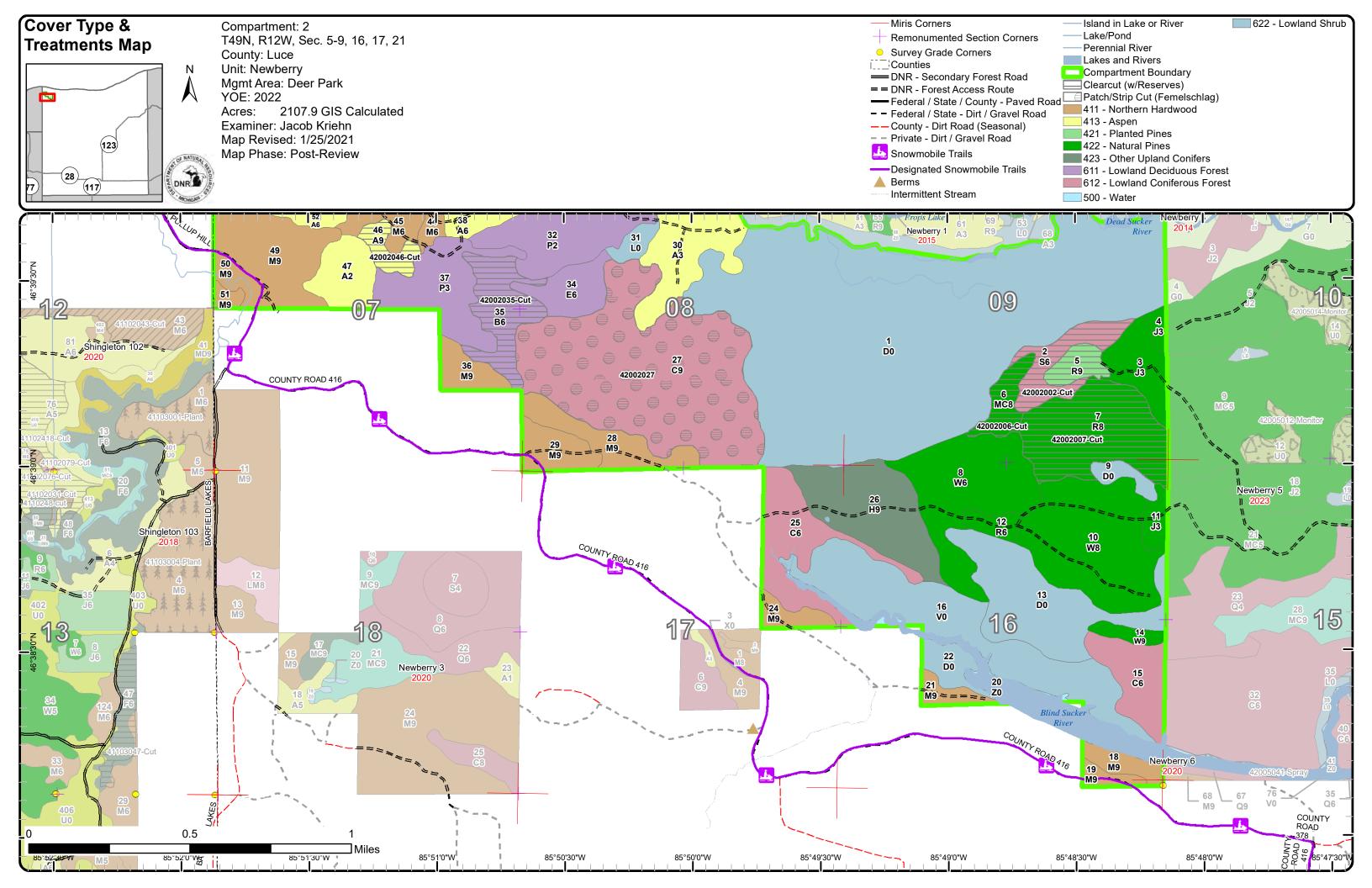
Base feature information, stand boundaries, cover types, and numbers

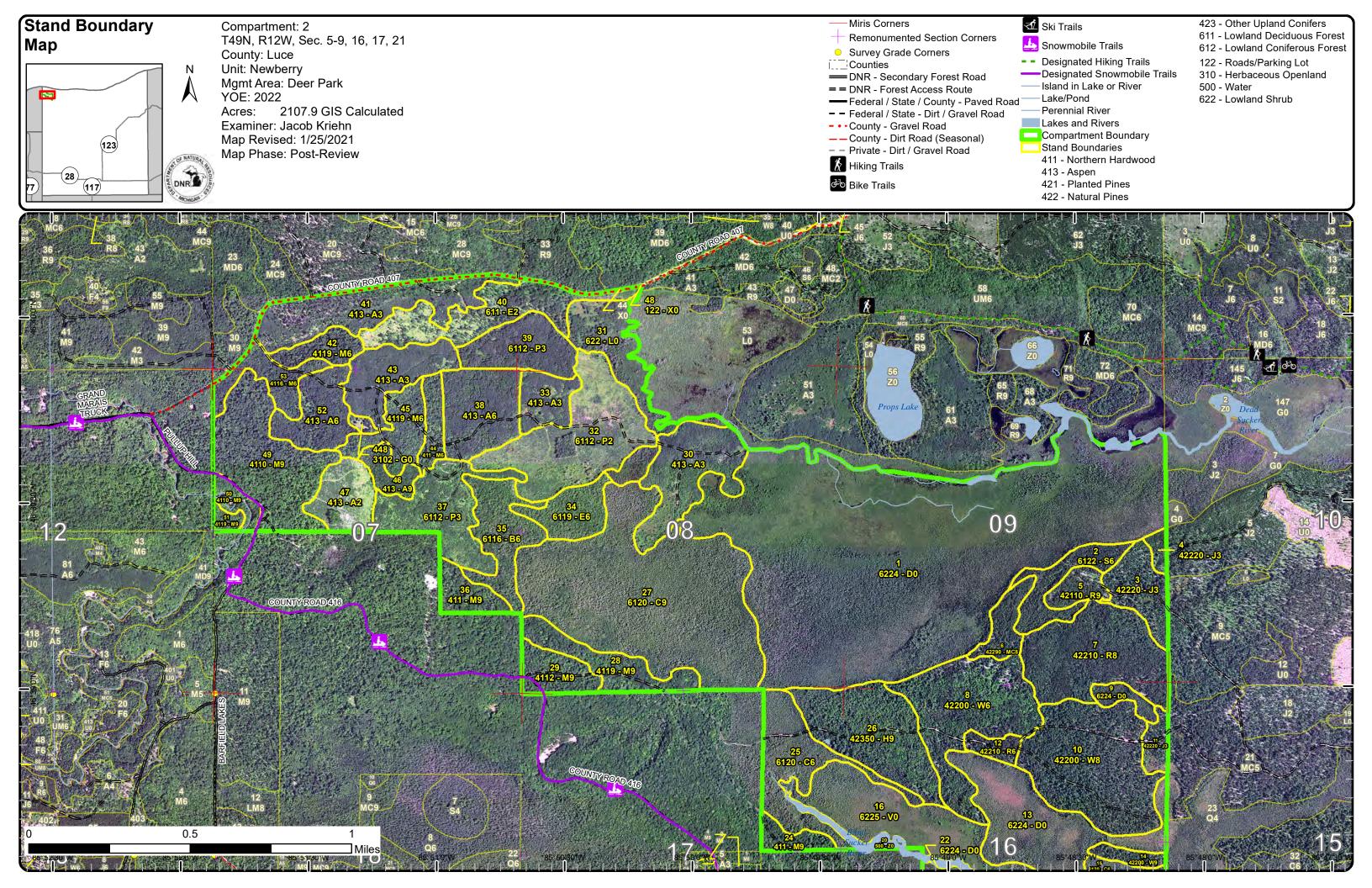
Proposed treatments
Site condition boundaries

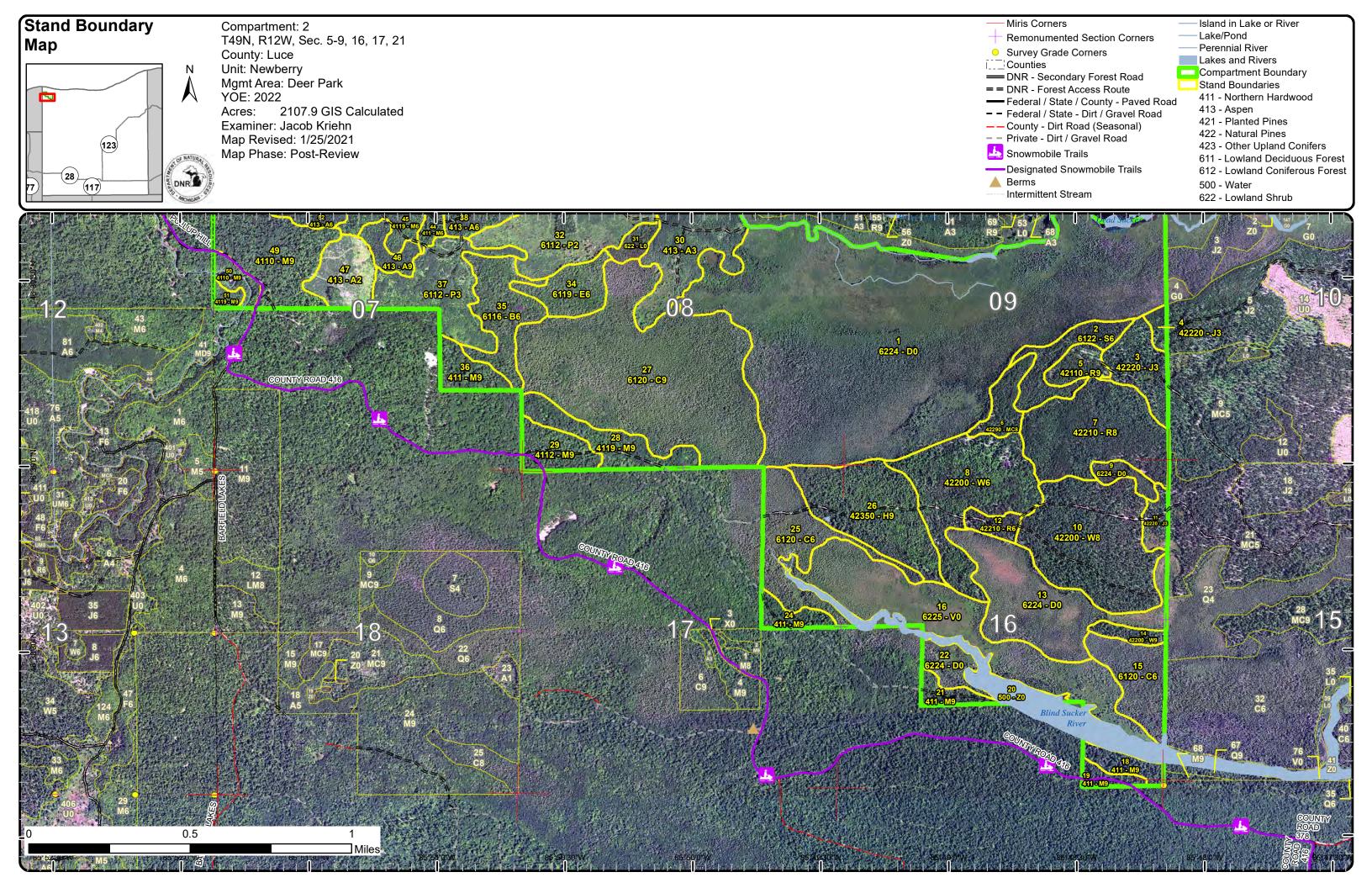
Details on the road access system

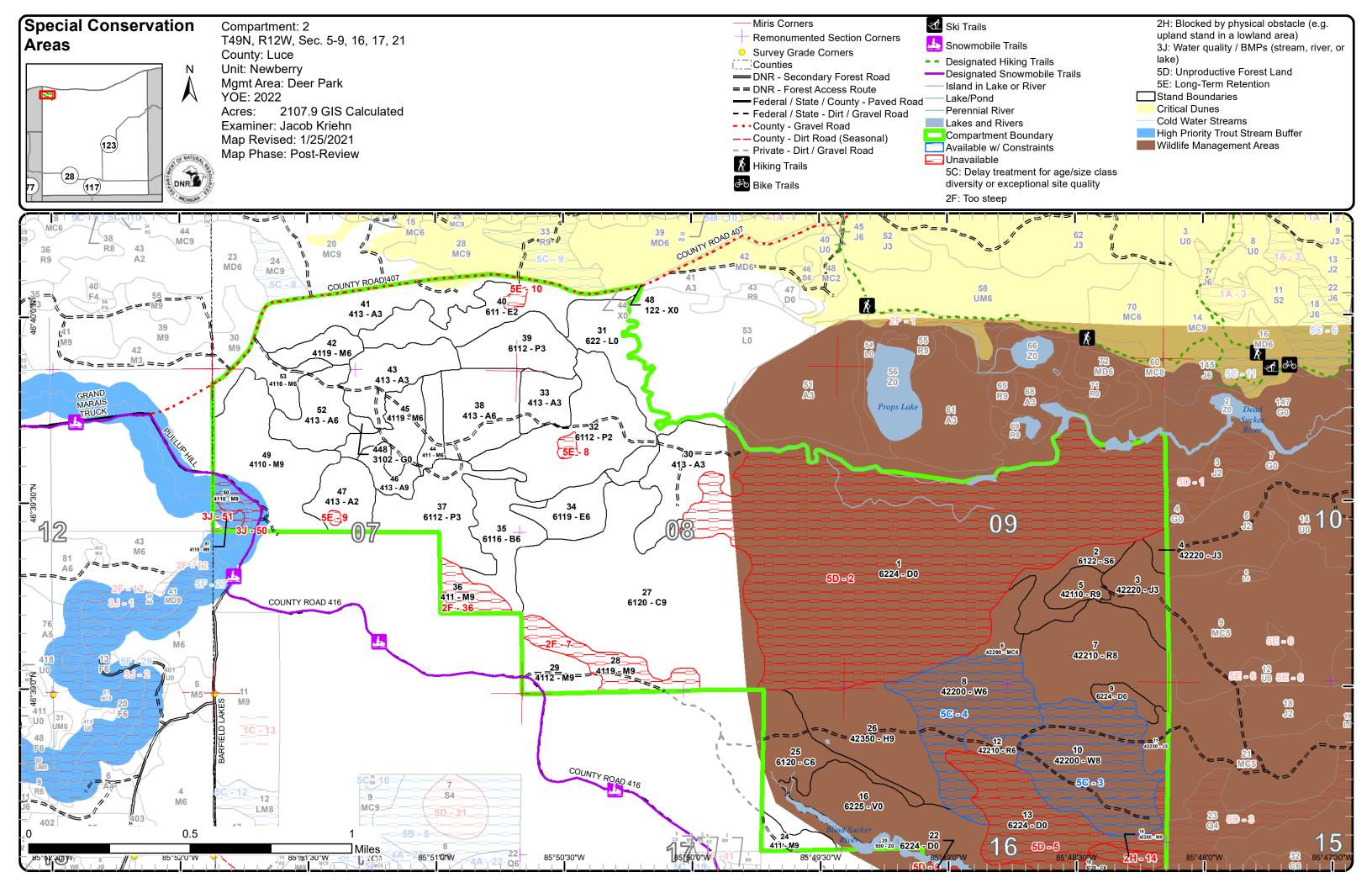


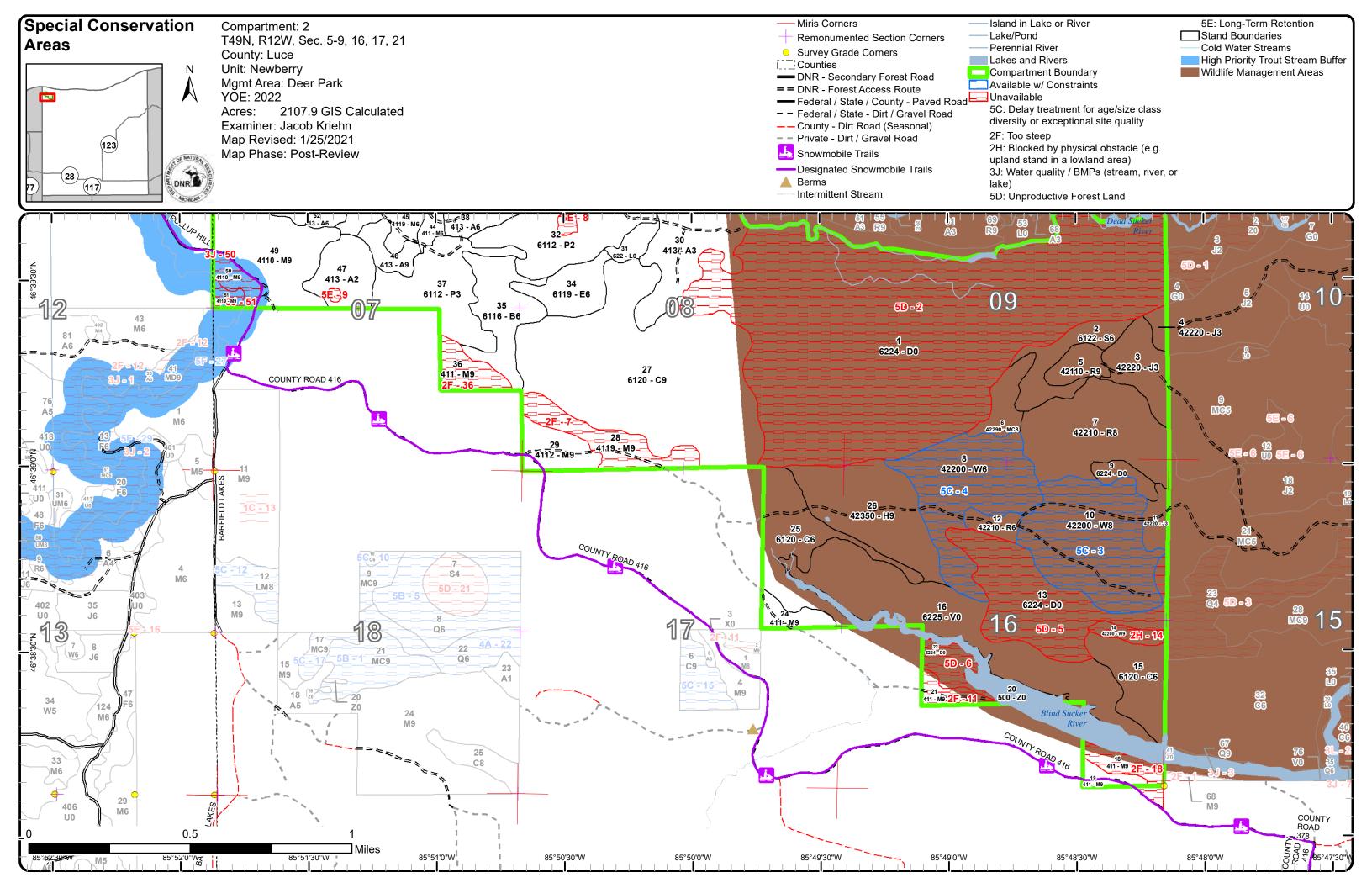












Compartment 2

Year of Entry 2022

Newberry Mgt. Unit

Jacob Kriehn: Examiner



Age Class

	Age.	Kor C	\$ / <u>\$</u>	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	* * * * * * * * * * * * * * * * * * *	3/8		3/8	8/8	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			72, 18	Ø / &	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	25 S	Ø / 4	St Jres	Lago Lago
Aspen	0	24	102	45	68	0	11	0	0	0	0	0	0	0	0	0	0	0	249
Bog	96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96
Cedar	0	0	0	0	0	0	0	0	0	0	0	75	187	0	0	0	0	0	262
Hemlock	0	0	0	0	0	0	0	0	0	0	0	61	0	0	0	0	0	0	61
Herbaceous Openland	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Jack Pine	0	0	0	4	33	0	0	0	0	0	0	0	0	0	0	0	0	0	37
Lowland Aspen/Balsam Poplar	0	73	46	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150
Lowland Deciduous	0	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	68
Lowland Shrub	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	23
Natural Mixed Pines	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	14
Northern Hardwood	0	0	0	0	0	0	23	20	0	0	0	0	0	0	0	0	0	198	241
Paper Birch	0	0	0	0	0	0	0	0	0	0	34	0	0	0	0	0	0	0	34
Red Pine	0	0	0	0	0	0	0	77	0	11	0	0	0	0	0	0	0	0	88
Treed Bog	543	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	543
Urban	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Water	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
White Pine	0	0	0	0	0	0	0	73	0	0	0	0	86	0	7	0	0	0	166
Total	716	144	148	80	101	0	34	170	14	34	34	136	273	0	7	0	0	219	2108



Report 2 – Treatment Summary

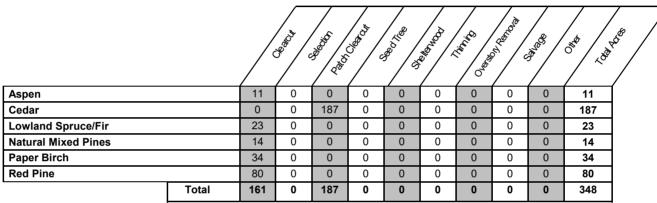
Newberry Mgt. Unit Year of Entry: 2022

Acres of Harvest

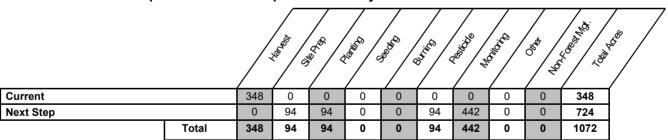
Compartment 2
Total Compartment Acres: 2,108

Commercial Harvest - 348 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



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Compartment: 2 Year of Entry: 2022



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

Approved Treatments:

42002002-Cut 22.8 6122 - Black Spruce Poletimber 111-Harvest Clearcut 6122 - Black Even-Aged No

140

Spruce

Prescription Clear cut stand. Final acreage may decrease due to wet areas.

Specs:

Leave retention along the bog on the north side of the stand (Stand 1).

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Black Spruce

Regen: **Other**

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

42002005-Cut 10.8 42110 - Planted Sawtimber 85 Clearcut with 4211 - Planted 111-Harvest Even-Aged Nο Red Pine Well 140 Retention Red Pine

Prescription Clearcut with retention.

Specs:

Leave diversity in the red line, especially non red pine.

Retention should be on the edge of the stand to facilitate trenching and spraying. Maximize diversity left in retention.

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

Treatments:

Acceptable Red Pine

Regen:

Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

42002006-Cut 14.1 42290 - Natural Sawtimber 73 51-80 Harvest Clearcut with 4211 - Planted Even-Aged No Red Pine Mixed Pine Medium Retention

Prescription Clear Cut with Retention.

Specs:

Leave diversity in the red line, especially non red pine species.

Retention should be on the edge of the stand to facilitate trenching and spraying. Maximize diversity in the retention.

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

Treatments:

Acceptable Red Pine

Regen: Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

Prescription Clear cut with retention.

Specs:

t

d

Leave diversity in red line, especially non red pine.

Red Pine

Medium

Retention should be on the edge of the stand to facilitate trenching and spraying. Maximize diversity left in retention. Retention for this stand should be left along the southeastern edge along stand 9.

Retention

Next Step SitePrep, Trenching; Pesticide, Aerial - Site Prep; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr **Treatments:**

Acceptable Red pine

Regen:

Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

27 42002027 187.1 6120 - Lowland Sawtimber 119 141-Harvest Strip/Patch/Gap 6120 - Lowland Two-Aged No Cedar Well 170 Cut Cedar (Femelschlag)

Prescription Patch clearcuts. Total acreage cut will be about 1/2 to 2/3 of the total stand acreage. Clearcut pockets will be approximately 10-15 acres in size and skid trails will need to be marked/designated between pockets. Leave a component of hemlock and yellow birch in the clearcuts if Specs: present. Potential legacy trees in this stand.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments

Acceptable Cedar, Hemlock, birch, black spruce

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2021

42002035-Cut 6116 - Lowland Poletimber 90 81-110 Harvest Clearcut with 6116 - Lowland No 34 2 Even-Aged Well Rirch Retention Rirch

Prescription Clearcut with retention to regenerate birch and aspen.

Specs:

Retention should be 3-5% of stand acreage and in multiple pockets. These pockets should be at least 0.5 acres or larger to avoid blowdown. Retention pockets should include aspen and conifer.

Leave mature aspen and birch in the red line where possible.

Final acreage may be reduced due to wet areas.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Birch, aspen, red maple, ash, black spruce

Regen:

Other Best access will be coming from the road near the NW corner of the stand. Road will need work in order to facilitate logging operations.

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

S t		Newberry	Mgt. Unit		Repo	rt 3 '	Treatments		Compartme Year of Entr		DNR DOUBLES
a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
46	42002046-Cut	10.5	413 - Aspen	Sawtimbe Well	er 52	51-80	Harvest	Clearcut	413 - Aspen	Even-Aged	No
Spec Next	cs:		ention due to sma	J	Leave	some mat	ure aspen in the	e red line.			
Acce Rege		red maple,	sugar maple.								
Othe Com	e <u>r</u> nment:										
	Condition oosed Start Date	: 10/1 /202	1								

Total Treatment Acreage Proposed: 348.4

Newberry Mgt. Unit Jacob Kriehn : Examiner Compartment: 2 Year of Entry: 2022



Availability for Management

Total	Acres	Acres Avail	Acres	D	omina	nt Site	e Con	dition	s	
Acres	Available	With Condition	Not Available		5C	2F	2H	3J	5D	5E
249	248	0	1	Aspen						1
96	96	0	0	Bog						
262	262	0	0	Cedar						
61	61	0	0	Hemlock						
2	2	0	0	Herbaceous Openland						
37	37	0	0	Jack Pine						
150	148	0	2	Lowland Aspen/Balsam Poplar						2
68	66	0	2	Lowland Deciduous						2
41	41	0	0	Lowland Shrub						
23	23	0	0	Lowland Spruce/Fir						
14	14	0	0	Natural Mixed Pines						
240	168	0	73	Northern Hardwood		60		12		
34	34	0	0	Paper Birch						
87	87	0	0	Red Pine						
543	8	0	535	Treed Bog					535	
2	2	0	0	Urban						
31	31	0	0	Water						
166	0	159	7	White Pine	159		7			
2,108	1,328	159	621	Total Forested Acres	159	60	7	12	535	6
	63%	8%	29%	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.

		,	,		•	•	3,
	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
2	Unavailable	5D: Unproductive Forest Land	451	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						

Newberry Mgt. Unit Jacob Kriehn: Examiner



3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	86	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	73	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	5D: Unproductive Forest Land	72	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	5D: Unproductive Forest Land	12	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	2F: Too steep	28	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
8	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
9	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
	0024 42:48:27 PM Pag	. 0 - 5 4					SWADTZN

Newberry Mgt. Unit Jacob Kriehn: Examiner



10	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
11	Unavailable	2F: Too steep	8	2G: Too wet (sensitive soils, does not include access issues)	2I: Survey needed	Unspecified	Unspecified
(Comments:						
14	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	7	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
18	Unavailable	2F: Too steep	13	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
36	Unavailable	2F: Too steep	14	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
50	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	9	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
125120	24 42:48:27 DM Dag	- 2 - 4					SWADT7N1

Newberry Mgt. Unit Jacob Kriehn: Examiner

Compartment: 2 Year of Entry: 2022



51	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	4	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	Unspecified	Unspecified	Unspecified
Co	omments:						

1/25/2021 12:48:27 PM - Page 4 of 4 SWARTZN3

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: 2
Year of Entry 2022



Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

Conservation Area	n Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen cond stocked trout populations and those of other coldwater fish speci year to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	es (e.g., slimy sculpin) to persist from se conditions due to substantial
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high communities are ecologically and socially significant in their effects as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, liversity of plants and wildlife. Riparian cts on water quality and quantity, as well
HCVA	Critical Dunes	Critical dune areas are established via the public legislative proc Dune Protection and Management, of the Natural Resources and 451. The program is administered by the Michigan Department of current distribution of designated critical dunes is established by Areas.	d Environmental Protection Act, 1994 PA of Environmental Quality (DEQ). The



Stand	Level 4 Co	over Type)	Size De	nsity	Acres	Stand Age	BA Range	Managed S	ite	General Comments
1	6224 - 1	Гreed Bog		Nonsto	cked	451.2			No		OPIC - FMD: southeastern portion of the stand has young jack pine on bog type ground. Possible future stand of merchantable jack pine.
											Stand was not visited this YOE, information is from previous inventory done in 2010.
2	6122 - BI	ack Spruc	e	Poletimbe	er Well	22.8	85	111-140	N/A		OPIC - FMD: Black spruce with component of red pine and jack pine. Spruce is healthy and small diameter. Hold for 10 years for diversity.
											Stand was not visited this YOE. Stand information is from previous inventory done in 2010.
3	42220 - Nat	ural Jack	Pine	Sapling	Well	24.2	33	Immature	N/A		OPIC - FMD: Good jack pine reproduction, 15-25 ft tall. Thick. Some red pine residual left from harvest. Part of the Vicious Dog Sale #36-84-01.
											Stand was not visited this YOE, all stand information is from the previous inventory done in 2010.
4	42220 - Nat	ural Jack	Pine	Sapling	Well	4.2	28	Immature	N/A		OPIC - FMD: Stand was harvested in 1993 as sale #26-93-1. FTP C-42-402. Good J3 regeneration, 8-10 ft tall avg.
											Stand was not visited this YOE, all stand information is from the previous inventory done in 2010.
5	42110 - Plai	nted Red	Pine	Sawtimbe	er Well	10.8	85	111-140	N/A		Stand thinnned as Dead Sucker Red Pine (029-02-01). Completed 08/26/04. FTP42-579: small east tip of stand, which was JP, was never scarified, but regen check in May, 2008 shows good mix of JP (6" ht), S, R and W filling in. No further cultural work needed. As of June 2010, no red pine regeneration.
6	42290 - Natu	ıral Mixed	Pine S	Sawtimber	Medium	14.1	73	51-80	N/A		12/7/16 - Sale Closed 12/7/16 Blind Flsh Pine 054-12. Payment units 2
	Canopy Species	% Cove	r Size Class	DBH	Age	Sub-Can	opy Species	s Density	Avg. Height	Size	and 5 were scheduled to scarified in 2017 but was canceled due to high residual regeneration and overstory.
	Red Pine	50	Log/Pole	10	73	Whi	te Pine	Medium	Variable	Sapling	
	White Pine	50	Log/Pole	12		Quaki	ng Aspen	High	5 - 10 feet	Sapling	Regen check 2020 - Stand has good regen coming in. Lots of aspen in the open pockets and a fair amount of white pine in the areas with less
						Re	d Pine	Low	< 5 feet	Sapling	aspen. MO is red pine - not currently meeting this MO.
7	42210 - Nat	tural Red I	Pine S	Sawtimber	Medium	68.9	66	81-110	N/A		Blind Fish Pine Sale 054-12. Completed 12/16. MP
	Canopy Species	% Cove	r Size Class	DBH	Age	Sub-Can	opy Species	s Density	Avg. Height	Size	2020 Regen check - Fully stocked, regen is free to grow in the openings
	Red Pine	60	Log	16	66		Maple	Low	5 - 10 feet	Sapling	from the harvest. Lots of white pine growing in. Low red pine regen. MO
	White Pine	40	Log	18		Whi	te Pine	High	10 - 20 feet	Sapling	is stated at Red Pine.
					1	White	Spruce	Medium	5 - 10 feet	Sapling	
						Re	d Pine	Low	5 - 10 feet	Sapling	
8	42200 - Natu	ural White	Pine	Poletimbe	er Well	72.8	61	51-80	N/A		OPIC - FMD: Stand is regenerating. Young white pine stand. 40-50 years old. 9-10 inch diameter. Open grown around openings. Low quality red maple and aspen mixed in.
											Stand was not visited this YOE, all stand information is from the previous inventory done in 2010.



Stand	Level 4 C	Level 4 Cover Type Size Density Acres Stand Age BA Range Managed Site		ite	General Comments						
9	6224 -	Treed Bog		Nonsto	ocked	7.5			No		Stand not visited this YOE - OI stand last YOE.
10	42200 - Nat	ural White F	Pine	Sawtimber	Medium	86.3	118	81-110	N/A		Blind Fish Pine 054-12. Closed 12/16. 2017 scarification was canceled due to the high BA of residuals left.
	Canopy Species	% Cover	Size Class	s DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	due to the high BA of residuals left.
	White Pine	85	Log	14	118	Re	ed Maple	Low	10 - 20 feet	Sapling	Regen check 2020 - Stand is fully stocked with lots of white pine regen.
	Red Pine	10	Log/Pole	12		W	hite Pine	Full	Variable	Sapling	
	Hemlock	5	Log	14		Wh	ite Spruce	Medium	Variable	Sapling	
						Ва	alsam Fir	Low	Variable	Sapling	
11	42220 - Na	tural Jack P	ine	Sapling	ı Well	8.5	33	Immature	N/A		OPIC - FMD: Good jack pine reproduction, 15-25 ft tall. Thick. Some red pine residual left from harvest. Part of the Vicious Dog Sale #36-84-01. Stand was not visited this YOE, all stand information is from the previous inventory done in 2010.
12	42210 - Na	atural Red Pi	ne	Poletimb	er Well	7.5	60	81-110	N/A		Blind Fish Pine Sale 054-12. Completed 12/16 Scarified in 2017.
	Canopy Species	% Cover	Size Class	s DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Good red pine stand with a strong component of white pine. Overall a
	Red Pine	70	Log	12	60		hite Pine	High	Variable	Sapling	high quality stand.
	White Pine	30	Log	12		R	ed Pine	Medium	< 5 feet	Sapling	
				'	<u> </u>	Ja	ack Pine	Low	< 5 feet	Sapling	Regen check 2020: Lots of white pine coming in with a moderate amount of red pine. A few scattered jack pine coming in as well.
13	6224 -	Treed Bog		Nonsto	ocked	72.2			No		Stand not visited this YOE - OI stand from last year of entry.
14	42200 - Nat	tural White F	Pine	Sawtimb	er Well	6.7	136	81-110	N/A		Trees are healthy. The area around the stand is swampy and would not be easy to cross.
											Stand was not visited this YOE. Stand information is from previous inventory done in 2010.
15	6120 - Lo	owland Ceda	ır	Poletimb	er Well	30.4	103	51-80	N/A		OPIC - FMD: Low quality cedar. Flooding water table is controlling factor resulting in slow growth. Older trees predating flooding have died or are dying. Trees seem to be recovering south of road as they establish a higher layer of organic soil. North of road has poor drainage and has stunted growth of stand.
											Stand was not visited this YOE, all stand information is from the previous inventory done in 2010.
16	622	25 - Bog		Nonsto	ocked	96.1			No		OPIC - FMD: OI Stand Year Origin was Stand not visited this YOE. Previous OI Stand.
18	411 - North	nern Hardwo	od	Sawtimb	er Well	10.3	99	111-140	N/A		OPIC - FMD: Beech Bark Disease. Beech is the predominant species in the stand. Thei stand is on the steep escarpment that leads down to the Blind Sucker Flooding. Too steep to log.



Stand	d Level 4 Co	over Type		Size	Density	,	Acres	Stand Age	BA Range	Managed S	ite	General Comments
19	411 - Northe	ern Hardwo	ood	Sawt	imber We	ell	6.1	99	51-80	N/A		OPIC - FMD: Residual stand following harvest is in bad shape. Heavy Beech Bark Disease. Low quality residual appears to have been left. Beech Bark Disease present. Beech is the predominant species in stand. Stand harvested (selection) as "Sucker River Hardwoods" (002-02-01). Completed 11-01-04. Residual BA of 80.
20	500 -	Water		Noi	nstocked		31.3			No		Blind Sucker Flooding.
21	411 - Northe	ern Hardwo	ood	Sawt	imber We	ell	8.3	99	51-80	N/A		OPIC - FMD: Yellow birch is dying. North part of stand butts up against the flooding and the south part of stand is on the steep escarpment leaving a very narrow strip of loggable land. Erosion hazard if logged. Beech Bark Disease is
												Logging is improbable due to the small acreage of the stand with the steep ground and erosion hazard. Would also need a survey.
22	6224 - T	Treed Bog		Noi	nstocked		12.2			No		Stand not visited this YOE - OI stand last year of entry.
24	411 - Northe	ern Hardwo	ood	Sawt	imber We	ell	9.7	99	81-110	N/A		OPIC - FMD: excellent site. Small stand surrounded by shelter bay. Good site and good road access. Beech Bark Disease. Good hard maple regeneration. Stand harvested (Selection) as "Sucker River Hardwoods" (002-02-01). Completed 11-01-04. Residual BA of 70.
25	6120 - Lov	wland Ceda	ar	Polet	imber We	ell	44.7	103	51-80	N/A		OPIC - FMD: Low quality cedar. Flooding water table is controlling factor resulting in slow growth. Older trees predating flooding have died or are dying. Trees seem to be recovering south of road as they establish a higher layer of organic soil. North of road has poor drainage and has stunted growth of stand.
												Stand was not visited this YOE, all stand information is from the previous inventory done in 2010.
26	42350 - Upl	and Hemic	ock	Sawt	imber We	ell	60.6	107	141-170	N/A		OPIC - FMD: Stand could be managed (access, silvi ready). However, stand is very scenic, large diameter hemlock stand. Pockets of younger trees. There was a recommendation for a timber sale within this sale lst year of entry.
27	6120 - Lov	wland Ceda	ar	Sawt	imber We	ell	187.1	119	141-170	N/A		A large cedar stand. Somewhat short and stubby but 16 foot of good
	Canopy Species	% Cover	Size Class	; C	DBH Age		Sub-Ca	nopy Species	s Density	Avg. Height	Size	log. Mixed quality, very good patches to scattered trees with blowdown. No thermal cover. Clumpy appearance. Understory is a mix of balsam,
No	orthern White Cedar	85	Log/Pole		10 119			low Birch	Medium	5 - 10 feet	Sapling	red maple, spruce, tag alder and some cedar. No deer problems. If you
	Hemlock	5	Log		18		Н	lemlock	Medium	5 - 10 feet	Sapling	are looking to cut some good cedar this stand would be the one to look at
	Yellow Birch	5	Log/Pole		10		Ва	ılsam Fir	Medium	Variable	Sapling	due to low deer numbers and the local area's capability of reproducing cedar.
	Black Spruce	5	Log/Pole		10							
28	4119 - Mixed No	orthern Hard	dwoods	Sawt	imber We	ell	27.6	99	81-110	N/A		OPIC - FMD: Steep escarpment, too steep to operate on. Large diameter hardwoods, hard maple, red maple, yellow birch and beech.
												Stand was not visited this YOE, information is from previous inventory done in 2010.



Stand	Level 4 Co	over Type		Size Density	Acres	Stand Age	BA Range	Managed S	ite	General Comments	
29	4112 - Maple, Beech, Cherry Association			Sawtimber Well	18.5	99	81-110	N/A		Stand harvested (thinning) as "Sucker River Hardwoods" (002-02-01). Completed 11-01-04. Residual BA of 80. The level ground above	
	Canopy Species	anopy Species % Cover Size C		DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	escarpment, was cut in the 70s, needed to release the regeneration created by that cut. Good hard maple regeneration. Residual BA ranges	
	Sugar Maple	45	Log	14 99		Beech	Medium	10 - 20 feet	Sapling	from 80-100 sq ft. Looks like beech bark disease is starting to impact the	
	Beech	40	Log	14	Su	gar Maple	Medium	10 - 20 feet	Sapling	stand. Beech tops are starting to die back, there is also a good amount	
	Red Maple	15	Log	12	Re	ed Maple	Low	10 - 20 feet	Sapling	of healthy looking beech throughout the stand as well. The overall sand has a wide diameter range with some diameters around 18" or more.	
30	413 -	Aspen		Sapling Well	45.0	26	Immature	N/A		OPIC - FMD: TIMBER SALE #32-92-1. Northern 3/4 of stand is A3/F2, 15 ft tall and thick. The southern 1/4 of the stand bordering the adjacent cedar stand is more of P2/S2, averaging 6-10 ft tall, spruce, white birch and some aspen.	
										Stand was not visited this YOE, data from previous inventory.	
31	622 - Low	/land Shrub)	Nonstocked	40.8			No		Stand not visited this YOE - OI stand last YOE.	
32	6112 - Lov Canopy Species	•	en Size Class	Sapling Medium DBH Age	73.1	8	Immature	N/A		Stand harvested via final harvest as sale #014-12-01, Compartment 2 Mix. Completed 09/27/13.	
	Quaking Aspen Red Maple Balsam Fir Paper Birch	50 40 5 5	Sapling Sapling Sapling Sapling	2 8 2 1 2 2						Very wet stand. Primarily coming back as lowland aspen with a strong component of red maple. Some scattered balsam and birch coming in.	
33	413 -	Aspen		Sapling Well	17.8	16	Immature	N/A		OPIC - FMD: ***Stand harvested as "Sucker River Mix" (032-02-01). Completed 11/15/05. Stand is regenerating well to aspen. Spots where regen is not as thick, mixed with maple saplings. Regeneration is a mix of aspen, red maple, and cherry. Raspberry brush present. Old Notes prior to harvest ********A large # of 2 to 4 inch maple saplings that need to be cut along with the marked trees. Give timber sale credit for cutting these whips. Look to plant some white pine in understory after harvest. Most of stand area is and will be red maple if it doesn't convert to aspen. 10% of trees are grade #1, 30% are grade #2, and the 60% are grade #3.	
										Stand was not visited this YOE, information is from previous inventory.	
34	6119 - Mixed Lo Fo	wland Dec prest	iduous	Poletimber Well	21.4	99	51-80	N/A		OPIC - FMD: Wet, lowland hardwoods stand with pockets of large diameter hemlock and red maple. Some large cedar throughout also. Old notes******clearcutting this stand leaving a yellow birch seed source would regenerate a lot of yellow birch. A lot of blowdowns. Stand looks wet even on top of 4 feet of snow.	
										Stand information is from previous inventory done in 2010.	
35	6116 - Lo	wland Bircl	h	Poletimber Well	34.2	90	81-110	N/A		OPIC - FMD: Lowland white birch stand. Mainly white birch and red maple. Component of black ash, balsam, and black spruce. Dieback and mortality in white birch. Higher areas with mature aspen and birch. Left over from sale #15-84-1.	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
36	411 - Northern Hardwood	Sawtimber Well	14.2	99	81-110	N/A	OPIC - FMD: Stand lies mainly on escarpment. Majority of the stand is on the slope, may be too steep to harvest. Access is questionable through private land as well. Many yellow birch dying. Adjacent private land has been harvested.
37	6112 - Lowland Aspen	Sapling Well	46.3	16	Immature	N/A	OPIC - FMD: Stand harvested as "Sucker River Mix" (032-02-01). Completed 11/15/05. This was originally 3 stands (58, 59, 60 in 2002yoe). Combined as one stand after timber harvest. Regenerating to a P3/E3. Lots of aspen and maple regeneration. Areas with white birch and black ash regen. Very wet, access road into old sale is under water. Regeneration averages 10 ft tall. Clumps of red maple.
							Stand was not visited this YOE, information is from previous inventory done in 2010.
38	413 - Aspen	Poletimber Well	39.3	37	1-50	N/A	OPIC - FMD: Stand is transitioning from an A3 to an A6. Lots of 2-4 inch aspen, some merchantable (5-7 inch dbh) aspen and maple. Thick stand. Cut as sale #15-84-1. TSI in late 1980's.
							Stand was not visited this YOE, information is from previous inventory.
39	6112 - Lowland Aspen	Sapling Well	31.0	27	Immature	N/A	OPIC - FMD: Stand cut as sale #17-92-1. Completed in 1994. Very good site! Young stand, yet starting to transition to merchantable size classes. Wetter ground, heavy soils. Some elm left as residual from previous harvest.
							Stand was not visited this YOE, information is from previous inventory.
40	611 - Lowland Deciduous Forest	Sapling Medium	46.8	8	Immature	N/A	Stand harvested via final harvest as sale #014-12-01, Compartment 2 Mix. Completed 09/27/13.
41	413 - Aspen	Sapling Well	51.6	16	Immature	N/A	Stand harvested as "Grand Marais Road Aspen" (030-02-01). Completed 10/18/05. Stand is regenerating nicely to aspen.
42	4119 - Mixed Northern Hardwoods	Poletimber Well	13.4	99	51-80	N/A	OPIC - FMD: Stand harvested as "Grand Marais Road Aspen" (030-02-01). Completed 10/18/05. Selection cut.
							Stand was not visited this YOE, all stand information is from the previous inventory done in 2010.
43	413 - Aspen	Sapling Well	32.7	16	Immature	N/A	OPIC - FMD: Stand harvested as "Grand Marais Road Aspen" (030-02-01). Completed 10/18/05. Final harvested. Any oak, red pine, white pine were left as residual. Good aspen regeneration 15 ft tall. Maple understory. Thick stand of regeneration.
							Stand was not visited this YOE, information is from previous inventory.



Stand	Level 4 C	over Type		Size Den	sity	Acres	Stand Age	BA Range	Managed S	ite	General Comments
44	411 - Northern Hardwood			Poletimbe	r Well	11.5	99	51-80	N/A		OPIC - FMD: Stand harvested by selection cut as "Sucker River Mix" (032-02-01). Completed 11/15/05. Stand is mainly hard maple with white birch and red maple. Lots of maple regen coming in 2-6 ft tall. South part of stand has higher component of white birch. Fair amount is dead. Aspen regen is thick in areas where aspen was removed with harvest. Occasional yellow birch.
											Stand was not visited in 2020 Inventory. Stand information is from previous inventory done in 2010.
											Look to harvest next inventory.
45	4119 - Mixed No	lwoods	Poletimbe	r Well	23.0	52	51-80	N/A		OPIC - FMD: Stand acreage has decreased since last entry year. Separated out aspen areas for future aspen management. Young maple stand with components of aspen, balsam, white birch, etc. Possible management (thinning) in 20-30 years. A lot of white birch repro. This was not a clearcut. Many maple stems. Aspen is 25-31 years old for younger trees, it is in clones. Much of this stand will convert to quality hard maple when stand is cut again. Let grow another 2 decades.	
											Stand was not visited this YOE, information is from previous inventory done in 2010.
46	6 413 - Aspen			Sawtimber Well			0.5 52	51-80	N/A		OPIC - FMD: Stand was separated out from original stand (adjacent stand 45). Separated out aspen areas for future aspen management. Young aspen stand with a maple component along with balsam, white birch, etc. Possible management in 10 years. Aspen is 35-41 years old.
										Stand was not visited this YOE. Stand information is from previous inventory done in 2010.	
47	413		Sapling Mo	edium	23.6	8	Immature	N/A		Stand harvested via final harvest as sale #014-12-01, Compartment 2 Mix. Completed 09/27/13.	
48	122 - Roa	ot	Nonstoc	ked	2.5			No			
49	4110 - Sugar Maple Ass		iation	Sawtimber Well		65.7	99	81-110	N/A		OPIC - FMD: Stand harvested (selection) as "Sucker River Hardwoods"
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	(002-02-01). Completed 11-01-04. Residual BA of 70. Very high quality site. Excellent quality stand. Very tall heights. Regeneration from the
	Sugar Maple	85	XLog/Log		99	Sug	gar Maple	Low	10 - 20 feet	Sapling	harvest is starting to take hold, 6-15 ft tall.
	Beech	5	Log	18			Beech	Low	10 - 20 feet	Sapling	
	Yellow Birch	5	Log	18							•
	Red Maple	5	Log/Pole	12							
	Yellow Birch	5	Log	18			Deecn	Low	10 - 20 leet	Sapling	



Stand	Level 4 Co	Size Density Sawtimber Well		Acres I 8.6	Stand Age E	BA Range 111-140	Managed Site		General Comments OPIC - FMD: Water influence zone Sucker River, 150 feet west side,		
50	4110 - Sugar M				99						
	Canopy Species	% Cover	Size Class	s DBI	H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	between road and river east side.
	Sugar Maple 86 Log			16 99		Am	erican Elm	Low	10 - 20 feet	Sapling	
No	rthern White Cedar	2	Log/Pole	12		Su	gar Maple	Low	10 - 20 feet	Sapling	
	Yellow Birch	5	Log	14			Beech	Low	5 - 10 feet	Sapling	
	Beech	5	Log	16							-
	Green Ash	2	Log/Pole	12							
51	1 4119 - Mixed Northern Hardwoods				oer Well	3.9	99	111-140	N/A		Very high quality site. Excellent quality stand. However you have to cross the sucker river to get to it.
52	413 - Aspen		Poletimber Well		l 28.4	39	51-80	N/A		OPIC - FMD: Quality stand of young, immature aspen. TSI done middle to late 80s. Pockets of slightly older aspen. Good quality maple mixed in. Pockets of A4/A5.	
											Stand was not visited in this YOE, Information is from previous inventory done in 2010.
53	53 4116 - Mixed N. Hardwood - A			Poletiml	oer Well	19.7	60	51-80	N/A		OPIC - FMD: A regenerating stand. A combination of aspen clones and small maple poles and saplings. This is a quality hard maple site. It will take 20 years to develop. The maple saps and small poles are quality trees.
											Stand was not visited this YOE, information is from previous inventory done in 2010.
448	3102	- Grass		Nonst	ocked	2.3			No		OPIC - FMD: old grass opening, seems stable Stand not visited this YOE - OI stand last YOE.