

Compartment Review Presentation

Newberry Forest Management Unit

Compartment 42042 Entry Year 2019 Acreage: 3,888

County Luce

Management Area: Deer Park

Revision Date: 2017-08-30

Stand Examiner: Amy Douglass

Legal Description:

T49N R09W Sections 25-27 & 34-36

T48N R09W Sections 1-3

Identified Planning Goals:

Restore forested cover types burned by the Duck Lake Fire in 2012, naturally or artificially, through proper management, while providing for wildlife habitat and recreational opportunities. Maintain or enhance cover types not burned by the fire to provide sustainable timber, wildlife habitat and recreational resources.

Soil and topography:

The area is comprised of sand ridges of level to rolling with very steep ridges mixed throughout, intermixed with lowlands and intermittent wetlands. The upland is mainly Rousseau fine sand with isolated patches of Wallace sand. Transitional areas are mainly Rubicon-Spot complex, but also support Croswell-Spot complex and Wallace-Spot complex. The bog types are dominated by Dawson, Greenwood, and Loxley soils. The area surrounding Little Two-Hearted Lakes has slightly different soils, comprised of Spot-Finch complex, Paquin-Spot complex, Carbondale, Lupton, and Tawas soils and Spot-Dawson peats.

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

The compartment is generally contiguous State ownership. There are a few inholdings of Hancock lands and The Nature Conservancy lands. Similar ownership patterns exist on lands surrounding the compartment. There are some private forty's and eighty's scattered outside the compartment boundary. There is a current LERC exchange proposed with The Nature Conservancy in this area, as well as other areas within the Newberry Unit, to consolidate both of our ownerships. Predominate land use in the area mostly involves recreation (hunting, fishing, dog sledding, hiking, ORV and snowmobile riding, berry picking, wildlife/nature viewing) and timber production.

Unique Natural Features:

The following ERA's are found within the compartment: Intermittent Wetlands (Swamp Lakes), Dry-Mesic Northern Forests (Little Two-Hearted Lakes Pines & Swamp Lakes) and Mesic Northern Forests (Little Two-Hearted Lakes). Type 2 Old Growth has been identified in stands along Little Two-Hearted Lakes. MNFI has also identified a Poor Conifer Swamp (Little Two-Hearted Lakes) and a Muskeq (Little Two-Hearted Lakes Muskeq).

There is potential for other threatened, endangered or special concern flora and fauna species.

Archeological, Historical, and Cultural Features:

None noted.

Special Management Designations or Considerations:

The Little Two Heated Lakes located on the south end of the compartment is a unique area that has been left relatively undisturbed. The forested areas of pine, hemlock and hardwoods immediately adjacent to the north edges of Mink Lake and Bone Lake are like taking a step back in time. This area has characteristics that many would consider to be "old growth". Its uniqueness should be factored in while making land management decisions.

The Swamp Lakes Complex is a series of intermittent wetlands interspersed amongst pine/oak ridges. Many of the small ponds within this complex seasonally dry up. Any land management decisions made in the area must consider the uniqueness of this area.

Watershed and Fisheries Considerations:

Fisheries Values: Minimal

Fisheries Concerns: This compartment contains the Little Two Hearted Lakes and the Swamp Lakes area. The Little Two Hearted River intersects the far southeast corner of the compartment, however stands in proximity to the river are mostly lowland areas. Both complexes of lakes provide minimal fisheries benefits as they are both prone to winterkills due to shallow depths and seasonal lake levels during drought years. No treatments are proposed near any of these waterbodies,

so there are no fisheries concerns at this time.

Wildlife Habitat Considerations:

Compartment 42 lies in the northern portion of Luce county and is in the Grand Marais Sandy End Moraine and Outwash ecological sub-subsection. The compartment is in the Deer Park Management Area and American marten, Kirtland's warbler, Piping plover, and red crossbill are featured species. The compartment is composed largely of treed bogs, marshes, and forested uplands, which generally support red or white pine. Species diversity within stands is generally high in the compartment. The landscape characteristics and vegetation patterns of this compartment are likely quite similar those found in pre-settlement times.

Wildlife objectives are being achieved by the retention of hard and soft mast producing trees, wildlife den and nest trees and snags in existing stands. Structural diversity of stands will be retained by preserving understory spruce and maple. Marshes will be buffered and low ground leatherleaf areas will be protected to preserve wetland wildlife values and habitats. Wildlife species expected to use this compartment include ruffed grouse, white-tailed deer, black bear, moose, otter, mink, coyotes, gray wolves, fisher, marten, and waterfowl.

Mineral Resource and Development Concerns and/or Restrictions

Gravel pits are not located in the area. There may be some sand and gravel potential within the compartment but little information about the surface geology is available for the area. Much of the compartment is covered by wetlands, which could limit any sand and gravel development. There is no known metallic mineral potential in this area, and there is no known potential for economic oil and gas production in the UP.

Vehicle Access:

The compartment is located approximately 26 miles north of Newberry via M-123 and County Road 500. The compartment can be accessed mainly by the Swamp Lakes Road or the Bone Lake Trail (also known as the Little Two Hearted Lakes Road). The Swamp Lakes Road is a fair dirt road for the most part but may be seasonally impassible. The Bone Lake Trail is a poor dirt road that can be seasonally impassible to normal two-wheel drive traffic. The Culhane Grade runs through portion of the compartment as well as several other two-tracks. Many of the two-tracks within the compartment are narrow and difficult to navigate with a normal vehicle, especially in light of the deadfalls from the Duck Lake Fire.

Survey Needs:

None noted at this time. The proposed exchange/consolidation of ownership with The Nature Conservancy will negate the need for additional survey requirements in the future. The Duck Lake Fire in 2012 took care of a cabin trespass.

Recreational Facilities and Opportunities:

Recreational opportunities include hunting, fishing, dog sledding, hiking, ORV and snowmobile riding, berry picking and wildlife/nature viewing. Most of the roads throughout the compartment are primarily used for all for the mentioned activities. The North Country Pathway runs through the NE corner of the compartment. There are a few remote "unofficial" camping sites throughout the compartment primarily used during deer hunting season.

Fire Protection:

Pine mixed with grassy/brush marsh fuel types throughout this compartment have potential for large fire development, as evidenced by the Duck Lake Fire in 2012. Mixture of marsh areas could be a challenge to suppression forces. There are a fair number of roads, but most are very difficult to navigate and will require extensive work to be used as fire lines or access.

Additional Compartment Information:

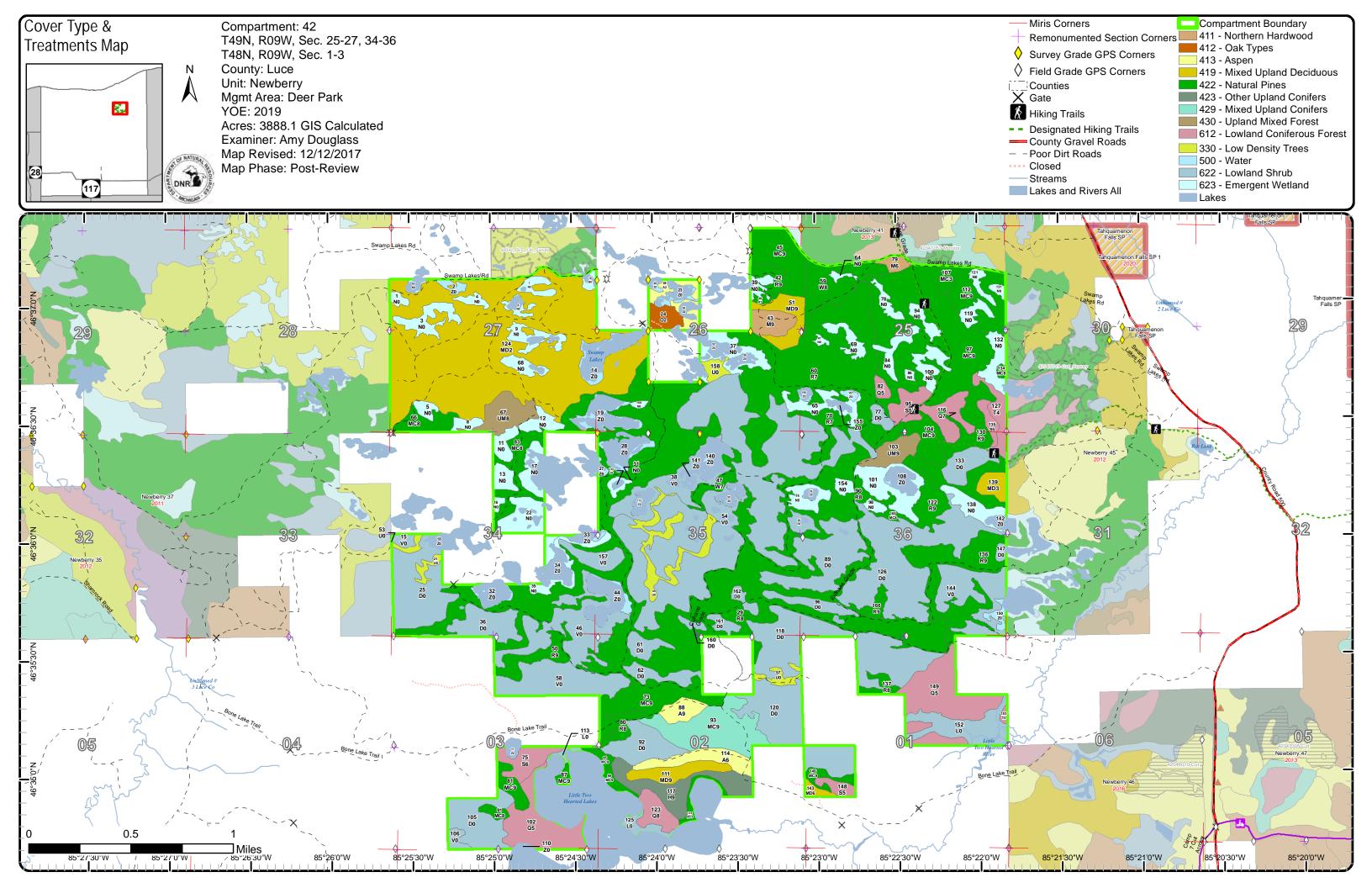
The Duck Lake Fire, in 2012, burned approximately 2/3 of this compartment.

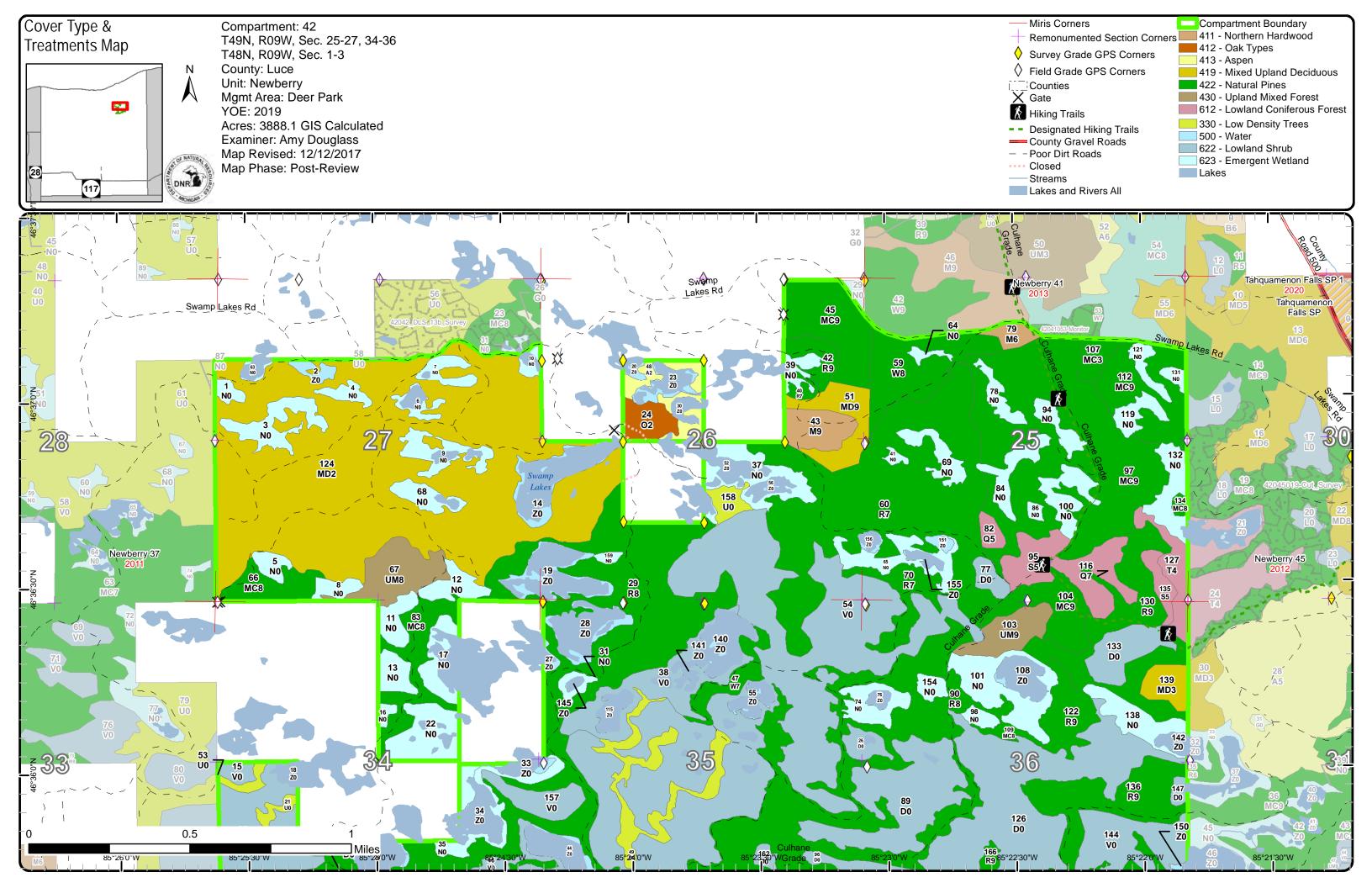
The following reports from the Inventory are attached:

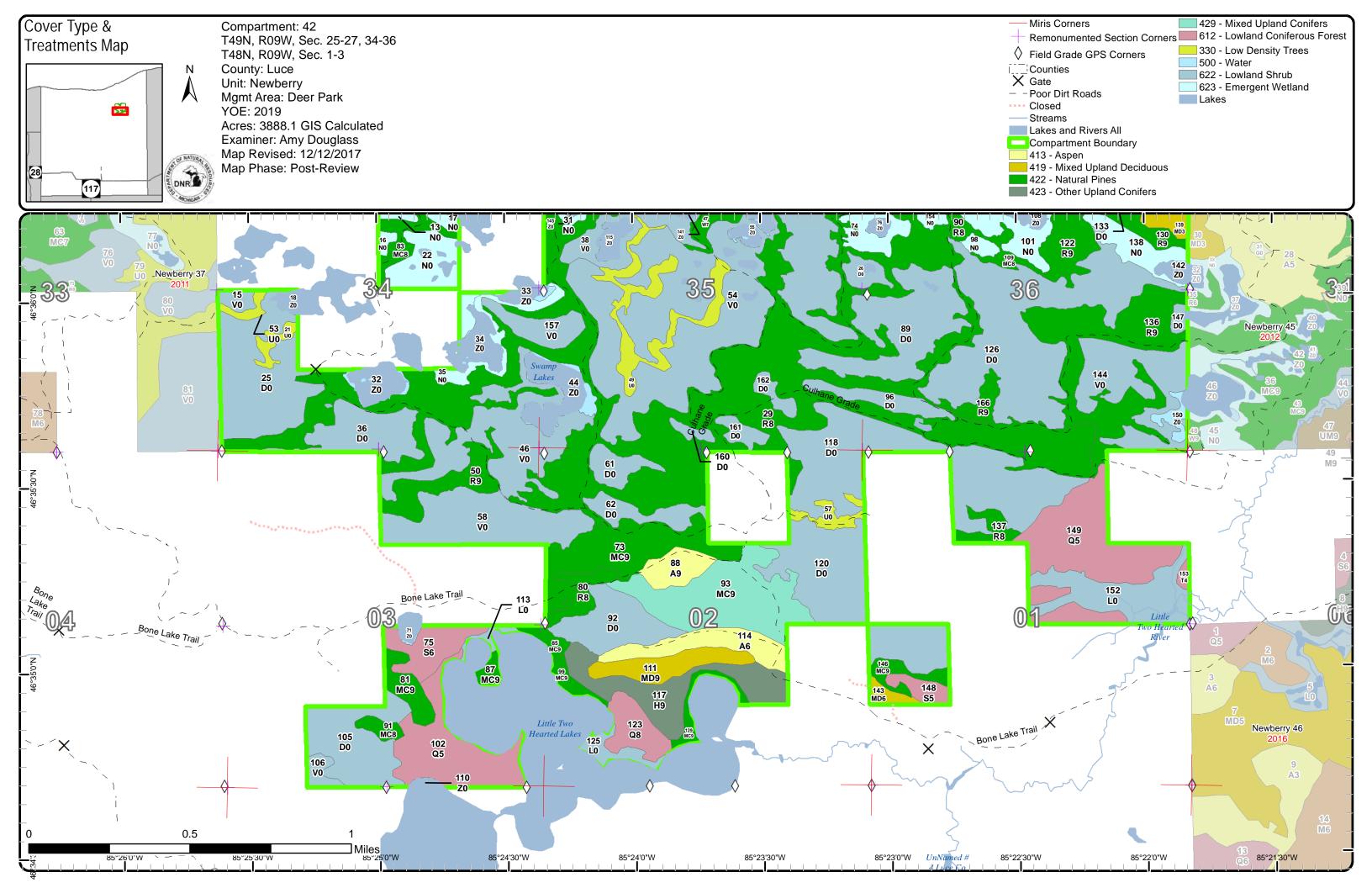
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

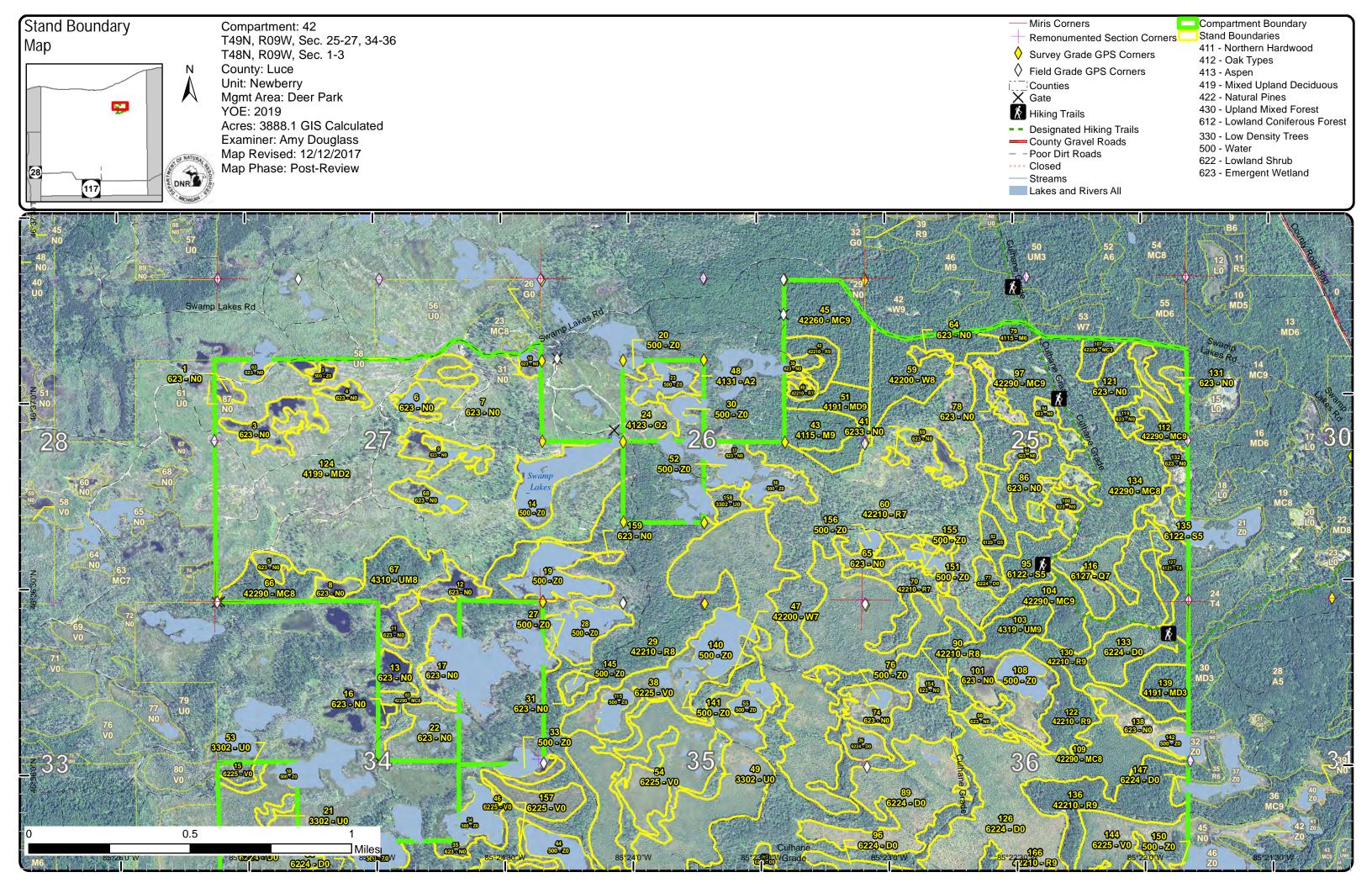
The following information is displayed, where pertinent, on the attached compartment maps:

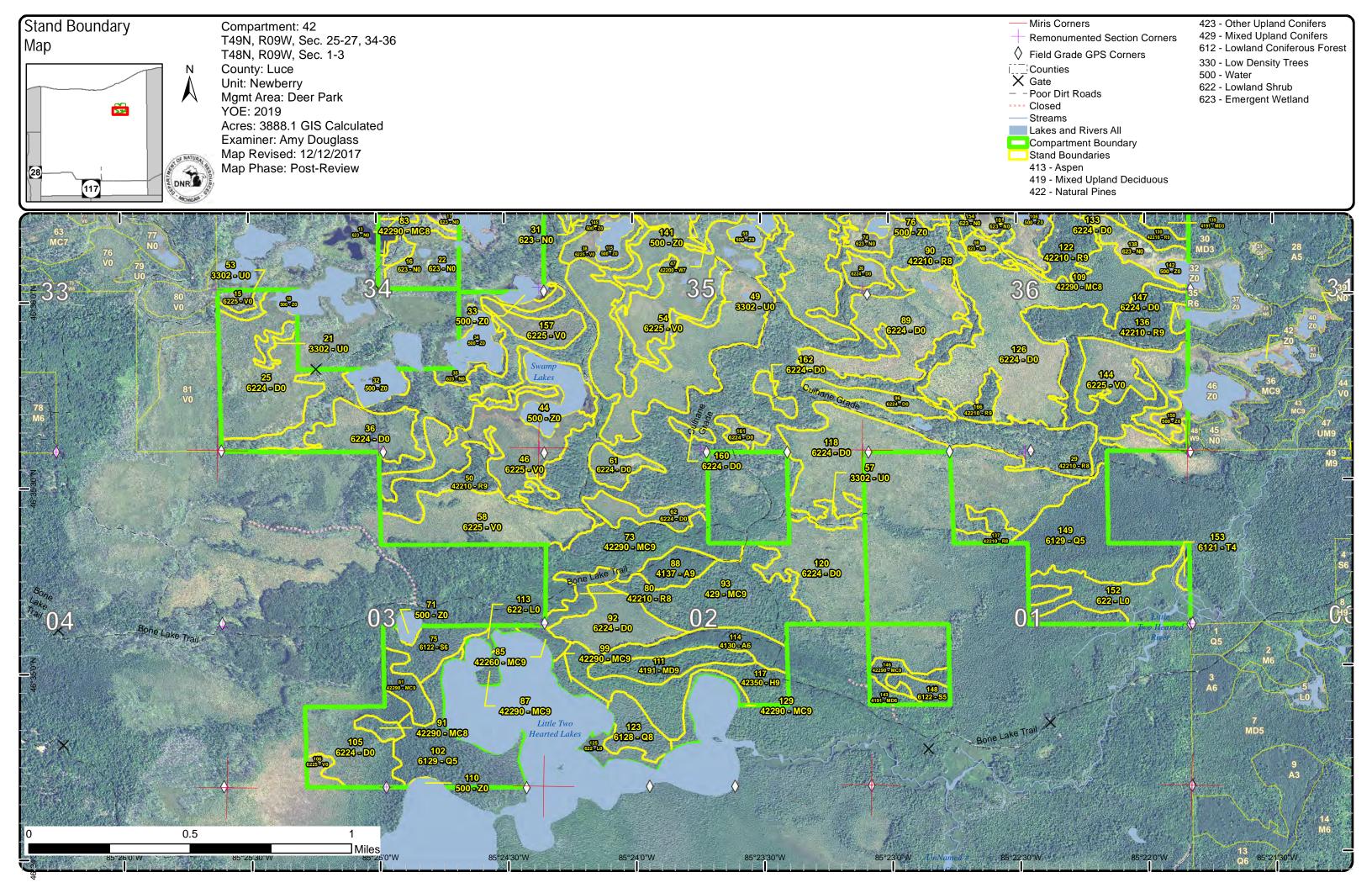
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

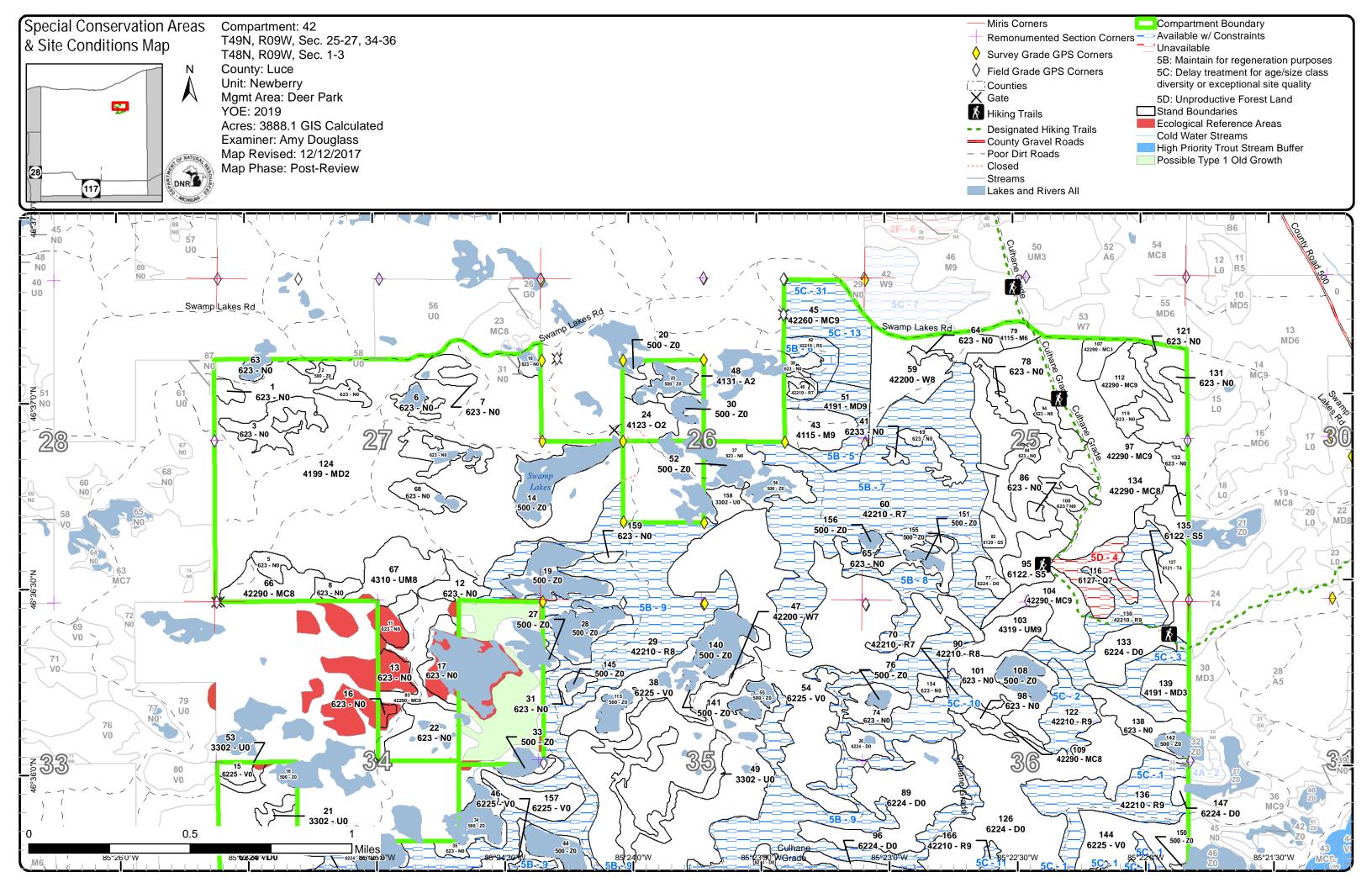


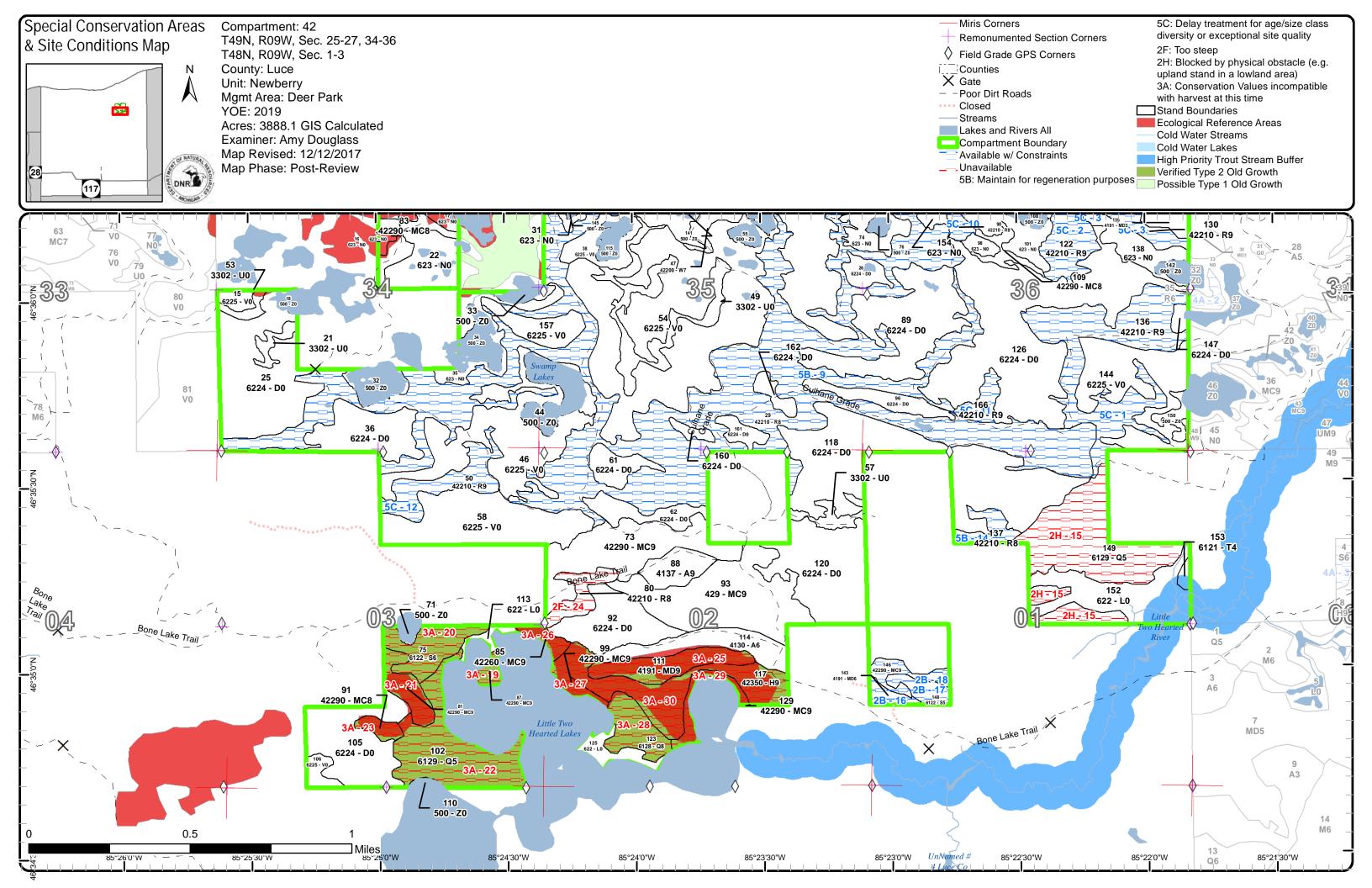












Newberry Mgt. Unit **Amy Douglass : Examiner**



Age Class

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Aspen	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	15		0	22	12		0		0	0			0				\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	49
Bog	513	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	512
Hemlock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39	39
Low-Density Trees	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
Lowland Conifers	0	0	0	0	0	0	4	0	0	0	86	0	45	16	0	0	0	0	151
Lowland Shrub	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49
Lowland Spruce/Fir	0	0	0	0	0	0	21	0	0	7	18	0	0	0	0	0	0	0	46
Marsh	328	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	328
Mixed Upland Deciduous	0	368	0	0	11	0	0	0	0	5	20	0	0	0	0	0	0	19	422
Natural Mixed Pines	0	0	0	7	0	0	0	0	0	8	357	0	5	0	13	0	0	0	388
Northern Hardwood	0	0	0	0	0	0	0	0	0	6	15	0	0	0	0	0	0	0	21
Oak	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Red Pine	0	0	0	0	0	0	0	0	0	0	887	0	0	0	0	0	0	0	887
Tamarack	0	0	0	0	0	14	0	0	0	0	2	0	0	0	0	0	0	0	16
Treed Bog	575	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	575
Upland Conifers	0	0	0	0	0	0	0	0	0	0	60	0	0	0	0	0	0	0	60
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	17	25	0	0	0	0	0	0	0	40
Water	193	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	193
White Pine	0	0	0	0	0	0	0	0	0	0	52	0	0	0	0	0	0	0	51
Total	1706	395	0	7	33	26	25	0	0	43	1522	0	50	16	13	0	0	58	3887



Report 2 – Treatment Summary

Newberry Mgt. Unit Year of Entry: 2019

Acres of Harvest

Compartment 42
Total Compartment Acres: 3,888

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

Compartment: s Year of Entry: t а Age Structure **Treatment** Acres Stand Size Stand ВА Treatment **Treatment Cover Type Approval** n CoverType Density Age Method Objective Status Name Range Type

Report 3 -- Treatments

#Type!

Habitat Cut:

Site Condition:

Mgt. Unit

Prescription Specs:

Next Step Treatments:

<u>Acceptable</u> Regen:

<u>Other</u> Comment:

Proposed Start Date:

Total Treatment Acreage Proposed:

0.0

Compartment: 42

Newberry Mgt. Unit

Amy Douglass : Examiner Year of Entry: 2019

Availa	ability for	Managemer	nt								
Total	Acres	Acres Avail	Acres		Domina	nt Site	Cond	dition	S		
Acres	Available	With Condition	Not Available		2B	5B	5C	2F	2H	3A	5D
49	49	0	0	Aspen							
512	512	0	0	Bog							
39	0	0	39	Hemlock						39	
48	48	0	0	Low-Density Trees							
151	4	0	146	Lowland Conifers					67	61	19
49	49	0	0	Lowland Shrub							
46	21	7	18	Lowland Spruce/Fir	7					18	
328	328	0	0	Marsh							
422	378	25	19	Mixed Upland Deciduous	5	20				19	
389	306	45	38	Natural Mixed Pines	8		37			38	
21	21	0	0	Northern Hardwood							
11	11	0	0	Oak							
887	3	874	10	Red Pine		702	171	10			
16	16	0	0	Tamarack							
575	575	0	0	Treed Bog							
60	60	0	0	Upland Conifers							
41	41	0	0	Upland Mixed Forest							
193	193	0	0	Water							
51	51	0	0	White Pine							
3,888	2,667	950	270	Total Forested Acres	19	723	209	10	67	175	19
	69%	24%	7%	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.

1 Available 5C: Delay treatment for 67 Unspecified Uns	1 Availabl	67	Unspecified	Unanagified	11	
Comments:		ſ	5.1.5p = 3.1.1.5	Orispecified	Unspecified	Unspecified
	Comments:					

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2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	19	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	53	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	5D: Unproductive Forest Land	19	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Available	5B: Maintain for regeneration purposes	20	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
6	Available	5B: Maintain for regeneration purposes	10	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Duck Lake Fire are	ea.					
7	Available	5B: Maintain for regeneration purposes	176	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Duck Lake Fire are	ea. Part of salvage sales.					

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8	Available	5B: Maintain for regeneration purposes	18	Unspecified	Unspecified	Unspecified	Unspecified
	omments: ouck Lake Fire ar	ea.					
9	Available	5B: Maintain for regeneration purposes	491	Unspecified	Unspecified	Unspecified	Unspecified
С	comments:						
10	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
11	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	7	Unspecified	Unspecified	Unspecified	Unspecified
С	comments:						
12	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	21	Unspecified	Unspecified	Unspecified	Unspecified
	omments: luck Lake Fire ar	ea.					
13	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	29	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						

Newberry Mgt. Unit
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14	Available	5B: Maintain for regeneration purposes	8	2B: Unknown if access through adjacent landowner(s) is possible	2I: Survey needed	Unspecified	Unspecified
	Comments: Duck Lake Fire are	a.					
15	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	67	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
C	Comments:						
16	Available	2B: Unknown if access through adjacent landowner(s) is possible	5	2I: Survey needed	Unspecified	Unspecified	Unspecified
C	Comments:						
17	Available	2B: Unknown if access through adjacent landowner(s) is possible	7	2I: Survey needed	Unspecified	Unspecified	Unspecified
C	Comments:						
18	Available	2B: Unknown if access through adjacent landowner(s) is possible	8	2I: Survey needed	Unspecified	Unspecified	Unspecified
C	Comments:						

Newberry Mgt. Unit

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19	Unavailable	3A: Conservation Values incompatible with harvest at this time	5	1D: Interest Group / Neighbor	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified
	Comments: Nominated for Type	e 2 Old Growth with several adja	acent st	ands. Scheduled for trade	with The Nature Conserva	ancy.	
20	Unavailable	3A: Conservation Values incompatible with harvest at this time	18	1D: Interest Group / Neighbor	2G: Too wet (sensitive soils, does not include access issues)	2B: Unknown if access through adjacent landowner(s) is possible	2I: Survey needed
	Comments: Nominated for Type	e 2 Old Growth with several adja	acent st	ands. Scheduled for trade	with The Nature Conserva	ancy.	
21	Unavailable	3A: Conservation Values incompatible with harvest at this time	11	1D: Interest Group / Neighbor	2I: Survey needed	Unspecified	Unspecified
	Comments: Nominated for Type	e 2 Old Growth with several adja	acent st	ands. Scheduled for trade	with The Nature Conserva	ancy.	
22	Unavailable	3A: Conservation Values incompatible with harvest at this time	45	1D: Interest Group / Neighbor	2G: Too wet (sensitive soils, does not include access issues)	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified
	Comments: Nominated for Type	e 2 Old Growth with several adja	acent st	ands. Scheduled for trade	with The Nature Conserva	ancy.	
23	Unavailable	3A: Conservation Values incompatible with harvest at this time	4	1D: Interest Group / Neighbor	2E: Road needed	Unspecified	Unspecified
	Comments: Nominated for Type	e 2 Old Growth with several adja	acent st	ands. Scheduled for trade	with The Nature Conserva	ancy.	
24	Unavailable	2F: Too steep	10	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

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Unavailable	3A: Conservation Values incompatible with harvest at this time	19	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Nominated for Type	e 2 Old Growth with several adja	acent s	tands.			
Unavailable	3A: Conservation Values incompatible with harvest at this time	5	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments: Nominated for Type	e 2 Old Growth with several adja	acent s	tands. Located along Little	Two Hearted Lakes.		
Unavailable	3A: Conservation Values incompatible with harvest at this time	6	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments: Nominated for Type	e 2 Old Growth with several adja	acent s	tands. Located along Little	Two Hearted Lakes.		
Unavailable	3A: Conservation Values incompatible with harvest at this time	16	3J: Water quality / BMPs (stream, river, or lake)	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified
Comments: Nominated for Type	e 2 Old Growth with several adja	acent s	tands. Located along Little	Two Hearted Lakes.		
Unavailable	3A: Conservation Values incompatible with harvest at this time	7	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments: Nominated for Type	e 2 Old Growth with several adja	acent s	tands. Located along Little	Two Hearted Lakes.		
	Comments: Nominated for Type Unavailable Comments:	Comments: Nominated for Type 2 Old Growth with several adja Unavailable 3A: Conservation Values incompatible with harvest at this time Comments: Nominated for Type 2 Old Growth with several adja Unavailable 3A: Conservation Values incompatible with harvest at this time Comments: Nominated for Type 2 Old Growth with several adja Unavailable 3A: Conservation Values incompatible with harvest at this time Comments: Nominated for Type 2 Old Growth with several adja Unavailable 3A: Conservation Values incompatible with harvest at this time Comments: Nominated for Type 2 Old Growth with several adja Unavailable 3A: Conservation Values incompatible with harvest at this time Comments:	incompatible with harvest at this time Comments: Nominated for Type 2 Old Growth with several adjacent so incompatible with harvest at this time Comments: Nominated for Type 2 Old Growth with several adjacent so incompatible with harvest at this time Comments: Nominated for Type 2 Old Growth with several adjacent so incompatible with harvest at this time Comments: Nominated for Type 2 Old Growth with several adjacent so incompatible with harvest at this time Comments: Nominated for Type 2 Old Growth with several adjacent so incompatible with harvest at this time Comments: Nominated for Type 2 Old Growth with several adjacent so incompatible with harvest at this time Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments: Comments:	Incompatible with harvest at this time	Comments: Nominated for Type 2 Old Growth with several adjacent stands. Unavailable 3A: Conservation Values incompatible with harvest at this time 5 3J: Water quality / BMPs (stream, river, or lake) Comments: Nominated for Type 2 Old Growth with several adjacent stands. Located along Little Two Hearted Lakes. Unavailable 3A: Conservation Values incompatible with harvest at this time 6 3J: Water quality / BMPs (stream, river, or lake) Comments: Nominated for Type 2 Old Growth with several adjacent stands. Located along Little Two Hearted Lakes. Unavailable 3A: Conservation Values incompatible with harvest at this time 16 3J: Water quality / BMPs (stream, river, or lake) Comments: Nominated for Type 2 Old Growth with several adjacent stands. Located along Little Two Hearted Lakes. Unavailable 3A: Conservation Values incompatible with harvest at this time 7 3J: Water quality / BMPs (stream, river, or lake) Unavailable 3A: Conservation Values incompatible with harvest at this time 7 3J: Water quality / BMPs (stream, river, or lake) Unavailable 3A: Conservation Values incompatible with harvest at this time 8 3J: Water quality / BMPs (stream, river, or lake)	Comments: Nominated for Type 2 Old Growth with several adjacent stands. Unavailable Incompatible with harvest at this time Sequence of the properties of t

Newberry Mgt. Unit

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30	Unavailable	3A: Conservation Values incompatible with harvest at this time	39	Unspecified	Unspecified	Unspecified	Unspecified
_	Comments: Nominated for Typ	e 2 Old Growth with several adja	acent stan	ds.			
31	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	9	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						

Newberry Mgt. Unit

Compartment: 042 Year of Entry: 2019



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
Little Two-Hearted Lakes Comments	Type 1 or Type 2 Old Growth	Verified Type 2 Old Growth Area	Proposed SCA	175

Newberry Mgt. Unit Compartment: 42
Year of Entry 2019



Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

Conservati Area	ion Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions stocked trout populations and those of other coldwater fish spectonditions for coldwater fishes may occur in Michigan lakes if the groundwater inflows, or are located in colder (northern) areas of Director's action and designated as trout resources by Fisheries	ey are relatively deep, have substantial the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions and those of other coldwater fish spectyear to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	ies (e.g., slimy sculpin) to persist from ese conditions due to substantial
SCA	Type 1 and Type 2 Old Growth	Old-Growth forest (also termed primary forest, ancient forest, vir forest, or primeval forest) is an area of forest that has few or no exhibits unique ecological features related to age, composition are of natural origin. They may be dominated by late succession American beech), or may be a very old example of a stand domi species (i.e. oak, or red pine).	signs of human disturbance and that and associated structure. Old growth forests all forest species (i.e. sugar maple and
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, diversity of plants and wildlife. Riparian ects on water quality and quantity, as well
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of identified as Element Occurrences (EOs) by the Michigan Natural context of their natural community classification system. Element (Excellent) or B (Good) and a Global (G) or State (S) element (rathreatened (2), or rare (3) serve as an initial base of ERAs. They the State. The system is comprised of individual or associations managed for restoration and maintenance of natural ecological public recommendations for lands as ERAs using the DNR Contents.	al Features Inventory (MNFI) within the at Occurrences with viability ranks of A carity) ranking of endangered (1), and may be located upon any ownership in of natural community types that are processes and values. The public may

s t	Newberry	Mgt. Unit		Report 7	Forested	Stands Compartment: 42 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
24	4123 - Red Oak	Sapling Medium	11.5	4	Immature	Burned in Duck Lake Fire 2012. Part of DLS #14. Few residual pine. Regenerating pine is not yet 3' tall to be counted in the overstory. Regen 2016: 513 TPA of red pine, 611 TPA of red oak, 195 TPA of white pine. No live residual basal area. Average TPA of both stands in Double Gate Red Pine 42-026-09.
 29	42210 - Natural Red Pine	Sawtimber Medium	491.1	96	51-80	Burned in Duck Lake Fire 2012. Variable BA and species. Several old stands combined into this stand. Most areas had been harvested on large timber sale from 1971-79, #008-71A. Rolling to steep ridges, with areas that are inoperable to logging. Red pine/white pine with areas of jack pine poles.
40	42210 - Natural Red Pine	Sawtimber Poor	3.2	96	51-80	Burned in Duck Lake Fire 2012. DLS #15 cut in 2013. Expect pine seedlings to be present too.
42	42210 - Natural Red Pine	Sawtimber Well	9.7	96	81-110	Thinned in 2013 as part of Compartment 42 Pine, #001-10. Just outside of the Duck Lake Fire area. Expect pine seedlings to be present too.
43	4115 - Y.Birch, Hemlock NH	Sawtimber Well	15.4	97	81-110	Some beech still hanging in there. OIPC comments: Hemlock/beech/red maple/birch stand. Hardwoods are poor quality. Hemlock and balsam fir are decent. Some large diameter WP present. Beech had BBD and is dying or dead. Stand has been treated in the past, stumps present.
45	42260 - Natural Pine, Mixed Deciduous	Sawtimber Well	37.3	97	111-140	OIPC comments: Stand transitions from WP/RP type to a WP/H/beech type as you move from east to west. Beech has scale and is dying or dead already. Stand has large diametered WP/H over small/younger hemlock.
47	42200 - Natural White Pine	Sawtimber Poor	12.9	96	1-50	Burned in Duck Lake Fire 2012. Expect pine seedlings to be present too.
48	4131 - Aspen, Oak	Sapling Medium	14.7	4	1-50	Burned in Duck Lake Fire 2012. Few residual pine. Expect pine seedlings to be present too.
50	42210 - Natural Red Pine	Sawtimber Well	20.9	96	81-110	Burned in Duck Lake Fire 2012. OIPC comments: East half of stand was part of large sale in 1971-79, #1-72A. Stand is now a mix of pine, aspen, oak, spruce and paper birch. Western portion of stand was not treated. Stand falls on ridge/knob, difficult access due to topography.
51	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	20.2	97	51-80	Young hardwood poles under hemlock. OIPC comments: Stand was treated in 1960's/early 70's. Heavily cut over. Large overtopping white pine and hemlock. Understory is mostly balsam (thick) with red maple and hemlock saplings mixed in, some of which is making pole size class now. Some large diametered WP, 30"+ DBH.
59	42200 - Natural White Pine	Sawtimber Medium	38.5	97	51-80	Western portion of stand was treated in 1991, #028-89. Eastern finger was treated in 1992, Davis Grade Sale, #21-91. Pine/hemlock overstory over aspen/maple/balsam understory.

S t	Newberry	/ Mgt. Unit		Report 7	– Forested	Stands Compartment: 42 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
60	42210 - Natural Red Pine	Sawtimber Poor	175.5	96	51-80	Burned in 2012 Duck Lake Fire. Salvage cut in 2013 as part of DLS #15. Variable densities of overstory. Burn scars on residual. Rolling topography with seasonally wet potholes.
66	42290 - Natural Mixed Pine	Sawtimber Medium	16.1	96	81-110	Burned in Duck Lake Fire 2012. Not part of salvage sales. Rolling topography.
67	4310 - Pine, Oak Mix	Sawtimber Medium	24.5	96	51-80	Burned in Duck Lake Fire 2012. OIPC comments: Stand is situated on the back of a ridge with a steep south facing slope. Stand is mostly oak/pine/birch mix. WP/oak regeneration.
70	42210 - Natural Red Pine	Sawtimber Poor	18.3	96	51-80	Burned in Duck Lake Fire 2012. Expect pine seedlings to be present too. OIPC comments: Stand was treated in 1980, #18-74A. There is an overstory of RP/WP sawlog size trees overtopping younger pine regen, as well as some paper birch, aspen, spruce. Some areas of stand are heavier to jack pine, some coming into pole size class.
73	42290 - Natural Mixed Pine	Sawtimber Well	46.2	97	81-110	Middle portion burned in Duck Lake Fire 2012. OIPC comments: Stand was treated in 1972-75, #1-72A. Stand was heavily cut over in places. Topography dictated how the stand was treated and the type/variability of timber in here. Topography is level to steep. Old skid trails and road throughout the stand. NW corner of stand has some nice red pine. Regeneration is thick in most places and variable; red maple, white pine, birch, balsam, aspen and hemlock with some sapling sized going into pole size.
75	6122 - Black Spruce	Poletimber Well	18.4	96	Unspecified	OIPC comments: Decent stand of spruce. Some nice red pine mixed throughout. White pine, balsam, cedar, paper birch, red maple scattered. Level ground in here for the most part.
79	4115 - Y.Birch, Hemlock NH	Poletimber Well	6.0	85	81-110	OIPC comments: Stand is a mix of hemlock and poor quality hardwoods. Some white pine in stand as well; large diameter and tall. Beech has scale and is nearly dead.
80	42210 - Natural Red Pine	Sawtimber Medium	9.9	96	111-140	North of road burned in Duck Lake Fire 2012. Steep ridge of red pine. OIPC comments: Very steep topography through most of stand. Some old red pine in stand. Stand was not treated when adjacent stand as treated to the north, probably due to the difficult topography.
81	42290 - Natural Mixed Pine	Sawtimber Well	11.3	96	141-170	OIPC comments: Very nice stand of red pine and white pine, both species very tall. RP is utility pole quality. Stand sits on a subtle rise in topography relative to surrounding level ground. Access is somewhat limited with no roads and steep topography/PVT land to the west.
82	6129 - Mixed Coniferous Lowland Forest	Poletimber Medium	4.1	55	Unspecified	Just outside of the Duck Lake Fire line. OIPC comments: Stand looks to have been treated approx. 30 years ago?, no good records. Stand has an overstory of mostly spruce, white pine, red pine and tamarack and is seasonally wet. Regen is variable with spruce, white pine, red pine, paper birch and tamarack - thick and thin.

s t	Newberry	Newberry Mgt. Unit			– Forested	Stands Compartment: 42 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
83	42290 - Natural Mixed Pine	Sawtimber Medium	26.3	96	51-80	Burned in Duck Lake Fire 2012. Expect pine seedlings to be present too. OIPC comments: Most of stand falls on the back of a sand ridge. Stand has been logged in the past and is now a pine/oak mix with aspen/birch component. Some pine is very old. Marshes surrounding.
85	42260 - Natural Pine, Mixed Deciduous	Sawtimber Well	5.0	96	111-140	OIPC comments: Stand is along Bone Lake. Stand is difficult to access with PVT land and difficult topography to the north and lake to the south. Very nice RP/WP.
87	42290 - Natural Mixed Pine	Sawtimber Well	4.5	112	141-170	OIPC comments: Stand is a mix of RP/WP. White pine fringes the stand and red pine is more in the center of the stand. Utility pole quality RP.
88	4137 - Aspen, Birch	Sawtimber Well	12.3	43	Unspecified	Big ridge to the north. Along road, stand is low, holding water. Stand was treated in 1972-75, #1-72A. OIPC comments: Nice stand of aspen coming along. White pine, hemlock, paper birch mixed in.
90	42210 - Natural Red Pine	Sawtimber Medium	4.6	97	51-80	Not burned in Duck Lake Fire. Thinned in 2013 as part of Compartment 42 Pine, #001-10.
91	42290 - Natural Mixed Pine	Sawtimber Medium	4.4	96	111-140	OIPC comments: Very nice stand of red pine and white pine, both species very tall. RP is utility pole quality. Stand sits on a subtle rise in topography relative to surrounding level ground. Paper birch and aspen in stand, birch is nearly dead. Access is somewhat limited with no roads and steep topography/PVT land to the north and lowland type to the south.
93	429 - Mixed Upland Conifers	Sawtimber Well	59.8	97	81-110	Much of hardwood is young pole size. Stand was cut in 1972-75, #1-72A. Rolling topography with wet pockets throughout stand. Stand is mixed bag of species.
95	6122 - Black Spruce	Poletimber Medium	14.9	55	Unspecified	OIPC comments: Stand looks to have been treated approx. 30 years ago?, no good records.
97	42290 - Natural Mixed Pine	Sawtimber Well	145.1	96	81-110	Most of stand is outside the Duck Lake Fire area. Thinned in 2013 as part of Compartment 42 Pine, #001-10. OIPC comments: NE corner of stand was partially treated in 1992; T.Sale #029-91. The east side of stand (east of Culhane Grade) is level to rolling with more white pine overstory with a paper birch/red maple understory. The west side of stand has more sand ridges with red pine overstory and a WP/spruce understory. Some red pine in stand has utility pole quality. Low pockets with leatherleaf brush and grasses scattered throughout. Old logging roads through stand.
99	42290 - Natural Mixed Pine	Sawtimber Well	5.6	137	111-140	OIPC comments: Very nice stand of white pine, tall, straight, some large diameter and thick.
102	6129 - Mixed Coniferous Lowland Forest	Poletimber Medium	44.9	112	Unspecified	OIPC comments: Stand is mostly lowland conifers - tamarack, white pine and spruce with some cedar mixed in. Spruce is decent, some white pine is sawlog sized.

S t	Newberry	Newberry Mgt. Unit			- Forested	Stands Compartment: 42 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
103	4319 - Mixed Upland Forest	Sawtimber Well	16.5	85	81-110	OIPC comments: Stand is a mixed bag of hardwood species as well as conifer species. Topography is rolling to steep. Stand was treated in 1981, #19-78A. Regen on ground is thick in most places with red maple, beech, aspen, balsam, white pine and hemlock.
104	42290 - Natural Mixed Pine	Sawtimber Well	23.6	96	81-110	Not burned in Duck Lake Fire. Thinned in 2013 as part of Compartment 42 Pine, #001-10. OIPC comments: Stand occurs along the back of a sand ridge that becomes very steep on the east and south sides. Some areas of stand would be inoperable to logging. Stand was partially treated in 1981; T. Sale #19-78A.
107	42290 - Natural Mixed Pine	Sapling Well	7.3	26	1-50	Cut as part of Log Cabin Sale, #029-91.
109	42290 - Natural Mixed Pine	Sawtimber Medium	5.8	97	51-80	OIPC comments: Ridge of pine with lowland types on both sides. Old road through stand. Stand was treated in 1981, #19-78A. RP/WP/JP/aspen regen present.
111	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	18.8	90	111-140	OIPC comments: Old hardwood stand, mostly red maple, beech, yellow birch, aspen, hemlock and white pine. The hardwood trees are mostly lower quality and defective. Most trees are large diametered and tall. Beech has scale and is dying. Thick hardwood reproduction, mostly beech and red maple.
112	42290 - Natural Mixed Pine	Sawtimber Well	33.3	96	111-140	Thinned in 1991 as part of Log Cabin Sale, #029-91. Stand is variable with pine with areas heavier to red pine and areas heavier to white pine. Low bog pockets scattered throughout stand.
114	4130 - Aspen	Poletimber Well	22.3	39	Unspecified	OIPC comments: Stand was treated in 1972-75, #1-72A; then TSI'd in 1977. Very nice aspen coming along, moving from sapling to pole size class. Large overtopping WP scattered through stand. Includes steep south facing slope that was not harvested.
116	6127 - Lowland Pine	Sawtimber Poor	18.8	90	1-50	Bog stand with scattered trees. OIPC comments: Scattered white pine and spruce with some tamarack, red maple, paper birch. Stand is in low/wet ground that is not very productive for timber growth.
117	42350 - Upland Hemlock	Sawtimber Well	38.6	95	141-170	OIPC comments: This is a stand that would certainly make a good candidate for old growth, it is like taking a step back in time. Very large diametered hemlock, white pine and old hardwood - beech, yellow birch, red maple. The beech is dying out with BBD.
122	42210 - Natural Red Pine	Sawtimber Well	19.1	97	81-110	Stand was cut in 2000 as part of Swamp Lakes Pine, #003-00. Utility pole quality red pine. East side of stand is very steep.
123	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Medium	15.9	127	81-110	OIPC comments: Stand is WP type in some areas, Q in others.

s t	Newberry	Newberry Mgt. Unit			– Forested	Stands Compartment: 42 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
124	4199 - Other Mixed Upland Deciduous	Sapling Medium	367.5	4	Immature	Duck Lake Fire 2012. Part of DLS #13 & #14 sales. Few residual pine left. Regen count from 2015 (TPA): JP-56, RP-22, A-349, Oak-411, WB-38, RM-451, Beech-49, CH-9, WP-38. Variable regen. Pines generally < 5' tall.
127	6121 - Tamarack	Poletimber Poor	14.1	47	Unspecified	Data taken from adjacent compartment/stand. Mainly tamarack with some white pine and black spruce. Spruce, tamarack, willow understory.
129	42290 - Natural Mixed Pine	Sawtimber Well	7.4	137	141-170	OIPC comments: Very nice stand of white pine, tall straight, some large diameter and thick.
130	42210 - Natural Red Pine	Sawtimber Well	53.3	96	81-110	Level to rolling ground with steep ridges. Stand was treated in 2003 as part of Swamp Lakes Pine, #003-00. And parts were treated in 1981 as part of #19-78A.
134	42290 - Natural Mixed Pine	Sawtimber Medium	2.0	93	51-80	Stand shelterwood harvested with adjacent compartment/stand (42045019) as part of sale #047-12; completed 11/06/13.
135	6122 - Black Spruce	Poletimber Medium	6.3	55	Unspecified	OIPC comments: Stand is growing mostly in low ground. Stand has decent spruce on the west side where it is adjacent to a steep sand ridge and gets more suppressed on the east side against lower/wetter ground. South end of stand is more of a red pine/white pine/spruce type.
136	42210 - Natural Red Pine	Sawtimber Well	66.5	96	81-110	Not burned in Duck Lake Fire. Stand was thinned in 2002 as part of Swamp Lakes Pine, #003-00; and in 1983, #020-78. Stand falls on sand ridges that are very steep in places.
137	42210 - Natural Red Pine	Sawtimber Medium	7.9	96	51-80	Burned in Duck Lake Fire 2012. Island of pine amongst a treed bog. No access.
139	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	10.6	37	1-50	Stand was treated in 1980 with adjacent compartment/stand (42045030), sale #20-77A. OIPC comments: Overstory of large WP/H/beech/RM/YB. Beech has BBD and showing decline. Thick understory of RM/beech/H/WP/balsam, mostly sapling size.
143	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	4.5	85	51-80	OIPC comments: Stand is a mix of red maple, beech, yellow birch, white birch, aspen, hemlock, balsam and white pine. Stand has been treated approx. 25 years ago. Not a clean clearcut, mixed ages now. Beech is dying out with BBD. Stand is difficult to access with a steep ridge running through it. Old skid road runs through stand. Accessed through PVT lands.
146	42290 - Natural Mixed Pine	Sawtimber Well	7.7	85	111-140	OIPC comments: Subtle ridge of sawlog sized white pine. Difficult stand to access with PVT land, lowland forest types and steep topography to the south.
148	6122 - Black Spruce	Poletimber Medium	6.8	87	Unspecified	Lowland conifers.

S t a n d	Newberry Mgt. Unit			Report 7	- Forested	Stands Compartment: 42 Year of Entry: 2019
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
149	6129 - Mixed Coniferous Lowland Forest	Poletimber Medium	67.0	95	Unspecified	OIPC comments: Area is difficult to access with low ground, the river, PVT land, no roads or very poor roads. Small ridge of pine on the far east end of stand.
153	6121 - Tamarack	Poletimber Poor	1.8	95	Unspecified	Very wet.
166	42210 - Natural Red Pine	Sawtimber Well	7.1	96	81-110	Not burned in Duck Lake Fire. Stand was thinned in 2002 as part of Swamp Lakes Pine, #003-00; and in 1983, #020-78. Stand falls on sand ridges that are very steep in places.



Stand	Cover Type	Acres	Managed Site	General Comments:
1	623 - Emergent Wetland	3.2	No	Seasonally ponded.
2	500 - Water	3.7	No	Seasonally dry.
3	623 - Emergent Wetland	14.7	No	Seasonally ponded.
4	623 - Emergent Wetland	4.3	No	Seasonally ponded.
5	623 - Emergent Wetland	4.6	No	Seasonally ponded. Includes scattered pine.
6	623 - Emergent Wetland	5.6	No	Seasonally ponded.
7	623 - Emergent Wetland	6.5	No	Seasonally ponded.
8	623 - Emergent Wetland	4.8	No	Seasonally ponded.
9	623 - Emergent Wetland	12.5	No	Seasonally ponded.
10	623 - Emergent Wetland	3.7	No	Seasonally ponded.
11	623 - Emergent Wetland	8.0	No	Seasonally ponded. Includes scattered pine.
12	623 - Emergent Wetland	9.0	No	Seasonally ponded.
13	623 - Emergent Wetland	7.5	No	Seasonally ponded.
14	500 - Water	23.2	No	
15	6225 - Bog	4.2	No	Seasonally ponded.
16	623 - Emergent Wetland	1.9	No	Seasonally ponded.
17	623 - Emergent Wetland	16.1	No	Seasonally ponded.
18	500 - Water	2.5	No	



Stand	Cover Type	Acres	Managed Site	General Comments:
19	500 - Water	21.6	No	
20	500 - Water	2.0	No	
21	3302 - Low Density Conifer Trees	4.3		Burned in Duck Lake Fire 2012. Regeneration of jack pine with red pine, white pine, spruce, aspen and birch expected.
22	623 - Emergent Wetland	20.7	No	Small ponds within; the rest is seasonally ponded. Scattered pine.
23	500 - Water	8.9	No	
25	6224 - Treed Bog	59.3	No	
26	6224 - Treed Bog	6.6	No	Small pond included.
27	500 - Water	1.9	No	
28	500 - Water	17.1	No	
30	500 - Water	3.0	No	
31	623 - Emergent Wetland	3.4	No	
32	500 - Water	10.4	No	
33	500 - Water	3.7	No	
34	500 - Water	10.1	No	
35	623 - Emergent Wetland	15.2	No	
36	6224 - Treed Bog	28.3	No	
37	623 - Emergent Wetland	21.2	No	Seasonally ponded. Includes scattered pine.
38	6225 - Bog	33.5	No	Includes small ponds.



Stand	Cover Type	Acres	Managed Site	General Comments:
39	623 - Emergent Wetland	5.1	No	Seasonally ponded.
41	6233 - Wet Meadow	1.5	No	Seasonally ponded.
44	500 - Water	19.5	No	
46	6225 - Bog	59.7	No	
49	3302 - Low Density Conifer Trees	27.5		Burned in Duck Lake Fire 2012. Narrow sand ridges in bog type. Expect pine seedlings to be present too. OIPC comments: Stand was part of large timber sale that took place in 1971-79, #8-71A. It regenerated to mostly jack pine with some red pine, white pine and paper birch. There are larger red pine and white pine left as residual from the cut.
52	500 - Water	5.0	No	
53	3302 - Low Density Conifer Trees	3.3		Burned in Duck Lake Fire 2012. Expect pine seedlings to be present too. OIPC comments: Sand ridge that was treated in the 70's, #8-71A. There is a residual of red pine and white pine that was left, variable density. Red pine/white pine reproduction as well. Old road running along the back of this ridge from the west.
54	6225 - Bog	298.9	No	Areas of treed bog.
55	500 - Water	5.7	No	
56	500 - Water	2.9	No	
57	3302 - Low Density Conifer Trees	6.5		Duck Lake Fire 2012. Few residual pine left. Expect pine seedlings to be present too. OIPC comments: Subtle ridge of RP/WP, spruce, cedar mix. Surrounded by treed bog. Regen of spruce, maple, paper birch and white pine. Stand has been treated in the past.
58	6225 - Bog	52.5	No	Includes some small upland islands.
61	6224 - Treed Bog	10.3	No	
62	6224 - Treed Bog	12.7	No	
63	623 - Emergent Wetland	3.1	No	Seasonally ponded.
64	623 - Emergent Wetland	1.9	No	Seasonally ponded.



Stand	Cover Type	Acres	Managed Site	General Comments:
65	623 - Emergent Wetland	14.2	No	Seasonally ponded.
68	623 - Emergent Wetland	8.2	No	Seasonally ponded.
69	623 - Emergent Wetland	8.5	No	Seasonally ponded.
71	500 - Water	2.0	No	
74	623 - Emergent Wetland	10.9	No	
76	500 - Water	2.1	No	
77	6224 - Treed Bog	5.5	No	Burned in 2012 Duck Lake Fire.
78	623 - Emergent Wetland	5.8	No	Seasonally ponded. Rimmed with pines.
84	623 - Emergent Wetland	9.7	No	Seasonally ponded.
86	623 - Emergent Wetland	1.5	No	
89	6224 - Treed Bog	55.4	No	
92	6224 - Treed Bog	29.0	No	Small pond in center of stand.
94	623 - Emergent Wetland	6.3	No	Seasonally ponded. Rimmed with pines.
96	6224 - Treed Bog	11.9	No	
98	623 - Emergent Wetland	3.3	No	Seasonally ponded.
100	623 - Emergent Wetland	11.8	No	Seasonally ponded.
101	623 - Emergent Wetland	25.1	No	Seasonally ponded.
105	6224 - Treed Bog	38.4	No	
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Stand	Cover Type	Acres	Managed Site	General Comments:
106	6225 - Bog	5.0	No	
108	500 - Water	9.5	No	
110	500 - Water	1.6	No	
113	622 - Lowland Shrub	3.8	No	
115	500 - Water	5.5	No	
118	6224 - Treed Bog	97.7	No	
119	623 - Emergent Wetland	6.7	No	Seasonally ponded. Includes scattered pines.
120	6224 - Treed Bog	69.0	No	
121	623 - Emergent Wetland	4.8	No	Seasonally ponded.
125	622 - Lowland Shrub	8.9	No	
126	6224 - Treed Bog	116.2	No	
131	623 - Emergent Wetland	2.5	No	Seasonally ponded.
132	623 - Emergent Wetland	13.9	No	Seasonally ponded. Includes scattered pines.
133	6224 - Treed Bog	18.6	No	
138	623 - Emergent Wetland	14.4	No	Seasonally ponded.
140	500 - Water	14.2	No	
141	500 - Water	1.1	No	
142	500 - Water	3.4	No	



Stand	Cover Type	Acres	Managed Site	General Comments:
144	6225 - Bog	44.9	No	
145	500 - Water	0.9	No	
147	6224 - Treed Bog	2.7	No	
150	500 - Water	4.9	No	
151	500 - Water	1.9	No	
152	622 - Lowland Shrub	36.2	No	
154	623 - Emergent Wetland	3.9	No	
155	500 - Water	2.2	No	
156	500 - Water	2.5	No	
157	6225 - Bog	13.8	No	
158	3302 - Low Density Conifer Trees	6.2		Burned in Duck Lake Fire 2012. Few residual pine left. Upland with lowland. Pine seedlings expected.
159	623 - Emergent Wetland	1.5	No	Seasonally ponded.
160	6224 - Treed Bog	2.9	No	
161	6224 - Treed Bog	5.5	No	
162	6224 - Treed Bog	4.9	No	