

Compartment Review Presentation

Newberry Forest Management Unit

Compartment 42053 Entry Year 2018 Acreage: 3,880

County Chippewa

Management Area: Whitefish Vermillion Point

Revision Date: 2016-08-31

Stand Examiner: Amy Douglass

Legal Description:

T49N R07W Sections 4 & 5

T50N R07W Sections 5, 8, 15, 17, 18, 20 - 22, 27 - 29 & 32 - 34

Identified Planning Goals:

Promote multiple aged and diversified tree species where possible to reduce forest pest impacts and improve conditions for wildlife species. Provide for consistent, sustainable wood fiber production over the long term.

Soil and topography:

Much of the eastern dry, sandy plain portion is made up of Deer Park fine sand of varying slopes and Deer Park-Kinross complex. Much of the western ridge and swale portion is comprised of Dawson-Deer Park-Wainola complex. Other associated soils are Rousseau fine sand, dark subsoil; Rousseau fine sand, dark subsoil-Alcona complex; Wainola-Kinross-Rousseau complex; Markey and Carbondale mucks; and Alcoma loamy very fine sand. Along the lakeshore is Kalkaska sand, Markey-Kinross-Au Gres complex, and Deer Park fine sand. The upland terrain is rolling to extreme slopes and razor back ridges; while the low areas are level, intermixed with shallow, rolling ridges.

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

The compartment is mainly bounded by private lands and also has private parcels intermixed within the compartment itself. The private lands are largely undeveloped with isolated hunting camps, although subdivision of parcels has occurred. Extensive hunting and ORV use appear to occur throughout the area. Active forest management has been ongoing on both the private and adjacent state lands.

Unique Natural Features:

MNFI has identified several and potential threatened and endangered flora and fauna, mostly associated with the lakeshore. The potential exists for several other species also.

Archeological, Historical, and Cultural Features:

None noted.

Special Management Designations or Considerations:

MNFI identified a Mesic Northern Forest in the adjacent Crisp Point property purchase. It is likely that the designation crosses the boundary into this compartment. The area along the lakeshore should be designated as Contiguous Resource Area to match up to adjacent compartments. This area is remote and inaccessible.

Watershed and Fisheries Considerations:

Fisheries Values: Good

Fisheries Concerns: The Betsy River skirts the east side of this compartment. This reach of the Betsy River is a designated trout stream and is assigned a high priority trout stream buffer of 300 feet. Since Aspen management is proposed for stands adjacent to the river and the river width is <50 feet, a minimum of 300 feet needs to be adhered to. Browns Creek in the northern sections of this compartment is not a designated trout stream and already has heavy beaver activity occurring. Standard BMP's should be applied to any treatments in this section. Bear Lake is not actively managed by Fisheries Division, but standard BMP's should be applied to any adjacent stands with treatments.

Wildlife Habitat Considerations:

Compartment 53 lies in the far northern portion of Chippewa county and is in the Grand Marais Sandy End Moraine and Outwash ecological sub-subsection. The compartment lies in the Whitefish Vermillion Point Management Area and moose, red crossbill, spruce grouse and piping plover are featured species. The western portion of the compartment is dominated by various conifer stands surrounded by treed bogs. The remainder of the compartment is comprised of jack pine in various age classes, aspen, and northern hardwoods. Overall diversity of the compartment is good with a few birch, cedar, and oak stands throughout.

Red and white pine and hard and soft mast producing species will be retained in jack pine final harvests to increase

structural and species diversity. Hard mast species will be retained in all harvested stands and conifer components of aspen and hardwood stands will be maintained to provide food sources and nest and den trees. Species of special interest potentially using this compartment include white-tailed deer, moose, black bear, gray wolf, coyote, spruce and ruffed grouse, pileated woodpeckers and loons.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine sand and gravel and an end moraine of coarse-textured till. There is insufficient data to determine the glacial drift thickness (>100 feet). The Precambrian Jacobsville Sandstone subcrops below the glacial drift. The Jacobsville was used as a building stone in the past. A small, former gravel pit is located less than two miles to the west and there could be potential on the uplands, though gravel appears to be limited. There is no economic oil and gas production in the UP and there is no known metallic mineral potential in this area.

Vehicle Access:

Access is fair overall. The Maple Block Road provides the main access for the compartment with two track roads branching from it. The Bear Lake Road provides access to some of the southern areas of the compartment. These roads are extremely sandy and can be barely accessible during parts of the year. Access into the western and northern areas of the compartment is poor due to lack of roads, swamp/bog and private lands.

Survey Needs:

Survey assistance will be needed in running the line along the north line of Section 4, east of the 1/4 corner (stand 1). Survey confirmation of the north 1/16 corner of Section 21 is needed for possible cabin trespass and timber sale. Corner locations in Section 8, 17 and 20 are needed for timber sales.

Recreational Facilities and Opportunities:

A segment of the Pine Stump Snowmobile trail (Trail #8) runs through the compartment. Other traditional recreational uses (hunting, berry picking, ORV use, etc.) are also ongoing.

Fire Protection:

This compartment is part of the Whitefish Zone Dispatch Area. It has a well mixed, wide variety of lowland and upland cover types. Mixed cover types and topographical features may have challenging impacts to fire suppression tactics. Large fires are possible in the contiguous areas of pine types in the southeastern area. Long response times and drought conditions will enhance the ability to have large fires. Private properties may be at risk.

Additional Compartment Information:

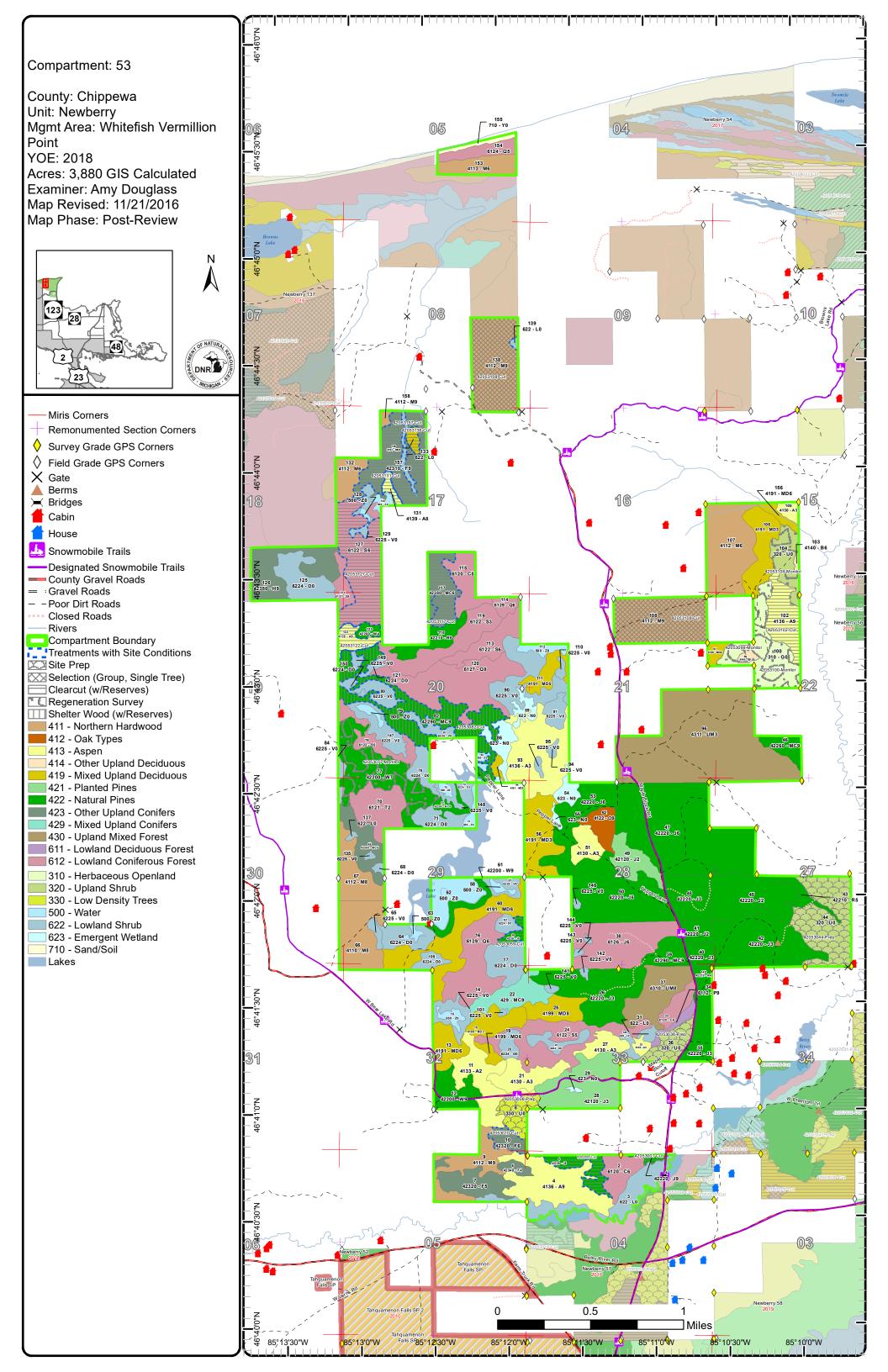
Portions of the compartment had been moved into adjacent Compartment 54 during the 2017 YOE due to proximity, access and management. This compartment will likely undergo a change of boundaries with the adjacent Compartment 137 (the Crisp Point Property purchase) that was reviewed during the 2016 YOE. These compartments are now intertwined.

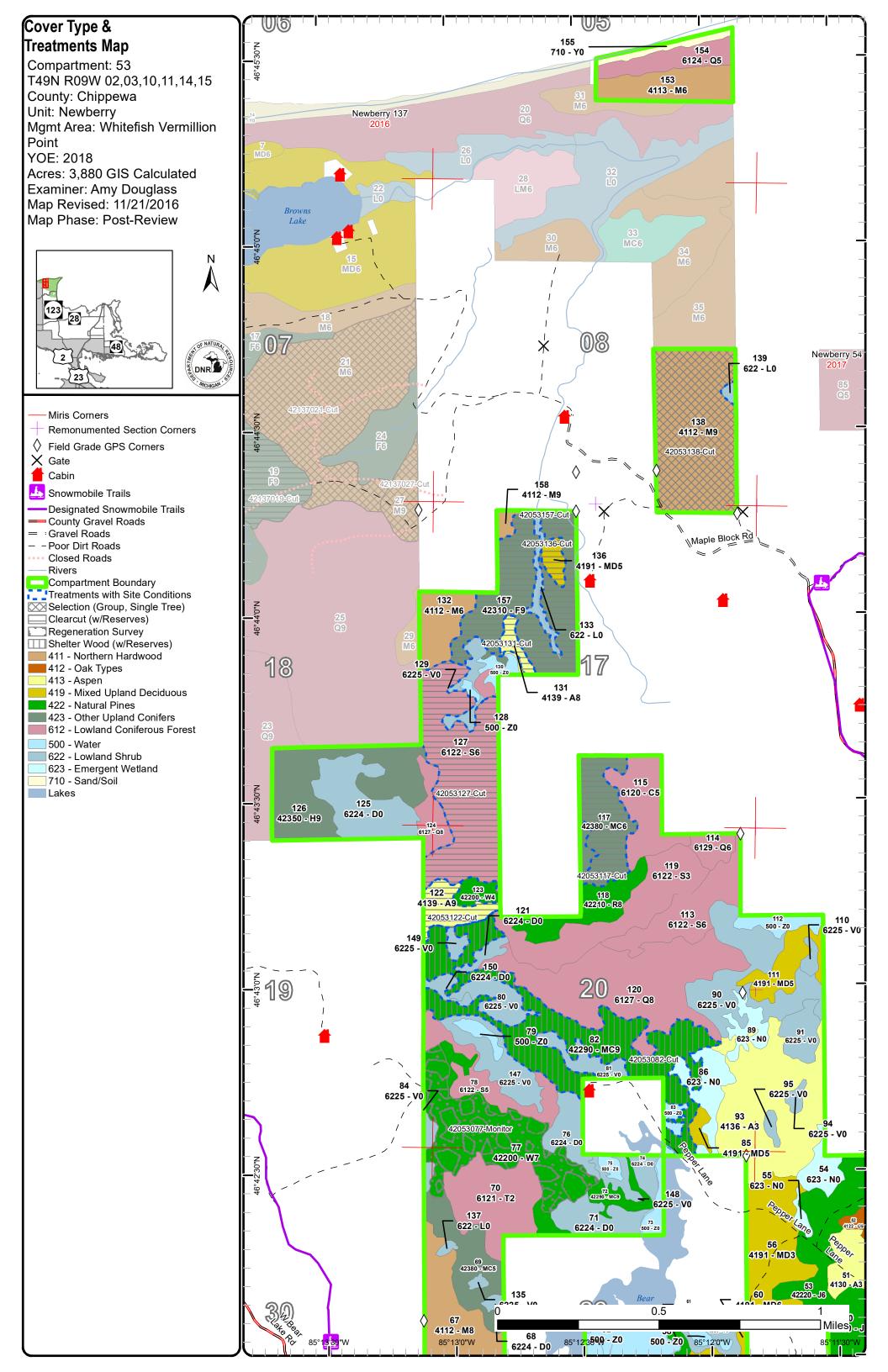
The following reports from the Inventory are attached:

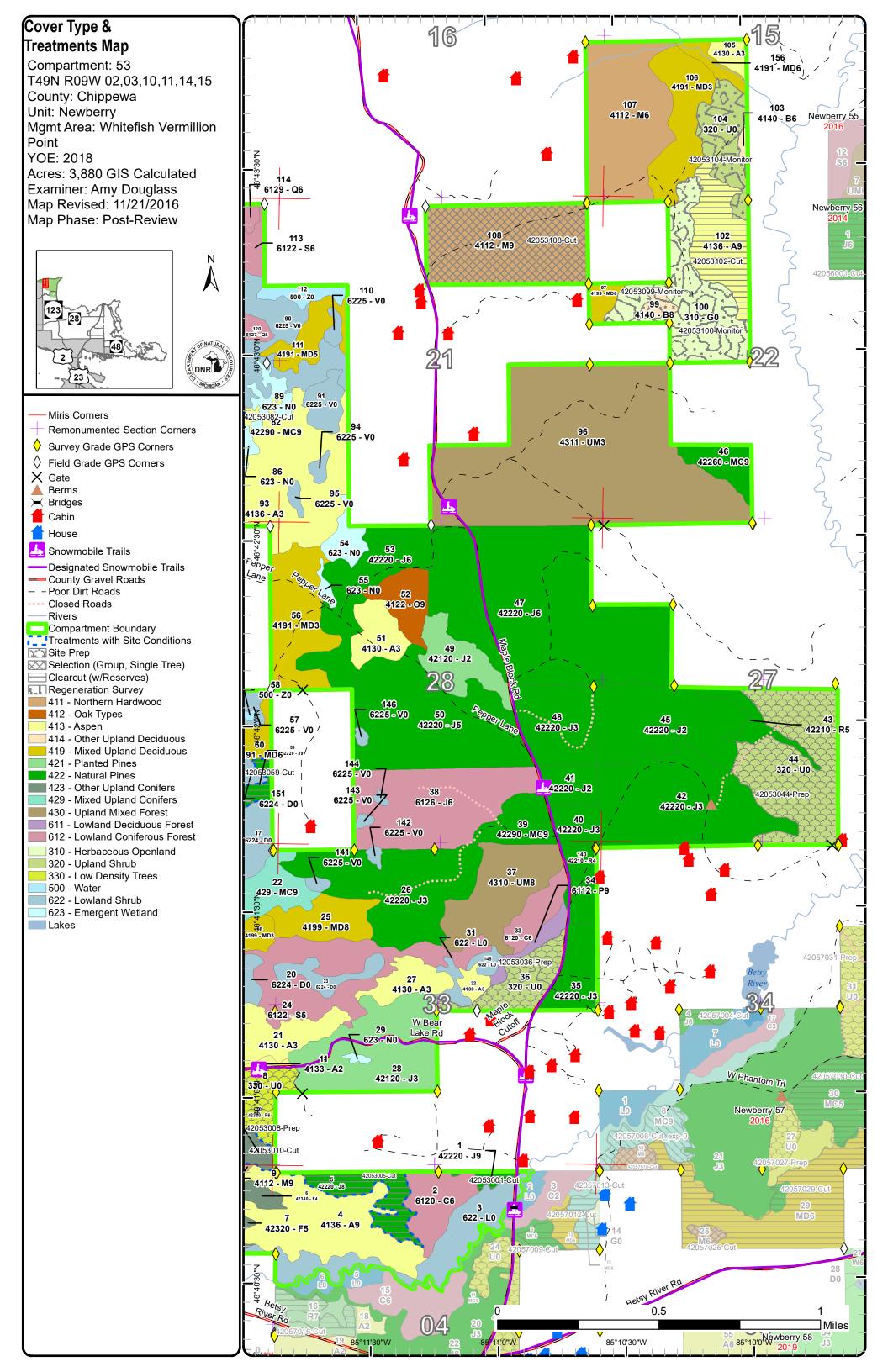
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

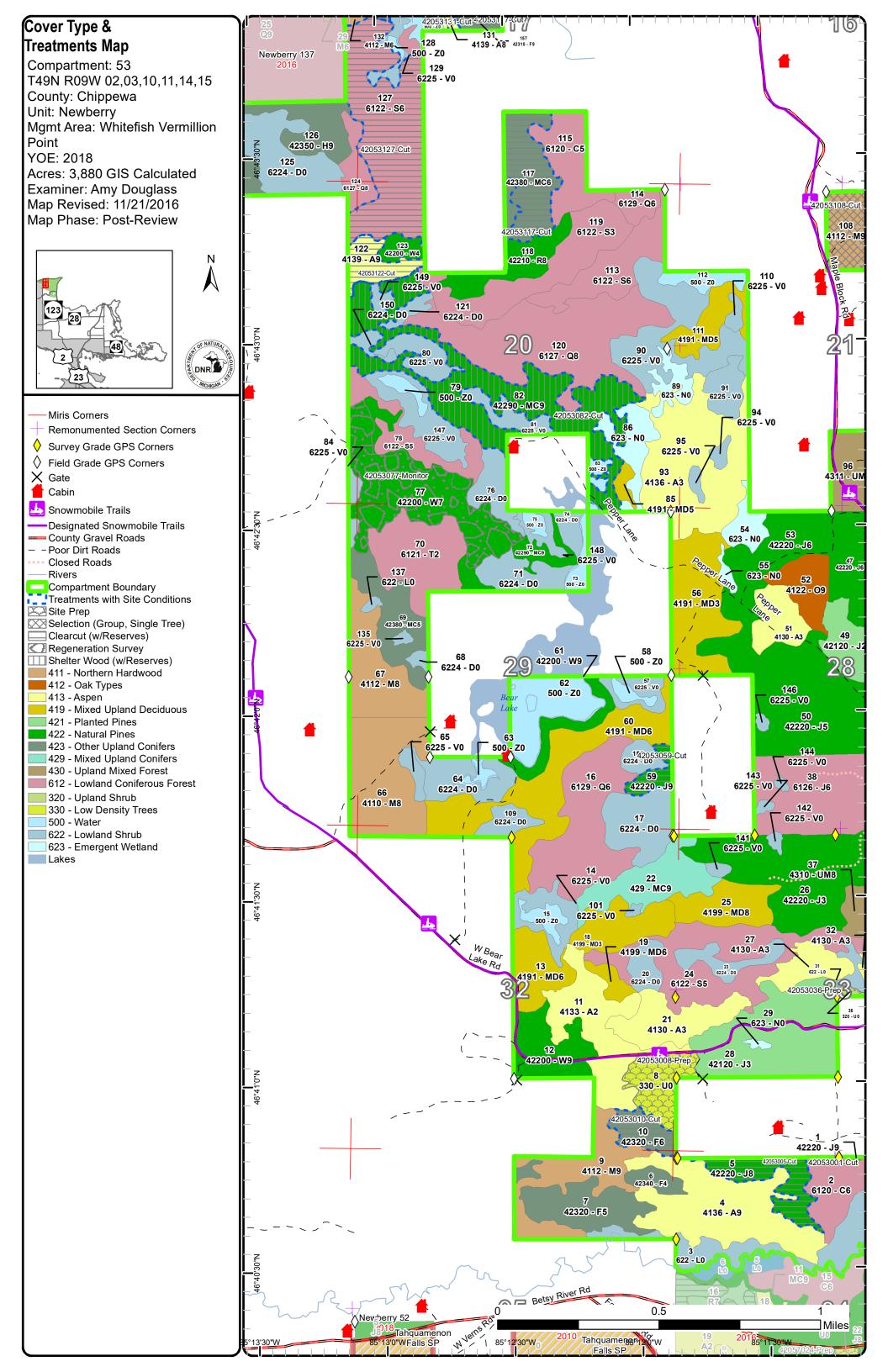
The following information is displayed, where pertinent, on the attached compartment maps:

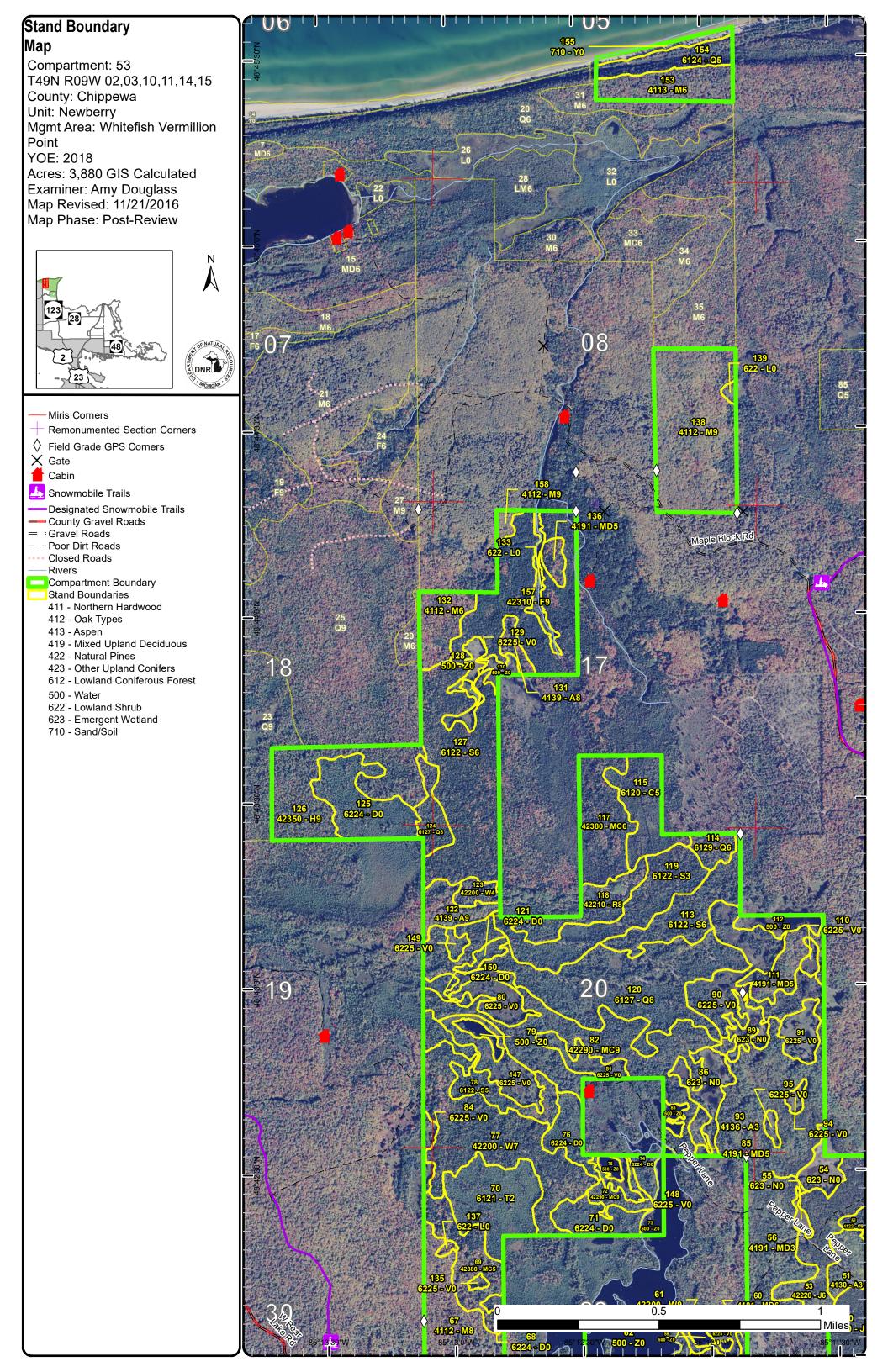
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

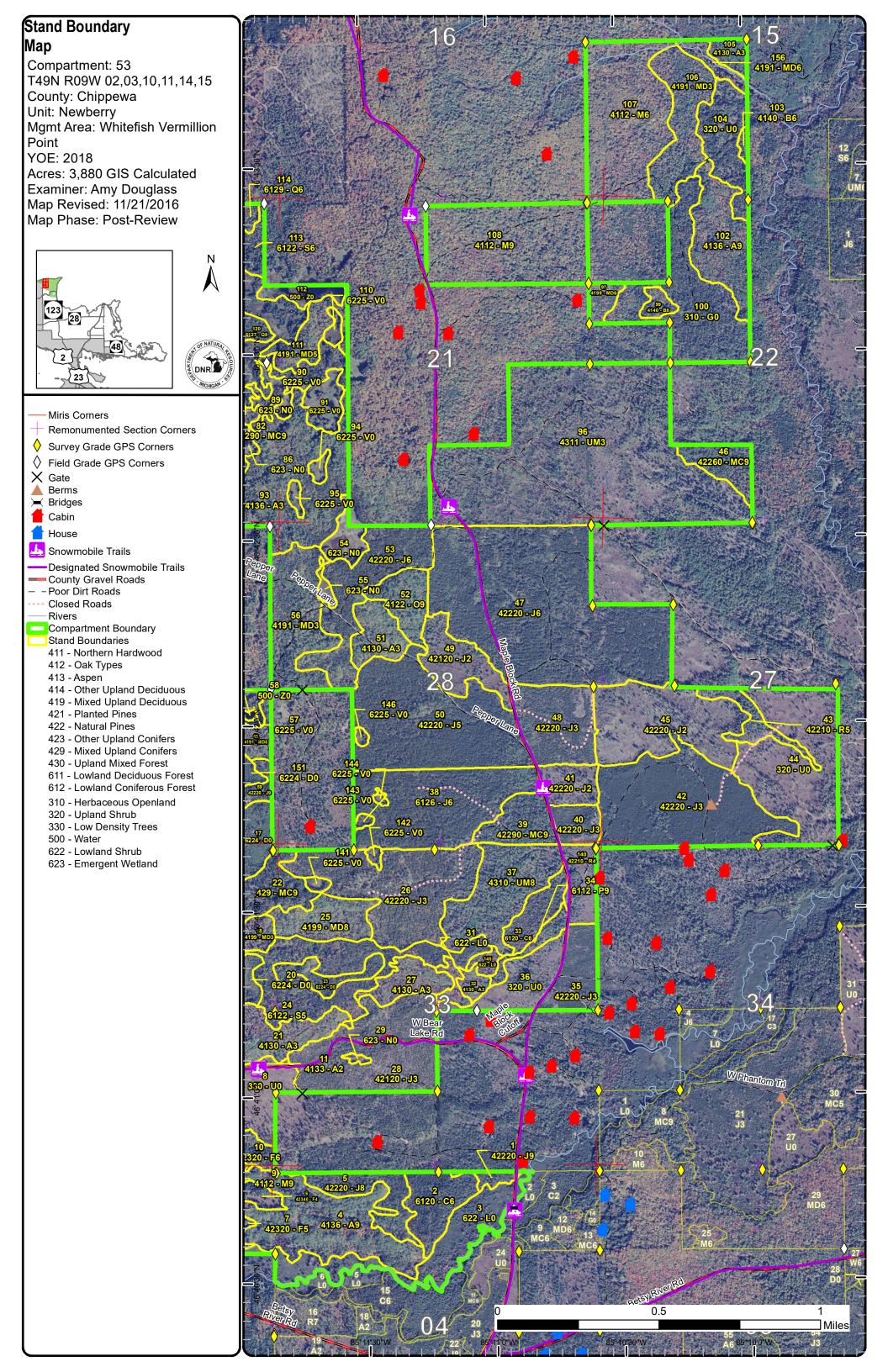


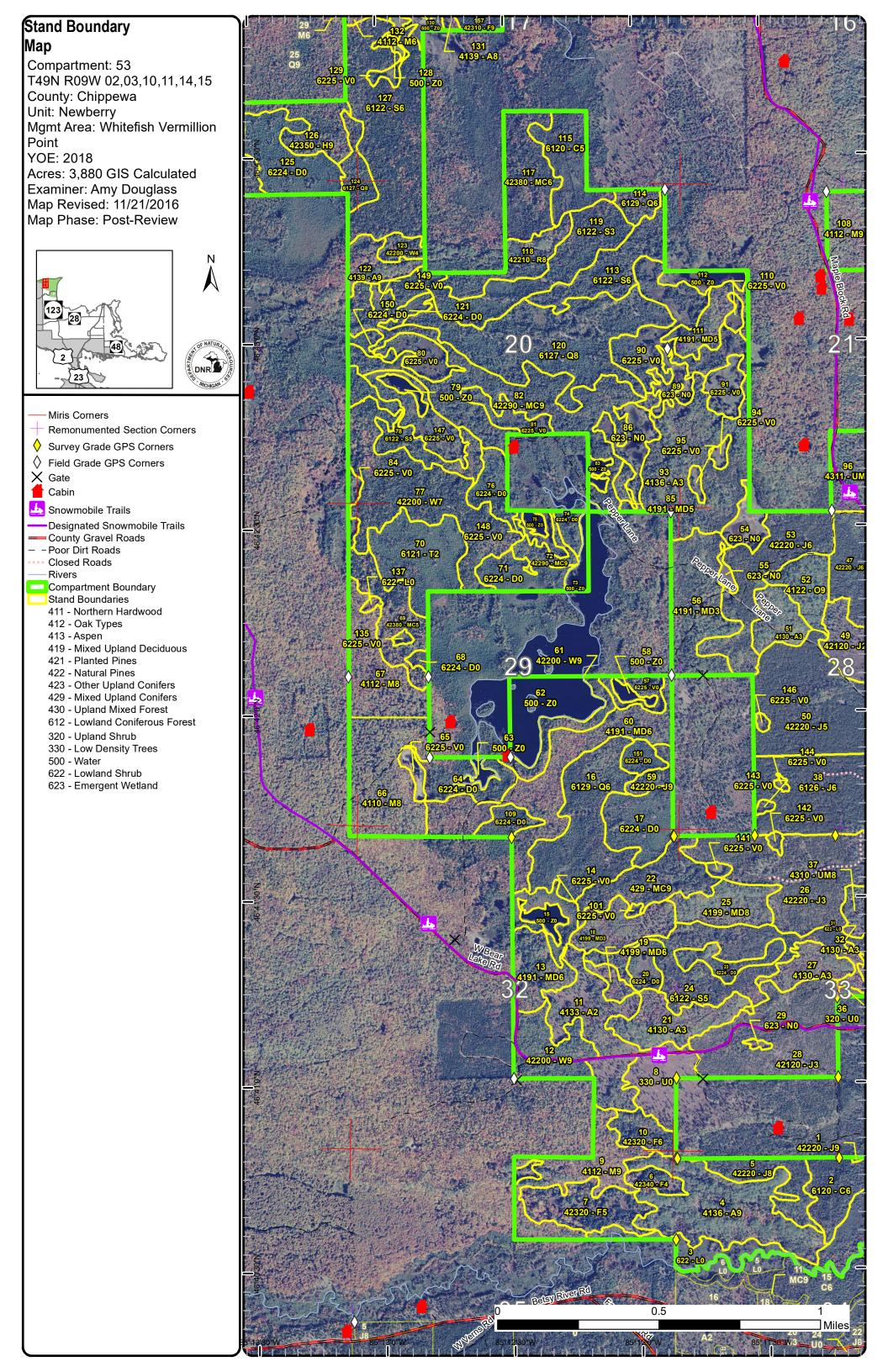


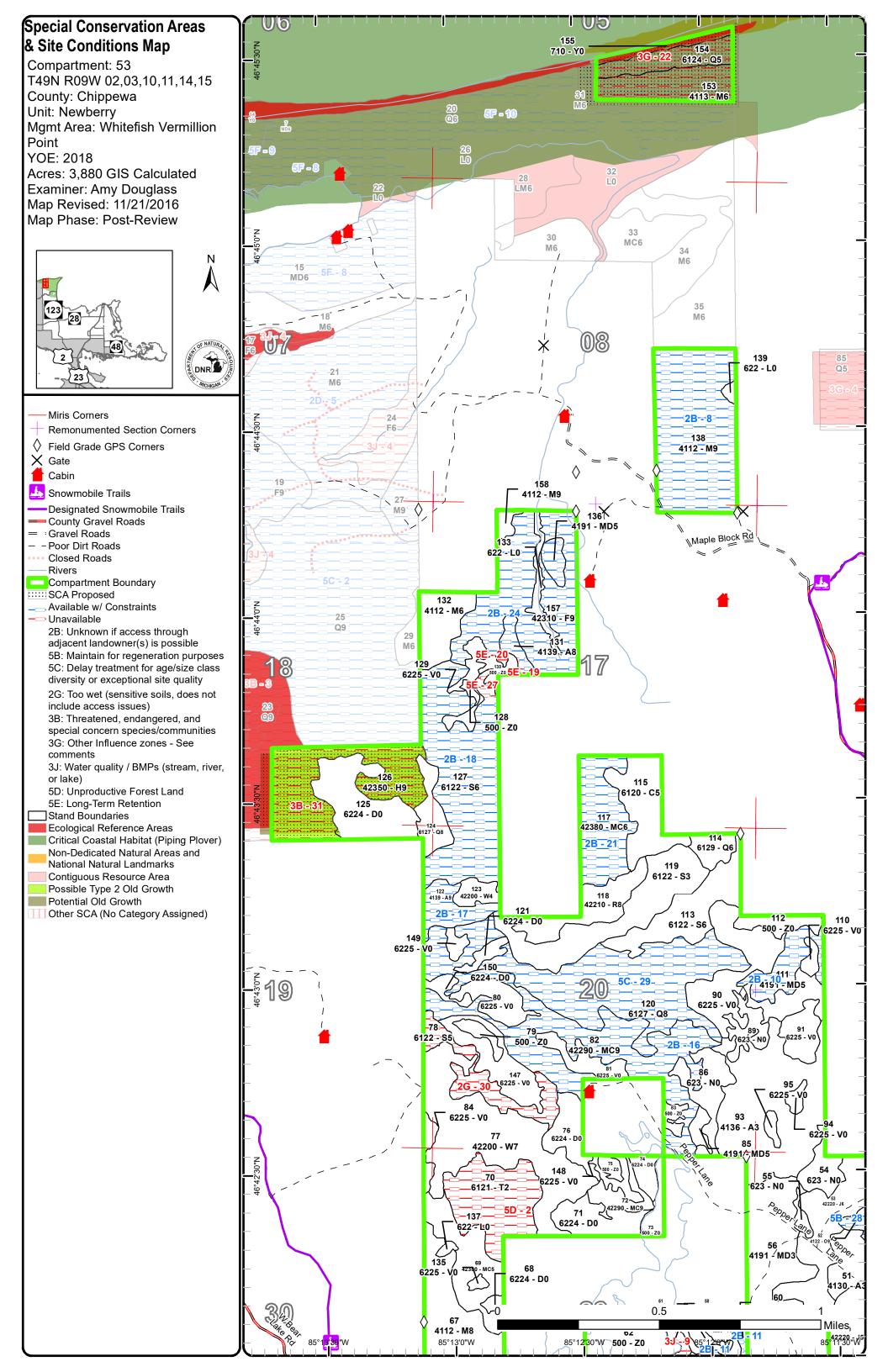


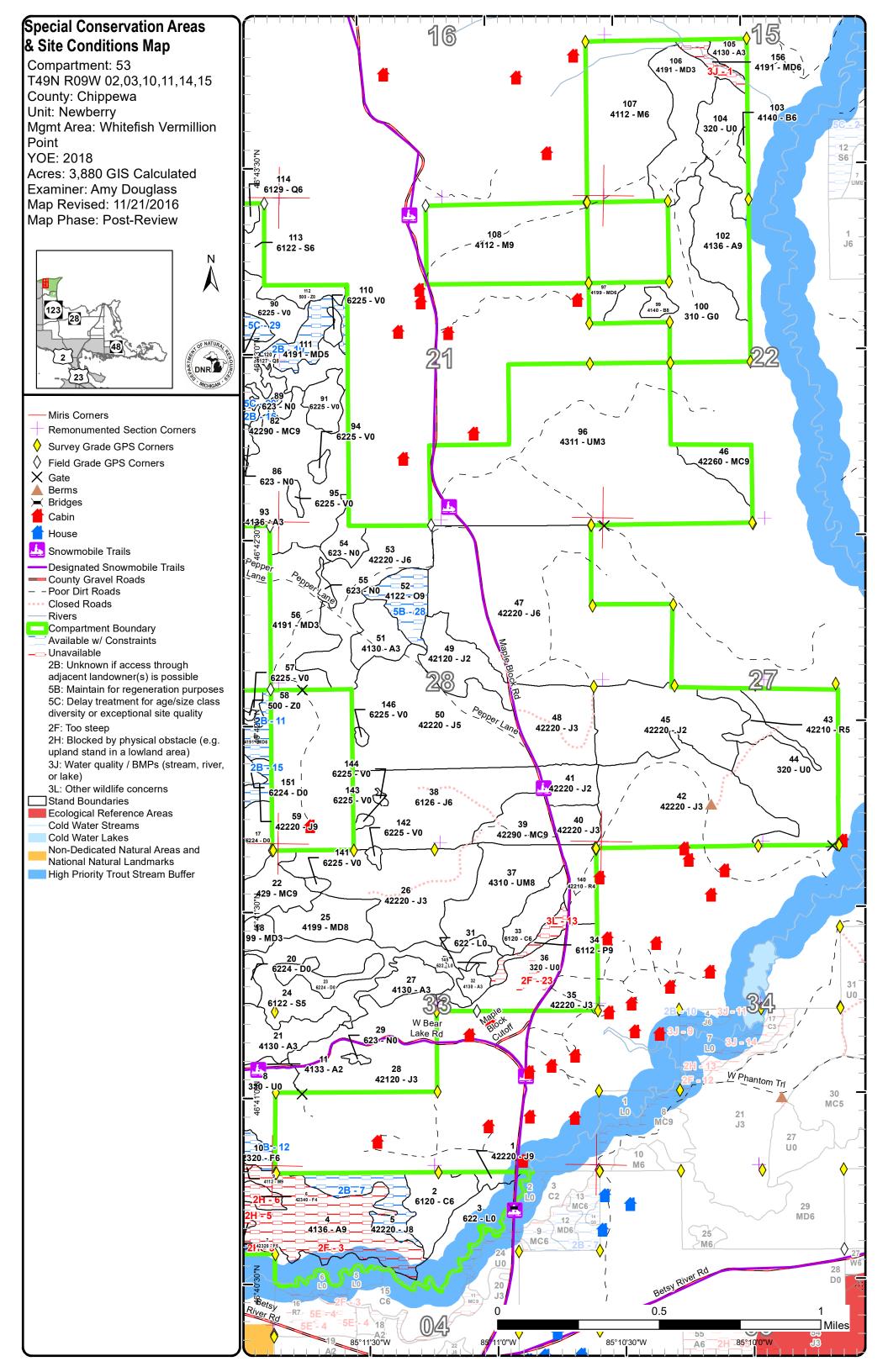


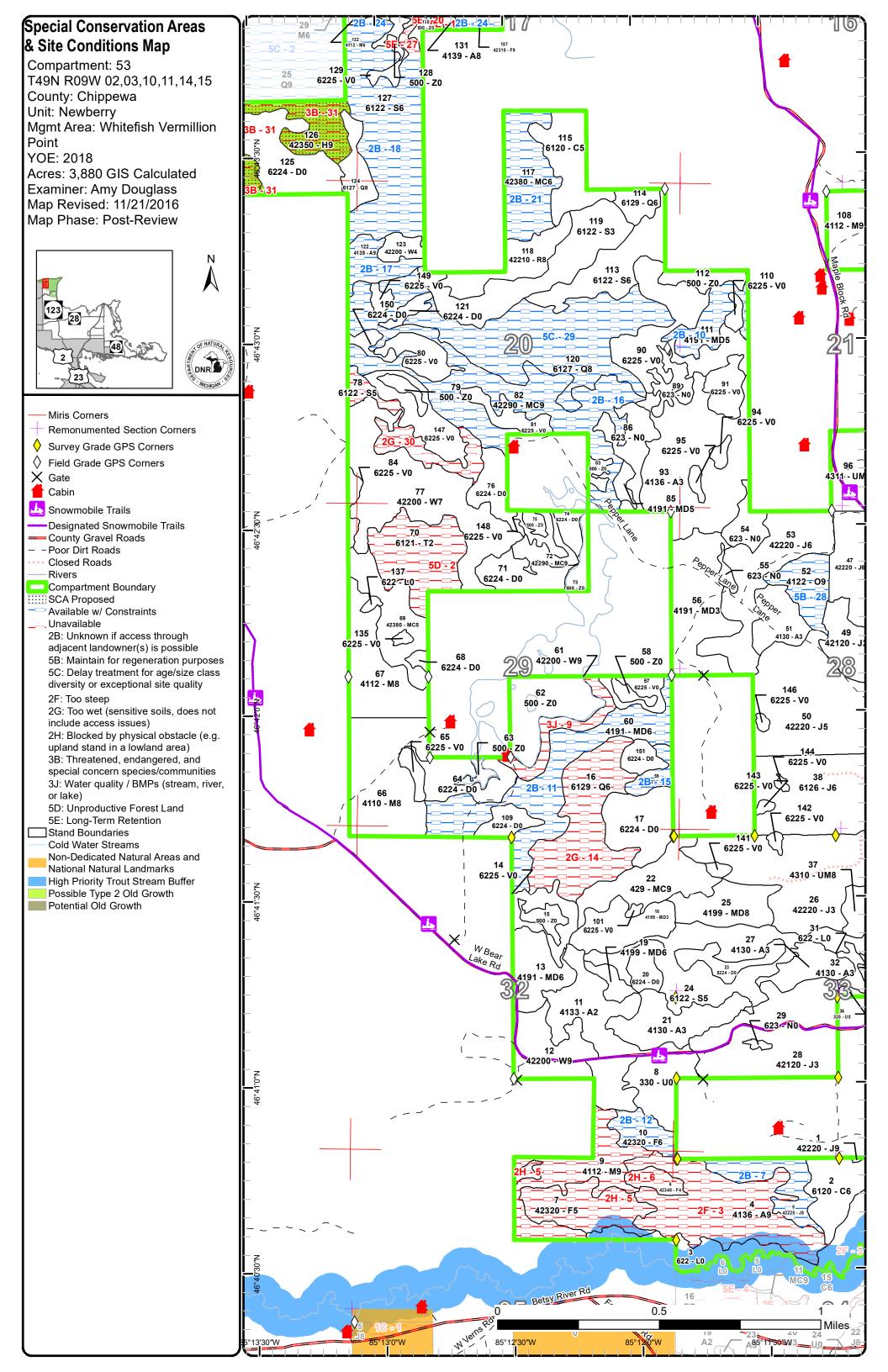












Newberry Mgt. Unit **Amy Douglass: Examiner**



Age Class

	¥ó	KO KO	, S. / S.	\$ \ \	, g	§ / §	10 10 10 10 10 10 10 10 10 10 10 10 10 1	, g 8		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	8 8	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	70,7	,	\$ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	N. S. A.	pr Jug	No. No.
Aspen	0	46	53	0	90	0	0	55	0	66	0	0	0	0	0	0	0	0	310
Bog	157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	156
Cedar	0	0	0	0	0	0	0	0	14	50	0	0	0	0	0	0	0	0	64
Hemlock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52	52
Herbaceous Openland	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
Jack Pine	0	0	167	141	406	72	0	7	20	4	0	0	0	0	0	0	0	0	817
Low-Density Trees	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Lowland Aspen/Balsam Poplar	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	7
Lowland Conifers	0	0	0	0	0	0	0	0	20	160	0	0	0	0	0	0	0	0	180
Lowland Shrub	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63
Lowland Spruce/Fir	0	0	0	0	0	0	75	171	0	0	0	0	0	0	0	0	0	0	246
Marsh	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
Mixed Upland Deciduous	0	0	23	0	80	6	116	0	7	0	0	0	0	0	0	0	0	23	255
Natural Mixed Pines	0	0	0	0	0	0	0	0	42	95	0	0	0	0	0	0	0	0	137
Northern Hardwood	0	0	0	0	0	0	0	125	3	118	0	0	0	0	0	0	0	159	405
Oak	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	17
Paper Birch	0	0	0	0	0	0	0	5	2	0	0	0	0	0	0	0	0	0	7
Red Pine	0	0	0	0	0	0	21	15	11	0	0	0	0	0	0	0	0	0	47
Sand, Soil	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Tamarack	0	0	0	0	0	0	0	39	0	0	0	0	0	0	0	0	0	0	39
Treed Bog	158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	158
Upland Conifers	0	0	0	0	0	27	31	34	0	0	0	0	0	0	0	0	0	0	92
Upland Mixed Forest	0	0	223	0	0	0	0	0	46	0	0	0	0	0	0	0	0	0	269
Upland Shrub	128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	128
Upland Spruce/Fir	0	0	0	0	0	0	90	0	0	0	0	0	0	0	0	0	0	31	121
Water	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71
White Pine	0	0	0	0	0	6	0	69	0	40	0	0	0	0	0	0	0	0	115
Total	702	46	466	141	576	111	333	520	172	550	0	0	0	0	0	0	0	265	3881



Report 2 – Treatment Summary

Newberry Mgt. Unit Year of Entry: 2018

Acres of Harvest

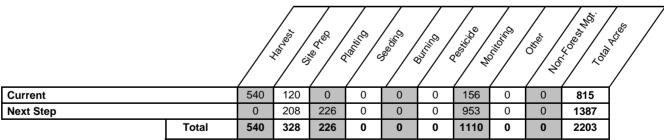
Compartment 53
Total Compartment Acres: 3,880

Commercial Harvest - 118
Harvests with Site Condition - 421
Next Step Harvest - 0
Habitat Cut - 0

Cover Type by Harvest Method

			13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TO T		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	O No	Origin, Son	To to to	88/18		
Aspen		54	0	0	0	0	0	0	0	0	54	
Jack Pine		31	0	0	0	0	0	0	0	0	31	
Lowland Spruce/Fir		82	0	0	0	0	0	0	0	0	82	
Mixed Upland Deciduous		5	0	0	0	0	0	0	0	0	5	
Natural Mixed Pines		0	0	0	0	95	0	0	0	0	95	
Northern Hardwood		0	159	0	0	0	0	0	0	0	159	
Upland Conifers		31	0	0	0	0	0	0	0	0	31	
Upland Spruce/Fir		82	0	0	0	0	0	0	0	0	82	
	Total	286	159	0	0	95	0	0	0	0	540	

Proposed and Next Step Treatments by Method



s	
t	
а	
n	

a n d	Treatment Name	Acres	Stand CoverType	Size S Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
1	42053001-Cut	3.6	42220 - Natural Jack Pine	Sawtimber Well	89	Unspec ified	Harvest	Clearcut	4212 - Planted Jack Pine	Even-Aged	Draft Field Boundary

Habitat Cut: No Site Condition:

<u>Prescription</u> Cut all species, leaving a few residual red pine and any oak if present. No retention due to small size of stand. Specs:

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

Treatments:

Acceptable Jack pine with associated red pine, white pine and oak.

Regen:

Other Private line will have to be run with help from surveyor, since the corner is across the Betsy River. Access may be best through private property to the north. Stay on top of ridge, but still should be plenty far enough away from Betsy River. Would prefer to trench and plant instead of scarify due to dying jack pine.

Proposed Start Date: 10/01/2017

42053005-Cut 20.4 42220 - Natural 4212 - Planted Draft Field Sawtimber Unspec Clearcut with Harvest Even-Aged Jack Pine Medium ified Retention Jack Pine Boundary

Habitat Cut: No Site Condition: Unknown Access

<u>Prescription</u> Harvest all species except oak. Leave large diameter red and white pine (>18"), so as not to leave too much residual BA. Retention will be in small pockets, probably along the edge. Protect understory species to provide structural diversity in the stand for mid-canopy nesters.

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

Treatments:

Acceptable Jack pine with red pine, white pine, aspen and oak.

Regen:

Other Best access would be through private property due to the many steep ridges. Would like to trench and plant instead of scarification due to dying

Comment: jack pine.

Proposed Start Date: 10/01/2017

8 42053008- 21.2 330 - Low-Density Nonstocked 0 Unspec SitePrep Trenching 4212 - Planted Even-Aged Draft Field Prep Trees ified Jack Pine Boundary

Habitat Cut: No Site Condition:

<u>Prescription</u> Trench failed scarification area in preparation for planting to jack pine. Avoid areas too steep to operate or with sufficient advanced regeneration. <u>Specs:</u>

Next Step Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Treatments:

Acceptable Jack pine with red pine, white pine, aspen and oak.

Regen:

Other May continue to the west if needed to fill in areas. Advanced regeneration/leave trees in the cut provide structural diversity in the stand for mid-canopy nesters. Regenerating the stand will result in closed canopy conditions to benefit wildlife species, including spruce grouse.

Proposed Start Date: 10/26/2016

10 42053010-Cut 12 0 42320 - Upland Poletimber Unspec Harvest Clearcut with 42340 - Upland Even-Aged Draft Field Spruce/Fir Spruce Well ified Retention Boundary

Habitat Cut: No Site Condition: Unknown Access

Prescription Cut all species, leaving scattered large diameter white pine for bear refuge trees. Steep ridges may pose access and harvest problems. Limit

Specs: retention of older spruce/fir due to budworm.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Spruce, fir, white pine, jack pine, aspen, oak, birch.

Regen:

Other Best access may be through private land to the east. Look for possible access over steep ridge to the north.

Comment:

Proposed Start Date: 10/01/2017

s	
t	
а	
n	

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
36	42053036- Prep	21.8 3	320 - Upland Shrub	Nonstocke	d 0	Unspec ified	SitePrep	Trenching	4212 - Planted Jack Pine	Even-Aged	Draft Field Boundary

Site Condition: Habitat Cut: No

Prescription Trench failed scarification area in preparation for planting to jack pine. Avoid areas too steep to operate or with sufficient advanced regeneration. Specs:

Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr) Next Step

Treatments:

Acceptable Jack pine with red pine, white pine, aspen and oak.

Regen:

Advanced regeneration/leave trees in the cut provide structural diversity in the stand for mid-canopy nesters. Regenerating the stand will result in Other

Comment: closed canopy conditions to benefit wildlife species, including spruce grouse.

Proposed Start Date: 10/26/2016

42053044-76.6 320 - Upland Shrub Nonstocked 0 Unspec SitePrep Trenchina 4212 - Planted Draft Field Even-Aged Jack Pine Boundary Prep ified

Habitat Cut: No Site Condition:

Prescription Trench failed scarification area in preparation for planting to jack pine. Avoid areas too steep to operate or with sufficient advanced regeneration. Specs:

Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr) Next Step

Treatments:

Acceptable Jack pine with red pine, white pine, aspen and oak.

Regen:

Advanced regeneration/leave trees in the cut provide structural diversity in the stand for mid-canopy nesters. Regenerating the stand will result in Other closed canopy conditions to benefit wildlife species, including spruce grouse.

Comment:

Proposed Start Date: 10/26/2016

42053059-Cut 7.0 42220 - Natural Sawtimber 60 4222 - Natural Even-Aged **Draft Field** Unspec Harvest Clearcut Jack Pine Jack Pine Well ified Boundary

Habitat Cut: No Site Condition: Unknown Access

Prescription Cut all species, leaving a few large diameter red pine. No retention due to small size of stand. Leave a few large trees along the bog edges. Specs:

Next Step SitePrep, Scarification; Monitoring, Natural Regen (Intermediate); SitePrep, Trenching; Planting, Initial Plant

Treatments:

Acceptable Jack pine with red pine, white pine, spruce, aspen and oak.

Regen:

Other Difficult access through multiple landowners.

Comment:

Proposed Start Date: 10/01/2017

42053077-42200 - Natural 1-50 64.4 Sawtimber 63 Monitoring Natural Regen 429 - Mixed Two-Aged Field Boundary White Pine **Upland Conifers** Monitor Poor (Intermediate)

Habitat Cut: No Site Condition:

Prescription Monitor for adequate regeneration per Work Instructions.

Specs:

Next Step **Treatments:**

Acceptable White pine, red pine, spruce, fir with associated aspen and maple.

Regen:

Other Advanced regeneration/leave trees in the cut provide structural diversity in the stand for mid-canopy nesters. Regenerating the stand will result in

closed canopy conditions to benefit wildlife species. Comment:

Proposed Start Date: 10/01/2019

Compartment: 53

Year of Entry: 2018

s t а

Treatment Stand BA **Treatment Treatment Cover Type** Acres Stand Size Age Approval n Method Objective Name CoverType Density Age Range Type Structure Status d 42053082-Cut 94.7 42290 - Natural Sawtimber 81-110 Harvest Shelterwood with 429 - Mixed Two-Aged Draft Field 82 Mixed Pine Well Retention **Upland Conifers** Boundary

Habitat Cut: No Site Condition: Unknown Access

Prescription Mark red and white pine to 50 BA (40-60 BA). Leave some white pine for bear refuge trees. Remove all other species. Leave oak if present.

Specs:

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

Treatments:

Acceptable Red pine, white pine, jack pine, spruce.

Regen:

Other Access is questionable. Steep ridges and/or drainages may limit what can be accessed. Access through private land only. Possible access may Comment: work out between private landowners to the west and east, if/when their lands are harvested. Treatment area likely to be reduced due to access.

Proposed Start Date: 10/26/2016

42053099-4.6 4140 - Other 61 1-50 Natural Regen 4199 - Other Two-Aged Field Boundary 99 Sawtimber Monitoring **Upland Deciduous** Medium (Intermediate) Mixed Upland Monitor Deciduous

Habitat Cut: No Site Condition:

Prescription Monitor for adequate regeneration per Work Instructions.

Specs:

Next Step Treatments:

Acceptable Aspen, birch, oak, maple, jack pine, red pine, white pine.

Regen:

Other Comment:

Proposed Start Date: 10/01/2019

100 42053100-60.1 310 - Herbaceous Nonstocked Natural Regen 42220 - Natural Two-Aged Field Boundary Unspec Monitoring Openland (Intermediate) Jack Pine Monitor ified

Site Condition: **Habitat Cut: No**

Prescription Monitor for adequate pine regeneration. Regen Check in 2020.

Specs:

Next Step **Treatments:**

Acceptable Jack pine, red pine and mixed pine species.

Regen:

Stand currently has a good mix of species left from previous harvest and when stand regenerates the overall stand diversity and closed canopy Other

Comment: condition will benefit more diverse wildlife species, including spruce grouse.

Proposed Start Date: 10/01/2019

102 42053102-Cut 35.8 4136 - Aspen, Sawtimber 69 Unspec Harvest Clearcut with 413 - Aspen Even-Aged Draft Field Mixed Conifer Well ified Retention Boundary

Site Condition: **Habitat Cut: No**

Prescription Cut all trees, leaving oak if present and leaving large diameter red and white pine for bear refuge trees. Some areas may be too steep for Specs: harvest. These will be retention areas. Try to keep some fir and especially hemlock clumps, if present, in the retention areas for moose loafing

areas.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, birch, jack pine, red pine, white pine, oak, spruce, fir.

Regen:

Other 5 year delayed start date due to green up in adjacent stands. May re-evaluate as regeneration is monitored. Treatment area may be reduced due

Comment: to access and topography.

Proposed Start Date: 10/01/2022

Newberry Mgt. Unit Report 3 -- Treatments Compartment: 53 s Year of Entry: 2018 t а **Treatment** Stand BA **Treatment Treatment Cover Type** Acres Stand Size Age Approval n **Objective** Method Name CoverType Density Age Range Type Structure Status d 104 42053104-27.1 320 - Upland Shrub Nonstocked 0 Unspec Monitoring Natural Regen 4133 - Aspen, Even-Aged Field Boundary ified (Intermediate) Mixed Pine Monitor **Habitat Cut: No Site Condition:** Prescription Check for adequate regeneration per Work Instructions. Specs: Next Step **Treatments:** Acceptable Aspen, jack pine with red pine, white pine and oak. Regen: Other Comment: **Proposed Start Date:** 10/01/2019 108 42053108-Cut 79.1 4112 - Maple. Sawtimber 86 111-Harvest Single Tree 411 - Northern Uneven-Draft Field Beech, Cherry Well 140 Selection Hardwood Aged Boundary Association **Habitat Cut: No Site Condition:** Prescription Select cut hardwood down to 80 - 90 BA, leaving best tree in place. Look for any healthy beech to retain if possible. Specs: Monitoring, Natural Regen (Re-Inventory) Next Step Treatments: Acceptable Hard maple and red maple, with oak and yellow birch. Regen: Other Comment: Proposed Start Date: 10/01/2017 117 42053117-Cut 31.1 42380 - Non Pine Poletimber 63 Clearcut with 429 - Mixed Draft Field 81-110 Harvest Even-Aged Upland Conifer. Well Retention **Upland Conifers** Boundary Mixed Deciduous **Habitat Cut:** No Site Condition: Unknown Access Prescription Cut all species except red and white pine (for bear refuge trees). Patch retention as variable as possible to benefit wildlife species. Specs: Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Spruce, fir, jack pine, white pine, red pine, aspen, oak, maple.

Regen:

Access is questionable. Steep ridges and/or drainages may limit what can be accessed. Access through private land only. Possible access may Other work out between private landowners to the west and east, if/when their lands are harvested. Treatment area likely to be reduced due to access. Comment:

10/26/2016 **Proposed Start Date:**

122 42053122-Cut 13.6 4139 - Aspen, Sawtimber 64 81-110 Clearcut with **Draft Field** Harvest 413 - Aspen Even-Aged

Retention

Mixed Deciduous Well

Site Condition: Unknown Access **Habitat Cut: No** Prescription Cut all species except oak, red pine and some white pine to maximize browse production for moose. Some areas may be too steep to cut.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen with red pine, jack pine, white pine, oak and birch.

Regen:

Specs:

Access is questionable. Steep ridges may limit what can be accessed. Access through private land only. Possible access may work out between Other

private landowners to the west and east, if/when their lands are harvested. Comment:

Proposed Start Date: 10/26/2016 Boundary

Acceptable Aspen with spruce, fir, jack pine, red pine, white pine, oak and birch. Areas of inadequate aspen regeneration should be trenched and planted to

Regen:

Access through private lands only. May need to cross creek or access from other side of Browns Creek. Other

Comment:

Proposed Start Date: 10/01/2017

4112 - Maple, Sawtimber Draft Field 138 42053138-Cut 80.2 96 Single Tree 411 - Northern 111-Harvest Uneven-

Beech, Cherry Well 140 Selection Hardwood Aged Boundary Association

Habitat Cut: No Site Condition: Unknown Access

Prescription Select cut down to 80-90 BA, leaving best tree in place. Marking will need to be done looking for careful access for harvesting due to the ravines

throughout the stand. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Hard maple, red maple with yellow birch, oak and hemlock.

Regen:

Other Old grown in roads exist through the stand. Best accessed through private property. Treatment area may be reduced due to access and

Comment: topography.

Proposed Start Date: 10/01/2017

Newberry Mgt. Unit Report 3 -- Treatments Compartment: 53 s Year of Entry: 2018 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age Approval n Method Objective Structure Status Name CoverType **Density** d Age Range Type 42053157-Cut 70.0 42310 - Planted Sawtimber 51-80 Harvest Clearcut 413 - Aspen Even-Aged Draft Field 157 Spruce Well Boundary **Habitat Cut: No** Site Condition: Unknown Access Prescription Cut all species, except large diameter red and white pine. Leave oak if present. No retention due to budworm. Leave 50' buffer, or stay on top of the bluff, along Browns Creek. Specs: Next Step Monitoring, Natural Regen (Intermediate); SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Treatments: Regen(3yr) Acceptable Aspen with spruce, fir, jack pine, red pine, white pine, oak and birch. Areas of inadequate aspen regeneration should be trenched and planted to Regen: red pine.

Access through private lands only. May need to cross creek or access from other side of Browns Creek. Treatment size may change due to

Proposed Start Date: 10/01/2017

access and topography.

Total Treatment Acreage Proposed:

Other

Comment:

815.3

Compartment: 53

Newberry Mgt. Unit

Amy Douglass : Examiner Year of Entry: 2018

Availa	ability for	Managemen	nt														
Total	Acres	Acres Avail	Acres	De	omina	nt Site	e Con	dition	s								
Acres	Available	With Condition	Not Available		2B	5B	5C	5F	2F	2G	2H	3B	3G	3J	3L	5D	5E
309	224	19	67	Aspen	19				66								1
157	157	0	0	Bog													
64	64	0	0	Cedar													
52	0	0	52	Hemlock								52					
60	60	0	0	Herbaceous Openland													
817	790	27	0	Jack Pine	27												
21	21	0	0	Low-Density Trees													
7	0	0	7	Lowland Aspen/Balsam Poplar											7		
179	19	86	74	Lowland Conifers			86			57			17				
63	63	0	0	Lowland Shrub													
246	135	82	29	Lowland Spruce/Fir	82					27							2
38	38	0	0	Marsh													
254	140	107	7	Mixed Upland Deciduous	86			21						7			
137	42	95	0	Natural Mixed Pines	95												
405	263	80	62	Northern Hardwood	80				37				25				
17	0	17	0	Oak		17											
6	6	0	0	Paper Birch													
47	47	0	0	Red Pine													
6	0	0	6	Sand, Soil									6				
39	0	0	39	Tamarack												39	
158	158	0	0	Treed Bog													
92	58	34	0	Upland Conifers	34												
269	269	0	0	Upland Mixed Forest													
128	126	0	2	Upland Shrub					2								
121	0	82	39	Upland Spruce/Fir	82						38						1
71	71	0	0	Water													
115	98	0	17	White Pine						0				13			4
3,880	2,850	629	401	Total Forested Acres	504	17	86	21	105	84	38	52	49	20	7	39	8
	73%	16%	10%	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.

01/06/2017 11:46:58 AM - Page 1 of 6 POLEYN

Newberry Mgt. Unit

Amy Douglass : Examiner

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	7	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
2	Unavailable	5D: Unproductive Forest Land	39	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
3	Unavailable	2F: Too steep	103	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
4	Available	5F: Evaluated for Forest Health Considerations	21	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Evaluated for SBW.						
5	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	31	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Blocked by steep ric	lges.					
6	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	7	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Blocked by steep ric	lges.					

Newberry Mgt. Unit

Amy Douglass : Examiner

7	Available	2B: Unknown if access through adjacent landowner(s) is possible	20	Unspecified	Unspecified	Unspecified	Unspecified
C	omments:						
8	Available	2B: Unknown if access through adjacent landowner(s) is possible	80	Unspecified	Unspecified	Unspecified	Unspecified
C	omments:						
9	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	13	Unspecified	Unspecified	Unspecified	Unspecified
C	omments:						
10	Available	2B: Unknown if access through adjacent landowner(s) is possible	17	Unspecified	Unspecified	Unspecified	Unspecified
C	omments:						
11	Available	2B: Unknown if access through adjacent landowner(s) is possible	64	Unspecified	Unspecified	Unspecified	Unspecified
C	omments:						
12	Available	2B: Unknown if access through adjacent landowner(s) is possible	12	Unspecified	Unspecified	Unspecified	Unspecified
	omments: est access may b	e through private. Otherwise m	ay have t	o punch through steep ric	dge.		

Newberry Mgt. Unit
Amy Douglass: Examiner

13	Unavailable	3L: Other wildlife concerns	7	Unspecified	Unspecified	Unspecified	Unspecified
_	Comments: Vildlife corridor.						
14	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	57	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
15	Available	2B: Unknown if access through adjacent landowner(s) is possible	7	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
16	Available	2B: Unknown if access through adjacent landowner(s) is possible	95	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
17	Available	2B: Unknown if access through adjacent landowner(s) is possible	14	Unspecified	Unspecified	Unspecified	Unspecified
	comments: ncludes steep ridge	es that may not be accessible.					
18	Available	2B: Unknown if access through adjacent landowner(s) is possible	82	Unspecified	Unspecified	Unspecified	Unspecified
C	comments:						

Newberry Mgt. Unit
Amy Douglass: Examiner

19	Unavailable	5E: Long-Term Retention	1	3J: Water quality / BMPs (stream, river, or lake)	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified
	Comments: Buffer left along po	nd.					
20	Unavailable	5E: Long-Term Retention	1	3J: Water quality / BMPs (stream, river, or lake)	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified
	Comments: Fingers left along p	ond.					
21	Available	2B: Unknown if access through adjacent landowner(s) is possible	34	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
22	Unavailable	3G: Other Influence zones - See comments	49	Unspecified	Unspecified	Unspecified	Unspecified
F	Comments: Proposed natural a and 54.	rea along recessional beach lin	es, dui	nes, and adjacent areas of l	_ake Superior. Connect wit	th existing proposed natura	ıl area(s) in Comp 137
23	Unavailable	2F: Too steep	2	Unspecified	Unspecified	Unspecified	Unspecified
-	Comments: This is roughly the	area too steep for trenching.					
24	Available	2B: Unknown if access through adjacent landowner(s) is possible	80	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

Newberry Mgt. Unit
Amy Douglass: Examiner

26	Unavailable	5E: Long-Term Retention	4	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
27	Unavailable	5E: Long-Term Retention	2	3J: Water quality / BMPs (stream, river, or lake)	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified
С	omments:						
28	Available	5B: Maintain for regeneration purposes	17	5C: Delay treatment for age/size class diversity or exceptional site quality	Unspecified	Unspecified	Unspecified
С	omments:						
29	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	86	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
30	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	27	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
31	Unavailable	3B: Threatened, endangered, and special concern species/communities	52	3A: Potential old growth / biodiversity	Unspecified	Unspecified	Unspecified
	omments: djacent to MNFI id	dentified Mesic Northern Forest.					



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				
	Type 1 or Type 2 Old Growth	Possible Type 2 Old Growth Area	Proposed SCA	52				
Comments Large diameter hemlock over	r 250 years old.							
	Type 1 or Type 2 Old Growth	Verified Type 2 Old Growth Area	Proposed SCA	52				
Comments Large diameter hemlock over	r 250 years old.							
Crisp Point/Browns Lake Proposed Natural Area	Contiguous Resource Area		Proposed SCA	54				
Comments								
Proposed natural area along	recessional beach lines, dunes, a	and adjacent areas of Lake Superior.						
Crisp Point/Browns Lake Proposed Natural Area	Contiguous Resource Area		Proposed SCA	54				
Comments Proposed natural area along recessional beach lines, dunes, and adjacent areas of Lake Superior.								

Newberry Mgt. Unit Compartment: 53
Year of Entry 2018



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 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.	ies (e.g., slimy sculpin) to persist from ese conditions due to substantial
SCA	Non-Dedicated Natural Areas and National Natural Landmarks	This category is comprised of those Natural, Wilderness and Wilproposed for legal dedication, but for which legal dedication by le nomination process is defined by Part 351, Wilderness and Natu Environmental Protection Act, 1994 PA 451. The program is adm require the submittal of a Natural Areas Nomination Packet to the proposed sites in various stages of review. Final dedication of no Areas is accomplished through legislative action.	egislature has not occurred. The trail Areas, of the Natural Resources and ninistered by the DNR. Nominations e DNR. This is an active program, with
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 effe as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, diversity of plants and wildlife. Riparian cts on water quality and quantity, as well
HCVA	Designated Critical Habitat	Critical habitat areas are established via a consultative and coop U.S. Fish and Wildlife service for the recovery of threatened and 365, Endangered Species Protection, of the Natural Resources and PA 451, and the Federal Endangered Species Act of 1973. This species plans in various stages of review. As of now only two explover Habitat.	endangered species, as governed by Part and Environmental Protection Act, 1994 is an active program, with proposed
HCVA	Legally dedicated Natural Areas, Wilderness or Wild Areas	The nomination process is defined by Part 351, Wilderness and and Environmental Protection Act, 1994 PA 451. The program is require the submittal of a Natural Areas Nomination Packet to the proposed sites in various stages of review. Final dedication of no Areas is accomplished through legislative action.	administered by the DNR. Nominations e DNR. This is an active program, with
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of identified as Element Occurrences (EOs) by the Michigan Natura context of their natural community classification system. Elemen (Excellent) or B (Good) and a Global (G) or State (S) element (rathreatened (2), or rare (3) serve as an initial base of ERAs. They the State. The system is comprised of individual or associations managed for restoration and maintenance of natural ecological psubmit recommendations for lands as ERAs using the DNR Con	al Features Inventory (MNFI) within the t Occurrences with viability ranks of A arity) ranking of endangered (1), may be located upon any ownership in of natural community types that are processes and values. The public may

S t				Report 7	– Forested	Stands Compartment: 53 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42220 - Natural Jack Pine	Sawtimber Well	3.8	89	Unspecified	Small stand with small access opportunity off Maple Block Road. JP is dying. Best access is thru PVT. Driveway is north of property line.
2	6120 - Lowland Cedar	Poletimber Well	22.8	86	Unspecified	Cedar poletimber. Associated b.spruce, tamarack. Scattered r.maple saplings. Tag alder understory. Cedar seedlings. Scattered high ground islands with j.pine, w.pine, r.pine, and high ground b.spruce.
4	4136 - Aspen, Mixed Conifer	Sawtimber Well	65.9	83	Unspecified	Very steep, long slopes/ridges througout stand, 20-40 % slopes. Areas of thick oak saplings.
5	42220 - Natural Jack Pine	Sawtimber Medium	20.4	79	Unspecified	JP dying. Includes a steep ridge that hopefully you can go around. Areas heavier to WP/RP and thick WP understory, but most is fairly open. Best access is through PVT,
6	42340 - Upland Spruce/Fir	Poletimber Poor	6.7	56	Unspecified	JP is scattered in patches. Opening is neck high bracken fern with some juneberry. Aspen at edges. Steep ridges surrounding stand.
7	42320 - Upland Spruce	Poletimber Medium	31.2	46	Unspecified	Semi open areas with juneberry and dogwood. Filling in with spruce, balsam and aspen with red maple. Heavy blueberry and bracken ground cover. Very hummocky ground.
9	4112 - Maple, Beech, Cherry Association	Sawtimber Well	36.6	69	111-140	Fairly decent red maple stand - not all good quality, but mostly single stem. Lots of white birch has died out. Fairly open understory. Steep series of ridges (20-30% slope) running east to west.
10	42320 - Upland Spruce	Poletimber Well	12.0	53	Unspecified	Access is poor due to steep ridge of white birch, aspen with white pine and red maple, running roughly east to west at north edge of the stand. Jack pine overstory is largely dead. Fairly flat to rolling except for ridge on north and south ends. May be able to cross the ridge.
11	4133 - Aspen, Mixed Pine	Sapling Medium	45.8	8	Immature	Stand harvested as "May Snow Pine", sale #042-08-01. Complete 11/25/09. Scarification completed 2010 by Holli. FTP 42-734. Passed regen check in 2013. Variable regen. Fully stocked aspen to moderately stocked aspen/oak/JP. There are spots that could be planted to JP (especially south of road and possibly areas north of road), but stand 8 covers the majority of failed scarification.
12	42200 - Natural White Pine	Sawtimber Well	26.9	86	111-140	White pine with associated w spruce, r maple, w birch. Balsam, r maple sapling understory. Scattered pockets of aspen. Small patch of JP on north side of road near curve. Very rolling topography.
13	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	21.3	56	81-110	Most of WB has died out. Scattered large dbh white spruce.
16	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	57.0	86	Unspecified	Black spruce 6-8"dbh, 3-5 sticks tall. Cedar interspersed throughout the stand (C3 inclusions with C4 overstory), in these cedar areas, heavy cedar regeneration is occuring 1-4' tall. Associated tamarack in more open areas.

S	Newberry	/ Mgt. Unit		Report 7	- Forested	Stands Compartment: 53 Year of Entry: 2018
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
18	4199 - Other Mixed Upland Deciduous	Sapling Well	22.7	17	Immature	Very mixed stand. Part of Maple Block Aspen sale #033-98, completed 6/00
19	4199 - Other Mixed Upland Deciduous	Poletimber Well	5.5	52	Unspecified	
21	4130 - Aspen	Sapling Well	27.2	17	Immature	Some nice RP and JP regen in the old road. Part of Maple Block Aspen sale #033-98, cut completed 6/00
22	429 - Mixed Upland Conifers	Sawtimber Well	30.6	58	81-110	Jack pine/spruce with aspen/birch/white pine. Low upland ridges and lowland swales.
24	6122 - Black Spruce	Poletimber Medium	60.0	66	Unspecified	Low timber quality black spruce swamp. Heavy understory of willow. Scattered, associated w pine, w birch, r maple poletimber.
25	4199 - Other Mixed Upland Deciduous	Sawtimber Medium	22.6	86	51-80	JP old and dying, but aspen just a little too small. Ridge on south line. Lots of oak seedlings and small saplings - all sizes present.
26	42220 - Natural Jack Pine	Sapling Well	72.0	27	Immature	Some growing into pole size. Scattered residual oak. Aspen saps in places. Overgrown road. Timber sale #028-88, completed 08/90
27	4130 - Aspen	Sapling Well	14.8	17	Immature	Part of Maple Block Aspen sale #033-98, completed 06/00
28	42120 - Planted Jack Pine	Sapling Well	66.6	17	Immature	Too Tall Jack Pine sale #026-88 cut completed 9/93. FTP 42-320 shows planting of 40 acres in 2000. Includes some bog inclusions.
32	4130 - Aspen	Sapling Well	4.6	17	Immature	Widely scattered w pine. Stand adjacent to lowland swale. Part of Maple Block Aspen sale #033-98, cut completed 6/00.
33	6120 - Lowland Cedar	Poletimber Well	14.4	76	Unspecified	Cedar of all sized present, with areas of cedar regeneration.
34	6112 - Lowland Aspen	Sawtimber Well	7.1	76	Unspecified	Large overmature aspen. Small stand along lowland cedar edge. Transition ground. May leave for wildlife travel corridor.
35	42220 - Natural Jack Pine	Sapling Well	21.6	27	Immature	Good j pine regen 20'+ tall. Maple Block Pine sale #016-88. FTP 42-303.
37	4310 - Pine, Oak Mix	Sawtimber Medium	45.8	74	1-50	Lots of oak residual with areas of moderate to heavily stocked w pine r pine poletimber. Good regen throughout despite residual BA. Good variety of regen too. Residual BA quite variable. Part of Maple Block Aspen sale# 033-98 completed 6/00
38	6126 - Lowland Jack Pine	Poletimber Well	72.3	41	Unspecified	Large, remnant RP scattered. Nice JP stand. Deadfall all along old road. Timber sale #03-76, completed 10/76.

S	Newberr	y Mgt. Unit		Report 7	′ – Forested	Stands Compartment: 53 Year of Entry: 2018
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
39	42290 - Natural Mixed Pine	Sawtimber Well	19.2	74	81-110	Very variable stand. Variable overstory and areas of regen from 1970's cut. Older aspen harvest with high residual r pine, w pine left. Poor aspen regen in many places, but good overall species mix growing in (young aspen, w pine, scattered r oak seedlings/saplings). Associated r oak poletimber.
40	42220 - Natural Jack Pine	Sapling Well	11.0	29	Immature	Thick jack pine regen. Part of Maple Block Pine, sale #016-88. FTP 42-301.
41	42220 - Natural Jack Pine	Sapling Medium	13.6	15	Immature	10-20' tall j pine regen. Residual RP with WP log/poles. Nosey Moose Jack Pine sale #07-98; completed 01/02. FTP 42-459: Portion along road was planted w/ 2-0 JP (MI seedlot 0239) 5/22/07; ~5,000 seedlings, filling in, where needed. Steep ridge was avoided. Regeneration count 5/30/08 = 466 t/ac (433 natural, 33 planted - ~1/2 feet in height).
42	42220 - Natural Jack Pine	Sapling Well	86.8	37	Unspecified	Excellent j pine regen just coming into pole size. Inclusions of r pine sawtimber and w pine poletimber. Timber sale #008-78, cut completed 8/80.
43	42210 - Natural Red Pine	Poletimber Medium	11.3	71	1-50	Stand is entirely on a steep, narrow ridge. Aspen pockets through the length of the stand along with a mix of red and white pine residual. Stand harvested as "No Survey Pine", 42-047-08-01. Complete 11/25/09. Regen check 2013: 650 TPA.
45	42220 - Natural Jack Pine	Sapling Medium	61.3	10	Immature	R pine, w pine sawtimber scattered throught, left as residual after the past harvest. 2006 regen survey resulted in trenching/planting of portion of stand (C42-459). Trenching (~half of stand) was completed 11/3/2006 (see FTP map); planted in spring, 2007. Nosy Moose Jack Pine sale #017-98 completed 9/02. Planting of 2-0 JP (MI seedlot 0239) completed 5/22/2007; ~41,000 seedlings. Regeneration count 5/30/08 = 384 t/ac (203 nat'l, 181 planted).
46	42260 - Natural Pine, Mixed Deciduous	Sawtimber Well	15.1	75	81-110	Jack pine, red pine, white pine with aspen and oak. Steep ridges prevent access.
47	42220 - Natural Jack Pine	Poletimber Well	178.0	37	Unspecified	Inclusions of low areas (potholes) with leatherleaf - seasonally ponded. Pockets of aspen. Associated black spruce saplings in lower areas. Occasional oak. Timber sale #08-78 completed 03-80.
48	42220 - Natural Jack Pine	Sapling Well	36.3	25	Immature	Scattered individual and patches of aspen. Road through stand is grown shut. Part of Maple Block Pine, sale 16-88; closed 9/8/92. FTP 42-301.
49	42120 - Planted Jack Pine	Sapling Medium	24.8	10	Immature	Planted in 2007 after failed 2006 regen survey showing only scattered j pine and aspen regen. C42-459. Trenching completed 11/3/2006; planted in spring 2007. Part of Nosy Moose Sale #017-98, completed 01/02. Planting of 2-0 JP (MI seedlot 0239) completed 5/22/2007 - 17,000 seedlings. 1st yr planting check 5/30/08 = 475 t/ac (25 nat'l, 450 planted).
50	42220 - Natural Jack Pine	Poletimber Medium	94.3	31	Immature	Includes low boggy pockets. Sale 25-79A.

S t	Newberry	Mgt. Unit		Report 7	– Forested	Stands Compartment: 53 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
51	4130 - Aspen	Sapling Well	16.5	35	Unspecified	Aspen knob. Oak poletimber scattered throughout stand. Sale 25-79A.
52	4122 - Oak, Pine	Sawtimber Well	17.4	86	51-80	Thick regen under residual oak and WP. Sale 25-79A.
53	42220 - Natural Jack Pine	Poletimber Well	47.4	35	Immature	Just coming into pole size. Cut in 1982, sale 25-79A.
56	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	43.7	35	Immature	Mix of oak, r maple, aspen, w birch saplings. Jack pine poletimber is scattered throughout the stand and also found in small inclusions, as is white pine. Pine species are open grown and very limby. Scattered occasional hemlock.
59	42220 - Natural Jack Pine	Sawtimber Well	7.0	60	Unspecified	Jack pine with associated black spruce poletimber and scattered red pine. Areas of low ground holding jack pine and black spruce.
60	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	63.5	56	81-110	White birch experiencing die off. Associated white pine and red maple. Balsam understory, scattered aspen inclusions.
61	42200 - Natural White Pine	Sawtimber Well	13.3	81	51-80	Conifer stand adjacent to Bear Lake. Mixed stand of balsam, spruce, jack pine and white pine, the white pine is consistant throughout. Red pine inclusions at the north end of the stand where the ridge is higher.
66	4110 - Sugar Maple Association	Sawtimber Medium	51.9	66	51-80	Heavy maple regeneration. Top dieback noticeable on maple. Occasional large WP. Bear Lake Hardwood sale #024-99 completed 01/03.
67	4112 - Maple, Beech, Cherry Association	Sawtimber Medium	35.8	66	51-80	R maple with some sugar maple. Beech largely standing snags now. Lower quality timber. Very thick understory. Part of Bear Lak Hardwoods sale that was left uncut due to very low quality, poor marking and very wet soils. Stand has old orange and red paint
69	42380 - Non Pine Upland Conifer, Mixed Deciduous	Poletimber Medium	27.0	49	Unspecified	Clump red maple - low quality. Open grown white pine, spruce and balsam - limby. Heavy balsam understory.
70	6121 - Tamarack	Sapling Medium	39.4	63	Unspecified	Leatherleaf, labrador tea, stunted tamarack and black spruce
72	42290 - Natural Mixed Pine	Sawtimber Well	7.9	75	81-110	White pine and red pine, with black spruce. Stand is for the most part a narrow ridge. Associated red maple and scattered white birch.
77	42200 - Natural White Pine	Sawtimber Poor	68.6	63	1-50	Ridges interspersed with bog. MO r pine/w pine, with secondary MO of j pine, expected to regnerate in pockets. Cut in 2016; Comp 53 East, sale #42-029-11-01.
78	6122 - Black Spruce	Poletimber Medium	26.9	63	Unspecified	Widely scattered black spruce and tamarack. Occasional high ground ridges with r pine, w pine - short heights.

S t				Report 7	- Forested	Stands Compartment: 53 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
82	42290 - Natural Mixed Pine	Sawtimber Well	94.7	87	81-110	Red pine sawtimber 12-16" dbh. Black spruce understory. W birch, w pine inclusions with b spruce bog pockets. Old, grown in RR grade with 14" RP growing in it (~75 years old).
85	4191 - Mixed Upland Deciduous with Conifer	Poletimber Medium	3.5	56	51-80	Stand interspersed with low ground, bog pockets, w birch dying out. R maple poletimber component with spruce and balsam. Scattered w pine.
93	4136 - Aspen, Mixed Conifer	Sapling Well	73.0	35	Immature	Thick regen. Old road through stand. Timber sale #025-79, completed 12/82
96	4311 - Pine, Aspen Mix	Sapling Well	223.4	16	Immature	Very diverse stand. R pine, w pine, oak residual from last cut some areas have fairly high stocking and are inclusions. Fair amount of RP seeded in (6-20' tall). High and Low Jack Pine sale # 022-98, completed 11/01. FTP 42-451.
97	4199 - Other Mixed Upland Deciduous	Poletimber Well	6.2	46	1-50	Some larger trees left from last cut, but primarily pole/sapling size.
99	4140 - Other Upland Deciduous	Sawtimber Medium	4.6	61	1-50	Ridge on east side. High steep ridges primarily. Cut in fall 2015, #013-11, Comp 53 East.
102	4136 - Aspen, Mixed Conifer	Sawtimber Well	35.8	69	Unspecified	Mature aspen on ridge tops. Mix of red maple, white birch and balsam poletimber. White birch dying out. Rolling ridges, some may be too steep for harvest.
103	4140 - Other Upland Deciduous	Poletimber Well	1.8	75	Unspecified	W birch poletimber, some dead and dying. Stand is on steep slope. Let nature prevail.
105	4130 - Aspen	Sapling Well	6.5	19	Immature	Good aspen regen. Betsy River Triangle sale #046-97; cut completed 1/98.
106	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	36.0	37	1-50	Mostly sapling to pole size. Scattered, low quality r maple left as residual in a past cut. White pine residual is variable - heavier to the south. Sale 30-78A.
107	4112 - Maple, Beech, Cherry Association	Poletimber Well	74.1	86	81-110	Overall low quality red maple stand. Areas of better hard maple. Beech, yellow birch components. Good maple sapling establishment. Old grown in road thru stand. Sale 30-78A.
108	4112 - Maple, Beech, Cherry Association	Sawtimber Well	79.1	86	111-140	Beech dead and dying. Thick beech regen in spots. Large dbh red maple. Possible cabin trespass in SW corner.
111	4191 - Mixed Upland Deciduous with Conifer	Poletimber Medium	16.9	59	51-80	Diverse stand. Spruce/fir, white birch, red maple: widely scattered oak on the higher ridges. Heavy balsam advanced regeneration. Interspersed with small leatherleaf bog inclusions. Very difficult access with the multiple bog areas and multiple private landowners.
113	6122 - Black Spruce	Poletimber Well	29.8	56	81-110	Small knolls with red pine, jack pine, white pine interspersed with black spruce and low (bog) areas. Red maple, white birch sapling component.

S t	Newberry	y Mgt. Unit		Report 7	- Forested	Stands Compartment: 53 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
114	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	7.5	72	Unspecified	Black spruce with cedar growing amongst spruce. Higher ground rises have hemlock and white pine.
115	6120 - Lowland Cedar	Poletimber Medium	26.7	83	Unspecified	Cedar, black spruce saplings and poles. Tag alder interspersed. Appears to have been clearcut 80-90 years ago, several old narrow gauge sled roads. Open water pockets even during winter. Very diverse stand from timber to L to bog inclusions.
117	42380 - Non Pine Upland Conifer, Mixed Deciduous	Poletimber Well	34.1	63	81-110	White birch, multiple stemmed red maple, with white pine. Heavy balsam understory and saplings. VERY steep hills and ridges throughout the stand.
118	42210 - Natural Red Pine	Sawtimber Medium	20.8	56	1-50	Low ridges with red pine; black spruce in the lower bog areas and also a minor component on the ridges. Balsam sapling component.
119	6122 - Black Spruce	Sapling Well	45.1	56	1-50	Widely scatterd black spruce poletimber. Areas of DO type. Heavy black spruce and tamarack regeneration in areas, scattered open bog and cedar inclusions. Scattered ridges with pine.
120	6127 - Lowland Pine	Sawtimber Medium	86.0	81	51-80	Pine ridges with r pine sawtimber 12-16" dbh. Associated w pine, j pine and b spruce in the understory. Intermixed bog openings. Scattered r maple saplings/poletimber and declining w birch. Similar to adjacent pine (mixed conifer) stand, except more lower ground with upland ridges within and more spruce.
122	4139 - Aspen, Mixed Deciduous	Sawtimber Well	13.6	64	81-110	Mature aspen fair to good form. Clump red maple poletimber. White pine, balsam understory. STEEP rolling hills - access highly in question.
123	42200 - Natural White Pine	Poletimber Poor	6.2	42	1-50	Open grown stand. Heavy balsam regeneration in most areas. Interspersed open areas, red maple clump poletimber.
124	6127 - Lowland Pine	Sawtimber Medium	11.9	75	51-80	Mixed white pine poletimber/sawtimber and black spruce. Stand is a transition area out of a bog (DO). Scattered, poorly formed red maple poletimber. Low ground inlcusions of black spruce sphagnum swamp.
126	42350 - Upland Hemlock	Sawtimber Well	51.8	251	111-140	Areas of large H on upland transition ground, with areas of lower ground with smaller diameters of mainly WP, red maple, black spruce and white birch. Low boggy inclusions.
127	6122 - Black Spruce	Poletimber Well	83.9	65	141-170	Well formed black spruce. Heavy spruce/fir sapling regeneration. Mixed hardwood inclusion along the east side of the stand along the southern stand boundary (low quality).
131	4139 - Aspen, Mixed Deciduous	Sawtimber Medium	5.6	63	Unspecified	Scattered aspen among red maple and balsam fir. Balsam seedling/sapling understory. Stand lies entirely on a ridge.
132	4112 - Maple, Beech, Cherry Association	Poletimber Well	18.9	88	81-110	Small stand of low quality red maple poletimber. Inclusions of balsam. Areas of lower ground. Data taken from adjacent stand in C-137.

S t	Newberry	Mgt. Unit		Report 7	- Forested	Stands Compartment: 53 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
136	4191 - Mixed Upland Deciduous with Conifer	Poletimber Medium	5.3	56	51-80	Low quality maple with associated aspen, spruce and fir.
138	4112 - Maple, Beech, Cherry Association	Sawtimber Well	80.2	96	111-140	Very shaded with little understory. Lots of topography (draws/drainages). Fairly steep ridges and valleys through the stand. Old roads present through stand. Best access is through PVT. Would need careful marking and good operator to cut. Small inclusions on eastern edge: low quality red maple poletimber with balsam sapling understory. Larger diameter white pine component.
140	42210 - Natural Red Pine	Poletimber Poor	15.3	68	1-50	Patchy larger residual trees. Sapling to pole size residual too (RP, WP, FB). Stand harvested as sale #043-08-01, "Blushing Lady Pine". Completed 01/09/12. Scarified in 2012, FTP 42-732.
153	4113 - R.Maple, Conifer	Poletimber Well	25.4	88	81-110	Stand information is from adjacent stand (C-137, stand 31) taken 7/23/2014. Mixed hardwood poletimber with scattered w birch and associated larger diameter w pine. Spruce component, balsam sapling understory.
154	6124 - Lowland Spruce- Fir	Poletimber Medium	16.9	85	81-110	Data from adjacent stand/compartment (C-137, stand 20) taken 01/07/2014: Stand consists of mostly lowland areas with ridges of higher ground mixed in. Mix of various species. Stand is adjacent to Lake Superior shoreline. OPIC - FMD 2008: lowland conifer poletimber adjacent to Lake Superior. Areas of water pockets throughout stand (possible springs).
156	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	6.8	75	Unspecified	Steep ridge down to creek. Riparian area. Feeder creek into the Betsy River flows through the stand.
157	42310 - Planted Spruce	Sawtimber Well	70.9	56	51-80	White spruce plantation with associated balsam, aspen and r maple, scattered w pine. Small inclusions of mixed hardwood stands at the edges of the stand. Planted with in 1961 at 6x6 spacing. Access is only through PVT lands. Steep creek draws within stand. Adjacent Nichols property (to the east) recently cut and is coming back to aspen.

4112 - Maple, Beech, Cherry Association

158

Sawtimber Well

3.0

75

51-80



Stand	Cover Type	Acres	Managed Site	General Comments:
3	622 - Lowland Shrub	45.7	No	Tag alder adjacent to Betsy River. Widely scattered tamarack, b spruce, cedar.
8	330 - Low-Density Trees	21.2		Stand harvested as "May Snow Pine", sale #042-08-01. Complete 11/25/09. Scarification completed 2010 by Holli. FTP 42-734. Passed regen check in 2013, however, current levels are variable and should be reevaluated. Survey corner needs to be replaced (broken pipe).
14	6225 - Bog	13.0	No	Leatherleaf bog edge around edge of pond - widely scattered, stunted b spruce, tamarack, minor amounts of w pine.
15	500 - Water	5.5	No	Bog pond
17	6224 - Treed Bog	26.4	No	Leatherleaf/sedge bog with widely scattered, stunted b spruce, and tamarack.
20	6224 - Treed Bog	8.6	No	Leatherleaf bog adjacent to pond. Scattered, stunted black spruce.
23	6224 - Treed Bog	10.8	No	Widely scattered, stunted black spruce opening into a bog.
29	623 - Emergent Wetland	1.1	No	Small bog pond, seasonally ponded.
31	622 - Lowland Shrub	4.4	No	Tag alder, small drainage area. Scattered black ash, conifer, yellow birch.
36	320 - Upland Shrub	24.2		Stand harvested as sale #043-08-01, "Blushing Lady Pine". Completed 01/09/12. Scarified flat areas in 2011, FTP 42-732. Little regen found - patchy. Variable regen ~ 3' tall with RP residual on ridges.
44	320 - Upland Shrub	76.6		Stand harvested as "No Survey Pine", #42-047-08-01. Complete 11/25/09. Scarified 2010 by Holli. FTP 42-742. Regen 2013: 650 TPA. Spotty regen. Some RP seedlings along old road.
54	623 - Emergent Wetland	9.5	No	Leatherleaf on edges, with grasses interior. Seasonally ponded.
55	623 - Emergent Wetland	2.5	No	Leatherleaf/sedge bog. Seasonally ponded.
57	6225 - Bog	7.9	No	Leatherleaf bog surrounding small lake. Widely scattered, stunted black spruce and tamarack.
58	500 - Water	3.1	No	Small bog type lake.
62	500 - Water	29.7	No	Bear Lake



Stand	Cover Type	Acres	Managed Site	General Comments:
63	500 - Water	3.1	No	Part of Bear Lake.
64	6224 - Treed Bog	19.0	No	Leatherleaf, willows. Widely scatterd black spruce, jack pine, and white pine.
65	6225 - Bog	4.2	No	Leatherleaf bog, seasonally ponded.
68	6224 - Treed Bog	2.2	No	Leatherleaf, labrador tea. Stunted black spruce and tamarack.
71	6224 - Treed Bog	16.1	No	Leatherleaf, labrador tea, stunted tamarack and black spruce. Scattered white pine on the higher knolls. Partial bog lake inclusion.
73	500 - Water	6.6	No	Bear Lake.
74	6224 - Treed Bog	5.3	No	Leatherleaf, labrador tea bog with stunted spruce, occassional white pine.
75	500 - Water	2.6	No	Bog lake.
76	6224 - Treed Bog	13.4	No	Leatherleaf, labrador tea bog with stunted spruce, tamarack inclusions and pine ridges.
79	500 - Water	3.8	No	Bog lake.
80	6225 - Bog	12.5	No	Open bog for the most part. Scattered small ridges with red pine. Bog has scattered black spruce, tamarack, white pine saplings.
81	6225 - Bog	9.9	No	Open leatherleaf bog for the most part. Scattered white pine, black spruce. Small "island" high ground inclusions.
83	500 - Water	3.1	No	Bog lake.
84	6225 - Bog	4.0	No	
86	623 - Emergent Wetland	16.5	No	Seasonally ponded.
89	623 - Emergent Wetland	8.4	No	Bog - seasonally ponded.
90	6225 - Bog	43.0	No	Leatherleaf, labrador tea. Red pine, black spruce at edges; red pine, white pine, jack pine on higher ridges. Widely scatterd white birch and red maple. Small ponded inclusions.



Stand	Cover Type	Acres	Managed Site	General Comments:
91	6225 - Bog	11.0	No	Open leatherleaf bog for the most part. Very widely scattered jack pine and white pine growing on hummocks.
94	6225 - Bog	2.5	No	Open leatherleaf bog, seasonally ponded.
95	6225 - Bog	2.2	No	Open leatherleaf bog, seasonally ponded.
100	310 - Herbaceous Openland	60.1		Scarified 6/2016; FTP 42-794. Regen check needed 2019. Cut in fall 2015, #013-11, Comp 53 East. Some areas with thicker red pine (planted in 1960). MO for j pine, areas of aspen regeneration is expected in isolated pockets. Follow up with planting if j pine regeneration is not successful from scarification. Accessibility could be an issue due to private lands.
101	6225 - Bog	1.0	No	
104	320 - Upland Shrub	27.1		Cut in fall 2015, #013-11, Comp 53 East. MO is for aspen, secondary MO for a mix of spruce/fir, j pine. Expect j pine inclusions to regenerate to scattered j pine. Access may be a problems due to private lands.
109	6224 - Treed Bog	8.3	No	
110	6225 - Bog	2.7	No	Open leatherleaf bog. Edged by white birch, mixed hardwood, balsam and black spruce saplings.
112	500 - Water	7.9	No	Bog pond/lake ringed with leatherleaf and scattered r pine, w pine.
121	6224 - Treed Bog	4.1	No	Small diameter black spruce, tamarack, occassional white pine sapling scattered throughout. Standing water during spring.
125	6224 - Treed Bog	33.2	No	Semi open bog. Areas of small higher ground ridges where white pine sawtimber/poletimber are present. Black spruce, tamarack saplings and scattered poletimber.
128	500 - Water	1.2	No	Small bog pond.
129	6225 - Bog	7.6	No	Leatherleaf bog, scattered, stunted black spruce; seasonally ponded.
130	500 - Water	4.5	No	Pond.
133	622 - Lowland Shrub	6.4	No	Browns Creek headwaters, old beaver meadow - tag alder at edges. Small creek drainage.
135	6225 - Bog	1.3	No	_

Report 8 - Nonforested Stands



Stand	Cover Type	Acres	Managed Site	General Comments:
137	622 - Lowland Shrub	1.2	No	
139	622 - Lowland Shrub	1.5	No	Old beaver flooding.
141	6225 - Bog	1.8	No	
142	6225 - Bog	1.5	No	
143	6225 - Bog	1.3	No	
144	6225 - Bog	0.9	No	
145	622 - Lowland Shrub	3.6	No	
146	6225 - Bog	1.2	No	
147	6225 - Bog	19.3	No	Widely scattered black spruce and tamarack. Low bog potholes within stand.
148	6225 - Bog	4.8	No	Leatherleaf, labrador tea bog surrounding bog lake.
149	6225 - Bog	2.9	No	
150	6224 - Treed Bog	4.0	No	Open bog for the most part. Bog has scattered black spruce, tamarack, white pine saplings.
151	6224 - Treed Bog	6.6	No	Leatherleaf/sedge bog with widely scattered, stunted black spruce and tamarack, surrounding small bog pond.
155	710 - Sand, Soil	6.3	No	Lake Superior shoreline/beach.