

# **Compartment Review Presentation**

**Newberry Forest Management Unit** 

Compartment 42069 Entry Year 2017 Acreage: 2,083

**County Chippewa** 

Management Area: Whitefish Vermillion Point

Revision Date: 2015-08-21

Stand Examiner: Jason Tokar

**Legal Description:** 

T48N R6W Sections 3, 4 & 5 T49N R6W Sections 27, 33 & 34

### **Identified Planning Goals:**

Maintain or improve the forest health and productivity through limited timber management while simultaneously protecting the unique natural communities found within the compartment. Increase age class and structural diversity in forested upland stands. Through any management, care should be taken to maintain the integrity of the sensitive communities associated with the patterned fen complex within the compartment.

### Soil and topography:

Lowland peat soils and muck soils dominate the compartment. Forested cover types on these lowland soils are mainly treed bogs, sub-merchantable, low quality cedar, and some open bogs. Subtle ridges and higher ground within the compartment are comprised of sand or sand loams producing forested cover types of mixed deciduous, white birch, white pine, red pine and black spruce. The topography of the compartment is primarily level, low ground with slight ridges in the eastern portions of the compartment and areas of higher ground along the western reaches of the compartment.

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

The compartment is entirely State owned. The compartment is bordered by private property to the east and to the north. The western boundary is bordered primarily by two large private land holdings, the Hiawatha Club and the Maranatha Preserve (wildlife preserve). To the south of the compartment lies the Tahquamenon Falls State Park. Land use and development are substantial to the east of the compartment with many small private parcels containing either permanent or seasonal residences along Lake Superior. Land use and development to the north is increasing with the parceling and sale of many private properties. The lands to the west and south of the compartment should see very little development with the State Park and the wildlife preserve. Due to the lowland nature and "inaccessibility" of the compartment, land use within the compartment boundaries will remain minimal.

### **Unique Natural Features:**

MNFI has documented a Patterned Fen within sections 33, 34, and 3, 4 of the compartment, and lists a number of unique plants associated with the Patterned Fen. There is the potential for various wildlife such as osprey, moose, eagle and Blanding's turtle. There's also the potential for unique plants such as yellow pitcher plant, English sundew, black crowberry and a host of others. Black Creek flows through the compartment and out to Lake Superior.

### Archeological, Historical, and Cultural Features:

The Bureau of History does not list any records of historical features within the compartment. There are no concerns for this compartment.

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

Most of the compartment is a large complex of unique communities and features associated with the Patterned Fen. Those stands comprising the patterned fen and adjacent area have been designated as a Special Conservation Area (SCA). Possible effects on this system should be carefully considered when management activities take place.

#### **Watershed and Fisheries Considerations:**

Fisheries Values: Moderate

Fisheries Concerns: Black Creek is located within this compartment and is not a designated trout stream. Although this stream does not contain trout it still may provide nursery habitat for forage species of Lake Superior during their early stages of life. A minimum of 100 ft buffer should still be maintained in any stands where treatments are occurring.

#### Wildlife Habitat Considerations:

Compartment 69 lies in the Grand Marais Sandy End Moraine and Outwash ecological sub-subsection in northern

Chippewa County. The compartment lies in the Vermillion Whitefish Point Management Area and has moose, piping plover, spruce grouse and red crossbill as featured species. This compartment is dominated by bogs, marshes and lowland brush with a medium component of swamp conifers and scattered fir, birch and aspen stands. Current vegetation patterns are similar to what was expected during pre-settlement times. Approximately ½ to 1/3 of the compartment consists of wildlife purchased lands.

The limited amount of harvesting scheduled for this compartment will ensure that adequate corridors are maintained. Harvested stands have similar species diversity and thus maintaining as much structural and species diversity as possible and remaining trees will provide food sources, nest and den trees, and improve stand diversity. Wildlife species potentially using this compartment include white-tailed deer, moose, black bear, gray wolves, grouse, and mink.

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

Sections 27, 33, & 34, T49N R6W and sections 3-5, T48N R6W, Chippewa County.

Surface sediments consist of lacustrine sand and gravel and peat and muck. There is insufficient data to determine the glacial drift thickness (~ 100-300 feet). The Precambrian Jacobsville Sandstone subcrops below the glacial drift. The Jacobsville was used as a building stone in the past. There may be some minor sand and gravel pits in Section 22, and there may be some potential within the compartment. There is no economic oil and gas production in the UP.

#### Vehicle Access:

The compartment is located one mile south of Paradise, west of M-123. The main access to the general vicinity of the compartment is via Highway M-123 to the east. Preacher Lakes Road approaches the compartment from the northwest but is gated at the private property. Vehicle access to the actual compartment is limited to those with permission to cross private land. There is some ORV activity in the southwestern portion of the compartment, coming from the adjacent private land. During winter months, access can be via the groomed snowmobile trail.

### **Survey Needs:**

Survey needs are dependent on access issues. If access is gained and timber management occurs, the following corners are needed: W1/16, SW1/16 and S1/16 of Section 27; ¼ corner between Sec 27 and 34; the N1/16, Center, and S1/16 of Section 34; the ¼ corner between Sections 32 and 5; the N1/16, Center, S1/16 of Section 5; the ¼ corner between Sections 5 and 8; and the Section corner common to Sections 4, 5, 8 and 9. These survey needs will be prioritized once it is certain whether or not access can be acquired.

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

The Paradise-Raco snowmobile trail (trail #8) runs through the eastern most part of the compartment. Other recreational opportunities are limited due to access through private land, but would include hunting, hiking, and wildlife viewing.

#### Fire Protection:

The Whitefish Zone Dispatch Area touches the northern and northwestern portions of this compartment. This area will have long response times and lowland conifers may make suppression activities difficult. Due to the presence of the patterned fen and associated sensitive soils, Minimal Impact Suppression Tactic (MIST) should be implemented when suppressing wildfires in the majority of the compartment.

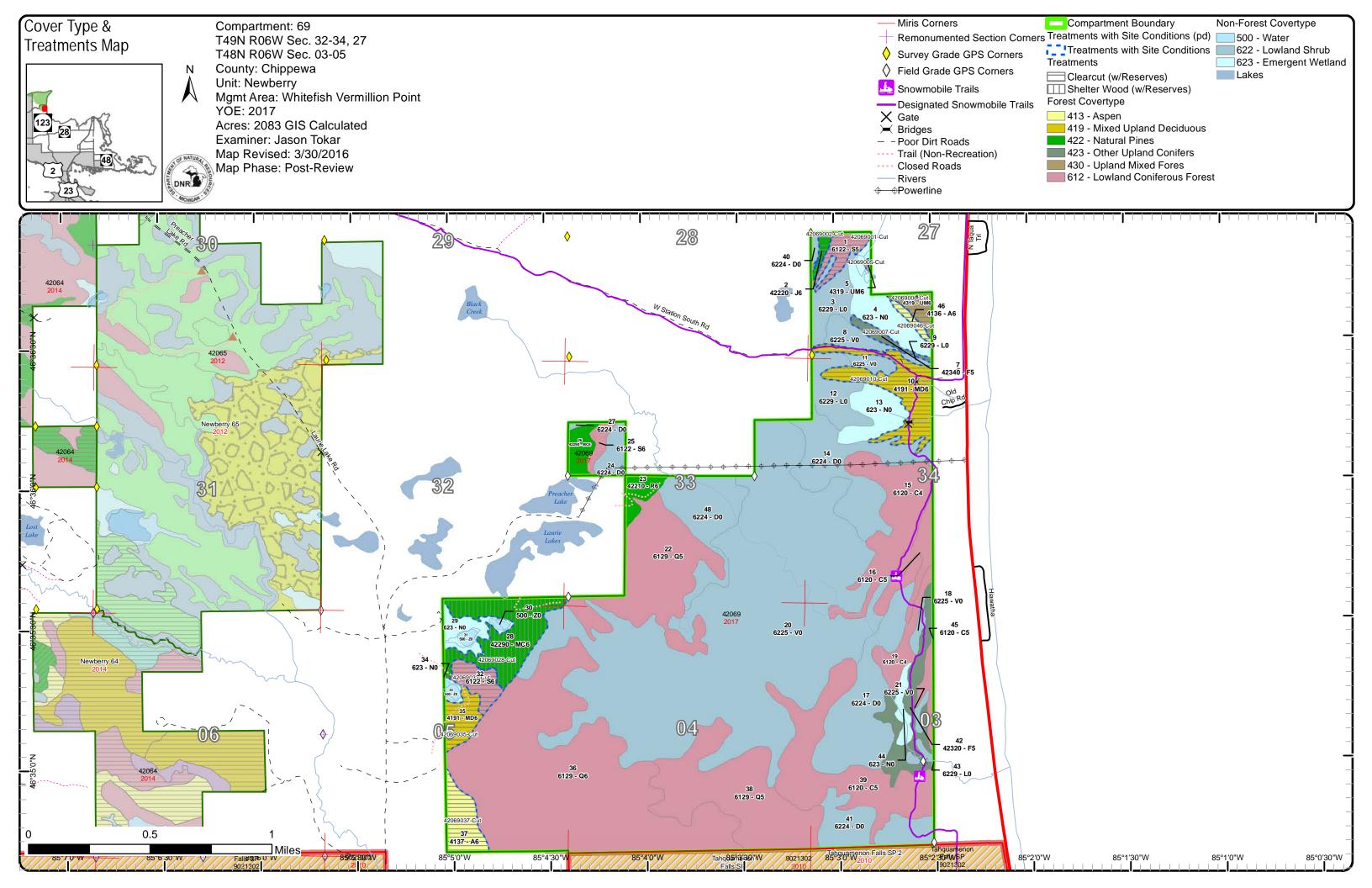
### **Additional Compartment Information:**

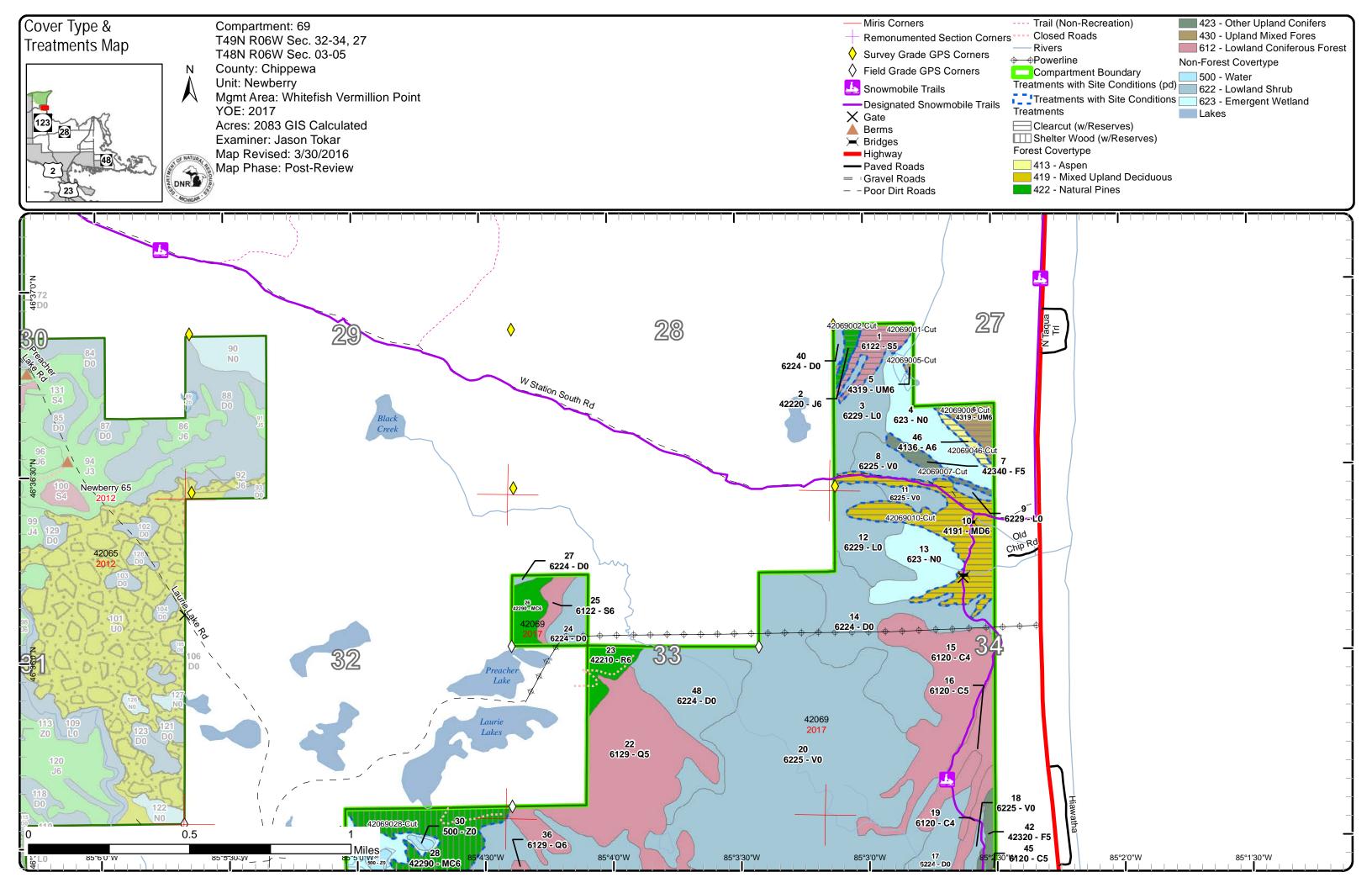
The following reports from the Inventory are attached:

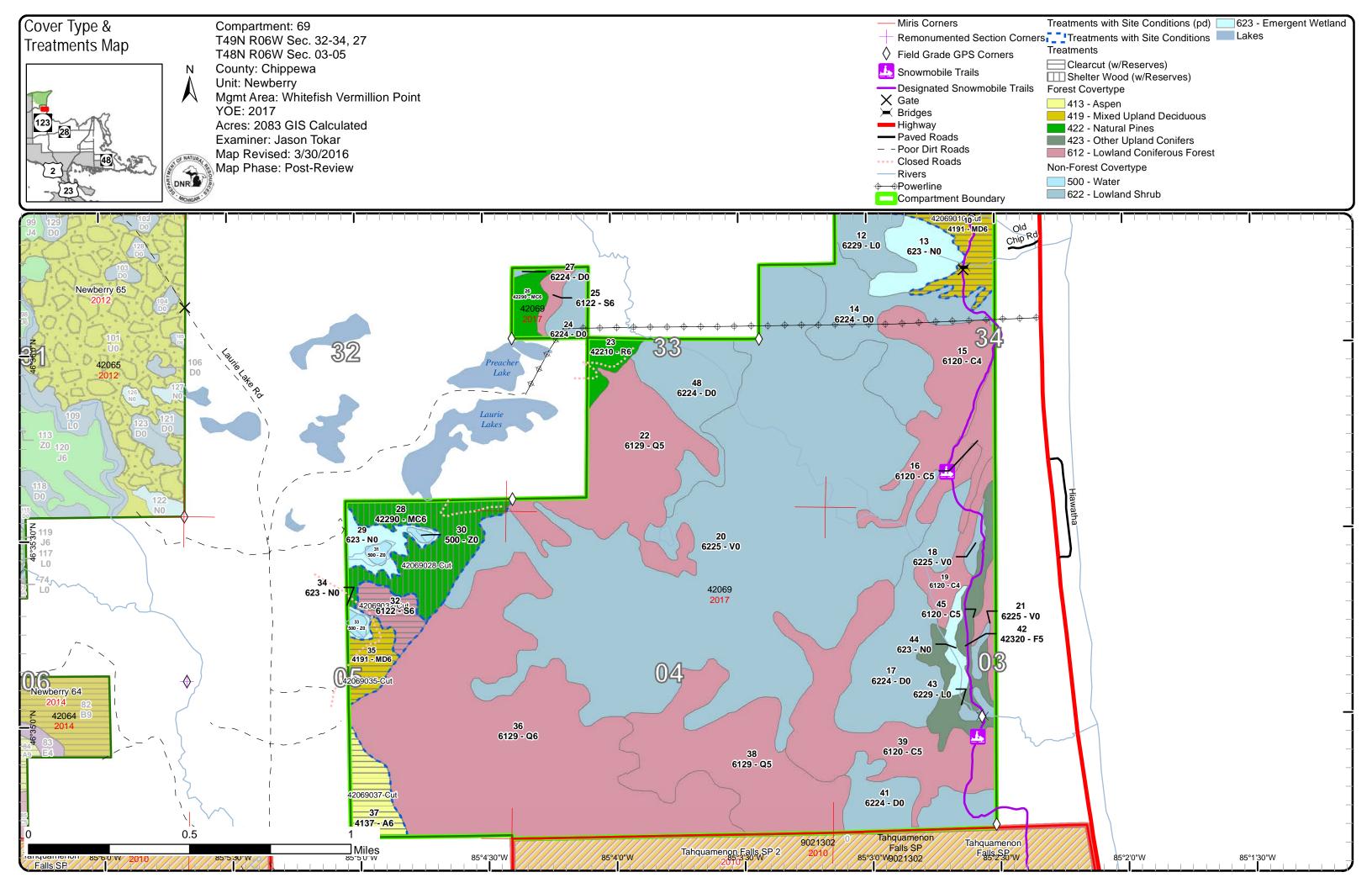
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

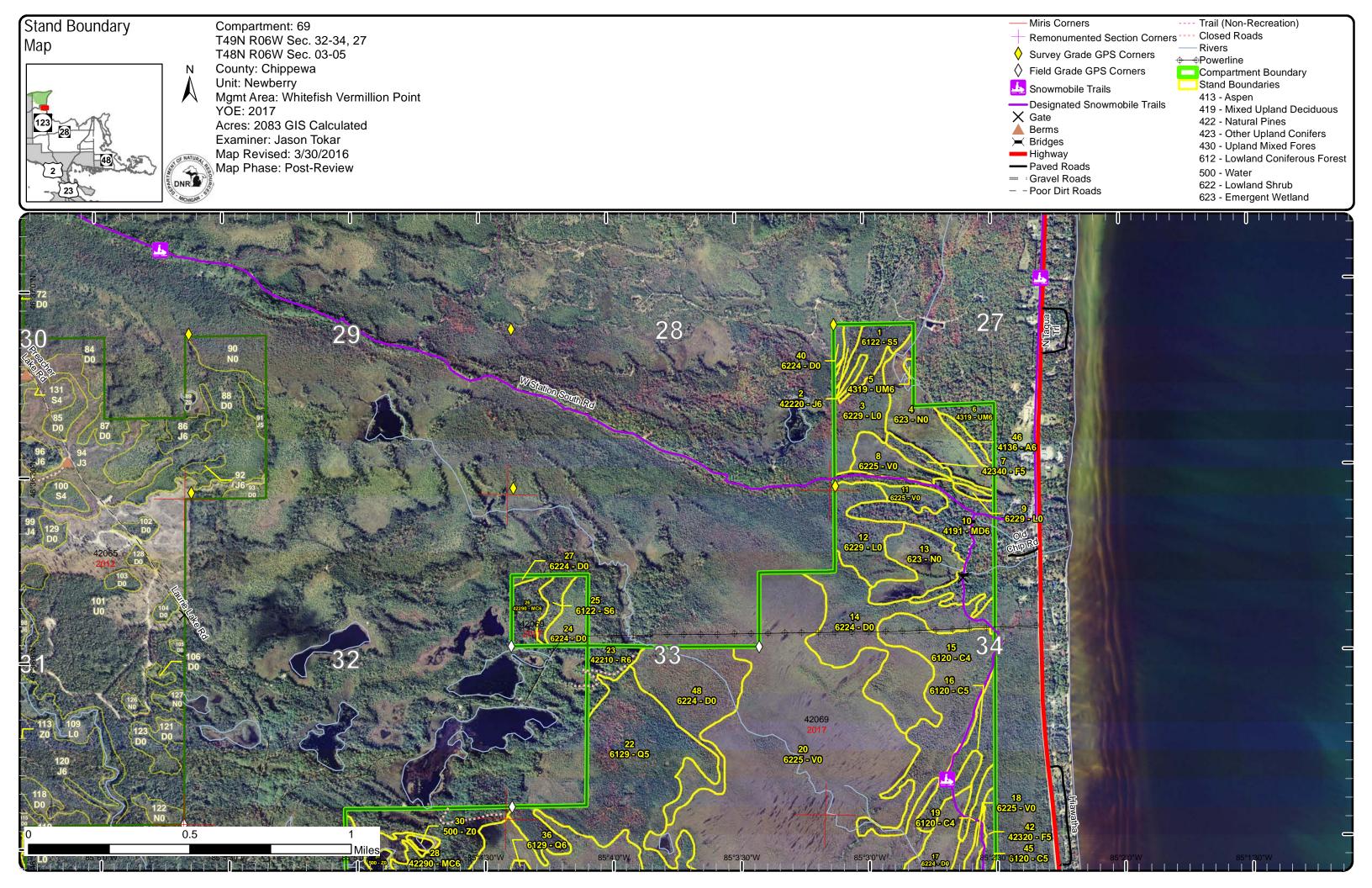
The following information is displayed, where pertinent, on the attached compartment maps:

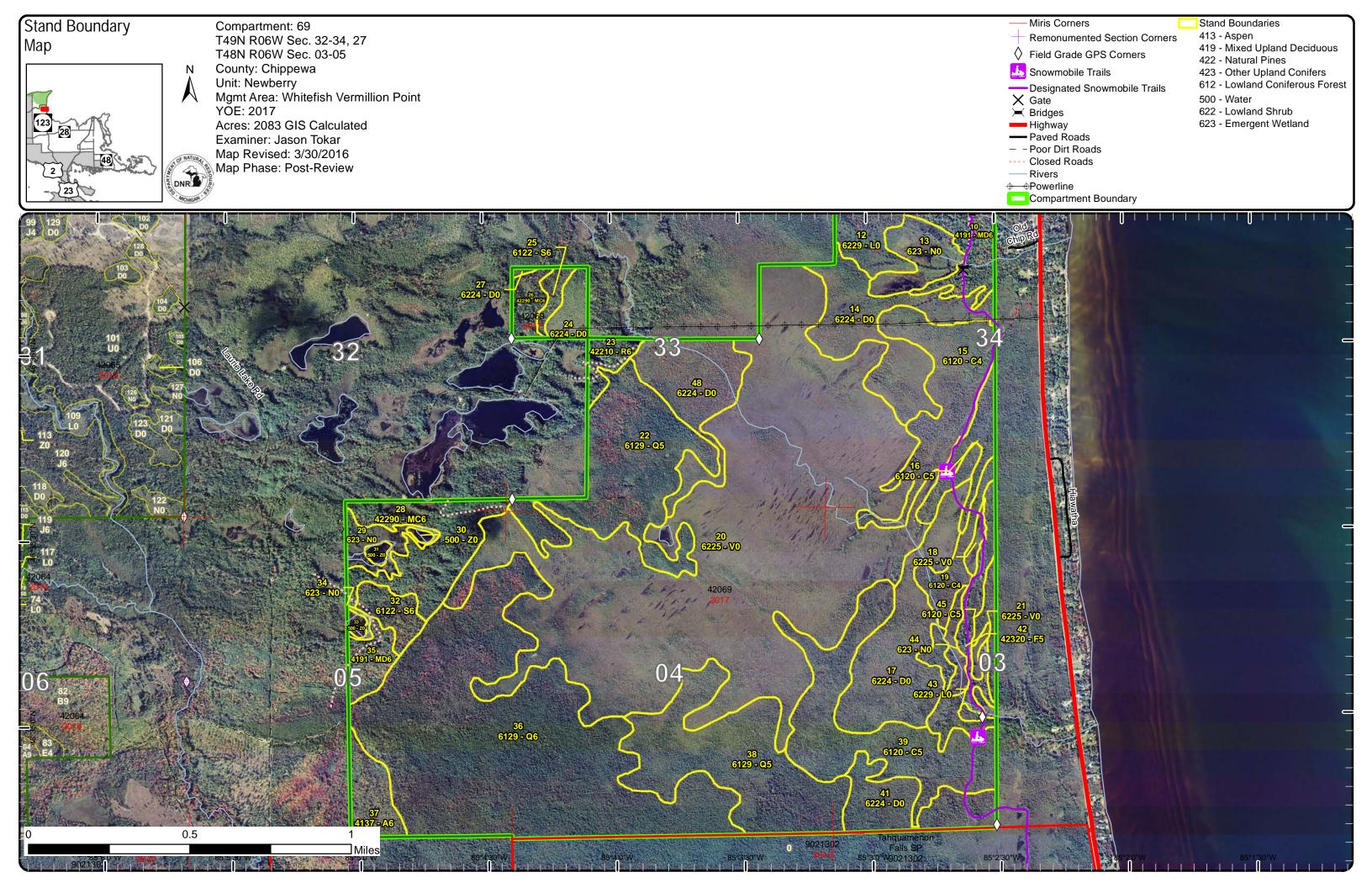
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

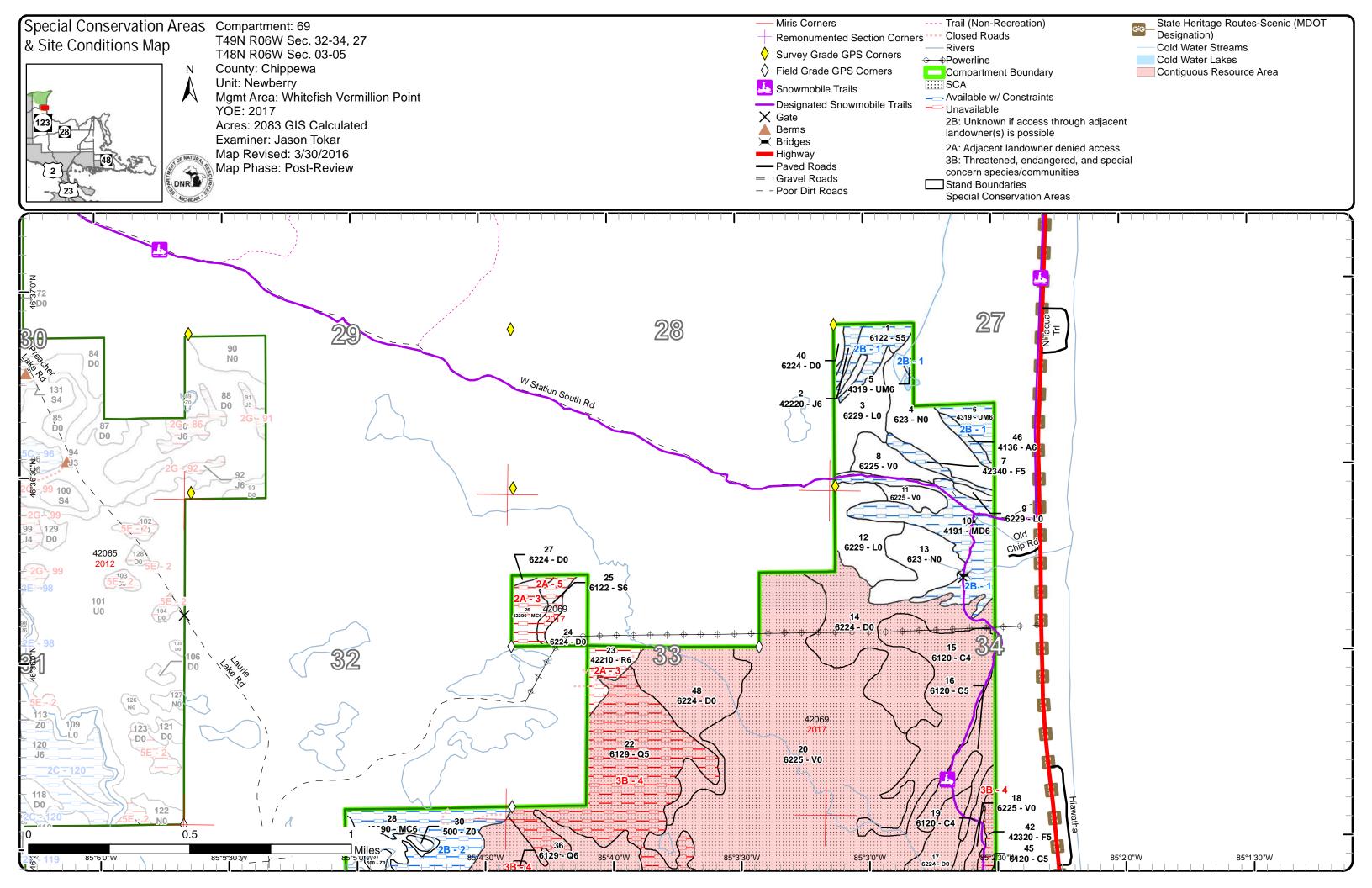


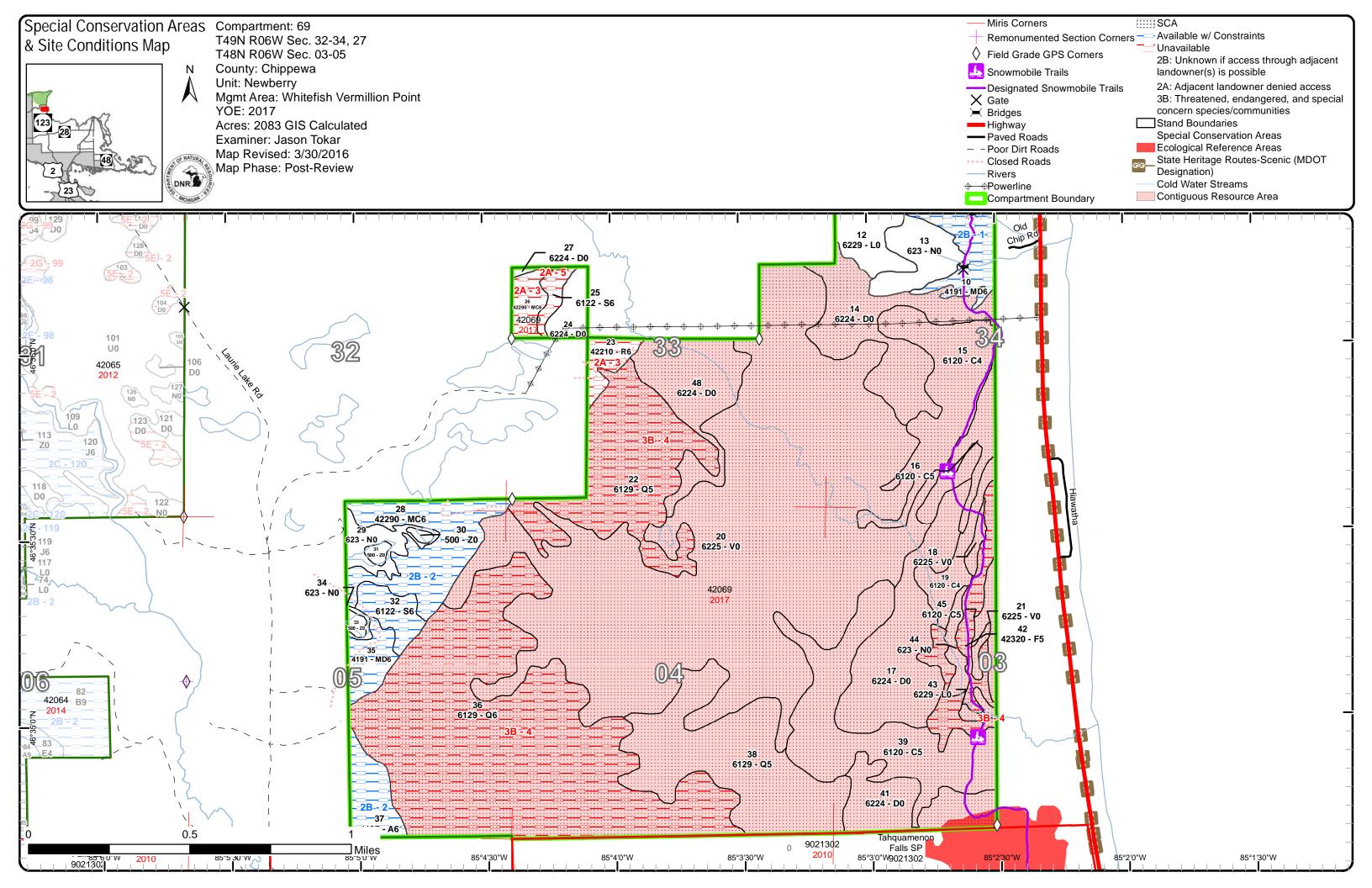












Compartment 69

Year of Entry 2017

Newberry Mgt. Unit Jason Tokar: Examiner



### Age Class

		Los C		<u>/</u>	<u> </u>	, / e /	<u>/</u>	<u>,                                     </u>	<u>/</u>	/ ^ /	<u>/</u>	, / g /	<u>/</u>	<u>»</u> /	<u>/</u>	<u>/</u>	<u>,</u> & /	/ /	Log Log
	¥or			\$ \ \		, / &		ૺ / હ	\$ <sup>3</sup>	,		"/s		`\_`%	\$\$\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	S. L.	Z. A.	No.	Z. Z
Aspen	0	0	0	0	0	0	0	0	0	23	4	0	0	0	0	0	0	0	27
Bog	615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	615
Cedar	0	0	0	0	0	0	0	0	16	104	102	0	0	0	0	0	0	0	222
Jack Pine	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4
Lowland Conifers	0	0	0	0	0	0	0	0	118	440	0	0	0	0	0	0	0	0	558
Lowland Shrub	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	14	23	0	0	0	0	0	0	0	0	37
Marsh	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85
Mixed Upland Deciduous	0	0	0	0	0	0	0	48	17	0	0	0	0	0	0	0	0	0	65
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71	71
Red Pine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	12
Treed Bog	266	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	266
Upland Mixed Forest	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	11
Upland Spruce/Fir	0	0	0	0	0	0	0	7	38	0	0	0	0	0	0	0	0	0	45
Water	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Total	1031	0	0	0	0	0	0	66	203	590	110	0	0	0	0	0	0	83	2083



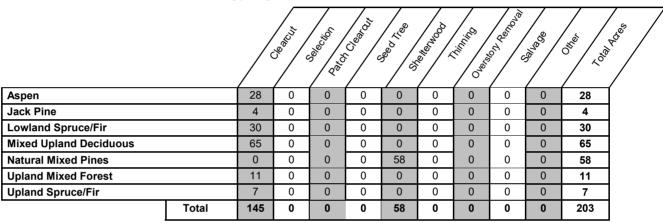
# **Report 2 – Treatment Summary**

# **Newberry Mgt. Unit**

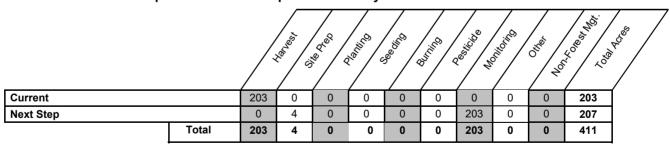
Compartment 69 Year of Entry: **Acres of Harvest Total Compartment Acres: 2,083** 

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

### **Cover Type by Harvest Method**



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



Newberry Mgt. Unit Report 4 -- Treatments Compartment: 69 s Year of Entry: 2017 t а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Age **Approval** n Method Structure Objective Status Name CoverType Density Age Range Type d 14.4 6122 - Black Spruce Poletimber Clearcut with 6122 - Black Draft Field 42069001-Cut 51-80 Harvest Even-Aged Medium Retention Spruce Boundary **Habitat Cut: No** Site Condition: Unknown Access Prescription Clearcut with reserves. Retain 3% of stand acreage in a retention pocket. Leave a few white pine and spruce along edges Specs: Next Step Treatments: Acceptable black spruce with a lowland conifer mix Regen: Other Old next step comments: Comment: **Proposed Start Date:** 10/01/2016 42069002-Cut 4 1 42220 - Natural Poletimber 96 51-80 Clearcut 4222 - Natural Draft Field Harvest Even-Aged Jack Pine Jack Pine Well Boundary **Habitat Cut: No** Site Condition: Unknown Access Prescription Clearcut. Remove all jack pine, and spruce. Small acreage, no retention needed. Leave a few white pine and spruce along edges Specs: Next Step SitePrep, Scarification, Monitoring, Natural Regen (Intermediate) Treatments: Acceptable Jack Pine with spruce Regen: Other Old next step comments: Comment **Proposed Start Date:** 10/01/2016 42069005-Cut 0.8 4319 - Mixed Poletimber 67 81-110 Harvest Clearcut 4319 - Mixed Draft Field Even-Aged **Upland Forest** Well **Upland Forest** Boundary **Habitat Cut: No** Site Condition: Unknown Access Prescription Clearcut. No retention Specs: Next Step Acceptable Aspen with mixed upland forest

Treatments:

Regen:

Old next step comments: Other

Comment:

**Proposed Start Date:** 10/01/2016

42069006-Cut 10.3 4319 - Mixed Poletimber 67 81-110 Harvest Clearcut 4319 - Mixed Even-Aged Draft Field **Upland Forest** Well **Upland Forest** Boundary

Site Condition: Unknown Access **Habitat Cut:** No

Prescription Clearcut, no retention, Small acreage. Leave all supercanopy white pine. Leave aspen in red line and leave all hemlock

Specs:

Next Step Treatments:

Acceptable Mixed upland with aspen

Regen:

Other Old next step comments:

Comment:

10/01/2016 **Proposed Start Date:** 

**Proposed Start Date:** 10/01/2016

42069032-Cut 16.0 6122 - Black Spruce Poletimber Draft Field 86 Clearcut with 6122 - Black 81-110 Harvest Even-Aged Well Retention Spruce Boundary

**Habitat Cut: No** Site Condition: Unknown Access

Prescription Clearcut with retention. Retain a component of white pine and hemlock. Patch retention not to exceed 5% of total stand area. Leave all

Specs: hemlock for moose

Next Step Treatments:

Acceptable black spruce with a lowland conifer mix

Regen:

Other Old next step comments:

Comment:

10/01/2016 Proposed Start Date:

Compartment: 69 s Year of Entry: 2017 t а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age Approval n Method Structure Objective Status Name CoverType Density Age Range Type d 4191 - Mixed Clearcut with 414 - Other Draft Field 42069035-Cut 16.9 Poletimber 78 81-110 Harvest Even-Aged 35 **Upland Deciduous** Well Retention Upland Boundary with Conifer Deciduous **Habitat Cut: No** Site Condition: Unknown Access Prescription Clearcut with retention. Harvest all white birch, aspen, maple balsam and spruce. Retain a component of white pine and hemlock. Patch

retention of 5% total stand acreage. Leave sub merchantable spruce and fir pockets for structural diversity for wildlife. Leave all hemlock for

Report 4 -- Treatments

moose and aspen on edges for grouse. Next Step Treatments:

Acceptable Mixed upland deciduous species with a high component of white birch and aspen

Regen:

Specs:

Other Old next step comments:

Comment:

10/01/2016 Proposed Start Date:

42069037-Cut 23.5 4137 - Aspen, Birch Poletimber 81-110 Harvest Clearcut with 413 - Aspen Even-Aged Draft Field Retention Boundary

Site Condition: Unknown Access **Habitat Cut: No** 

Newberry Mgt. Unit

Prescription Clearcut with retention. Patch retention of 3-5% of total stand acreage. Leave sub merchantable spruce and fir pockets for structural diversity Specs:

for wildlife. Leave all hemlock for moose and aspen on edges for grouse.

Next Step **Treatments:** 

Acceptable Mixed upland deciduous species

Regen:

Other Old next step comments:

Comment:

10/01/2016 **Proposed Start Date:** 

4136 - Aspen, Draft Field 42069046-Cut 4 1 81-110 Poletimber 92 Harvest Clearcut 413 - Aspen Even-Aged Well Boundary

Mixed Conifer

Site Condition: Unknown Access **Habitat Cut:** No Prescription Clearcut. Small acreage, no retention. Leave all oak and a component of white pine. Leave aspen in red line and leave all hemlock.

Specs:

Treatments:

Next Step

Acceptable Aspen with a mix of upland deciduous species Regen:

Other

Old next step comments:

Comment:

**Proposed Start Date:** 10/01/2016

**Total Treatment** 

203.3 Acreage Proposed:

# **Report 5 – Site Conditions**

Newberry Mgt. Unit

Jason Tokar: Examiner

ominant Site Conditions

Total	Acres	Acres Avail	Acres		Domina	nt Sit	e Con
Acres	Available	With Condition	Not Available		2B	2A	3B
28	0	28	0	Aspen	28		
615	615	0	0	Bog			
222	222	0	0	Cedar			
4	0	4	0	Jack Pine	4		
558	118	0	440	Lowland Conifers			440
58	58	0	0	Lowland Shrub			
37	0	30	7	Lowland Spruce/Fir	30	7	
85	85	0	0	Marsh			
65	0	65	0	Mixed Upland Deciduous	65		
71	0	58	12	Natural Mixed Pines	58	12	
12	0	0	12	Red Pine		12	
266	266	0	0	Treed Bog			
11	0	11	0	Upland Mixed Forest	11		
44	0	7	38	Upland Spruce/Fir	7		38
7	7	0	0	Water			
2,083	1,370	203	509	Total Forested Acres	203	32	478
	66%	10%	24%	Relative Percent		•	

<sup>\*</sup>Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Available	2B: Unknown if access through adjacent landowner(s) is possible	89	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
2	Available	2B: Unknown if access through adjacent landowner(s) is possible	115	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						

Newberry Mgt. Unit

Jason Tokar: Examiner

3	Unavailable	2A: Adjacent landowner denied access	25	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	3B: Threatened, endangered, and special concern species/communities	478	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	2A: Adjacent landowner denied access	7	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Newberry Mgt. Unit

Compartment: 069 Year of Entry: 2017



### Report 6 - 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
Patterned Fen and Buffer Area	Contiguous Resource Area		Proposed SCA	1673
0				

#### Comments

SCA - Area is adjacent to Patterned Fen area, possible buffer. Large lowland conifer and cedar stands along with small, open ridges of spruce and scattered larger white pine. Snowmobile trail runs through east part. Markey-Kinross-Au Gres complex.

Newberry Mgt. Unit Compartment: 69
Year of Entry 2017



# Report 7 – 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	on 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 condition stocked trout populations and those of other coldwater fish specific conditions for coldwater fishes may occur in Michigan lakes if the groundwater inflows, or are located in colder (northern) areas of the Director's action and designated as trout resources by Fisheries	es to persist from year to year. Suitable y are relatively deep, have substantial the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen condistocked trout populations and those of other coldwater fish specific year to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	es (e.g., slimy sculpin) to persist from se conditions due to substantial
SCA	Visual Management Area	An area of general social appreciation that is managed to recogn Examples of these areas include scenic vistas, scenic or natural	
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. Element (Excellent) or B (Good) and a Global (G) or State (S) element (ra threatened (2), or rare (3) serve as an initial base of ERAs. They the State. The system is comprised of individual or associations of managed for restoration and maintenance of natural ecological p submit recommendations for lands as ERAs using the DNR Constitutions.	I Features Inventory (MNFI) within the Occurrences with viability ranks of A rity) ranking of endangered (1), may be located upon any ownership in of natural community types that are rocesses and values. The public may

s t	Newberry	/ Mgt. Unit		Report 8	– Forested	Stands Compartment: 69 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6122 - Black Spruce	Poletimber Medium	14.4	71	51-80	Small diameter spruce stand. Some white birch and red maple along the east edge. Pockets of sapling size spruce. Only access is through private to the north. Stand is healthy. Kinross-Dawson complex of soils.
2	42220 - Natural Jack Pine	Poletimber Well	4.1	96	51-80	Small ridge of mature jack pine intermixed with adjacent spruce stand. Nice tall, jack pine. Jack pine is mature. Access could be a problem. Deer Park-Kinross complex
5	4319 - Mixed Upland Forest	Poletimber Well	0.8	67	81-110	Large diameter white pine over lower quality red maple, white birch, spruce and balsam. Similar to stand 10 without the pockets of birch. Access is questionable across various land owners. Very small acreage. Limiting factors. Halfaday sands.
6	4319 - Mixed Upland Forest	Poletimber Well	10.3	67	81-110	Large diameter white pine over lower quality red maple, white birch, spruce and balsam. Similar to stand 10 without the pockets of birch. Access is questionable (whitefish township schools). Limiting factors. Halfaday sands.
7	42340 - Upland Spruce/Fir	Poletimber Medium	6.5	66	51-80	Narrow ridge of small diameter black spruce, balsam, red maple and white birch with a thick F3 understory.
10	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	48.2	67	111-140	Mixed stand of maple, white birch, spruce, balsam, white pine, red pine, some red oak and some hemlock. Primarily red maple, medium to low quality. Pockets of high BA of white birch with many dead tops. Mortality in the white birch throughout the stand. Access could be possible via snowmobile trail off of M-123 across private land.
15	6120 - Lowland Cedar	Poletimber Poor	75.1	86	1-50	SCA - Patterned Fen association/adjacency. MNFI comments are included in the compartment file and some notes are included with stand 20. Many areas with dead cedar or dead tops. Some areas are mainly a C3. Fingers of cedar out within the treed bog. Markey and Carbondale muck soils.
16	6120 - Lowland Cedar	Poletimber Medium	16.3	78	1-50	SCA - stand adjacent to Patterned Fen, possible buffer/inclusion. C5/C3. Lower areas are more of a C3. Very slight ridges of thicker cedar. Lots of cedar with dead tops. Scattered black spruce. Snowmobile trail runs north-south through stand. Markey and Carbondale muck soils.
19	6120 - Lowland Cedar	Poletimber Poor	19.0	86	1-50	SCA - stand is adjacent to Patterned Fen, possible buffer/inlcusion to the complex. Many areas with dead cedar or dead tops. Some areas are mainly a C3. Fingers of cedar out within the treed bog. Markey and Carbondale muck soils.
22	6129 - Mixed Coniferous Lowland Forest	Poletimber Medium	111.2	82	51-80	SCA = Patterned fen association/adjacency. MNFI comments are included in the compartment file and some notes are included with stand 20. Markey and Carbondale muck soils. BA and quality are better in western portions of the stand.
23	42210 - Natural Red Pine	Poletimber Well	12.2	141	81-110	Natural red pine stand along ridges. Primarily red pine with jack pine and white pine throughout. Understory is fairly open. No access. Blocked off by gated/fenced private sanctuary. Deer park-Kinross soil complex.

S	Newberry	Mgt. Unit		Report 8	- Forested	Stands Compartment: 69 Year of Entry: 2017
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
25	6122 - Black Spruce	Poletimber Well	6.9	84	51-80	Bog type ground. Markey-Kinross-Augres soil complex.
26	42290 - Natural Mixed Pine	Poletimber Well	12.5	141	111-140	Natural red pine stand along ridges. Primarily red pine with jack pine and white pine throughout. Understory is fairly open. Good component of oak. Ridges with low areas mixed in.  Questionable access. Blocked off by gated/fenced private sanctuary. Deer park-Kinross soil complex.
28	42290 - Natural Mixed Pine	Poletimber Well	58.4	151	111-140	Ridges of natural white pine and red pine with a mix of white birch, spruce, maple and some red oak. Cedar along the edges of the lower ground. Mostly a red pine stand. Pockets of white birch and red maple. Rolling ridges. Deer Park-Kinross soil complex.
32	6122 - Black Spruce	Poletimber Well	16.0	86	81-110	Nice quality spruce stand. Cedar, red maple and tamarack.  Some white pine. Scattered white birch on edges. Access is a problem. Kinross-Wainola soil complex.
35	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	16.9	78	81-110	White birch, red maple, large diamter white pine, some spruce and balsam. Scattered hemlock mainly in lower areas. Some mortality in white birch. Access is a problem. Deer park-Kinross soil complex.
36	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	329.0	82	51-80	SCA = Patterned fen association/adjacency. MNFI notes are included in the compartment comments and some notes are included with stand 20. Large acreage, wet mixed conifer stand. Cedar, spruce and tamarack. Pockets of solid cedar (C6) within the stand. Lots of blowdown in areas. Markey and Carbondale muck soils.
37	4137 - Aspen, Birch	Poletimber Well	23.5	80	81-110	Old, mature aspen stand with mortality in the aspen throughout. Some white birch mortality. Thick understory of balsam. Pockets of solid white birch. Access is questionable through a gated private club. Markey-Kinross-Au Gres soil complex
38	6129 - Mixed Coniferous Lowland Forest	Poletimber Medium	118.2	78	51-80	SCA - stand is adjacent to Patterned Fen, possible buffer/inclusion to the complex. Lower basal area than stand 36 but same species (spruce, cedar and tamarack). Wet, mixed conifer stand. Lots of blowdown in areas. Markey and Carbondale muck soils.
39	6120 - Lowland Cedar	Poletimber Medium	101.9	91	51-80	SCA - stand is adjacent to Patterned Fen, possible buffer/inclusion to the complex. Wet ground, poor quality cedar. Scattered pockets of black spruce. Dead tops and mortality throughout stand. Markey-Kinross-Au Gres soil complex.
42	42320 - Upland Spruce	Poletimber Medium	37.7	70	51-80	SCA - stand is adjacent to Patterned Fen area, possible buffer. Small, open ridges of mainly spruce and scattered larger white pine. Pockets of higher BA of spruce. Snowmobile trail runs through stand. Markey-Kinross-Au Gres soil complex.
45	6120 - Lowland Cedar	Poletimber Medium	9.5	86	Unspecified	SCA - stand is adjacent to Patterned Fen area, possible buffer/inclusion to the complex. Markey-Kinross-Au Gres soil complex.

S t a n d	Newberry		Report 8	– Forested	Stands Compartment: 69 Year of Entry: 2017	
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
46	4136 - Aspen, Mixed Conifer	Poletimber Well	4.1	92	81-110	Small acreage of mature aspen along the edge of a marsh. Red maple, large diameter white pine and scattered white birch, balsam and a few red oak. Access is questionable (Whitefish Township School property).



Stand	Cover Type	Acres	Managed Site	General Comments:
3	6229 - Mixed lowland shrub	23.6	Yes	Markey and Carbondale mucks
4	623 - Emergent Wetland	33.6	Yes	Beaver marsh. Ponded areas. Old wood duck boxes along the edges.
8	6225 - Bog	13.8	Yes	Open bog. Histosols and Aquents
9	6229 - Mixed lowland shrub	2.1	Yes	Open bog. Histosols and Aquents
11	6225 - Bog	7.5	Yes	Open bog. Histosols and Aquents
12	6229 - Mixed lowland shrub	28.7	Yes	Markey and Carbondale mucks
13	623 - Emergent Wetland	26.3	Yes	Open marsh with areas of tag alder. Lots of water
14	6224 - Treed Bog	72.1	Yes	Patterned Fen association/adjacency. MNFI comments are included in the compartment file and some notes included with stand 20. Small spruce and cedar throughout. Trees are stunted and a good percentage of mortality. More cedar in northern portion and more spruce in the southern portion. Markey and Carbondale muck soils.
17	6224 - Treed Bog	80.0	Yes	SCA - Patterned Fen association/adjacency. MNFI comments are included in the compartment file and some notes are included with stand 20. Small spruce and cedar throughout. More cedar in northern portion and more spruce in the southern portion. Markey and Carbondale muck soils.
18	6225 - Bog	4.2	Yes	SCA - stand is adjacent to Patterned Fen, possible buffer or inclusion in the complex. Markey-Kinross-Au Gres soil complex.
20	6225 - Bog	586.5	Yes	ERA - Patterned Fen complex. Large open wetland complex. Series of small water holes and areas of "drier" ground situated in a NE-SW pattern. Field survey with MNFI (Josh Cohen) determined the area to be a Patterned Fen since last inventory. Discussion with MNFI (Josh Cohen) determined that the patterning from the documented patterened fen south of Section 3 extends into sections 3,4, 33 and 34. The survey that documented the patterned fen to the south was limited to the Tahquamenon Falls State Park boundary. Markey and Carbondale muck soils.
21	6225 - Bog	2.8	Yes	SCA - stand is adjacent to Patterned Fen area, possible buffer/inclusion to the complex. Markey-Kinross-Au Gres soil complex.
24	6224 - Treed Bog	12.6	Yes	Dawson and Loxley peats. Small stunted black spruce, cedar and tamarack.
27	6224 - Treed Bog	1.1	Yes	Dawson and Loxley peats. Small stunted black spruce.
29	623 - Emergent Wetland	15.2	Yes	Marsh/bog surrounding the small lakes. Dawson and Loxley peats.

# Report 9 - Nonforested Stands



Stand	Cover Type	Acres	Managed Site	General Comments:
30	500 - Water	1.5	Yes	small marsh/bog lakes
31	500 - Water	2.6	Yes	small marsh/bog lakes
33	500 - Water	2.5	Yes	small marsh/bog lakes
34	623 - Emergent Wetland	1.5	Yes	Marsh/bog surrounding the small lakes. Dawson and Loxley peats.
40	6224 - Treed Bog	2.5	Yes	Scattered, small diameter stunted spruce.
41	6224 - Treed Bog	43.4	Yes	SCA - northern reaches of a documented Patterned Fen complex to the south of the compartment. Also adjacency to documented patterned fen to the west. Treed bog filling in with stunted cedar and tamarack. Markey-Kinross-Au Gres soil complex.
43	6229 - Mixed lowland shrub	3.6	Yes	SCA - stand is adjacent to Patterned Fen area, possible buffer/inclusion to the complex. Black Creek flows through stand.
44	623 - Emergent Wetland	8.4	Yes	SCA - stand is adjacent to Patterned Fen area, possible buffer/inclusion to the complex. Beaver activity. Markey-Kinross-Au Gres soil complex.
48	6224 - Treed Bog	54.4	Yes	SCA - Patterned Fen association/adjacency. MNFI comments are included in the compartment file and some notes are included with stand 20. Small spruce and cedar throughout. More cedar in northern portion and more spruce in the southern portion. Markey and Carbondale muck soils.