

Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32217 Entry Year 2020 Acreage: 875

County Marquette

Management Area: Peshekee Highlands

Revision Date: 2018-08-06

Stand Examiner: Jason Caron

Legal Description:

T48N-R30W, Sections 6,7,18

Identified Planning Goals:

Planning goals within this compartment will consist of both timber production within the north half while allowing natural processes to occur within the southern half. Numerous Ecological Reference Areas (ERA) exist within the southern half of the compartment and will be re-inventoried in the summer of 2018. Within the areas that will be managed for timber production, stands will be managed more toward an even-aged system rather than uneven-aged due to the poorer quality timber that exists.

Soil and topography:

Soils in this compartment are comprised predominantly of the Keewaydin-Michigamme-Rock outcrop complex (KMR), and Carbondale and Tawas (CT) soils. Drainage inclusions in the DMR include poorly drainedWithbeck and Cathro soils. The CT soils are found in the remainder of the depressions and drainage ways that occure on the moraines. Topography is very rugged with steep hills and fairly deep ravines. The rocky terrain has allowed for the formation of several lakes in the area.

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

Ownership in and around the compartment is composed of primarily State and Private industry, with scattered private individual holdings. Craig Lake State Park is located immediately to the west and northwest of this compartment within Baraga County. The McCormick Wilderness Area and Van Riper State Park are both within a few miles to the north and west, respectively, of the compartment. Land use is predominately forest product production and recreation (snowmobiling, camping, hunting and fishing). There has been very little development; primarily camps around the lakes, around this compartment.

Unique Natural Features:

Rugged and rocky ground throughout most of the compartment. Numerous drainages and lakes within and around the compartment.

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

Portions of the compartment are currently listed as Ecological Reference Area's (ERA).

Watershed and Fisheries Considerations:

This compartment is located south of Thomas Lake and along the headwaters of Nelligan's Creek. There are unnamed creeks and wetland areas within this compartment. A 100' plus 5' per 1% increase in slope buffer is recommended to protect these areas in accordance with Best Management Practices.

Wildlife Habitat Considerations:

Compartment 217 is found within the Peshekee Highlands Management Area; on a Bedrock Controlled Ground Moraine in east central Baraga and northwestern Marquette County. The dominant Natural Communities are mesic northern forest, poor conifer swamps, and boreal forests. This management area receives significant snowfall and does not offer wintering habitat for deer. As a result, many tree species that do not reliably recruit across the Ecoregion are found in numerous age classes across this management area. Additionally, three of the largest tracts of mature forest in the Great Lakes (e.g. McCormick Tract, Craig's Lake Wilderness State Park, and the Huron Mountain Club) occur within or adjacent to this management area, the best example of a dry mesic northern forest (Rocking Chair Lakes) in the state and two of the top eight examples of Mesic Northern Forest statewide occur here. The current condition and spatial arrangement of these areas provide some of the best opportunities within the WUP, state, and Great Lakes for area sensitive wildlife requiring large tracts of mature forest, mesic conifer or corridors between such areas. Wildlife management issues in this management area are: habitat fragmentation; course woody debris; retain or develop large living and dead standing trees

(for cavities); mesic conifer; mature forest; within-stand diversity; early successional forest (hardwood browse adjacent to closed canopy lowland conifer swamps); and course woody debris.

The following have been identified as featured species for the Peshekee Highlands Management area: American marten, blackburnian warbler, gray jay, moose, northern goshawk, and pileated woodpecker.

Mineral Resource and Development Concerns and/or Restrictions

Sand/gravel pits are not located in the area, and potential appears to be limited due to shallow or exposed bedrock. The bedrock is not desirable for crushed stone but could be used for dimension stone. Abandoned iron mines are located less than two miles to the south. There is no known iron ore potential beneath the compartment, and there is no recent history of mineral leasing within the compartment. There is no potential for economical oil and gas production in the UP.

Vehicle Access:

The Craig Lake Road is the main road in the area. Access to the majority of the compartment is off of this road through private property that is gated to the general public. Within the compartment very few roads exist, and those that do are of poor quality.

Survey Needs:

Survey may be needed. More research needs to be done on stands that may be prescribed.

Recreational Facilities and Opportunities:

There is the potentail for the expansion of Craig Lake State Park using this compartment. If the private land around the remainder of Thomas Lake becomes available, it should be a high priority purchase.

Fire Protection:

Timber types within this compartment are not fire prone. However, this rugged and rocky ground is known for lightening strike fires. Access in this area is very limited. Suppression methods using portable pumps and hand tools may be more applicable and efficient within this area.

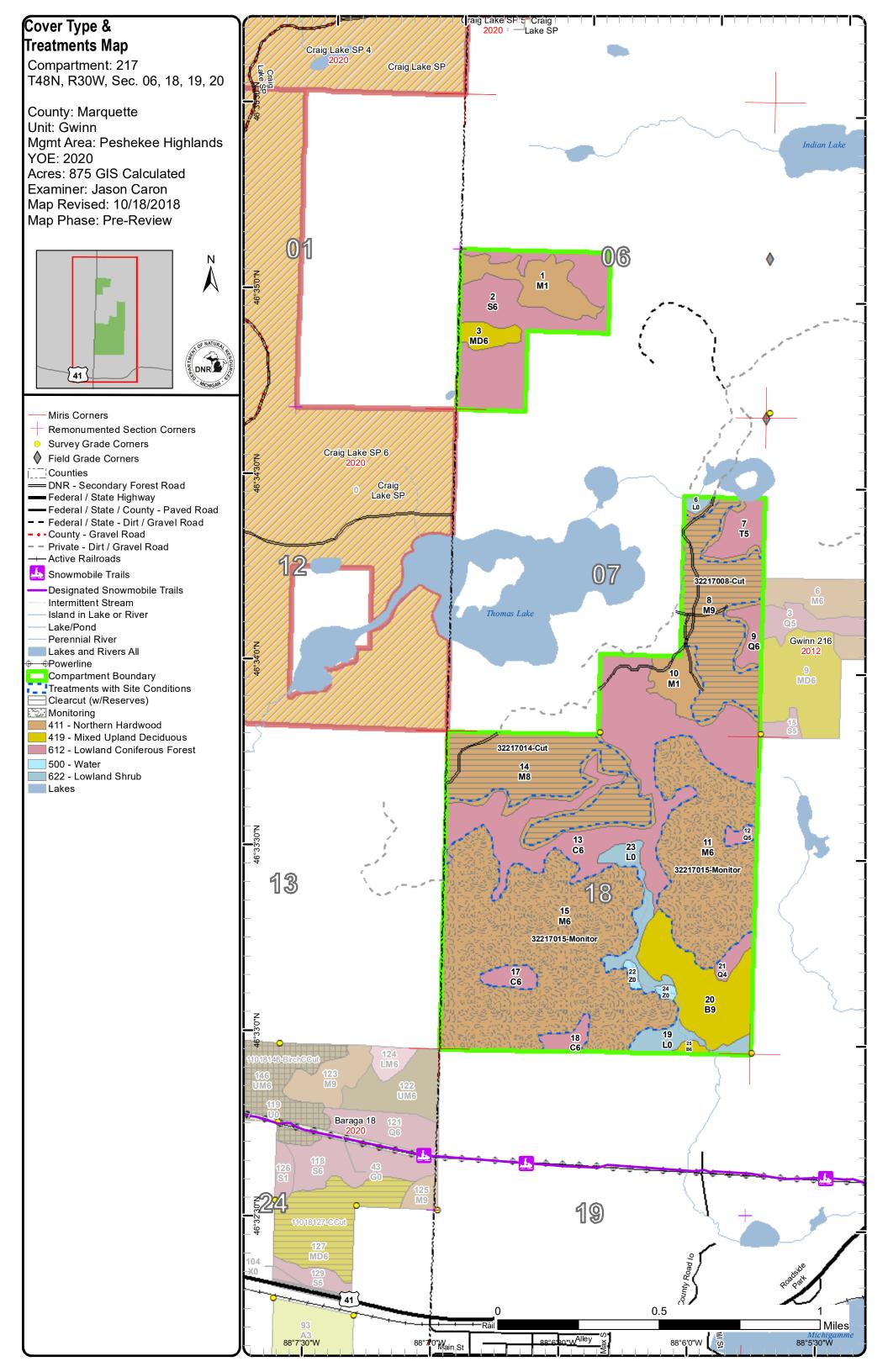
Additional Compartment Information:

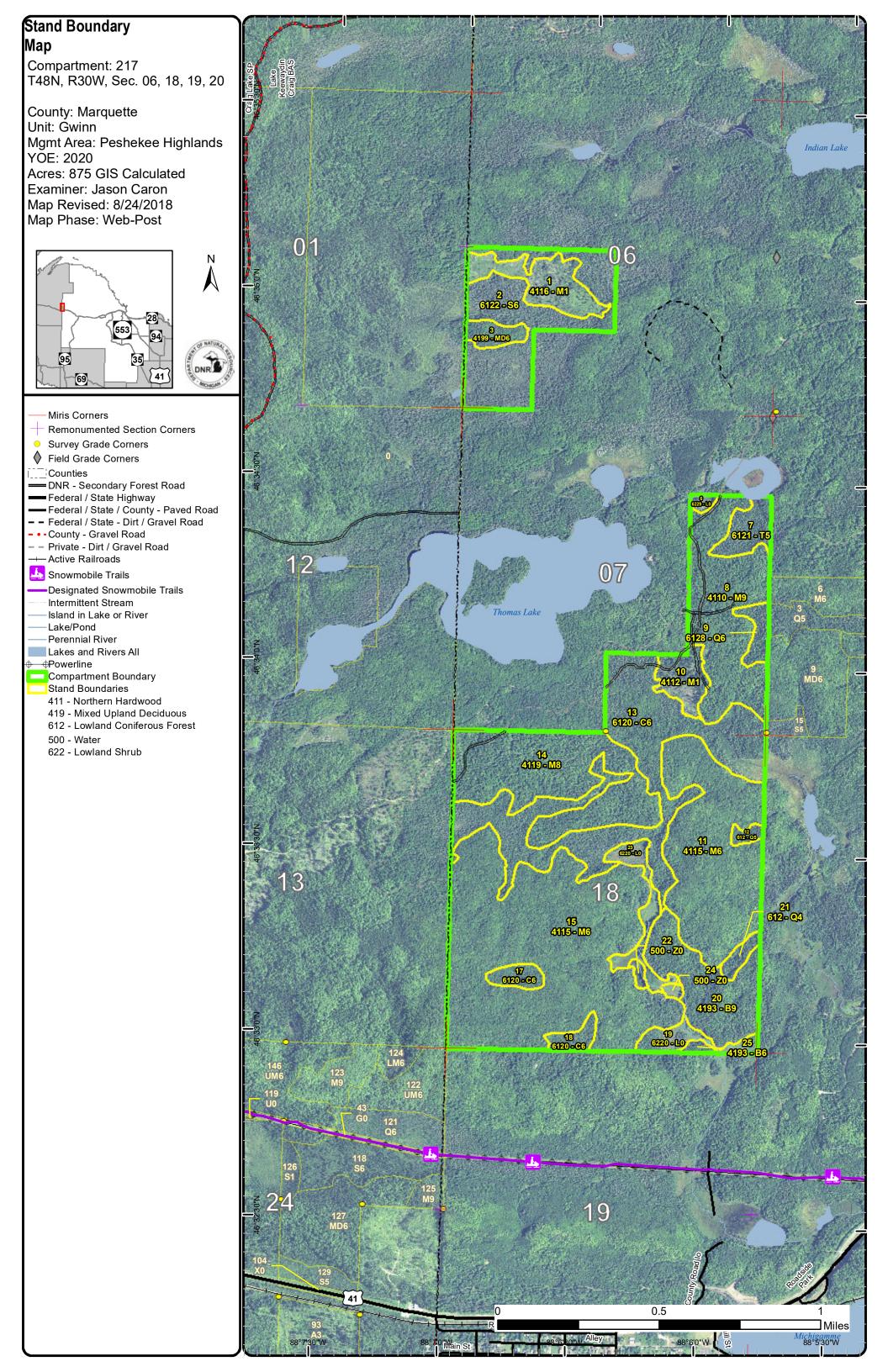
The following reports from the Inventory are attached:

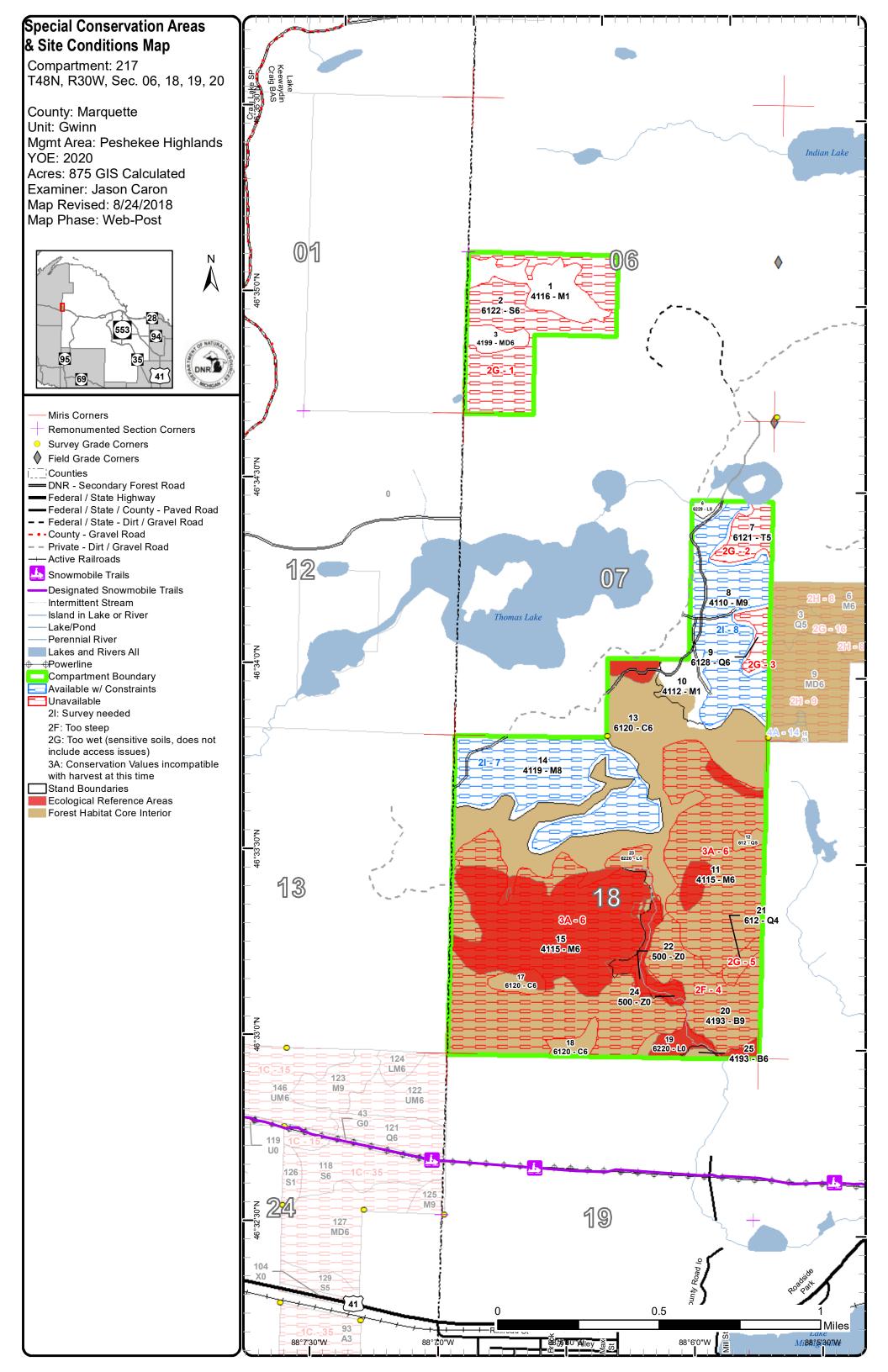
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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 217 Year of Entry 2020

Gwinn Mgt. Unit **Jason Caron: Examiner**



Age Class

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	A os		5 / 2	\$ / \$	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	\ \f	N. SO.	/ %	\$ / x	5/%	8	1,6	Z'o'z	`\	\$ / \&		Zing /	Dro Jro	1,00	
Cedar	0	0	0	0	0	0	0	0	0	143	0	0	0	0	0	0	0	0	143	ĺ
Lowland Conifers	0	0	0	0	0	0	0	0	0	8	8	0	0	0	0	0	0	0	16	
Lowland Shrub	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	l
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	73	0	0	0	0	0	0	0	0	73	l
Mixed Upland Deciduous	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	8	
Northern Hardwood	0	42	0	0	0	0	0	0	0	324	0	0	0	0	0	0	0	172	538	
Paper Birch	0	0	0	0	0	0	0	0	0	50	0	0	0	0	0	0	0	0	50	
Tamarack	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	14	
Water	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Total	33	42	0	0	0	0	0	8	0	612	8	0	0	0	0	0	0	172	875	



Report 2 – Treatment Summary

Gwinn Mgt. Unit

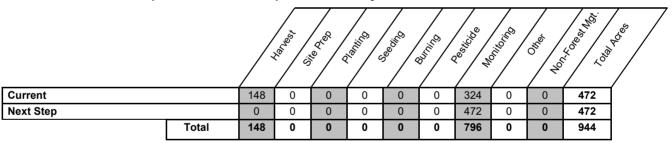
Compartment 217 Year of Entry: 2020 **Total Compartment Acres: 875 Acres of Harvest**

> Commercial Harvest -Harvests with Site Condition - 148 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Compartment: 217 Year of Entry: 2020

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Treatment Size Stand BA **Treatment Treatment Cover Type** Acres Stand Age **Approval** n Name CoverType Density Age Range Type Method Objective Structure Status d Even-Aged Draft Proposal 8 32217008-Cut 67.8 4110 - Sugar Maple Sawtimber 81-110 Clearcut with 4319 - Mixed Harvest Association Well Retention **Upland Forest**

Site Condition: Survey Needed **Habitat Cut: No**

Prescription Clearcut with retention. Do not harvest under-represented trees such as pine, hemlock & oak, Red line out a patch of mature trees to meet retention guidelines. Green tree any legacy tree or obvious wildlife tree. Depending on yellow birch density, consider harvesting some yellow Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable maple, oak, pine, hemlock, birch.

Regen:

Wildlife - Retain all Yellow Birch above 15" dbh - seed source and cavity nesters. Green-tree any obvious old wildlife Maples. Retain all Other

hemlock- moose; No Chipping- American marten Comment:

Proposed Start Date: 10/01/2019

32217014-Cut 79.8 4119 - Mixed Sawtimber 81 51-80 Harvest Clearcut with 4319 - Mixed Even-Aged Draft Proposal Northern Hardwoods Medium Retention **Upland Forest**

Habitat Cut: No Site Condition: Survey Needed

Prescription Clearcut with retention. Do not harvest under-represented trees such as pine, hemlock & oak. Red line out a patch of mature trees to meet retention guidelines. Green tree any legacy tree or obvious wildlife tree. Depending on yellow birch density, consider harvesting some yellow Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable maple, birch, oak, hemlock, pine.

Regen:

Wildlife - Retain all Yellow Birch above 12" dbh - seed source and cavity nesters. Green-tree any obvious old wildlife Maples. No Chipping-**Other**

American marten; Retain all hemlock - moose

Proposed Start Date: 10/01/2019

32217015-324.4 4115 - Y.Birch. Poletimber 15 89 81-110 411 - Northern Even-Aged Draft Proposal Monitoring **Invasive Species** Hemlock NH Monitor

Well Hardwood

Habitat Cut: No Site Condition: Conservation Values

Prescription Stand is part of the Thomas Lake ERA. Monitor this stand for invasive species. Refer to the Thomas Lake ERA plan for methods of invasive

Specs: species removal.

Monitoring, Invasive Species Next Step

Treatments:

Acceptable maple, birch, pine, oak, hemlock.

Regen:

Other Comment:

Proposed Start Date: 10/01/2019

Total Treatment Acreage Proposed:

472.0

Gwinn Mgt. Unit

Jason Caron : Examiner

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Availa	bility for	Managemer	nt					
Total	Acres	Acres Avail	Acres		Domina	nt Site	e Con	ditions
Acres	Available	With Condition	Not Available		21	2F	2G	3A
143	143	0	0	Cedar				
16	3	0	13	Lowland Conifers			13	
29	14	0	15	Lowland Shrub				15
73	0	0	73	Lowland Spruce/Fir			73	
8	8	0	0	Mixed Upland Deciduous				
538	66	148	324	Northern Hardwood	148			324
50	2	0	48	Paper Birch		48		
14	0	0	14	Tamarack			14	
3	3	0	0	Water				
875	240	148	487	Total Forested Acres	148	48	100	340
	27%	17%	56%	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.

NO. (Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	73	Unspecified	Unspecified	Unspecified	Unspecified
С	comments:						
	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	14	Unspecified	Unspecified	Unspecified	Unspecified
С	comments:						

Report 4 - Site Conditions

Compartment: 217 Year of Entry: 2020

3 Unavailable Unspecified Unspecified Unspecified Unspecified 2G: Too wet (sensitive 8 soils, does not include access issues) Comments: 2F: Too steep 2H: Blocked by physical Unspecified Unspecified Unspecified 4 Unavailable 48 obstacle (e.g. upland stand in a lowland area) Comments: Unspecified Unspecified Unspecified Unspecified 5 Unavailable 2G: Too wet (sensitive 5 soils, does not include access issues) Comments: Unspecified Unspecified 6 Unavailable 3A: Conservation Values 340 Unspecified Unspecified incompatible with harvest at this time Comments: Part of the Thomas Lake ERA. 7 **Available** 2I: Survey needed 80 Unspecified Unspecified Unspecified Unspecified Comments: 8 **Available** 2I: Survey needed 68 Unspecified Unspecified Unspecified Unspecified Comments:

Gwinn Mgt. Unit

Jason Caron: Examiner

Mgt. Unit

Compartment: #Type! Year of Entry:

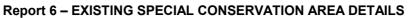


Report 5 - PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				

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

Conservation Ty Area	pe Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
ERA Ecolo Referenc	identified as Element Occurrences (EOs) be context of their natural community classific (Excellent) or B (Good) and a Global (G) of threatened (2), or rare (3) serve as an inition the State. The system is comprised of indimanaged for restoration and maintenance	gh quality examples of natural communities that have been by the Michigan Natural Features Inventory (MNFI) within the ation system. Element Occurrences with viability ranks of A r State (S) element (rarity) ranking of endangered (1), at base of ERAs. They may be located upon any ownership in vidual or associations of natural community types that are of natural ecological processes and values. The public may as using the DNR Conservation Area Recommendation Form.

s t	Gwini		Report 7	– Forested	Stands Compartment: 217 Year of Entry: 2020	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4116 - Mixed N. Hardwood - Aspen	Sapling Poor	26.6	3	Immature	Stand harvested as "Thomas Lake Hardwood" #102-10-01 by Carey Logging Inc, cut winter of 2013-2014. Stand contains a mix of aspen, red maple stump sprouts, cherry, and fir. Regeneration is heavily browsed by moose, especially the red maple and aspen. Cherry regeneration is dense in some locations of the stand.
2	6122 - Black Spruce	Poletimber Well	73.2	87	81-110	Stand of black spruce that contains pockets of mature cedar. Most of the ground is low but a few areas do contain higher ground.
3	4199 - Other Mixed Upland Deciduous	Poletimber Well	8.1	65	51-80	Stand is growing on a rock knob and contains mostly red maple, paper birch, scattered cherry, and aspen. Fir is scattered throughout the stand but is in poor condition. Paper birch is falling out of the stand due to age.
7	6121 - Tamarack	Poletimber Medium	13.7	81	51-80	Stand consists of low density tamarack with a mix of black spruce and cedar around the perimeter. The understory consists of tag alder, cedar, and black spruce. Mistletoe exists within the stand.
8	4110 - Sugar Maple Association	Sawtimber Well	77.5	86	81-110	Selective cut in 2003, TS#101-01-01. Selective cut 1981 Permit #11-81A. Stand consists of poorer quality hardwood. Basal area is still in the 90-100 square foot range. In some locations the maple regeneration looks good, in other areas it is heavily browsed by moose. Scattered large yellow birch exist within the stand. I noticed some top dieback within the stand. I am not sure of the extent of it beings it's winter.
9	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	7.7	93	81-110	Did not make it to this stand during inventory but used the adjacent compartments inventory (stand 3) in C-216 to come up with age and species.
10	4112 - Maple, Beech, Cherry Association	Sapling Poor	15.2	4	Immature	Stand harvested in the winter of 2014. TS #102-10-01. Stand has regenerated to mostly red maple stump sprouts. 2-3" dbh balsam exist that were remnants from the last stand. Red maple regen is being heavily browsed by moose. I notice some fir has started to regenerate already. It's hard to tell the extent of regeneration due to the deeper snow. A few scattered large diameter white pine exist within the stand.
11	4115 - Y.Birch, Hemlock NH	Poletimber Well	105.3	86	81-110	Stand consists of poorer quality hardwood. Stand consists of mostly sugar maple to the south but then grades into more of a red maple, sugar maple, yellow birch mix to the north. Pockets of hemlock exist throughout the stand, on the higher knobs. Fir sapling understory is patchy throughout the stand. Rolling and rocky hills throughout the stand as well. Some intermittent drainages exist throughout the stand. Some large diameter trees scattered within the stand. Old cut stumps exist within the stand. Basal area ranges from 90 to 130 square feet.
12	612 - Lowland Coniferous Forest	Poletimber Medium	3.1	86		Small inclusion of low ground amongst the large hardwood type. I was not able to get to this stand to inventory it.
13	6120 - Lowland Cedar	Poletimber Well	130.2	85	51-80	Stand consists of a mix of black spruce and cedar. Scattered red maple and yellow birch exist as well. Old cut stumps exist within portions of the stand. Cedar is regenerating via. layering. Scattered large diameter cedar exist within the stand.

s t	Gwinn	ı Mgt. Unit		Report 7	– Forested	Stands Compartment: 217 Year of Entry: 2020
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
14	4119 - Mixed Northern Hardwoods	Sawtimber Medium	94.4	81	51-80	Stand harvested in the winter of 2014. TS #102-10-01. Stand consists of red and sugar maple with yellow birch scattered throughout. A few large diameter white pine exist within the stand as well. The understory consists of decent quality sugar maple, red maple, and white pine regeneration. A few nice oaks within the stand.
15	4115 - Y.Birch, Hemlock NH	Poletimber Well	219.1	89	81-110	Stand consists of sugar and red maple mixed with hemlock and yellow birch. I noticed a few individual old hemlock and yellow birch of large diameter but no patches (or stands) of old timber. Stand goes from clumps of dense hemlock to mostly maple. Evidence exist throughout the stand of past logging, numerous cut stumps exist. Ground is rugged and rocky with rock hills and valleys throughout. Some valleys are most likely intermittent drainages during the spring season. Ground is more rugged on the western half with large rock ridges. Some hemlock and cedar regeneration exists. Hemlock and balsam is getting heavily browsed by moose. Hemlock is growing mostly on the rocky knobs and ridges that exist. The maple is growing on the flats and valleys within the stand. Some small linear lowland types (mostly cedar) exist within the stand, most are too small to delineate. A few large diameter white pine exist within the stand but not enough to put down as a species. I noticed a few white pine in the SE corner of the stand that were in the 25" (or more)
17	6120 - Lowland Cedar	Poletimber Well	6.8	81	111-140	Stand consists of mostly smaller diameter cedar with a few black ash and yellow birch mixed in. Nice cedar regeneration exists within the understory of the stand.
18	6120 - Lowland Cedar	Poletimber Well	6.3	81	111-140	Stand of pole sized cedar with young black ash and yellow birch existing in pockets within the stand.
20	4193 - Birch, Aspen	Sawtimber Well	47.7	83	81-110	Stand consists of mostly deciduous with scattered conifer. The understory is dense with fir. Rocky and hilly ground exists throughout the stand. Old aspen, paper birch, and white spruce exist. The aspen and paper birch are falling out of the stand due to old age. White spruce and balsam are in poor condition due to the budworm infestation.
21	612 - Lowland Coniferous Forest	Poletimber Poor	4.9	83		Lowland stand exists as a result of the topography. I was not able to get to this stand to do the inventory.
25	4193 - Birch, Aspen	Poletimber Well	2.1	83	51-80	Small stand that is the same cover type and age as stand 20 to the NE. Stand consists of a rock knob with a mix of deciduous and conifer species. Paper birch and aspen are falling out of the stand due to age.

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Stand	Cover Type	Acres	Managed Site	General Comments:
6	6229 - Mixed lowland shrub	2.2	No	Stand looks to be a former beaver pond that has since been drained.
19	6220 - Alder/willow	11.6	No	An open stand that consists of different types of lowland grasses and tag alder. The westernmost side of the stand contains stunted cedar along with tag alder. An island of spruce fir exists within the center of the stand. Beaver activity currently exists.
22	500 - Water	1.9	No	Beaver pond. I'm sure water fluctuates depending on beaver activity.
23	6220 - Alder/willow	15.3	No	Stand consists of the riparian area and stream that flow through this lowland valley. Stand is part of an existing ERA, Northern Wet Meadow EO ID 18142.
24	500 - Water	1.6	No	Beaver pond. I'm sure the water fluctuates depending on beaver activity.