



Compartment Review Presentation

Cadillac Forest Management Unit

Compartment 81

Entry Year 2016

Acreage: 2,046

County Missaukee

Management Area: Houghton Lake Wetlands

Revision Date: 06/05/2014

Stand Examiner: Jim Malloy

Legal Description:

T24N R5W, Sections 19,20,21,28

Identified Planning Goals:

Vegetation management in the Houghton Lake Wetlands Management Area (MA) will provide forest products; maintain or enhance wildlife habitat; protect areas of unique threatened, endangered and special concern species; and provide for forest-based recreational uses. Timber management for this 10-year planning period will focus on balancing the aspen age-class distribution. Wildlife habitat management objectives include perpetuating early-successional communities for species adapted to young forests for hunting and other wildlife-related recreation opportunity. Expected trends within the next decade are the need to continue to balance aspen age-class distributions, an expected increase in recreation pressure and invasive species encroachment.

Soil and topography:

Mainly Lupton-Roscommon-Tawas association. Mostly level terrain poorly drained mucky soils. Sandy soils in the upland depressions on outwash plains, till plains and moraines.

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

Solid state ownership, with the exception of a 40 acre parcel, NWSE of sec 20, listed for acquisition. Hunting and trapping are the main recreational use, there are no trails. The Deadstream creek runs east/west through compartment. Land use around the compartment are Christmas tree plantations and seasonal hunting residences. The two 40 acre parcels in the NE1/4 of section 19 have limited access through private property. These parcels should be available for disposal if a trade for something of greater value is available.

Unique Natural Features:

Potential for massasauga, along Deadstream. Potential for great blue heron rookery, eagle, osprey, blanding's turtle, wood turtle, eastern box turtle, spotted turtle and loon.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

Maintain integrity of deadstream watershed. Continue to create a variety of cover types and age classes.

Watershed and Fisheries Considerations:

Fisheries Division's Muskegon River Watershed Assessment and Plan recommends protection/restoration of natural vegetation along all waterbodies in the watershed. A 300' buffer is recommended as the Deadstream is a designated trout stream, within the Muskegon River Watershed. (Richard O'Neal)

Wildlife Habitat Considerations:

This compartment encompasses a large part of the Deadstream Swamp. This swamp complex and associated uplands are key black bear habitat and part of a large deer wintering complex. Greater emphasis should be placed on promoting larger stands of older age and mixed age classes to provide diversity in vertical and horizontal structure in this compartment. Generally, wildlife goals are to maintain lowland conifer and to promote oak and aspen adjacent to lowlands. Creation of brush piles near lowlands, protection of mast bearing shrubs and provision of coarse woody debris are also desired. Featured species of special interest are black bear, deer, snowshoe hare, woodcock, and golden-winged warbler. (E. Victory 7/18/14)

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of peat and muck and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is the Mississippian Michigan Formation. The Michigan Formation is quarried for gypsum in other areas of the State. Gravel pits are located two miles to the southwest, but gravel

potential appears to be limited. East Norwich Field is located to the north of this compartment. The field has produced over 15.9 million BO and 15.7 Bcf gas from the Devonian Richfield Formation. It is in secondary recovery operations currently. There is one State parcel currently leased and held by production in the Compartment.

Vehicle Access:

A forest road access plan is detailed on the compartment map. Identified are state and county roads as well as forest roads and trails under the jurisdiction of the DNR. Also indicated are forest roads and trails under the jurisdiction of the DNR that are proposed for abandonment. These roads were determined to be in excess of the access needs in the area, are a threat to the resources, or are a concern environmentally.

Survey Needs:

None needed at this time.

Recreational Facilities and Opportunities:

There are no developed recreational facilities within this compartment. There are numerous opportunities for hunting and trapping. (T.M.N. 3/14)

Fire Protection:

Access to this compartment is very limited for suppression equipment. Past fires have been very limited. BET5-14

Additional Compartment Information:

The following reports from the Inventory are attached:

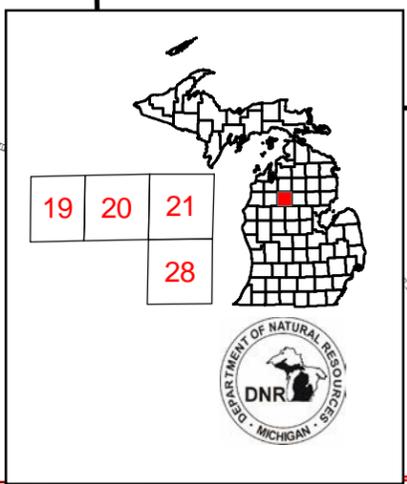
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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**

Cover Type & Treatment Map

Compartment: 081
 T24N R05W
 15 16 17 18 19 20 21 22 27 28
 County: Missaukee
 Unit: Cadillac
 Management Area: Houghton Lake Wetlands
 YOE: 2016
 Acres: 2,046 GIS Calculated
 Examiner: Jim Malloy
 Map Revised: 06/23/2014
 Map Phase: Pre-Review



Stand #
 23
Stocking Density
 (4120) - A7
 Level 3 OI
 Level 4 Code
Cover Type Code

Legend

- Miris Corners
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- - - Trail (Non-Recreation)
- Stream
- Intermittent Stream
- Lakes and Rivers
- State Forest Land

Treatments

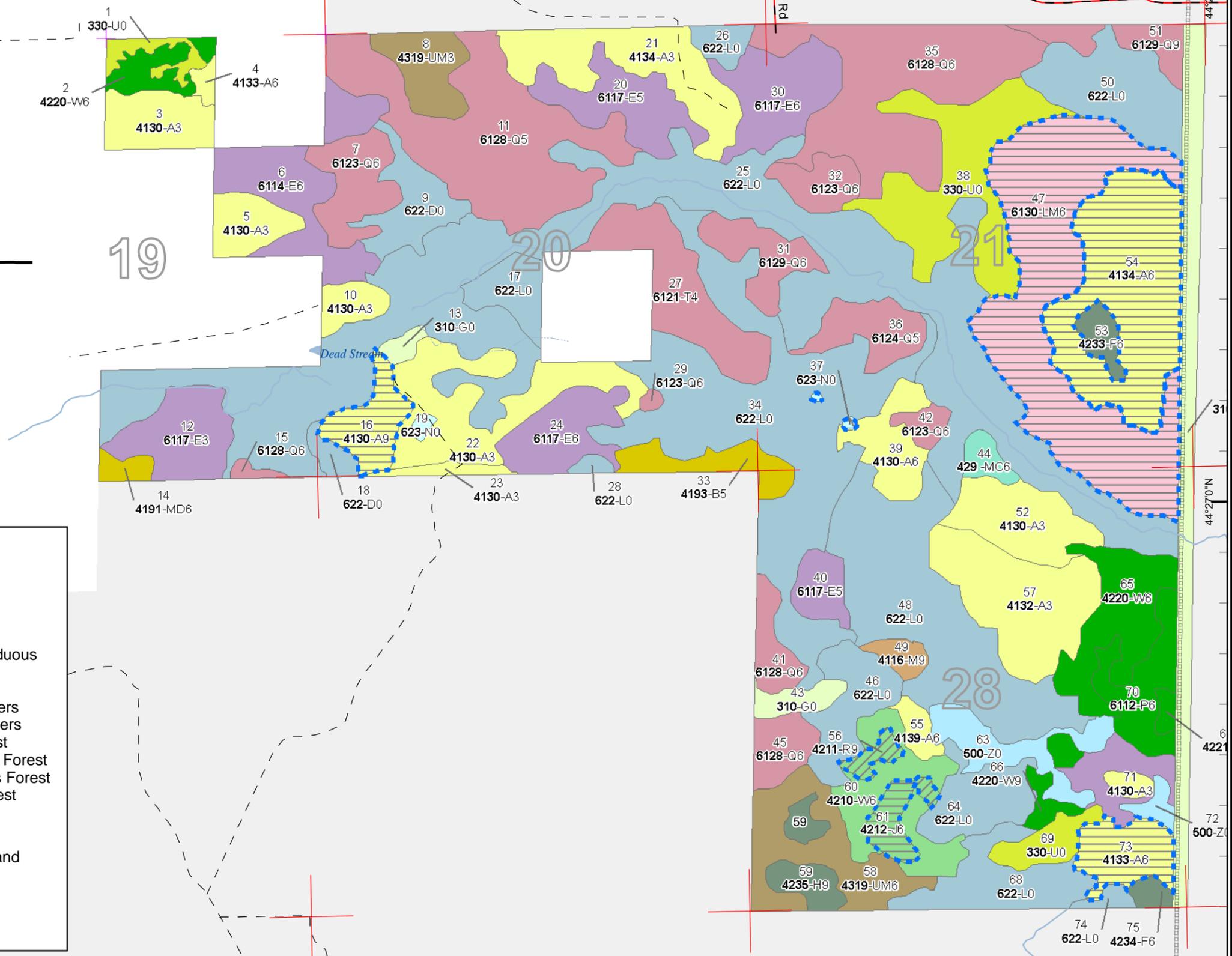
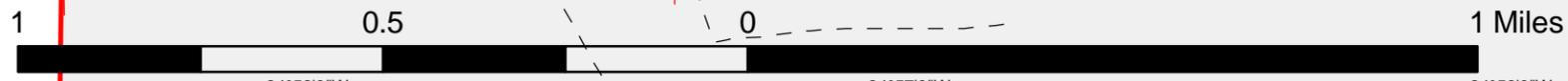
- Clearcut (w/Reserves, Patch/Strip)
- Thinning (Crown, Low, Systematic)
- Pesticide
- Treatments w/ Site Condition

Forest Stands

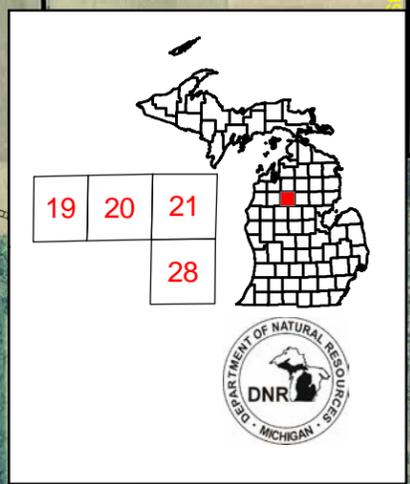
- Level 3**
- 411 - Northern Hardwood
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 423 - Other Upland Conifers
 - 429 - Mixed Upland Conifers
 - 431 - Upland Mixed Forest
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest
 - 613 - Lowland Mixed Forest

Non-Forest Stands

- Level 3**
- 310 - Herbaceous Openland
 - 330 - Low-Density Trees
 - 500 - Water
 - 622 - Lowland Shrub
 - 623 - Emergent Wetland

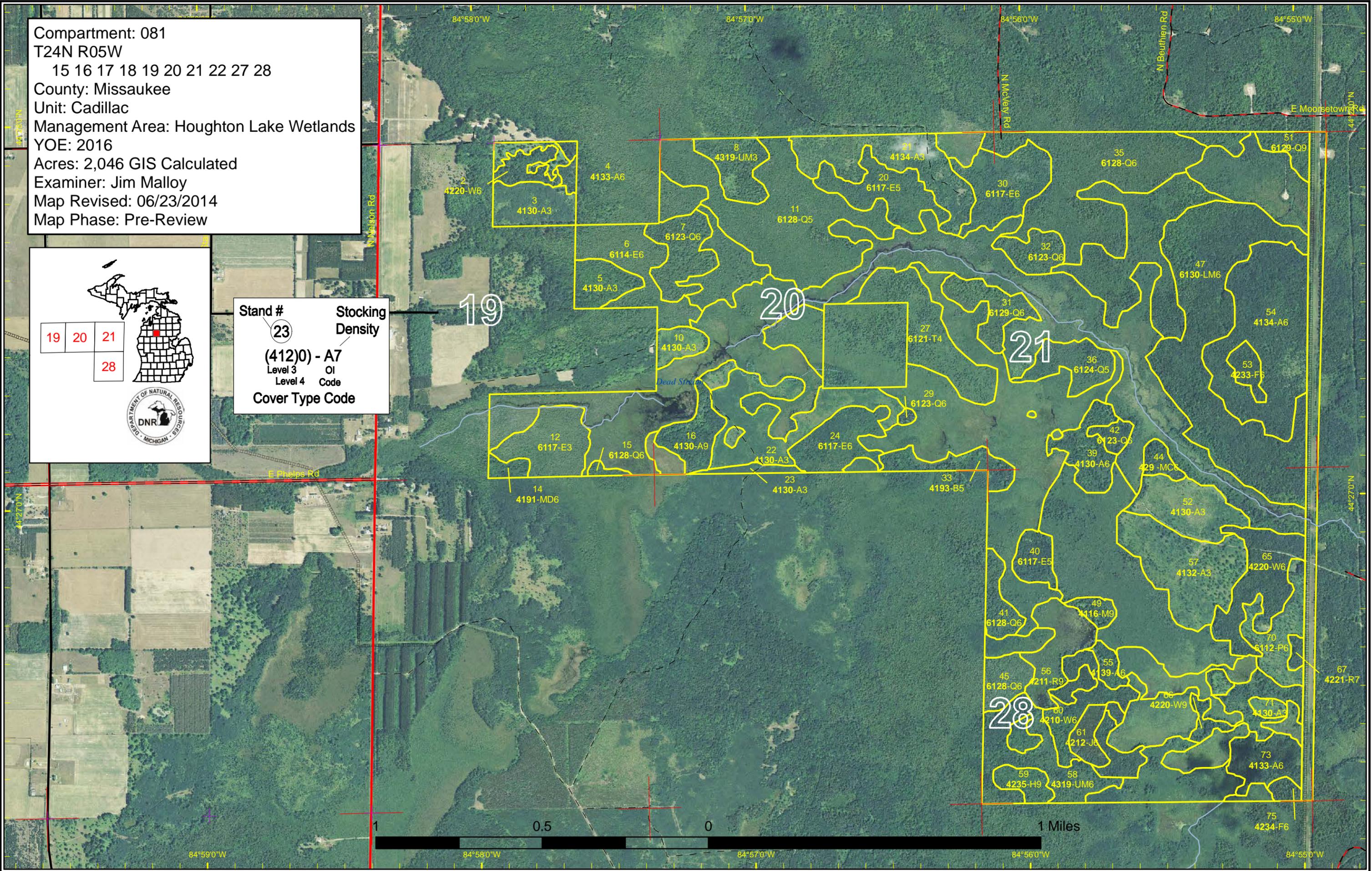


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Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code

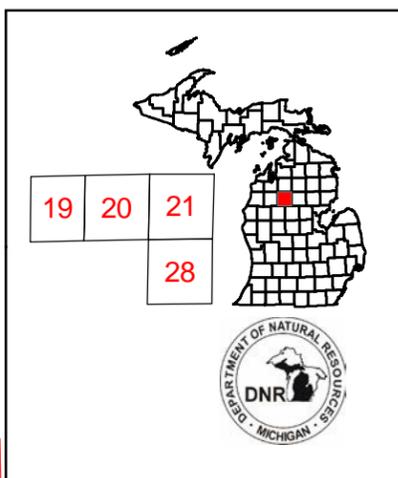
19	20	21
		28



84°59'0"W 84°58'0"W 84°57'0"W 84°56'0"W 84°55'0"W
 44°27'0"N 44°28'0"N 44°29'0"N

Special Conservation Areas & Site Conditions Map

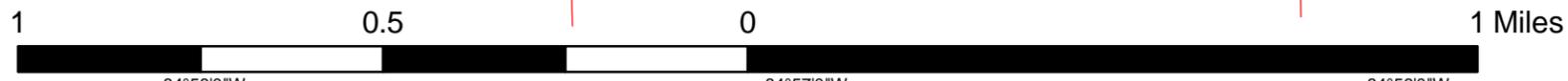
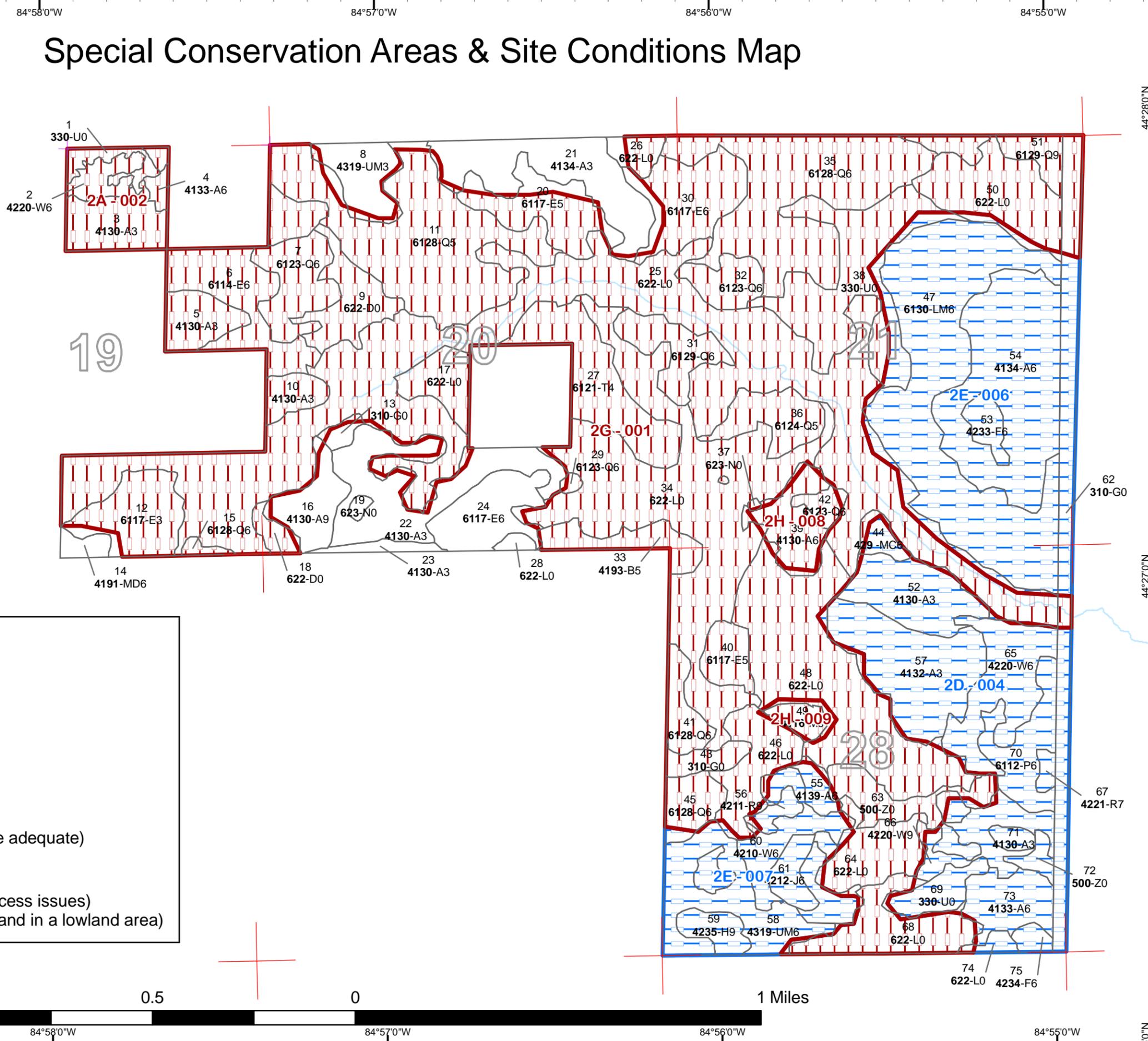
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Stand #
 23
Stocking Density
 (4120) - A7
 Level 3 OI
 Level 4 Code
Cover Type Code

Legend

- Miris Corners
- Stand Boundaries
- Site Condition Available**
- Available w/ Constraints (Factor - Number)
- Unavailable (Factor - Number)
- Site Condition Type**
- Available Factors W/ Constraints**
- 2E: Road needed
- 2D: Portable Bridge Needed (Dept. bridge will be adequate)
- Unavailable Factors**
- 2A: Adjacent landowner denied access
- 2G: Too wet (sensitive soils, does not include access issues)
- 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)



Report 1 – Total Acres by Cover Type and Age Class



	Age Class													Total	
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +		Uneven Age
Aspen	155	62	0	0	23	119	0	0	0	0	0	0	0	0	359
Hemlock	0	0	0	0	0	0	0	0	13	0	0	0	0	0	13
Herbaceous Openland	60	0	0	0	0	0	0	0	0	0	0	0	0	0	60
Jack Pine	0	0	0	0	0	9	0	0	0	0	0	0	0	0	9
Low-Density Trees	77	0	0	0	0	0	0	0	0	0	0	0	0	0	77
Lowland Aspen/Balsam Poplar	0	0	0	0	15	0	0	0	0	0	0	0	0	0	15
Lowland Conifers	0	0	0	0	22	100	41	14	0	0	113	0	0	0	289
Lowland Deciduous	0	0	0	51	27	11	31	0	0	0	40	0	0	0	161
Lowland Mixed Forest	0	0	0	0	0	123	0	0	0	0	0	0	0	0	123
Lowland Shrub	639	0	0	0	0	0	0	0	0	0	0	0	0	0	639
Marsh	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Mixed Upland Deciduous	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4
Northern Hardwood	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6
Paper Birch	0	0	0	0	0	0	0	15	0	0	0	0	0	0	15
Red Pine	0	0	0	0	0	0	31	0	0	0	0	0	0	0	31
Tamarack	0	0	0	0	0	0	0	38	0	0	0	0	0	0	38
Treed Bog	25	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Upland Conifers	0	0	0	0	0	6	0	0	0	0	0	0	0	0	6
Upland Mixed Forest	0	18	0	0	37	0	0	0	0	0	0	0	0	0	56
Upland Spruce/Fir	0	0	0	7	0	4	0	0	0	0	0	0	0	0	11
Water	25	0	0	0	0	0	0	0	0	0	0	0	0	0	25
White Pine	0	0	0	0	0	77	5	0	0	0	0	0	0	0	82
Total	984	80	0	58	124	448	119	67	13	0	153	0	0	0	2046



Report 2 – Proposed Treatment Summaries

Cadillac Mgt. Unit
Year of Entry 2016

Compartment 081
Total Compartment Acres: 2,046

Acres by Treatment Type

Commercial Harvest - 252	Tree Planting - 9	Other - 1
Habitat Cut - 0	Opening Maintenance - 0	

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen Types	114	0	0	0	0	0	114
Lowland Mixed Forest	123	0	0	0	0	0	123
Planted Pines	9	0	0	0	6	0	15
Total	246	0	0	0	6	0	252



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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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#Type! #Type!

Prescription
Specs:

Other
Comments:

Next
Steps:

Proposed
Start Date: #Type!

**Total Treatment
Acreage Proposed: 0.0**



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
16	63081016-Cut	17.2	4130 - Aspen	High Density Log	44		Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal
<u>Prescription</u> Final harvest stand. Leave a buffer along lowland complex to the west.										
<u>Specs:</u>										
<u>Other Comment:</u>										
<u>Next Steps:</u>										
<u>Proposed Start Date:</u> 10/01/2015										
<u>Limiting Factor</u> 2G: Too wet (sensitive soils, does not include access issues)										
47	63081047-Cut	123.0	6130 - Fir, Aspen, Maple	High Density Pole	51	51-80	Harvest	Clearcut	612 - Lowland Coniferous Forest	Cmpt. Review Proposal
<u>Prescription</u> Final harvest to regenerate lowland conifer component of stand.										
<u>Specs:</u>										
<u>Other Comment:</u>										
<u>Next Steps:</u>										
<u>Proposed Start Date:</u> 10/01/2015										
<u>Limiting Factor</u> 2E: Road needed										
54	63081054-Cut	77.8	4134 - Aspen, Spruce/Fir	High Density Pole	56	51-80	Harvest	Clearcut	413 - Aspen	Cmpt. Review Proposal
<u>Prescription</u> Final harvest aspen and maple and thin conifer component of white pine and balsam fir.										
<u>Specs:</u>										
<u>Other Comment:</u>										
<u>Next Steps:</u>										
<u>Proposed Start Date:</u> 10/01/2015										
<u>Limiting Factor</u> 2E: Road needed										
56	63081056-Cut	6.0	42110 - Planted Red Pine	High Density Log	65	141-170	Harvest	Crown Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Thin pine to a residual BA of 90-110										
<u>Specs:</u>										
<u>Other Comment:</u>										
<u>Next Steps:</u>										
<u>Proposed Start Date:</u> 10/01/2015										
<u>Limiting Factor</u> 2E: Road needed										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
61	63081061-Cut	8.6	42120 - Planted Jack Pine	High Density Pole	54	111- 140	Harvest	Clearcut	4212 - Planted Jack Pine	Cmpt. Review Proposal

Prescription Final harvest stand. Cut all jack, aspen, and maple.

Specs:

Other Acceptable regen would be a mix of aspen/maple with pine.

Comment: Temp bridge needed for access.

Next
Steps:

Proposed

Start Date: 10/01/2015

Limiting Factor 2E: Road needed

73	63081073-Cut	19.1	4133 - Aspen, Mixed Pine	High Density Pole	53	51-80	Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal
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Prescription Final harvest stand leaving retention along lowland complex to the west.

Specs:

Other Temp bridge needed for access.

Comment:

Next
Steps:

Proposed

Start Date: 10/01/2015

Limiting Factor 2D: Portable Bridge Needed (Dept. bridge will be adequate)

37	NF_63081037- Spray	0.7	6231 - Phragmites				Pesticide	Hand Sprayer	622 - Lowland Shrub	Cmpt. Review Proposal
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Prescription Herbicide for Phragmites Control

Specs:

Other
Comment:

Next
Steps:

Proposed

Start Date: Unspecified

Limiting Factor 2G: Too wet (sensitive soils, does not include access issues)

**Total Treatment
Acreage Proposed: 252.5**

Report 5 – Site Conditions

Cadillac Mgt. Unit
Jim Malloy : Examiner

Compartment 081
Year of Entry 2016

Availability for Management

Total Acres	Acres Available	Acres Not Available	Dominant Site Conditions	Dominant Site Conditions					
				No	2H	2G	2E	2D	2A
358	207	151	Aspen	104	94	35	5	98	22
13	13		Hemlock				13		
9	9		Jack Pine				9		
15	14	0	Lowland Aspen/Balsam Poplar			0		14	
289	4	285	Lowland Conifers	3	5	280	1		
161	38	122	Lowland Deciduous	38		122			
123		123	Lowland Mixed Forest		123				
4	4		Mixed Upland Deciduous	4					
6		6	Northern Hardwood		5	0			
15		15	Paper Birch			15			
31	30	2	Red Pine			2	6	24	
38		38	Tamarack			38			
6	4	2	Upland Conifers			2		4	
55	53	3	Upland Mixed Forest	16		3	37		
11	4	7	Upland Spruce/Fir		7			4	
82	68	14	White Pine			3	26	41	11
1,216	448	768	Total Forested Acres	166	234	500	96	186	34
	37%	63%	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.*

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
001	Not Available	2G: Too wet (sensitive soils, does not include access issues)	1,221	2B: Unknown if access through adjacent landowner(s) is possible	2E: Road needed	2D: Portable Bridge Needed (Dept. bridge will be adequate)	5A: Not able to obtain desirable regeneration
Comments:							
002	Not Available	2A: Adjacent landowner denied access	40				
Comments:							

Report 5 – Site Conditions

Cadillac Mgt. Unit
Jim Malloy : Examiner

Compartment 081
Year of Entry 2016

004	Available	2D: Portable Bridge Needed (Dept. bridge will be adequate)	228		
Comments:					
006	Available	2E: Road needed	250	No Limiting Factor	No Limiting Factor
Comments:					
007	Available	2E: Road needed	99	No Limiting Factor	No Limiting Factor
Comments:					
008	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	22	2D: Portable Bridge Needed (Dept. bridge will be adequate)	2E: Road needed
Comments:					
009	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	8	2E: Road needed	2C: Engineered Bridge Needed (Dept. portable bridge not available or inadequate)
Comments:					



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
Comments				



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.

ERA = Ecological Reference Area
 HCVA = High Conservation Value Area
 SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Archaeological Site	An aquatic or terrestrial area of the State that contains physical remains of human occupation. These are sites of cultural and historical significance that may occur upon terrestrial areas and Great Lakes bottomlands. They include thousands of Native American settlements and burial sites, as well as French and British outposts, nineteenth century logging camps, mines and homesteads. Beneath the waters of the Great Lakes, there are shipwrecks and other remains documenting the maritime trade. Such sites may be identified by Natural heritage data from the State Historic Preservation Office. Proposed treatments in this compartment will be implemented in such a manner as to maintain the integrity of these sites. Due to the sensitive nature of this information, no further detail about location is available.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.

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Cadillac Mgt. Unit

Report 8 – Forested Stands

Compartment: 081
Year of Entry: 2016

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	42200 - Natural White Pine	High Density Pole	11.2	54	81-110	
3	4130 - Aspen	High Density Sapling	19.7	15		Stand was cut with sale #63-102-96-01. Regeneration was spotty in some places. Scattered small (<.5ac) open areas.
4	4133 - Aspen, Mixed Pine	High Density Pole	2.7	54	81-110	Stand is a mix aspen and maple with balsam fir and white pine with red pine in the overstory. large amount of white pine blow down along edge.
5	4130 - Aspen	High Density Sapling	14.2	8		Stand was cut last entry. Access was through private as stand borders private to the west and the other three sides are surrounded by lowland complex.
6	6114 - Lowland Oak	High Density Pole	40.3	105	51-80	
7	6123 - Lowland Fir	High Density Pole	23.0	67		Stand is a lowland conifer with a small island of upland maple along the eastern edge.
8	4319 - Mixed Upland Forest	High Density Sapling	18.2	15		
10	4130 - Aspen	High Density Sapling	8.8	7		Stand was cut with sale #63-064-06-02. Regenerating well to aspen with a scattered maple component
11	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	89.3	104		Some of the cedar is starting to die out due to high water table. Stand borders Deadstream Creek to the south. All ash is dead/dying within stand.
12	6117 - Lowland Deciduous, Mixed Coniferous	High Density Sapling	26.8	35		pockets of cattails. very wet and borders Deadstream creek to the north,
14	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	4.5	68	51-80	mix of maple and spruce. no seed source for beech in understory. could be called retention for stand to the south in compartment 82 that was previously cut.
15	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	2.1	47		portion of stand to the south
16	4130 - Aspen	High Density Log	17.2	44		aspen and maple with scattered spruce. bordering lowland complex to the north. few scattered paper birch throughout and a few large white pine along the northern edge.
20	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	27.4	42	51-80	This portion of the stand was too wet to be harvested with the timber sale to the north.
21	4134 - Aspen, Spruce/Fir	High Density Sapling	42.4	15		recent cut. pockets of larger balsam fir with young aspen and maple. scattered oaks in the understorey.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
22	4130 - Aspen	High Density Sapling	46.6	7		aspen stand was cut last entry.
23	4130 - Aspen	High Density Sapling	4.4	9		Stand was cut as part of sale to the south.
24	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	24.1	32	1-50	Stand is a mix of various sized aspen clones, wet areas of tag alder and scattered balsam fir and black spruce. A few cedars are present along the northern edge of the stand.
27	6121 - Tamarack	Low Density Pole	38.4	78		Stand is mostly tamarack and tag alder. Close to being a non forested stand based on canopy closure.
29	6123 - Lowland Fir	High Density Pole	1.3	45	1-50	Small stand of balsam with a small amount of aspen and maple surrounded by a large wetland complex.
30	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	31.0	64	51-80	Red maple and balsam with an understory of tag alder, alder is heavy in some areas. Beaver dam along north-western edge of stand.
31	6129 - Mixed Coniferous Lowland Forest	High Density Pole	18.0	60		Stand appears to be an upland pocket along the edge of the Deadstream creek. A mix of Jack pine, balsam, black spruce, and white pines.
32	6123 - Lowland Fir	High Density Pole	12.5	54	81-110	Stand borders Deadstream Creek to the south. Pockets of balsam fir along small rises with tag alder in between small rises.
33	4193 - Birch, Aspen	Medium Density Pole	15.2	78		Aspen was cut during previous habitat cut. Now birch with scattered balsam.
35	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	82.4	56	51-80	
36	6124 - Lowland Spruce-Fir	Medium Density Pole	18.2	48	1-50	Wet stand is a mix of balsam fir and paper birch with black spruce and a few scattered cedars. Borders Deadstream Creek along northern edge of the stand.
39	4130 - Aspen	High Density Pole	19.0	57	51-80	stand of quaking aspen and maple with balsam fir understory.
40	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	10.9	51	81-110	
41	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	11.1	109		Stand is a small portion of the larger stand to the west in compartment 82.
42	6123 - Lowland Fir	High Density Pole	5.2	54	51-80	stand is mostly a mix of balsam fir and white pine with aspen and red maple as codominants and understory. scattered paper birch



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
44	429 - Mixed Upland Conifers	High Density Pole	5.9	57	81-110	Stand can serve as retention for the larger harvest to the south that occurred during the previous entry. Stand borders Deadstream Creek to the north.
45	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	12.5	109	51-80	Age based off of cedar in the adjacent compartment. This stand is a small portion of a larger stand to the west.
47	6130 - Fir, Aspen, Maple	High Density Pole	123.0	51	51-80	Stand is a transition area from the upland aspen stand to the east and the lowland complexes to the west and south.
49	4116 - Mixed N. Hardwood - Aspen	High Density Log	5.6	67	51-80	small island of maple with scattered aspen throughout. balsam fir understory is older than few scattered oaks and beech. no seed source for oak and beech in the stand.
51	6129 - Mixed Coniferous Lowland Forest	High Density Log	13.7	78	51-80	Small portion of larger stand to the north in compartment 80. Low quality lowland conifer that is seasonally wet.
52	4130 - Aspen	High Density Sapling	28.5	7		Stand was cut with sale #63-030-06-01. overstory cherry was left following sale. a few scattered oak seedlings.
53	42330 - Upland Fir	High Density Pole	7.1	38	51-80	heavy to balsam fir with aspen. small pocket within the larger aspen stand that appears younger with a higher amount of balsam fir than the surrounding stand.
54	4134 - Aspen, Spruce/Fir	High Density Pole	77.8	56	51-80	stand is a mix of balsam fir with aspen and maple
55	4139 - Aspen, Mixed Deciduous	High Density Pole	5.5	49	51-80	New stand added. aspen and maple stand with scattered balsam fir understory.
56	42110 - Planted Red Pine	High Density Log	6.0	65	141-170	New stand added. appears to have been planted red pine with scattered aspen through stand.
57	4132 - Aspen, Jack Pine	High Density Sapling	49.2	7		Stand was cut with sale #63-030-06-01. Similar to stand 55 but with a higher amount of jack pine regeneration.
58	4319 - Mixed Upland Forest	High Density Pole	37.3	47	51-80	
59	42350 - Upland Hemlock	High Density Log	13.1	84	81-110	Stand of hemlock. growing well and healthy. scattered aspen throughout stand. Provides good winter cover for the deer.
60	42101 - Planted White Pine, Mixed Deciduous	High Density Pole	28.5	54	81-110	stand is mostly white pine poles. was planted. scattered aspen and paper birch through stand.
61	42120 - Planted Jack Pine	High Density Pole	8.6	54	111-140	Planted Jack Pine with a scattering of aspen and red maple throughout

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Cadillac Mgt. Unit

Report 8 – Forested Stands

Compartment: 081
Year of Entry: 2016

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
65	42201 - Natural White Pine, Mixed Deciduous	High Density Pole	37.3	55	111-140	planted white pine with aspen and maple. growing well consider treatment next entry
66	42200 - Natural White Pine	High Density Log	5.0	69	81-110	Stand is a high point of land with white pine surrounded by lowland.
67	42210 - Natural Red Pine	Low Density Log	25.5	67	1-50	Stand was cut with sale #63-030-06-01 overstory red pine with aspen and red maple understory.
70	6112 - Lowland Aspen	High Density Pole	14.5	43	51-80	Stand had a small portion cut during previous entry. This was the only commercialy harvestable area.
71	4130 - Aspen	High Density Sapling	3.5	7		Stand was cut as part of sale 63-030-06-01, in progress of regenerating. Growing well.
73	4133 - Aspen, Mixed Pine	High Density Pole	19.1	53	51-80	
75	42340 - Upland Spruce/Fir	High Density Pole	3.6	59	81-110	Stand of black spruce/balsam fir that is part of a larger stand to the south in compartment 85.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
1	3301 - Low Density Deciduous Tree	6.6	No	Unspecified	really starting to fill in with white pine and aspen. may consider treatment to maintain opening.
9	6224 - Treed Bog	20.1	No	Unspecified	Scattered Blasam Fir
13	3105 - Mixed Upland Herbaceous	3.4	No	Unspecified	
17	6220 - Alder/willow	13.8	No	Unspecified	Tag alder with scattered cedars. Some cedar are dying out likely due to high water levels.
18	6224 - Treed Bog	5.0	No	Unspecified	open area with scattered tamarack. bordering lowland complex to the west.
19	623 - Emergent Wetland	1.5	Unspecified	Unspecified	
25	6220 - Alder/willow	275.4	No	Unspecified	Tag alder, cattails and numerous beaver dams, lodges, and floodings.
26	6220 - Alder/willow	6.6	No	Unspecified	beaver flooding
28	6223 - Inundated Shrub Swamp	2.2	No	Unspecified	
34	6220 - Alder/willow	135.0	No	Unspecified	Multipule old beaver dams and floodings of minimal drainage. Large areas of tag alder and cattails.
37	6231 - Phragmites	0.7	No	Unspecified	
38	3303 - Mixed Low Density Trees	58.9	No	Unspecified	Stand is a mix of red maple and swamp conifers with tag alder.
43	310 - Herbaceous Openland	7.4	Unspecified	Unspecified	
46	6223 - Inundated Shrub Swamp	23.7	No	Unspecified	flooded out spruce and tamarack. scattered tag alder.
48	6220 - Alder/willow	91.8	No	Unspecified	larger size tag alder throughout stand
50	6220 - Alder/willow	36.6	No	Unspecified	Stand contains an oil well pad. This well is located the furthest south of any well west of the pipeline in this field. Well pad is the only high ground within this stand.
62	3102 - Grass	49.6	No	Unspecified	Pipeline ROW



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
63	50 - Water	21.1	Unspecified	Unspecified	
64	6229 - Mixed lowland shrub	22.7	No	Unspecified	smaller tag alder and cattails
68	622 - Lowland Shrub	28.5	Unspecified	Unspecified	
69	3302 - Low Density Conifer Trees	11.1	Unspecified	Unspecified	
72	50 - Water	4.2	Unspecified	Unspecified	
74	622 - Lowland Shrub	3.0	Unspecified	Unspecified	