



Compartment Review Presentation

Roscommon Forest Management Unit

Compartment 190

Entry Year 2016

Acreage: 1,819

County Ogemaw

Management Area: Ogemaw Hills

Revision Date: 06/20/2014

Stand Examiner: Ben Wiese

Legal Description:

T22N R01E, Sec. 1 & 12; T22N R02E Sec. 6 & 7; T23N R02E, Sec. 31

Identified Planning Goals:

This compartment is part of the Ogemaw Hills management area. Vegetation management in the Ogemaw Hills management area will provide timber 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 in the compartment will focus on balancing age classes in the oak and pine cover types.

Soil and topography:

The soils in the compartment are mostly Rubicon sand with lesser amounts of Graycalm, Montcalm, Menominee and Croswell sands. The topography is ice contact ridges, with slopes ranging from low to moderate.

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

The east part of the compartment is bordered by privately owned land. Land use in the compartment is mostly recreational and based on the proximity to West Branch is heavily used by ATV's/ORV's and hunters.

Unique Natural Features:

No Unique Natural Features known.

Archeological, Historical, and Cultural Features:

There are known concerns within the compartment. All proposed management activities have taken these concerns into consideration.

Special Management Designations or Considerations:

None noted.

Watershed and Fisheries Considerations:

None noted.

Wildlife Habitat Considerations:

None noted.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of ice-contact outwash sand and gravel. The glacial drift thickness varies between 100 and 400 feet. Beneath the glacial drift is the Mississippian Michigan formation. The Michigan is quarried for gypsum in other parts of the state. Most of the good gravel pits are associated with upland areas. There are gravel pits in sections 6 and 12 and potential is good. West Branch Field is located one mile to the south. The field has produced over 16 million BO and 4.2 Bcf gas from the Devonian Dundee and Richfield formations, and is currently in secondary recovery operations. The field also produces from the Prairie Du Chien. Most of the compartment is currently leased for oil and gas development.

Vehicle Access:

Vehicle access is very good, there are poor quality forest roads along most section lines and "40" lines.

Survey Needs:

No surveys are needed at this time.

Recreational Facilities and Opportunities:

This compartment is heavily used by Hunting (large and small game), motorized recreation and seasonal mushroom / berry picking. Utilize timber management activities to balance resource protection by closing illegal trails, scramble areas

and mitigate resource damage.

The designated Ogemaw 72" ORV Route and 50"ORV Trail are widely distributed in this compartment.

Ensure signs are placed on the trail warning users of logging activity. Focus any retention pockets or clusters along or near trail. All sign posts shall be protected. Limit stacking of timber along the trail to areas with clear visibility. Ensure logging activity does not obliterate the 50" ATV trail. Protected and maintained non-merchantable understory adjacent to trail to promote narrow use. All stumps within 20 feet of the trails shall be Flush-Cut to ensure stumps do not result in unsafe conditions. For confidence markers attached to trees cut high to retain presence of signs. Portions of the ORV Route are likely to be used for hauling. Maintain road / trail bed to a condition equal to or better than before the sale prior.

Fire Protection:

This compartment is mostly oak and aspen with some small stands of red and white pine. The West Branch field office is close to this compartment which would allow quick response to fires within 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:

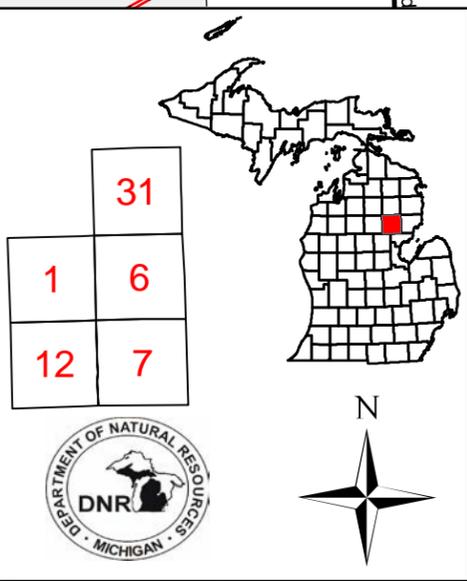
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatment Map

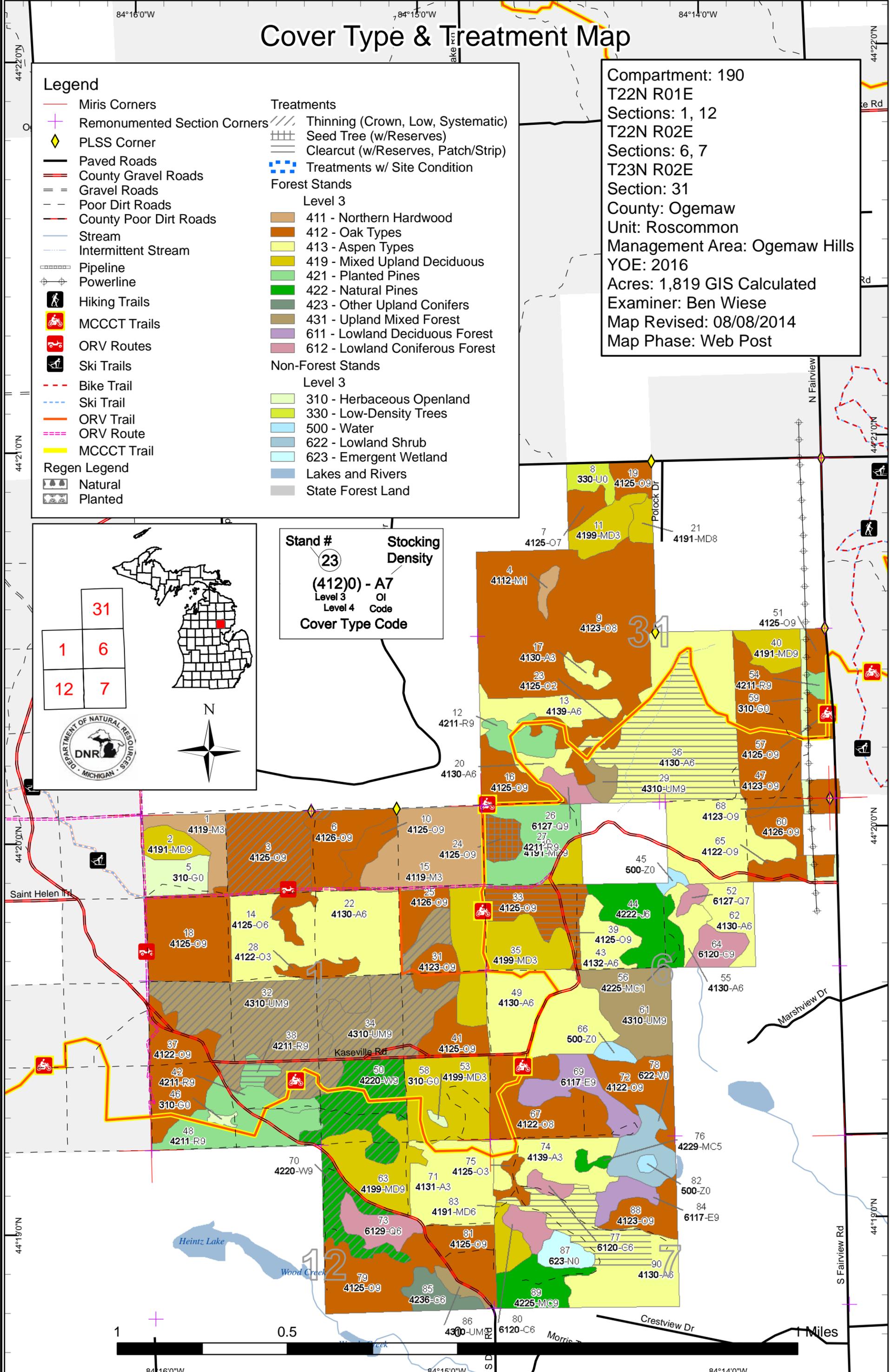
Legend

- Miris Corners
 - Remonumented Section Corners
 - PLSS Corner
 - Paved Roads
 - County Gravel Roads
 - Gravel Roads
 - Poor Dirt Roads
 - County Poor Dirt Roads
 - Stream
 - Intermittent Stream
 - Pipeline
 - Powerline
 - Hiking Trails
 - MCCCT Trails
 - ORV Routes
 - Ski Trails
 - Bike Trail
 - Ski Trail
 - ORV Trail
 - ORV Route
 - MCCCT Trail
-
- ### Treatments
- Thinning (Crown, Low, Systematic)
 - Seed Tree (w/Reserves)
 - Clearcut (w/Reserves, Patch/Strip)
 - Treatments w/ Site Condition
- ### Forest Stands
- Level 3
- 411 - Northern Hardwood
 - 412 - Oak Types
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 423 - Other Upland Conifers
 - 431 - Upland Mixed Forest
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest
- ### Non-Forest Stands
- Level 3
- 310 - Herbaceous Openland
 - 330 - Low-Density Trees
 - 500 - Water
 - 622 - Lowland Shrub
 - 623 - Emergent Wetland
 - Lakes and Rivers
 - State Forest Land

Compartment: 190
 T22N R01E
 Sections: 1, 12
 T22N R02E
 Sections: 6, 7
 T23N R02E
 Section: 31
 County: Ogemaw
 Unit: Roscommon
 Management Area: Ogemaw Hills
 YOE: 2016
 Acres: 1,819 GIS Calculated
 Examiner: Ben Wiese
 Map Revised: 08/08/2014
 Map Phase: Web Post



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



Stand Boundary Map

Legend

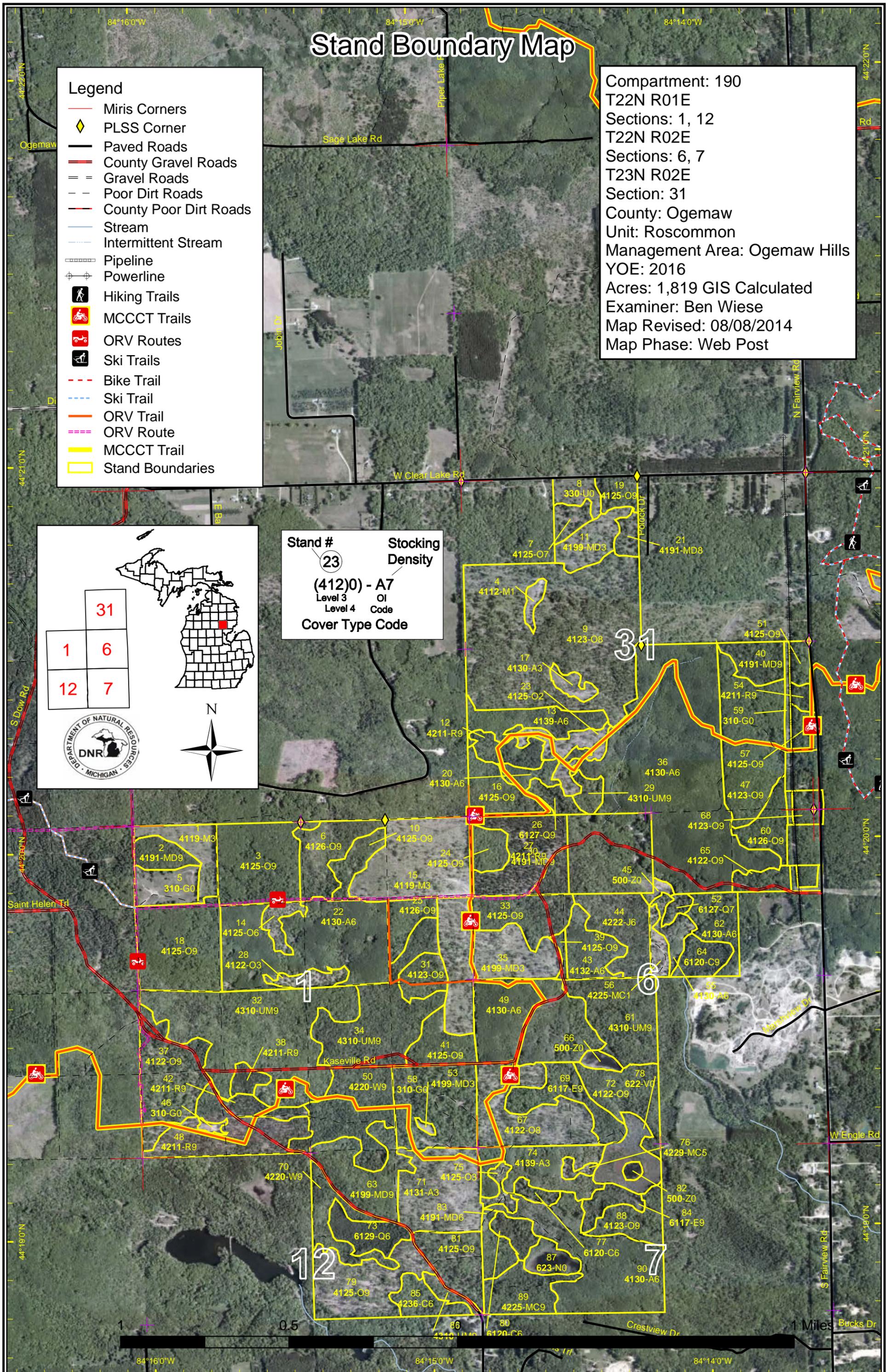
- Miris Corners
- ◆ PLSS Corner
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Stream
- Intermittent Stream
- Pipeline
- ⊕ Powerline
- 🚶 Hiking Trails
- 🚲 MCCCT Trails
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- Bike Trail
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- Stand Boundaries

Compartment: 190
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31	
1	6
12	7

N

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

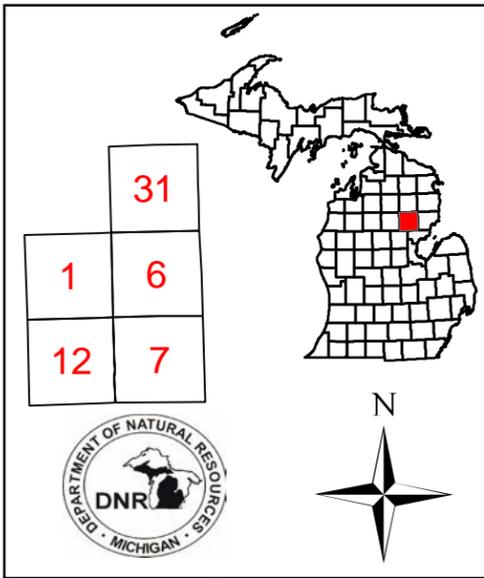


Special Conservation Areas & Site Conditions Map

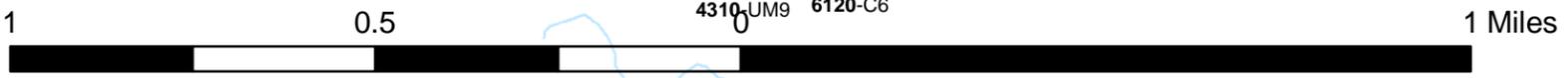
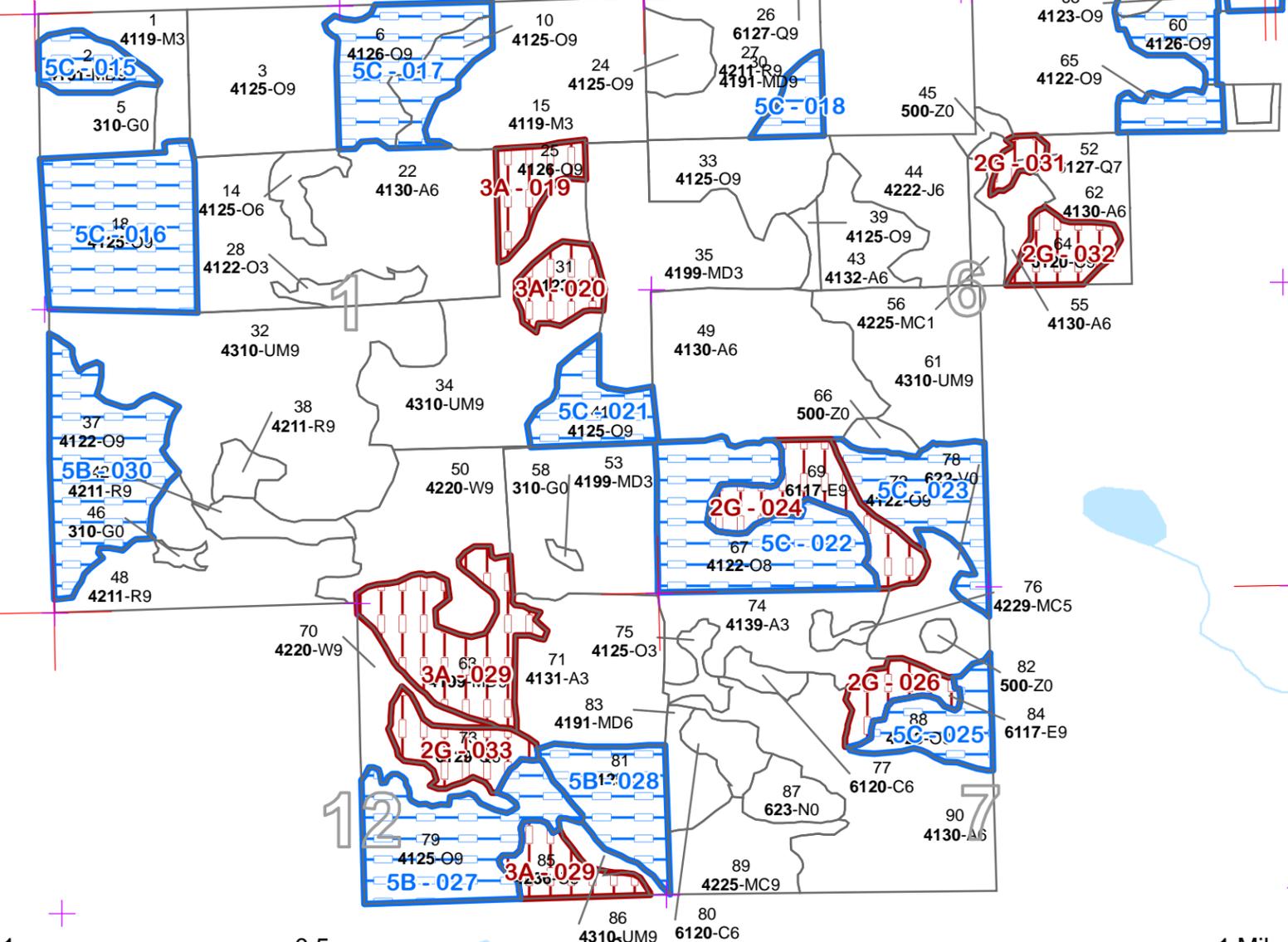
Legend

- Miris Corners
- Stand Boundaries
- + Remonumented Section Corners
- Site Condition Available
- Available w/ Constraints (Factor - Number)
- Unavailable (Factor - Number)
- Special Conservation Areas
- Cold Water Streams
- Cold Water Lakes

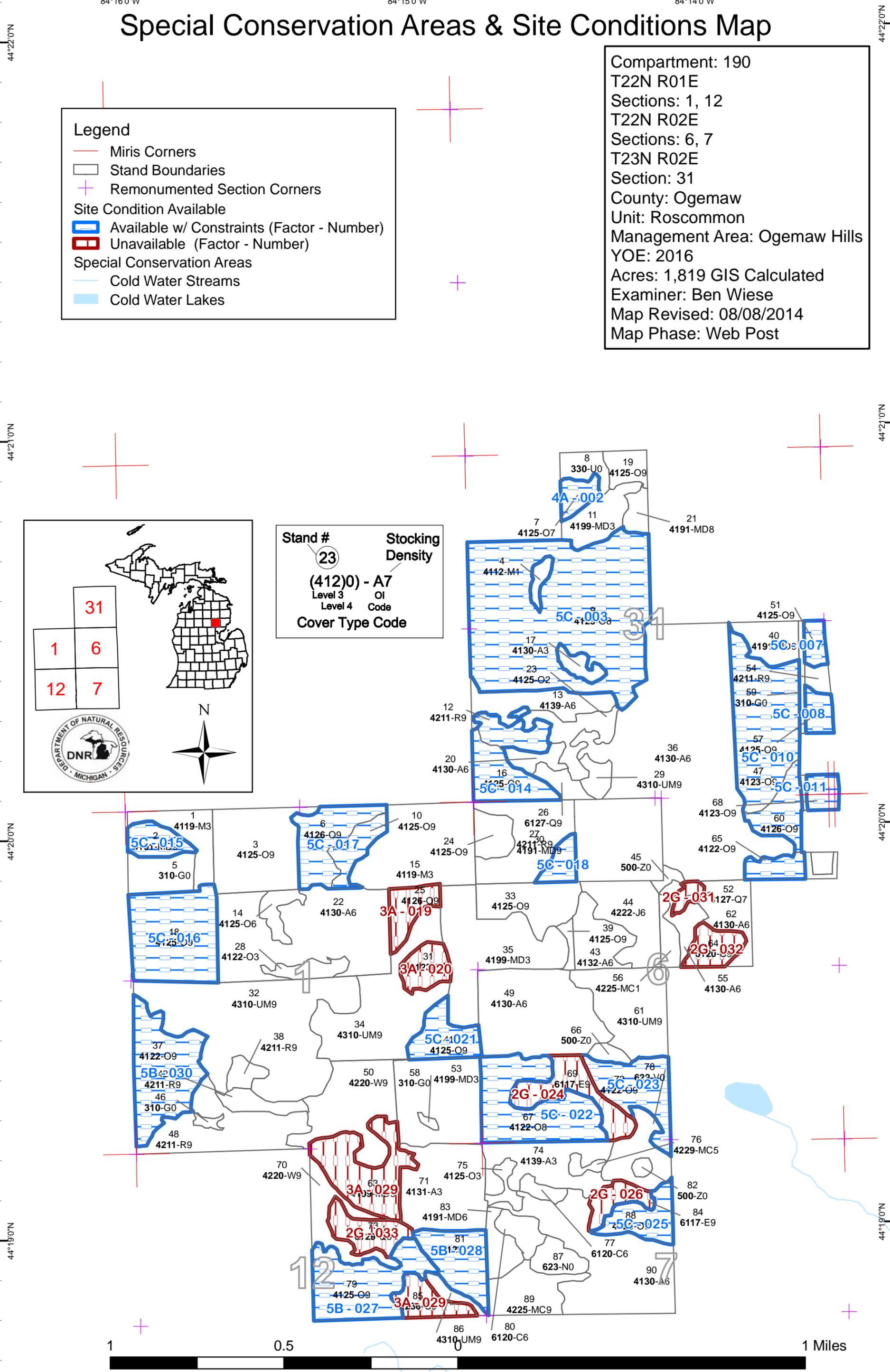
Compartment: 190
 T22N R01E
 Sections: 1, 12
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 T23N R02E
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 County: Ogemaw
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 Acres: 1,819 GIS Calculated
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 Map Revised: 08/08/2014
 Map Phase: Web Post



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



84°16'0"W 84°15'0"W 84°14'0"W



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	42	8	95	124	184	0	0	0	0	0	0	0	0	0	452
Bog	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	31	0	31
Herbaceous Openland	25	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Jack Pine	0	0	0	23	0	0	0	0	0	0	0	0	0	0	23
Low-Density Trees	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Lowland Conifers	0	0	0	0	0	6	13	0	0	0	0	0	3	0	22
Lowland Deciduous	0	0	0	0	0	0	0	19	8	0	0	0	0	0	27
Marsh	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Mixed Upland Deciduous	60	0	0	0	9	0	5	12	9	67	6	0	0	0	168
Natural Mixed Pines	0	0	8	0	0	0	0	0	0	18	0	0	0	0	26
Northern Hardwood	64	0	0	0	0	0	0	0	0	0	0	0	0	0	64
Oak	14	0	17	0	0	0	7	36	324	185	34	10	0	0	627
Red Pine	0	0	0	0	0	0	88	0	0	0	0	0	0	0	88
Upland Mixed Forest	0	0	0	0	0	0	9	33	136	0	0	0	0	0	178
Water	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
White Pine	0	0	0	0	0	0	16	35	0	0	0	0	0	0	51
Total	244	8	120	147	192	6	5	145	132	552	191	34	45	0	1819



Report 2 – Proposed Treatment Summaries

Roscommon Mgt. Unit
Year of Entry 2016

Compartment 190
Total Compartment Acres: 1,819

Acres by Treatment Type

Commercial Harvest - 364	Tree Planting - 5	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	

Cover Type by Harvest Method

	<i>Clearcut</i>	<i>Selection</i>	<i>Seed Tree</i>	<i>Shelterwood</i>	<i>Thinning</i>	<i>Other - Specify</i>	<i>Total Acres</i>
Aspen Types	102	0	0	0	0	0	102
Natural Pines	0	0	0	0	51	0	51
Oak Types	24	0	9	0	38	0	70
Planted Pines	5	0	0	0	0	0	5
Upland Mixed Forest	0	0	0	0	136	0	136
Total	131	0	9	0	224	0	364



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
3	71190003-Cut	38.0	4125 - Black, N. Pin Oak	High Density Log	100	111-140	Harvest	Crown Thinning	412 - Oak	Cmpt. Review Proposal
<p><u>Prescription</u> Thin the oak to a residual basal area of 70-80. Leave the dominant healthy trees. Cut all red maple and leave them in large bunch piles.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> This is a healthy stand of oak, thinning will reduce crowding and create less competition for the residual trees, allowing them to stay healthy and live longer. Cutting all of the red maple may reduce nutrient competition for the residual oak in the short term and may help induce stump sprouting in a small percentage of the oak that are harvested. Leaving large bunch piles of slash could be a benefit to wildlife. This harvest is similar to the Big Gap harvest in compartment 134. Logging access will likely be along the Ogemaw Hills Route which is also considered a forest road. Logging signs should be posted at appropriate distances.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										
24	71190024-Cut	8.8	4125 - Black, N. Pin Oak	High Density Log	103	111-140	Harvest	Seed Tree	4310 - Pine, Oak Mix	Cmpt. Review Proposal
<p><u>Prescription</u> Seed tree harvest to develop the understory and induce oak stump sprouting. Leave large healthy crowned oak for mast and seed also leave healthy well-formed white pine and red maple.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> Due to the age of the oak there is good chance that it will not coppice.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										
32	71190032-Cut	87.9	4310 - Pine, Oak Mix	High Density Log	92	111-140	Harvest	Crown Thinning	42200 - Natural White Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Thin to promote healthy white pine and oak. Heavy thinning, the residual basal area should be 90-110 but is variable due to the stand variability.</p> <p><u>Specs:</u> Leave the best tree in place but favor oak over white pine and white pine over red maple. Leave the aspen for diversity, future snags and CWD.</p> <p><u>Other Comments:</u> The residual stand will have a dominant component of white pine with a lesser amount of oak and red maple.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										
33	71190033-Cut	21.2	4125 - Black, N. Pin Oak	High Density Log	106	81-110	Harvest	Clearcut with Reserves	4121 - Oak, Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut with reserves, leave pine and large-crowned oak.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> The reserves will be considered retention, try to leave them in clumps.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
34	71190034-Cut	47.8	4310 - Pine, Oak Mix	High Density Log	96	81-110	Harvest	Crown Thinning	4310 - Pine, Oak Mix	Cmpt. Review Proposal
<p><u>Prescription</u> Thin the stand heavily. Cut most of the oak but leave the healthy, large-crowned trees. Thin the pine where the density is high and or the spacing is close. Give the residual trees plenty of room to grow and encourage oak stump sprouting.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> The Ogemaw Hills Trail passes through the north part of this stand. Use appropriate trail protection specs and post Logging signs at appropriate distances.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										
36	71190036-Cut	74.0	4130 - Aspen	High Density Pole	40	81-110	Harvest	Clearcut	413 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut to regenerate aspen and balance age classes..</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> ORV trail is the north boundary of the harvest. Use appropriate protection specs. Create one to three islands for retention, maybe in areas where the terrain is steep.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										
38	71190038-Cut	4.8	42110 - Planted Red Pine	High Density Log	73	141-170	Harvest	Clearcut	4211 - Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut. Chip slash for site prep.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> Site prep as needed to plant red pine. This may include roller chopping, herbicide application, trenching, or burning.</p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										
39	71190039-Cut	2.3	4125 - Black, N. Pin Oak	High Density Log	94	81-110	Harvest	Clearcut	411 - Northern Hardwood	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut. Mark to leave the healthy and well-formed pine to create diversity within the stand.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> Due the the small size of the stand it is recommended that no retention pockets be left.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										
50	71190050-Cut	35.1	42200 - Natural White Pine	High Density Log	82	171-200	Harvest	Crown Thinning	4220 - Natural White Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Manage for white pine. Low and crown thin to a residual basal area of 90-110. Remove suppressed trees first and co-dominants to create space for residual tree growth. Remove most of the oak but leave the ones that are healthy with large canopies for diversity and seed. Remove most of the aspen but leave some for diversity, future snags and coarse woody debris.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										



S t a n d	Roscommon Mgt. Unit		Report 3 -- Treatments Prescribed with No Limiting Factor				Compartment: 190 Year of Entry 2016		DNR MICHIGAN	
	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
70	71190070-Cut	15.5	42200 - Natural White Pine	High Density Log	72	141-170	Harvest	Crown Thinning	4220 - Natural White Pine	Cmpt. Review Proposal
<u>Prescription</u> Thin to promote growth and vigor of the white pine and to reduce competition for the healthy dominant oak. The residual basal area should be 90-110 <u>Specs:</u> but will vary based on stem density, size and spacing. Leave the best formed healthy trees.										
<u>Other</u> <u>Comments:</u>										
<u>Next</u> <u>Steps:</u>										
<u>Proposed</u> <u>Start Date:</u> 10/01/2015										
90	71190090-Cut	28.2	4130 - Aspen	High Density Pole	35	111-140	Harvest	Clearcut	413 - Aspen	Cmpt. Review Proposal
<u>Prescription</u> Clearcut to regenerate aspen and to balance age classes. <u>Specs:</u>										
<u>Other</u> Leave one to three islands for retention. <u>Comments:</u>										
<u>Next</u> <u>Steps:</u>										
<u>Proposed</u> <u>Start Date:</u> 10/01/2015										
Total Treatment										
Acres Proposed:		363.7								

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

Prescription
Specs:

Other
Comment:

Next
Steps:

Proposed
Start Date: #Type!

Limiting Factor

**Total Treatment
Acreage Proposed: 0.0**

Report 5 – Site Conditions

Roscommon Mgt. Unit

Ben Wiese : Examiner

Compartment 190

Year of Entry 2016

Availability for Management

Availability for Management			Dominant Site Conditions						
Total Acres	Acres Available	Acres Not Available		No	5C	5B	4A	3A	2G
452	452		Aspen	452					
31	11	20	Cedar	11				10	10
23	23		Jack Pine	23					
22	6	16	Lowland Conifers	6					16
27		27	Lowland Deciduous						27
168	139	29	Mixed Upland Deciduous	123	15			29	
26	26		Natural Mixed Pines	26					
64	64		Northern Hardwood	64					
626	606	20	Oak	111	400	89	6	20	
88	88		Red Pine	77	11				
178	178		Upland Mixed Forest	178					
51	51		White Pine	51					
1,754	1,642	112	Total Forested Acres	1,121	426	89	6	59	53
	94%	6%	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
002	Available	4A: No merchantable products (see product standards)	6				
Comments:							
003	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	136				
Comments:							

Report 5 – Site Conditions

Roscommon Mgt. Unit

Compartment 190

Ben Wiese : Examiner

Year of Entry 2016

007	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5	
Comments:				
008	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6	
Comments:				
010	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	68	
Comments:				
011	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6	
Comments:				
014	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	28	
Comments:				
015	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	9	
Comments:				

Report 5 – Site Conditions

Roscommon Mgt. Unit

Ben Wiese : Examiner

Compartment 190

Year of Entry 2016

016	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	41
Comments:			
017	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	30
Comments:			
018	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6
Comments:			
019	Not Available	3A: Potential old growth / biodiversity	10
Comments:			
020	Not Available	3A: Potential old growth / biodiversity	10
Comments:			
021	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	14
Comments:			

Report 5 – Site Conditions

Roscommon Mgt. Unit

Ben Wiese : Examiner

Compartment 190

Year of Entry 2016

022	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	39	
Comments:				
023	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	23	
Comments:				
024	Not Available	2G: Too wet (sensitive soils, does not include access issues)	19	
Comments:				
025	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	14	
Comments:				
026	Not Available	2G: Too wet (sensitive soils, does not include access issues)	8	
Comments:				
027	Available	5B: Maintain for regeneration purposes	34	
Comments:				

028	Available	5B: Maintain for regeneration purposes	20
Comments:			
029	Not Available	3A: Potential old growth / biodiversity	39
Comments:			
030	Available	5B: Maintain for regeneration purposes	36
Comments:			
031	Not Available	2G: Too wet (sensitive soils, does not include access issues)	3
Comments:			
032	Not Available	2G: Too wet (sensitive soils, does not include access issues)	10
Comments:			
033	Not Available	2G: Too wet (sensitive soils, does not include access issues)	13
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
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Comments				
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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 Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
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.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4119 - Mixed Northern Hardwoods	High Density Sapling	14.2	6		Cut in 2008 as part of Tomahawk Oak 71-012-06-01. Planted to red pine in 2010.
2	4191 - Mixed Upland Deciduous with Conifer	High Density Log	9.1	85	141-170	This is a small, healthy, unmanaged stand of oak and pine with a lot of coarse woods debris.
3	4125 - Black, N. Pin Oak	High Density Log	38.0	100	111-140	Cut in 1988-1989 as part of Block 472. The specs were to cut all aspen, red maple and jack pine containing at least one 100-inch pulp stick. The current stand is red oak canopy with a red maple understory.
4	4112 - Maple, Beech, Cherry Association	Low Density Sapling	3.3	5		This stand was the landing for the harvest of the surrounding stands in 2008-2009.
6	4126 - White, Black, N. Pin Oak	High Density Log	20.8	89	111-140	Mature oak stand the red maple wa cut in 1988-1989 as part of Block 472. The red maple understory is dense, a combination of single stem and stump sprouts.
7	4125 - Black, N. Pin Oak	Low Density Log	6.2	93	1-50	Oak and cherry stand with scattered trace ammounts of red pine and white pine. There are scattered openings and the density is variable.
9	4123 - Red Oak	Medium Density Log	135.9	93	81-110	Cut in 08-09 as part of Eastwood Oak 71-025-06-01. The stand is two-aged with a sapling cohort of oak, maple, cherry and aspen and mature oak.
10	4125 - Black, N. Pin Oak	High Density Log	9.6	89	81-110	This oak stand was cut in 1988-1989 as part of Block 472. The red maple was removed and has regenerated into a dense understory.
11	4199 - Other Mixed Upland Deciduous	High Density Sapling	14.3	5	1-50	Cut in 08-09 as part of Eastwood Oak 71-025-06-01. The stand is two-aged with a sapling cohort of oak, maple, cherry and aspen and scattered mature oak.
12	42111 - Planted Red Pine, Mixed Deciduous	High Density Log	10.9	79	81-110	Large mature red pine stand appears to be of natural origin but is a plantation that was established in 1935.
13	4139 - Aspen, Mixed Deciduous	High Density Pole	18.4	40	111-140	Pole-sized aspen mixed with red maple.
14	4125 - Black, N. Pin Oak	High Density Pole	6.3	26	1-50	Pole and sapling oak with red maple approximately 75% forested.
15	4119 - Mixed Northern Hardwoods	High Density Sapling	46.2	5		Cut in 2008 as part of Tomahawk Oak 71-012-06-01. Planted to red pine in 2010. There are scattered super canopy white oak. The natural regeneration is dense in places and sparse in others.
16	4125 - Black, N. Pin Oak	High Density Log	17.3	103	111-140	MAture stand of black/red hybrid oak with examples of each. White pine is mostly poles and saplings. There is a pocket of bigtooth aspen in the northwest part of the stand.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
17	4130 - Aspen	High Density Sapling	4.7	6		Cut in 08-09 as part of Eastwood Oak 71-025-06-01. The stand is two-aged with a sapling cohort of oak, maple, cherry and aspen and scattered mature oak.
18	4125 - Black, N. Pin Oak	High Density Log	41.5	103	141-170	Mature oak that was cut in 1988-1989 as part of Block 472. The red maple was cut and has since regenerated into a fully stocked understory and is now just entering the canopy.
19	4125 - Black, N. Pin Oak	High Density Log	7.3	73	81-110	Small upland mixed upland stand of oak, maple and pine. There is a developing cohort of red maple saplings and poles.
20	4130 - Aspen	High Density Pole	6.0	40	111-140	Pole size aspen and red maple stand.
21	4191 - Mixed Upland Deciduous with Conifer	Medium Density Log	5.1	62	51-80	Mixed mature stand of oak, pine and cherry. Density is variable with open areas of hawthorn, oak and maple saplings.
22	4130 - Aspen	High Density Pole	68.7	27	111-140	Aspen and oak pole-sized stand.
23	4125 - Black, N. Pin Oak	Medium Density	13.9	6	1-50	Cut in 08-09 as part of Eastwood Oak 71-025-06-01.
24	4125 - Black, N. Pin Oak	High Density Log	8.8	103	111-140	Mature oak stand with a white pine understory and a trace amount of red pine poles and saplings.
25	4126 - White, Black, N. Pin Oak	High Density Log	10.3	168	141-170	Mature, large, healthy white oak and black/red oak. The stand appears to be unmanaged. There is a trace amount of super canopy red pine and white pine.
26	6127 - Lowland Pine	High Density Log	5.6	54	81-110	Small lowland white pine with a variable density and age.
27	42110 - Planted Red Pine	High Density Log	28.8	72	81-110	Red and white pine stand that was heavily thinned in 1999 as part of the Block 884 timber sale. The stand is more open to the south.
28	4122 - Oak, Pine	High Density Sapling	6.2	26	1-50	Pole and sapling oak and white pine. Oak is both stump sprouts and from single stem, the sprouts are larger in diameter.
29	4310 - Pine, Oak Mix	High Density Log	5.1	79		Mature pine with oak, red maple and white pine in the understory.
30	4191 - Mixed Upland Deciduous with Conifer	High Density Log	6.2	103	111-140	Upland log-size stand with a mix of oak and pine.
31	4123 - Red Oak	High Density Log	9.8	99	111-140	This is a unique, small, unmanaged stand of large, healthy mature oak and white pine. There are two small ponds possibly vernal. The white oak is not evenly distributed and the white pine is present in the understory, mid-canopy, and canopy.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
32	4310 - Pine, Oak Mix	High Density Log	87.9	92	111-140	This stand is mixed log-sized oak and white pine with a trace amount of bigtooth aspen. It appears to be unamanged. The white pine is likely multi aged.
33	4125 - Black, N. Pin Oak	High Density Log	21.2	106	81-110	This is an unmanaged stand of oak and bigtooth aspen with white pine. The oak is poor to medium quality and is senescing, There is a moderate to heavy white pine understory.
34	4310 - Pine, Oak Mix	High Density Log	47.8	96	81-110	Poor to medium quality log sized black and red oak mixed with white pine and red pine. The oak is senescing, the pine is healthy. A small amount of oak is present in the sub-canopy. There is a moderate amount of coarse woody debris mostly from natural mortality.
35	4199 - Other Mixed Upland Deciduous	High Density Sapling	45.7	6		Two-aged stand with super canopy white oak and a mix of maple, aspen, pine and oak. The stand was regenerated in 2008 as part of Tomahawk Oak.
36	4130 - Aspen	High Density Pole	144.1	40	81-110	Pole-size aspen stand with a mix of red oak and red maple, there is a component of ash seedlings and saplings. The stand is healthy with vigorous growth.
37	4122 - Oak, Pine	High Density Log	35.6	106	81-110	This stand was thinned in 1999 as part of the Block 884 timber sale. This is a log sized white and red oak stand with a component of white pine. The north tip of the stand is mostly white pine. The oak is healthy. Red maple and white pine are both well developed in the understory, the red maple is very dense in places, there are pockets of aspen saplings.
38	42110 - Planted Red Pine	High Density Log	4.8	73	141-170	Red pine stand that was set up for thinning in 1999 as part of the Block 884 timber sale, the stand was never harvested.
39	4125 - Black, N. Pin Oak	High Density Log	2.3	94	81-110	Mature oak stand that is ready to be regenerated. There is a light amount of coarse woody debris.
40	4191 - Mixed Upland Deciduous with Conifer	High Density Log	12.1	73	51-80	Upland stand of mixed pine, oak, aspen and maple.
41	4125 - Black, N. Pin Oak	High Density Log	14.3	99	111-140	This is a small, unmanaged stand of mature red oak and white pine with a component of bigtooth aspen. The stand is healthy and adds good diversity to the compartment.
42	42110 - Planted Red Pine	High Density Log	7.1	75	111-140	The stand was harvested in 1999 as part of the Block 884 timber sale. It is now two-aged with a overstory of red pine and an understory of oak and pine.
43	4132 - Aspen, Jack Pine	High Density Pole	15.7	36	81-110	Mixed pole-sized aspen, oak and pine.
44	42220 - Natural Jack Pine	High Density Pole	23.0	36	51-80	Pole-sized jack pine and oak with low density oak seedlings and saplings in the understory.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
47	4123 - Red Oak	High Density Log	48.3	93	111-140	Very nice red oak stand. There is more black oak in the south part of the stand.
48	42110 - Planted Red Pine	High Density Log	33.1	75	111-140	Harvested in 2010 by cutting marked trees and all aspen, jack pine and red maple. Oak saplings are developing in the understory, most are less than three feet tall.
49	4130 - Aspen	High Density Pole	52.1	37	111-140	Pole-sized stand of aspen, oak, white pine, and red maple.
50	42200 - Natural White Pine	High Density Log	35.1	82	171-200	Natural white pine stand with a mix of mature oak. The stand density is high and growth is stagnant. The understory is well stocked with white pine and a moderate amount of oak seedlings less than three feet tall. Much of the canopy oak is suppressed and senescing.
51	4125 - Black, N. Pin Oak	High Density Log	5.0	93	81-110	Small stand of large healthy oak located between power lines and a road.
52	6127 - Lowland Pine	Low Density Log	3.1	147	1-50	Lowland stand of white pine mixed with cedar, red maple and some paper birch. Alder and winterberry in the understory.
53	4199 - Other Mixed Upland Deciduous	High Density Sapling	37.7	96	1-50	Harvested in 1999 as part of the Block 884 timber sale.
54	42110 - Planted Red Pine	High Density Log	3.4	70	111-140	Large, healthy red pine and oak with a small component of white ash poles and saplings infected with EAB.
55	4130 - Aspen	High Density Pole	7.5	15	51-80	Pole/sapling size aspen stand that was regenerated in 1999 as part of the Block 884 timber sale.
56	42250 - Pine, Oak	Low Density Sapling	5.6	22	1-50	Harvested in 1999 as part of the Block 884 timber sale. The stand is saplings and pole sized jack pine, pin oak and white pine.
57	4125 - Black, N. Pin Oak	High Density Log	6.0	84	51-80	This is a small, mature stand of healthy with a component of white pine located between Fairview Road and power lines.
60	4126 - White, Black, N. Pin Oak	High Density Log	13.0	93	81-110	Mature, healthy, oak stand. Based on the stump sprouts and an oak core that showed a growth increase, the red maple was removed 25-35 years ago. These red maple poles and saplings are just entering the canopy.
61	4310 - Pine, Oak Mix	High Density Log	33.2	86	111-140	This stand is a mix of log sized white pine and oak with a component of aspen, red pine and red maple. The south part of the stand has a low pocket of cedar.
62	4130 - Aspen	High Density Pole	15.2	40	81-110	Vigorous, healthy stand of pole and sapling aspen, oak and maple.
63	4199 - Other Mixed Upland Deciduous	High Density Log	28.9	95	141-170	Mature mixed upland stand. Nice white pine.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
64	6120 - Lowland Cedar	High Density Log	9.9	130	111-140	
65	4122 - Oak, Pine	High Density Log	7.2	98	51-80	
67	4122 - Oak, Pine	Medium Density Log	39.1	96	1-50	Cut in 2008 as part of Tomahawk Oak 71-012-06-01. The stand is a mix of white and black oak with a high percentage of white pine. The understory is well stocked with oak saplings less than three feet tall and also a mix of aspen, maple and white pine.
68	4123 - Red Oak	High Density Log	8.4	100	111-140	Healthy, mature red oak stand with a dense red maple understory. This is a small stand located between Fairview Road, power lines and PVT ownership.
69	6117 - Lowland Deciduous, Mixed Coniferous	High Density Log	18.8	86	81-110	The stand is a combination of lowland and upland, there are "wet runs" throughout the stand. There is a mix of upland and lowland species with large mature red maple and a trace amount of red pine.
70	42200 - Natural White Pine	High Density Log	15.5	72	141-170	Small stand of natural white pine mixed with white oak and red/back oak. Many of the dominant trees are crowded. Thinning this stand would reduce competition for the mature oak and would create room to grow for the white pine. Opening the canopy through thinning will also allow for understory development.
71	4131 - Aspen, Oak	High Density Sapling	37.4	6	1-50	Cut in 2008 as part of Tomahawk Oak 71-012-06-01. The stand is two-aged, there are super canopy white oak and white pine and sapling aspen, maple and oak. The red maple is mostly stump sprouts
72	4122 - Oak, Pine	High Density Log	22.6	95	81-110	The stand is mixed with mature oak and log/pole sized white pine. The species distribution are uneven. There are areas in the stand that are lower but not considered lowland.
73	6129 - Mixed Coniferous Lowland Forest	High Density Pole	12.9	70		Lowland conifer stand, treed bog.
74	4139 - Aspen, Mixed Deciduous	High Density Sapling	26.5	25	111-140	
75	4125 - Black, N. Pin Oak	High Density Sapling	4.2	25	1-50	
76	42290 - Natural Mixed Pine	Medium Density Pole	2.4	25	1-50	Natural mixed pine stand. The stand may have been a landing for the previous harvest. There are small dense pockets of jack pine, small openings and open grown trees.
77	6120 - Lowland Cedar	High Density Pole	3.8	124		Cedar swamp with super canopy white pine, and hemlock around the edge. The stand has pockets of blowdown and individual stems.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
79	4125 - Black, N. Pin Oak	High Density Log	33.9	110	51-80	Harvested in 2010 by cutting marked trees and all aspen, jack pine and red maple. The stand is now two-aged with a super canopy of black/red oak and red pine with a sapling class of aspen and red maple.
80	6120 - Lowland Cedar	High Density Pole	7.2	124	200+	Lowland cedar with super canopy white pine and scattered paper birch. There are pockets of blowdown trees and individual stems. The basal area is very high in some places. There are pockets of blowdown trees and also individual stems.
81	4125 - Black, N. Pin Oak	High Density Log	19.8	94	51-80	Harvested in 1999 as part of the Block 884 timber sale. The stand is two-aged with a oak and pine overstory and a maple aspen understory which is well developed. The red maple and aspen were removed from the stand, the oak and pine were not thinned. The basal area is variable due to the harvest method. There are some low, wet areas in the south part of the stand.
83	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	8.5	42	81-110	Pole-sized mixed upland stand. White oak and white pine were left when the stand was harvested.
84	6117 - Lowland Deciduous, Mixed Coniferous	High Density Log	8.0	92		Mixed lowland stand, mostly red maple.
85	42360 - Upland Cedar	High Density Pole	10.4	123	171-200	Lowland cedar mix.
86	4310 - Pine, Oak Mix	High Density Log	3.9	72	81-110	Small upland stand of white pine and oak.
88	4123 - Red Oak	High Density Log	13.9	109	111-140	Mature healthy stand of large red oak and super canopy white pine. This is a unique stand that borders lowland to the north.
89	42250 - Pine, Oak	High Density Log	17.8	90	81-110	Mixed stand of white pine, red pine and oak. There is lowland in the north part of the stand.
90	4130 - Aspen	High Density Pole	55.9	35	111-140	Pole-sized aspen oak and red maple. There was a small wildfire in 2011-2012, there was very little damage to the trees.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
5	3102 - Grass	13.3	No	Unspecified	
8	3301 - Low Density Deciduous Trees	7.4	No	Unspecified	
45	50 - Water	2.1	No	Unspecified	
46	3105 - Mixed Upland Herbaceous	1.5	No	Unspecified	
58	3105 - Mixed Upland Herbaceous	1.0	No	Unspecified	
59	3102 - Grass	9.4	No	Unspecified	
66	50 - Water	3.3	Unspecified	Unspecified	
78	6225 - Bog	16.3	No	Unspecified	
82	50 - Water	1.6	No	Unspecified	
87	6239 - Mixed Emergent Wetland	8.1	No	Unspecified	