



Compartment Review Presentation

Roscommon Forest Management Unit

Compartment 9

Entry Year 2015

Acreage: 1,148

County Roscommon

Management Area: Ausable Outwash

Revision Date: 05/22/2013

Stand Examiner: Dale Ekdom

Legal Description:

T24N R02W Sections 2, 11, 14

Identified Planning Goals:

Compartment is in the Au Sable Outwash Management Area. Broad management goals are to maintain current age and species diversity in a range of early and late succession ecosystems.

Soil and topography:

Topography is level to slightly rolling in the more upland northern portion of the compartment and flat in the southern portion of the compartment which is primarily swamp. Soils are Rubicon sands on the upland areas and Rifle peat in the lowland areas.

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

The northern portion of the compartment is a solid block of state land surrounded by private property with both seasonal and year-round residences. The southern portion of the compartment is a solid block of state land bounded by private to the north and state land on the other 3 sides. There is one 60 acre private parcel directly south of the compartment in the NW1/4 of Section 23.

Unique Natural Features:

Hills thistle and rough fescue have been identified within the compartment. Poor conifer swamp has been identified within the compartment.

Archeological, Historical, and Cultural Features:

None noted or detected during fieldwork.

Special Management Designations or Considerations:

The South Branch of the Au Sable River has Natural River designation and it and portions of adjacent stands are HCVA's. Stands in the Hudson Creek Swamp are designated as habitat area/corridor SCA's.

Watershed and Fisheries Considerations:

South Branch of the Au Sable River is a natural river and a designated trout stream. Hudson Creek is not a coldwater stream and is not a designated trout stream.

Wildlife Habitat Considerations:

Maintain ecosystem diversity in the compartment via habitat manipulation to benefit game species such as deer, grouse, rabbits, turkeys, as well as other non-game species.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of 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 is quarried for gypsum in other areas of the State. Most of the good gravel pits are associated with upland areas. The nearest gravel pit is several miles away, but there may be potential on the upland areas. St. Helen Field lies two miles to the southeast. The field has produced over 8.7 million BO and 14.7 Bcf gas from the Devonian Richfield Formation. It is in secondary recovery operations currently. Section 2 is currently leased for oil and gas development.

Vehicle Access:

Vehicle access to the north part of the compartment is excellent via county roads and forest two-tracks. Vehicle access to the middle and south part of the compartment is restricted by a private bridge, a railroad right-of-way, and by the Hudson Creek Swamp.

Survey Needs:

None necessary at this time.

Recreational Facilities and Opportunities:

No recreational infrastructure is within the compartment but the state land is heavily used for deer, bear, and turkey hunting. Trails and two-tracks are used by the locals for recreational hiking and snowmobile riding.

Fire Protection:

The north portion of the compartment is heavy to jack pine cover types and the south portion is mostly swamp conifer types.

Additional Compartment Information:

Some trash dumping is occurring due to the close proximity to residences and there is lots of illegal ORV activity for the same reason. No treatments have been proposed in this compartment for this year-of-entry.

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: 009
 T24N R02W
 Sections 2, 11, 14
 County: Roscommon
 Unit: Roscommon
 YOE: 2015
 Acres: 1,148 GIS Calculated
 Examiner: Dale Ekdorn
 Map Revised: 08/06/2013
 Map Phase: Web Post

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

2
 11
 14

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 DNR
 MICHIGAN

Legend

- Miris Corners
- + Remonumented Section Corners
- ◆ PLSS Corner
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- - - Poor Dirt Roads
- - - County Poor Dirt Roads
- Railroads
- Pipeline
- Powerline
- Lakes and Rivers
- Stream
- - - Intermittent Stream
- - - Ski Trail
- - - Hiking Trail
- - - Bike Trail
- Bike Trails
- Hiking Trails
- Ski Trails

Forest Stands

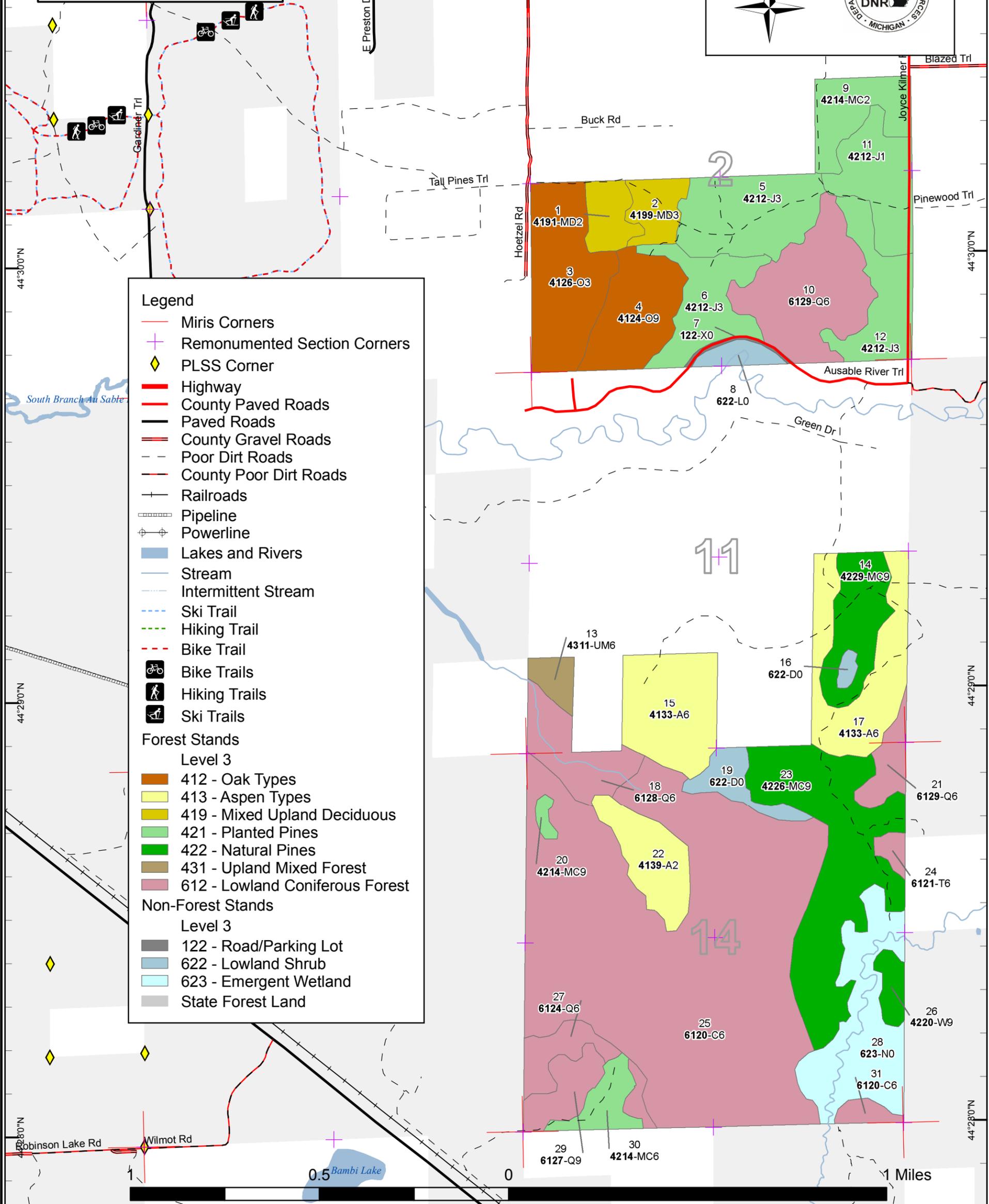
Level 3

- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands

Level 3

- 122 - Road/Parking Lot
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- State Forest Land



Stand Boundary Map

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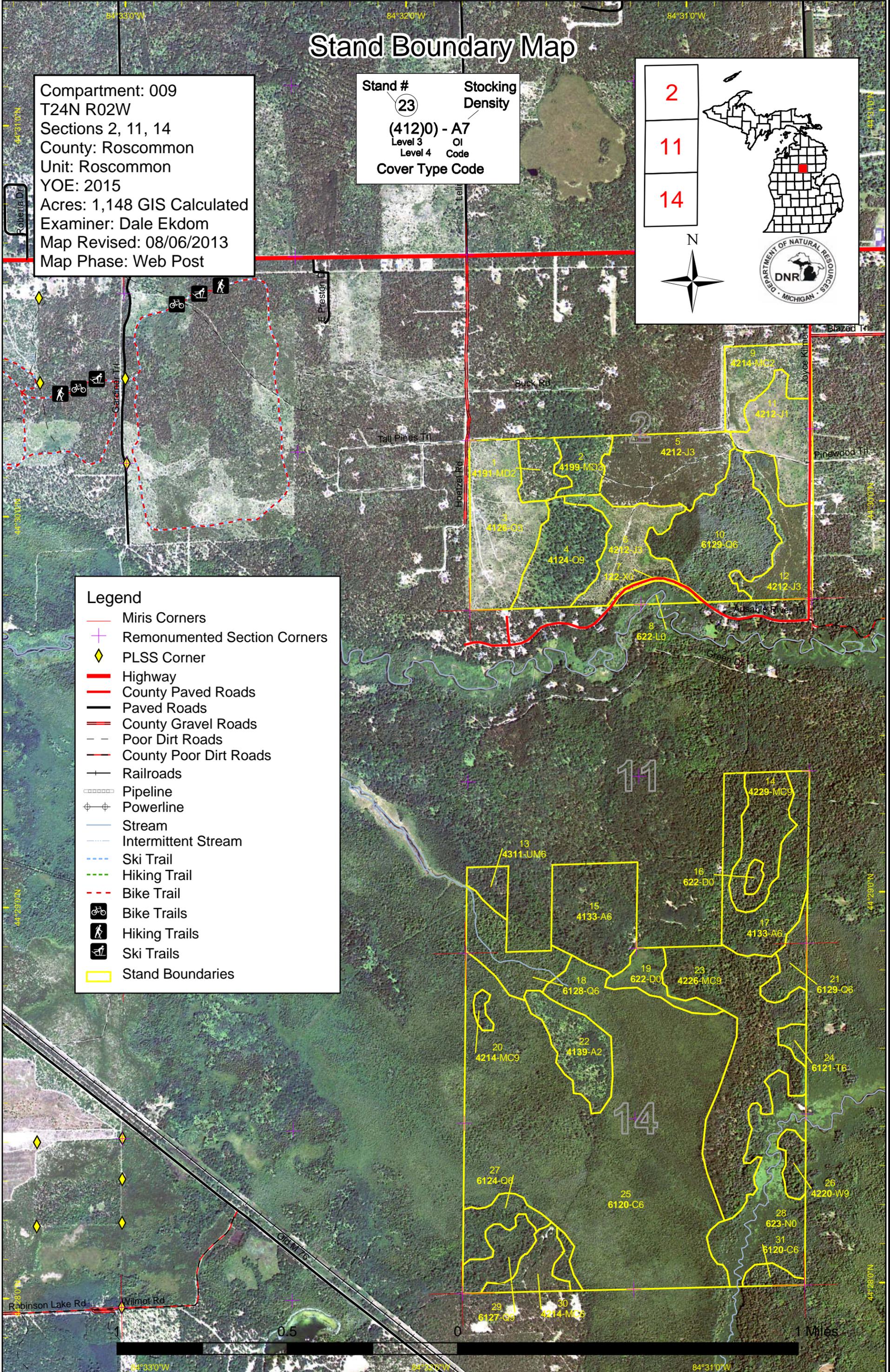
Stand #
 23
Stocking Density
 (4120) - A7
 Level 3 OI
 Level 4 Code
Cover Type Code

2
 11
 14

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DEPARTMENT OF NATURAL RESOURCES
DNR
MICHIGAN

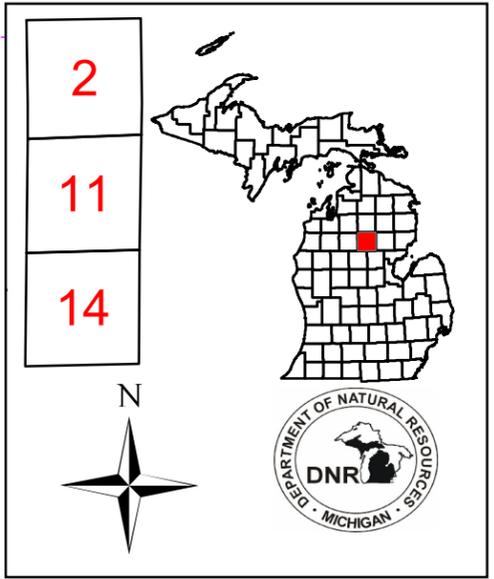
- Legend**
- Miris Corners
 - + Remonumented Section Corners
 - ◆ PLSS Corner
 - Highway
 - County Paved Roads
 - Paved Roads
 - County Gravel Roads
 - - - Poor Dirt Roads
 - County Poor Dirt Roads
 - Railroads
 - Pipeline
 - ⊕ Powerline
 - Stream
 - Intermittent Stream
 - - - Ski Trail
 - - - Hiking Trail
 - - - Bike Trail
 - 🚲 Bike Trails
 - 🚶 Hiking Trails
 - 🏂 Ski Trails
 - Stand Boundaries



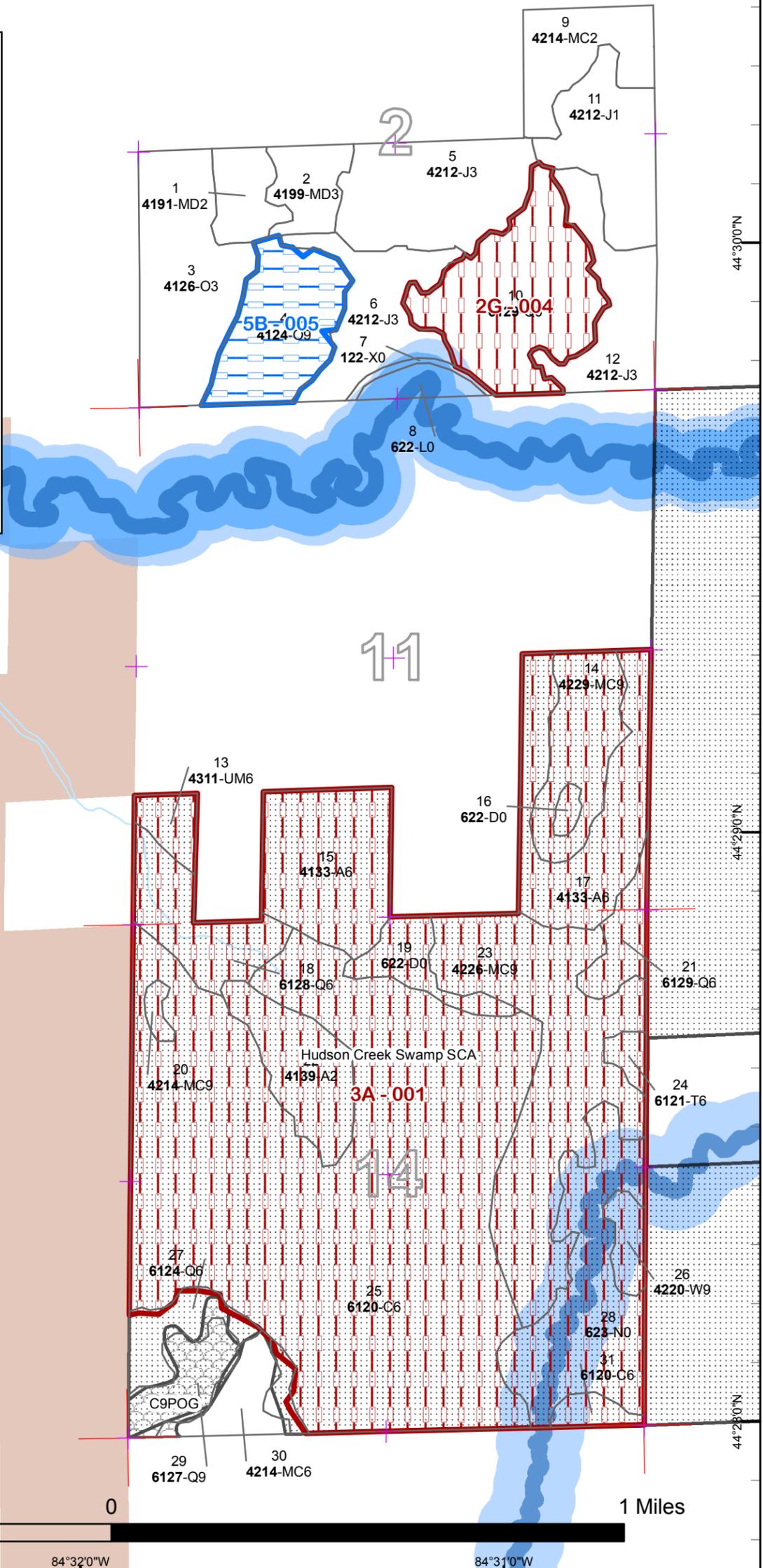
Special Conservation Areas & Site Conditions Map

Compartment: 009
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 Unit: Roscommon
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 Acres: 1,148 GIS Calculated
 Examiner: Dale Ekdorn
 Map Revised: 08/06/2013
 Map Phase: Web Post

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



- Legend**
- Miris Corners
 - Remonumented Section Corners
 - Site Condition Available
 - Available w/ Constraints (Factor - Number)
 - Unavailable (Factor - Number)
 - Reviewable SCAs
 - Proposed SCA
 - SCA Removal
 - Dedicated Special Conservation Areas
 - Research, Development, and Military Lands
 - High Priority Trout Stream Buffer
 - Cold Water Lakes
 - Cold Water Streams
 - Natural Rivers Zoning District
 - Natural Rivers Vegetative Buffer
 - Stand Boundaries



84°33'0"W 84°32'0"W 84°31'0"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	0	0	29	95	0	0	0	0	0	0	0	0	0	0	124
Cedar	0	0	0	0	0	0	0	0	0	0	350	0	0	350	
Jack Pine	67	32	47	0	0	0	0	0	0	0	0	0	0	146	
Lowland Conifers	0	0	0	0	0	0	0	0	72	0	0	0	63	135	
Lowland Shrub	7	0	0	0	0	0	0	0	0	0	0	0	0	7	
Marsh	58	0	0	0	0	0	0	0	0	0	0	0	0	58	
Mixed Upland Deciduous	0	0	28	0	0	0	0	0	0	0	0	0	0	28	
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	0	0	0	123	123	
Oak	54	0	0	0	0	0	0	0	38	0	0	0	0	92	
Planted Mixed Pines	0	27	0	15	0	0	0	0	0	0	0	0	3	44	
Tamarack	0	0	0	0	0	0	0	0	0	0	0	0	4	4	
Treed Bog	16	0	0	0	0	0	0	0	0	0	0	0	0	16	
Upland Mixed Forest	0	0	0	0	0	0	0	8	0	0	0	0	0	8	
Urban	2	0	0	0	0	0	0	0	0	0	0	0	0	2	
White Pine	0	0	0	0	0	0	0	0	0	0	0	0	8	8	
Total	206	59	104	110	0	0	0	0	8	111	0	350	0	201	1148



Report 2 – Proposed Treatment Summaries

Roscommon Mgt. Unit
Year of Entry 2015

Compartment 009
Total Compartment Acres: 1,148

Acres by Treatment Type

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

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
	#Error	#####	#Error	#####	#Error	#####	
Total	0	0	0	0	0	0	0



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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!

Prescription
Specs:

Other
Comments:

Next
Steps:

Proposed
Start Date: #Type!

**Total Treatment
Acreage Proposed: 0**

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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!

Prescription
Specs:

Other
Comment:

Next
Steps:

Proposed
Start Date: #Type!

Limiting Factor

Total Treatment
Acreage Proposed: 0

Report 5 – Site Conditions

Roscommon Mgt. Unit

Dale Ekdorn : Examiner

Compartment 009

Year of Entry 2015

Availability for Management

Total Acres	Acres		Dominant Site Conditions	No	3A	2G
	Available	Not Available				
124		124	Aspen		124	
350	0	350	Cedar	0	350	
146	146		Jack Pine	146		
135	34	102	Lowland Conifers	34	42	60
28	28		Mixed Upland Deciduous	28		
123		123	Natural Mixed Pines		123	
92	92		Oak	92		
44	41	3	Planted Mixed Pines	41	3	
4		4	Tamarack		4	
8		8	Upland Mixed Forest		8	
8		8	White Pine		8	
1,063	341	721	Total Forested Acres	341	662	60
	32%	68%	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	3A: Potential old growth / biodiversity	737	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	2G: Too wet (sensitive soils, does not include access issues)	1A: Federal/State/Local Law	
Comments: hudson creek swamp, blocked by low weight, private bridge/propety on the north and a large area of wet swamp to the south							
004	Not Available	2G: Too wet (sensitive soils, does not include access issues)	60				
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
Hudson Creek Swamp SCA	Habitat Areas or Corridors	Habitat Corridor	SCA	1771.2
Comments				
No access due to low wgt private bridge and wet terrain				
C9POG	Potential Old Growth		SCA Removal	18.0
Comments				
POTENTIAL OLD GROWTH AREA FOR RED AND WHITE PINE.				



Report 7 – DEDICATED CONSERVATION AREA DETAILS

* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

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.
SCA	Research and Military Areas	These areas provide facilities and lands specifically dedicated for research, or other purposes. They include the 5,847 acre Forest Fire Experiment Station, the 12,000 acre Houghton Lake Wildlife Research Area, the Beaver Islands Archipelago Wildlife Research Area (that includes most of Garden Island, all of High and Hog Islands, all state owned land on Beaver, South Fox and North Fox Islands), the Cusino Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Research Station, the 125 acre Wyman Nursery, and over 144,000 acres of Military Lands.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4191 - Mixed Upland Deciduous with Conifer	Medium Density	13.9	26		cut fall 1985/spring 1986, natural regeneration of oak/JP, poor quality oak, jack pine, and cherry brush
2	4199 - Other Mixed Upland Deciduous	High Density Sapling	14.6	26		cut fall 1985/spring 1986, natural regeneration of poor quality oak, TA, and JP
3	4126 - White, Black, N. Pin Oak	High Density Sapling	53.8	4		Cut 2008, all natural regeneration, looked at planting JP initially but did not need supplemental planting, 2 aged stand with J/R pine saps and poles, oak saplings, and jack pine seedlings
4	4124 - Red with White Oak	High Density Log	38.2	93	51-80	oak knob which was seedtree/shelterwood cut in 2008 removing A/RM and marked oak, scattered WP poles left also, lots of illegal ORV traffic and FW theft, lots of slash from t'sale and illegal FW cutting, oak quality ranges from poor quality black/pin oak to better quality R/W oak, good frost drainage, 2 aged stand going to all-aged with oak SL, WP poles, and O/A/M saplings, removal of O/S this YOY may damage a lot of oak seedlings as well as A/M seedlings/saplings which are just getting established
5	42120 - Planted Jack Pine	High Density Sapling	46.7	26		cut 1985, seeded to JP 1986, will be J6 next YOY
6	42120 - Planted Jack Pine	High Density Sapling	33.2	8		south part cut in 1997, north part cut in 2000, seeded to JP 6/02, planted to JP 5/04 after seeding failed, tried to close 2T with planting but locals opened it back up again, west arm has a few WP saps/poles scattered within arm
9	42140 - Planted Mixed Pine	Medium Density	26.7	14		cut 1997, planted to RP 1998, now mix of planted RP and natural J/O regeneration, some areas sparse where terrain is lower and there are frost pockets, some RP supplemental planting done in the past to fill in some of these sparser pockets
10	6129 - Mixed Coniferous Lowland Forest	High Density Pole	59.9	92		poor conifer swamp with scattered SL/XL WP, south end along road is marginally drier than rest of the stand and is heavier to WP poles
11	42120 - Planted Jack Pine	Low Density Sapling	34.2	2		cut 2008, planted to JP in 2010, scattered RP poles and areas heavy to oak poles are enough to make this a forested stand
12	42121 - Planted Jack Pine, Mixed Deciduous	High Density Sapling	31.8	14		cut 1997, planted to JP in 1998, some natural JP regeneration also
13	4311 - Pine, Aspen Mix	High Density Pole	8.2	82		upland stand with mix of WP/Oak/Aspen, no access except thru private property, no access for logging due to low wgt./private bridge
14	42290 - Natural Mixed Pine	High Density Log	30.0	Uneven Age	141-170	nice mixed pine stand with older/bigger pines and younger/smaller HW's underneath
15	4133 - Aspen, Mixed Pine	High Density Pole	46.3	33		TA with lots of WP saps and poles, scattered RP/Oak XL's also, some lower ground within stand but most is still operable, commercially cut but trucks had to have gone south to M-76 somehow thru Hudson Creek Swamp



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
17	4133 - Aspen, Mixed Pine	High Density Pole	48.7	33		stand is fairly level, youngest aspen is 1979 YOO and is TA, there are scattered small spots with older aspen which is BTA, scattered R/W pine L- XL's and oak Logs, aspen on the north end is mostly TA with the south and middle parts a mix of TA and BTA
18	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	27.4	Uneven Age		spongy ground with a high water table, possibly operable in the winter but no access for logging due to private property and low wgt/private bridge
20	42140 - Planted Mixed Pine	High Density Log	2.8	Uneven Age		island of WP surrounded by the Hudson Creek Swamp
21	6129 - Mixed Coniferous Lowland Forest	High Density Pole	12.4	92		generally wet but with a few drier areas with TA saps and poles
22	4139 - Aspen, Mixed Deciduous	Medium Density	28.6	23		island in swamp but commercially in 1989, froze a road across the hudson creek swamp, looks like there is on nice aspen clone in the center of the stand and the rest is scattered lower density HW's and conifers
23	42260 - Natural Pine, Mixed Deciduous	High Density Log	93.5	Uneven Age	141-170	RP/WP/Oak SL's separated by areas heavy to TA P-L's, scattered areas heavy to JP poles or WP poles, most aspen/JP/WP is younger than the RP and oak and stand is 2 -aged going towards all-aged, no access for a logging operation due to a low wgt/private bridge and private property
24	6121 - Tamarack	High Density Pole	4.4	Uneven Age		lowland stand with tamarack, scattered black spruce poles and WP XL's, multi-aged
25	6120 - Lowland Cedar	High Density Pole	344.2	112		large and wet cedar stand, part of the Hudson Creek Swamp
26	42201 - Natural White Pine, Mixed Deciduous	High Density Log	7.8	Uneven Age		no access, island of white pine P-L-X surrounded by "L" types in floodplain of Hudson Creek
27	6124 - Lowland Spruce- Fir	High Density Pole	19.0	Uneven Age		middle of stand is a somewhat upland ridge with edges, esp. north edge lower and wetter, WP coming into u.s. on higher ground & lower ground has BS, BF, and WP, u.s. in wettest part is tag alder
29	6127 - Lowland Pine	High Density Log	16.6	Uneven Age	81-110	mix of upland (south and east edges) and lowland (center, west and north edges), higher/drier parts are RP logs/XL's, JP logs/poles, WP poles and a heavy WP sap u.s., lower parts have BF saps/poles with cedar poles in u.s. and scattered WP XL's in the over-story
30	42141 - Planted Mixed Pine, Mixed Deciduous	High Density Pole	14.6	34		roller-chopped 1976, planted to JP 1978, mix of planted and natural JP and natural oak regeneration, intermixed with R-W pine poles
31	6120 - Lowland Cedar	High Density Pole	5.6	112		wet cedar swamp with some blowdown



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
7	122 - Road/Parking Lot	2.4	N/A	Unspecified	Au Sable River Trail
8	6229 - Mixed lowland shrub	7.4	No	Unspecified	stand is a lowland shrub with scattered conifers but includes a narrow forested strip of oak SL and WP saplings on a steep bank between the lowlands and the road, strip is approx. 1 chain wide on average
16	6224 - Treed Bog	2.6	No	Unspecified	
19	6224 - Treed Bog	13.8	No	Unspecified	
28	623 - Emergent Wetland	58.4	N/A	Unspecified	