



ROSCOMMON FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 36

ENTRY YEAR: 2012

Compartment Acreage: 1124

County: Roscommon

Revision Date: 1/26/10

Stand Examiner: D. Ekdom

Legal Description: T24N R02W Sections 20 & 21

Management Area: Au Sable Outwash

Management Goals: Maintain current age and species diversity in a range of early and late successional ecosystems.

Soil and Topography: Terrain is flat to gently rolling throughout the compartment except for the NE corner of Section 21 which rises to the east with a few very steep areas. Soils are well drained Rubicon and Grayling sands in the drier upland portions and poorly drained rifle peat in the Robinson Creek drainages.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Mostly state ownership interspersed with private ownership both within and adjacent to the compartment. Compartment has one small subdivision in Section 20 with permanent residences and seasonal cabins. Other private parcels in and adjacent to compartment include vacant land and permanent residences and seasonal cabins on forested acreages. Bambi Lake Baptist Camp is adjacent to the east edge of the compartment in the north part of Section 22.

Unique, Natural Features: Documented occurrences of Osprey and rough fescue within the compartment as well as high potential for other occurrences of T & E species especially in and adjacent to Robinson Creek and Robinson Creek Flooding.

Archeological, Historical, and Cultural Features: One historical site found during fieldwork and high potential for other sites especially along and adjacent to the creek and the flooding.

Special Management Designations or Considerations: Compartment is within the boundaries of the Forest Fire Experiment Station (FFES) which is designated as a Special Conservation Area. Stands adjacent to Robinson Creek are High Conservation Value Area's (HCVA) because it is a tributary to the S. Branch of the Au Sable River which has Natural River designation. Several stands along Robinson Creek are also part of the draft Old Growth Plan.

Watershed and Fisheries Considerations: Robinson Creek and Robinson Creek Flooding.

Wildlife Habitat Considerations: Maintain ecosystem diversity in the compartment via habitat manipulation to benefit game species such as deer, grouse, rabbits, and turkeys as well as 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 are the Mississippian Michigan Formation and Marshall Sandstone. The

Michigan is quarried for gypsum in the State and the Marshall has been used as a building stone. Most of the nearby gravel pits are associated with upland areas. The nearest gravel pit is located one mile to the northwest. Gravel potential in the NE corner is thought to be good. St. Helen Field lies three miles to the east. The field has produced over 8.7 million BO and 14.7 Bcf gas from the Devonian Richfield Formation and is in secondary recovery operations currently. None of the State land is currently leased in the compartment.

Vehicle Access: Access to the compartment edges and interior is very good via county seasonal roads and forest two-tracks except for the center of the compartment. One forest road is gated by the FFES to protect FFES activities.

Survey Needs: None necessary at this time.

Recreational Facilities and Opportunities: Compartment contains portions of the Roscommon to Geels ORV route and Roscommon to St. Helen snowmobile trail. There is moderate dispersed recreation especially waterfowl and deer hunting.

Fire Protection: Access is excellent and close to fire suppression forces. Several recent fires have been suppressed in this compartment. There are potential wildland-urban interface problems in this compartment and several areas are heavy to jack pine cover types.

Additional Compartment Information: MIMS plots within compartment in NE quarter of Section 21. Proposed treatments include 47 acres of final harvests in jack pine cover types and 37 acres of seed tree & shelter-wood cuts in oak cover types.

➤ **The following 5 reports from the Inventory are attached:**

- ◆ **Cover Type by Age Class**
- ◆ **Cover Type by Management Objective**
- ◆ **Compartment Volume Summary**
- ◆ **Proposed Treatments – No Limiting Factors**
- ◆ **Proposed Treatments – With Limiting Factors**

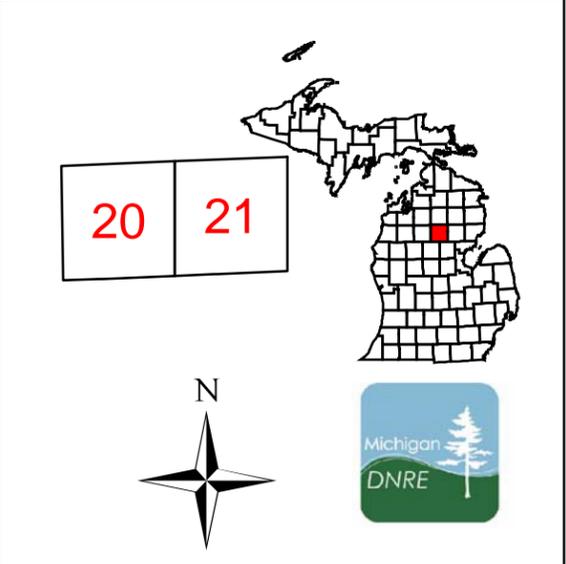
➤ **The following information is displayed, where pertinent, on the attached compartment maps:**

- ◆ **Base feature information, stand numbers, cover types**
- ◆ **Proposed treatments**
- ◆ **Proposed road access system**
- ◆ **Suggested potential old growth**

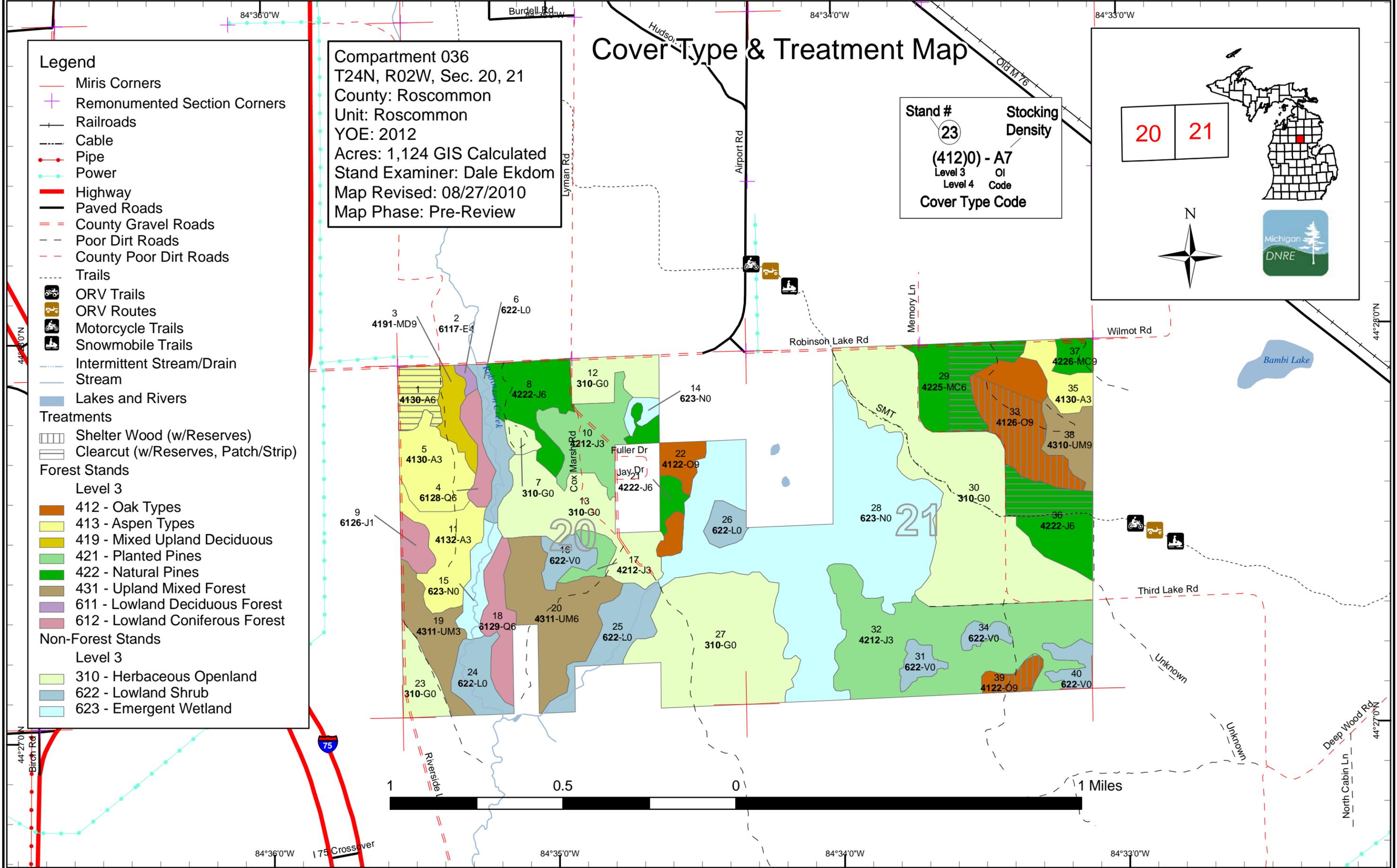
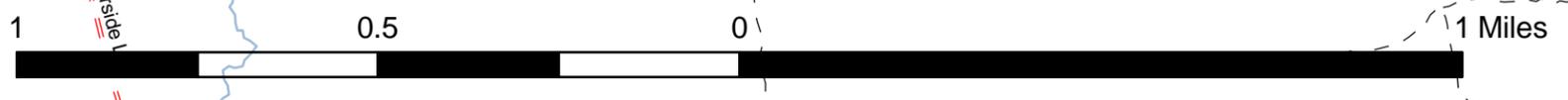
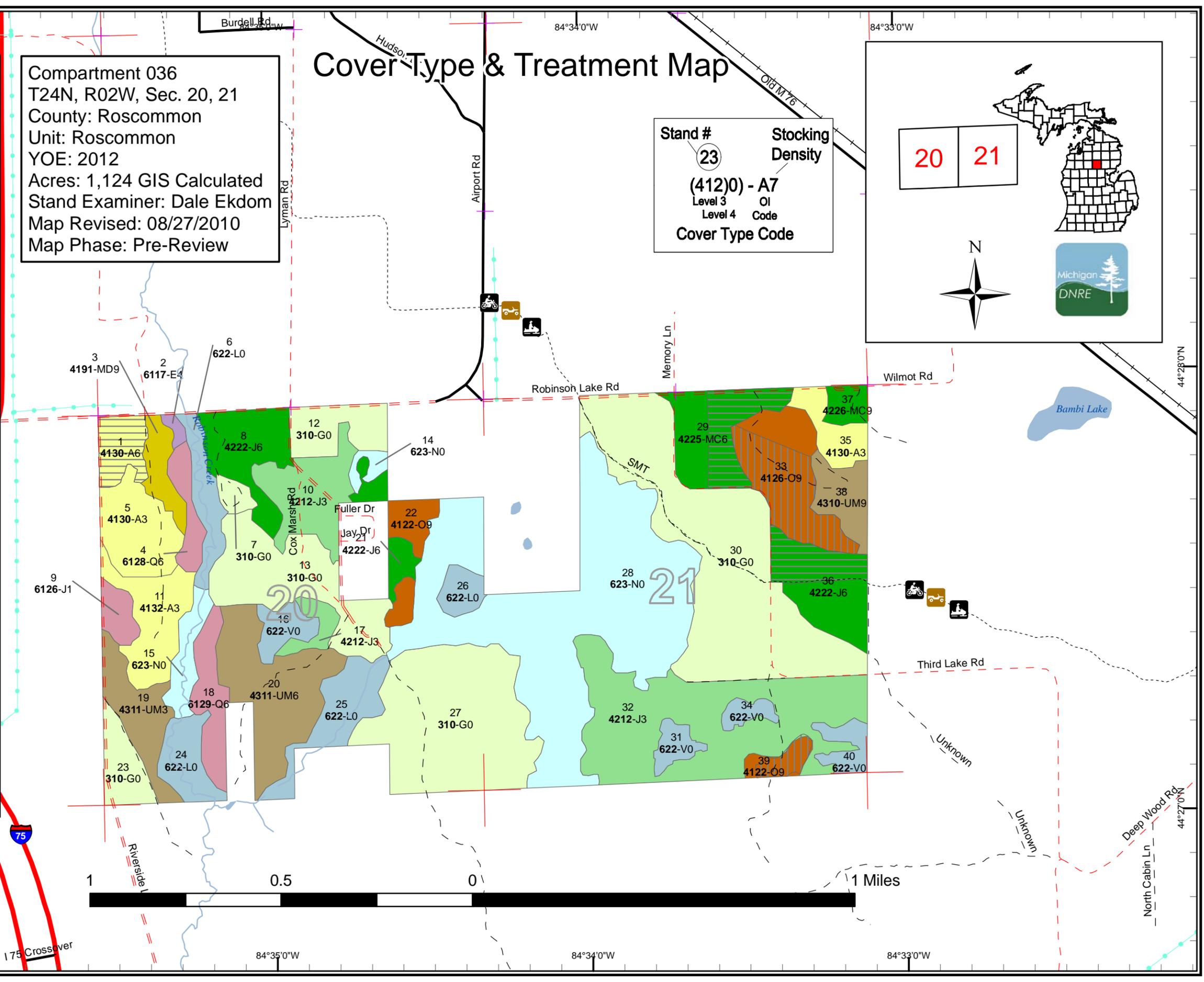
Cover Type & Treatment Map

Compartment 036
 T24N, R02W, Sec. 20, 21
 County: Roscommon
 Unit: Roscommon
 YOE: 2012
 Acres: 1,124 GIS Calculated
 Stand Examiner: Dale Ekdorn
 Map Revised: 08/27/2010
 Map Phase: Pre-Review

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



- Legend**
- Miris Corners
 - Remonumented Section Corners
 - Railroads
 - Cable
 - Pipe
 - Power
 - Highway
 - Paved Roads
 - County Gravel Roads
 - Poor Dirt Roads
 - County Poor Dirt Roads
 - Trails
 - ORV Trails
 - ORV Routes
 - Motorcycle Trails
 - Snowmobile Trails
 - Intermittent Stream/Drain
 - Stream
 - Lakes and Rivers
- Treatments**
- Shelter Wood (w/Reserves)
 - Clearcut (w/Reserves, Patch/Strip)
- Forest Stands**
- Level 3
- 412 - Oak Types
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 431 - Upland Mixed Forest
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest
- Non-Forest Stands**
- Level 3
- 310 - Herbaceous Openland
 - 622 - Lowland Shrub
 - 623 - Emergent Wetland

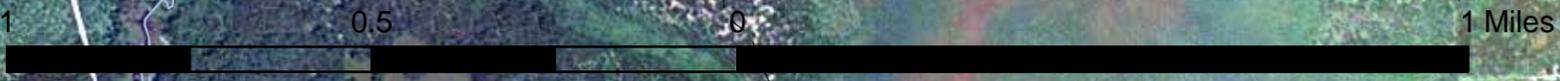
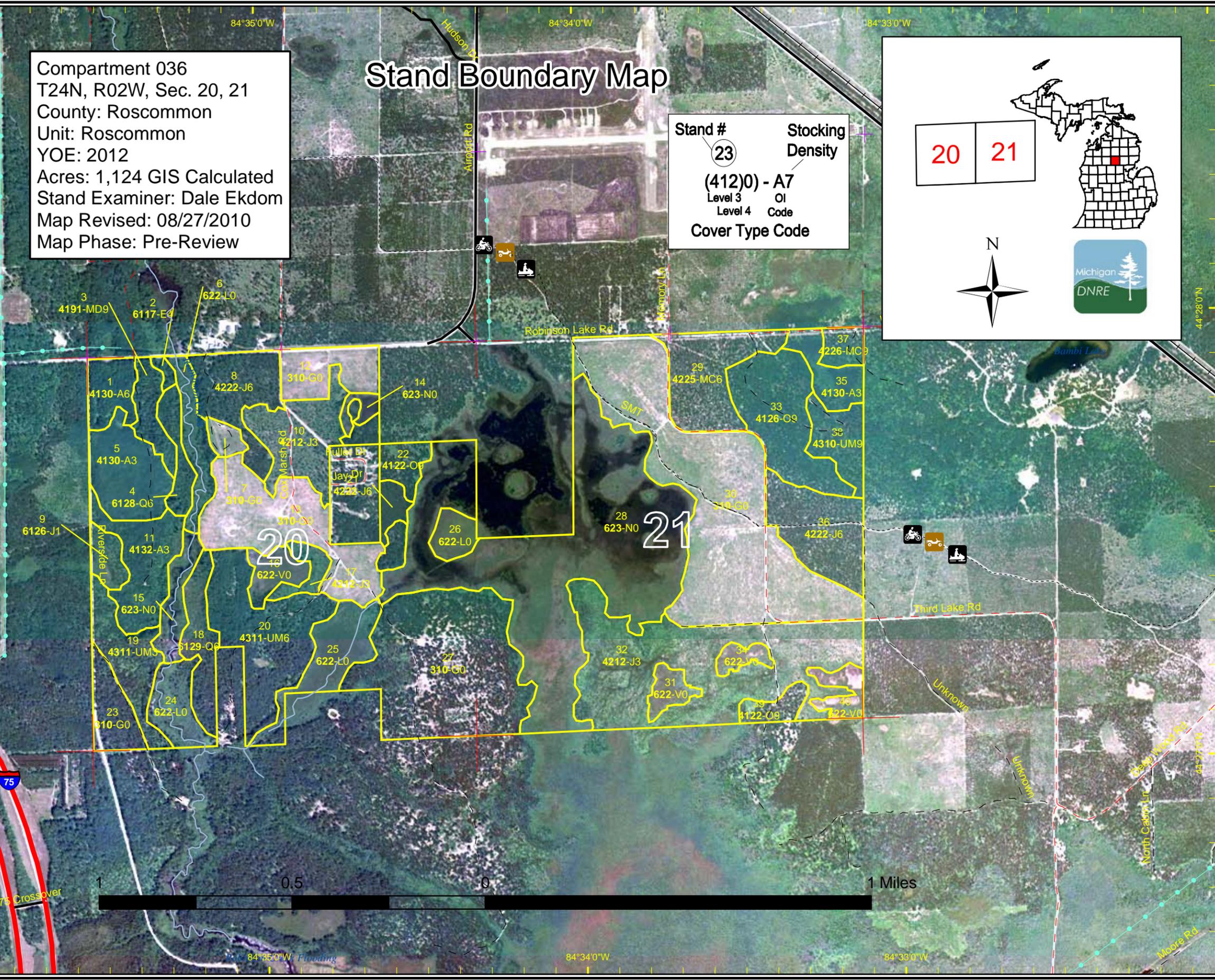


Stand Boundary Map

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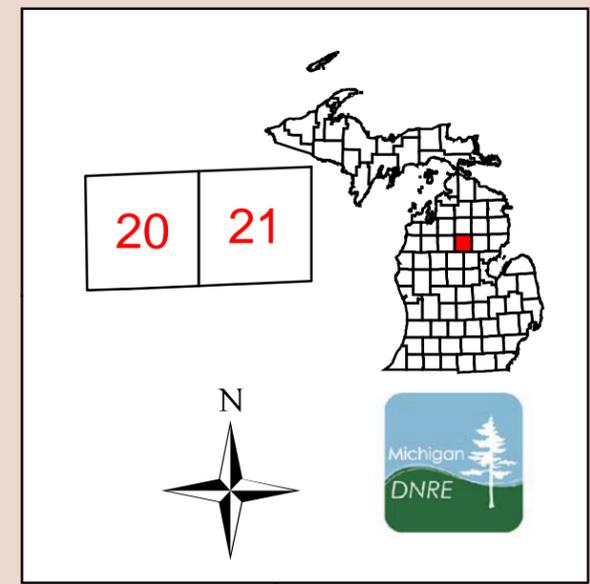
- Legend**
- Miris Corners
 - + Remonumented Section Corners
 - Cable
 - Pipe
 - Power
 - Railroads
 - Highway
 - Paved Roads
 - Poor Dirt Roads
 - County Poor Dirt Roads
 - Trails
 - Interstate Highway
 - ORV Trails
 - ORV Routes
 - Motorcycle Trails
 - Snowmobile Trails
 - Intermittent Stream/Drain
 - Stream
 - Stand Boundaries
- Forest Stands**
- Level 3**
- 412 - Oak Types
 - 413 - Aspen Types
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Dedicated & Proposed Special Conservation Area Map

Compartment 036
 T24N, R02W, Sec. 20, 21
 County: Roscommon
 Unit: Roscommon
 YOE: 2012
 Acres: 1,124 GIS Calculated
 Stand Examiner: Dale Ekdorn
 Map Revised: 08/27/2010
 Map Phase: Pre-Review

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



Legend

- Miris Corners
- ⊕ Remonumented Section Corners
- Stand Boundaries
- Proposed Special Conservation Areas**
- ▨ SCA - Special Conservation Area
- ▩ SCA Removal
- Dedicated Special Conservation Areas**
- Research, Development, and Military Lands
- Wildlife Management Areas
- Cold Water Streams
- Natural Rivers Zoning District
- Natural Rivers Vegetative Buffer
- Forest Stands**
- Level 3**
- 412 - Oak Types
- 413 - Aspen Types
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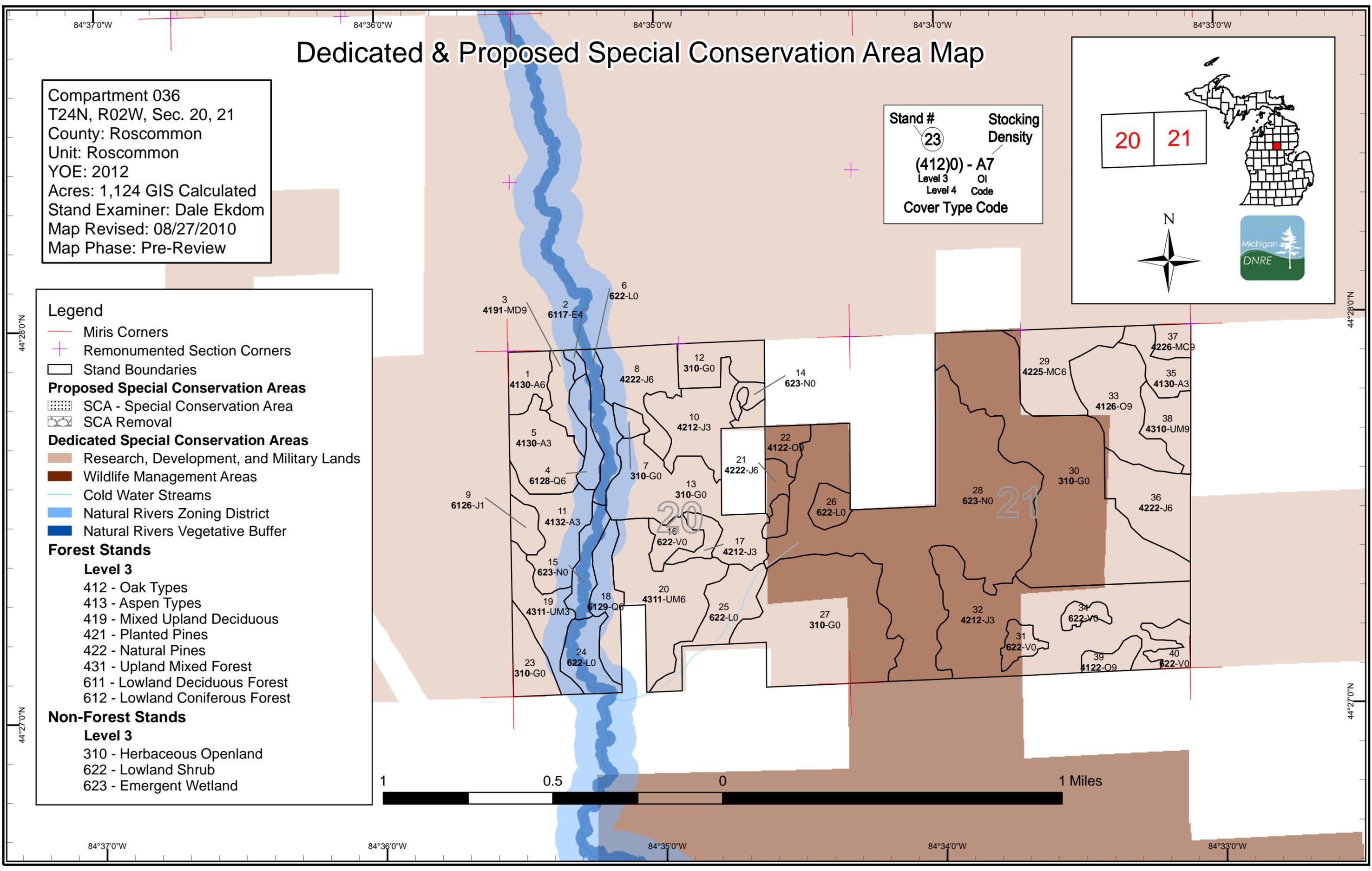


Table 1 – Total Acres by Cover Type and Age Class

Data updated before 10:00 AM



	Age Class														Total	
	Non-Forested	1-9	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	41	28	0	13	0	0	0	0	0	0	0	0	0	82
Bog	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
Herbaceous Openland	312	0	0	0	0	0	0	0	0	0	0	0	0	0	0	312
Jack Pine	0	0	138	8	5	0	0	33	0	0	0	0	0	0	32	215
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	0	28	0	0	0	28
Lowland Deciduous	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
Lowland Shrub	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63
Marsh	194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	194
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	11
Natural Mixed Pines	0	0	0	0	0	0	0	0	33	0	7	0	0	0	0	40
Oak	0	0	0	0	0	0	0	0	0	13	47	0	0	0	0	60
Upland Mixed Forest	0	0	0	72	0	0	0	0	0	0	0	0	0	0	16	88
Total	598	0	179	107	5	15	0	33	44	13	54	28	0	0	48	1124



Table 2 – Proposed Treatment Summaries

Data updated before 10:00 AM

Roscommon Mgt. Unit
Year of Entry 2012

Compartment 036
Total Compartment Acres: 1124

Acres by Treatment Type

Commercial Harvest - 82	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 0	

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen	13	0	0	0	0	0	13
Jack Pine	15	0	0	0	0	0	15
Natural Mixed Pines	19	0	0	0	0	0	19
Oak	0	0	0	35	0	0	35
Total	47	0	0	35	0	0	82



Data updated before 10:00 AM

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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
1 71036001-Cut	13.0	4130 - Aspen	High Density Pole	44	Harvest	Clearcut	Aspen	Cmpt. Review Proposal
<u>Prescription</u> final harvest and manage for aspen, no retention except for leaving scattered conifers for visual and well crowned oaks for wildlife mast, reasons								
<u>Specs:</u> for no retention are for small size of the stand and health concerns with the hypox. conker which is starting								
<u>Other</u> stand has clay pit in the center of the stand used for plowing tests in clay ground which may be left in or out of the sale after consultations with								
<u>Comments:</u> the FFES, small pocket of "L" along Lyman road will need to be buffered, alternative regeneration will be red pine although there should be no difficulty regenerating this stand to aspen								
<u>Next</u> regeneration survey								
<u>Steps:</u>								
29 71036029-Cut	18.6	42250 - Pine, Oak	High Density Pole	75	Harvest	Clearcut with Reserves	Planted Red Pine, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription</u> final harvest and plant red pine but manage for a mixed stand of pine and oak, mark well crowned oaks for visual/mast - especially white oak								
<u>Specs:</u>								
<u>Other</u>								
<u>Comments:</u>								
<u>Next</u> trench and plant red pine using oak weave								
<u>Steps:</u>								
33 71036033-Cut	29.6	4126 - White, Black, N. Pin Oak	High Density Log	93	Harvest	Shelter Wood with Reserves	Oak, Pine	Cmpt. Review Proposal
<u>Prescription</u> Mark 40-50 SF/Acre of large crowned oak to leave favoring white oak and better quality pin/black oak, leave all R/W pine for diversity and visual								
<u>Specs:</u> on 3rd Lake Road								
<u>Other</u> leave several small islands of oak along 3rd Lake Road for retention/visual, plant red pine in areas that are under-stocked in oak or pine,								
<u>Comments:</u> treatment may be smaller than proposed due to adjustments for terrain especially on the north and east sides where terrain is steepest								
<u>Next</u> regeneration survey to determine areas not fully stocked in oak or pine								
<u>Steps:</u>								
36 71036036-Cut	15.3	42220 - Natural Jack Pine	High Density Pole	59	Harvest	Clearcut with Reserves	Planted Jack Pine, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription</u> final harvest and plant jack pine managing for a mixed stand of jack pine and oak, mark well crowned oaks for mast - especially white oaks								
<u>Specs:</u>								
<u>Other</u> east end against private can be left for retention/visual as well as several small islands of smaller jack pine toward west end close to 3rd Lake								
<u>Comments:</u> Road, watch visuals and protection of recreational trail on south end edge of treatment								
<u>Next</u> trench and plant jack pine using oak weave to weave around areas heavy to advanced oak regeneration								
<u>Steps:</u>								
39 71036039-Cut	5.7	4122 - Oak, Pine	High Density Log	89	Harvest	Shelter Wood with Reserves	Oak, Pine	Cmpt. Review Proposal
<u>Prescription</u> Shelterwood/Seed Tree by cutting all jack pine and marking large crowned oak to leave favoring white oak, leave all R/W pine for retention and								
<u>Specs:</u> diversity, no retention in this stand except for the residual oak and R/W pine, Residual BA of oak should be 10-30 SF/Acre								
<u>Other</u> cut with Stand 10 to the south in 71037 in 2009 YOY,								
<u>Comments:</u>								
<u>Next</u> Accept whatever amount and type of regeneration occurs and manage the open areas as oak-pine barrens.								
<u>Steps:</u>								

**Total Treatment
Acreage Proposed: 82.1**



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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Prescription
Specs:

Other
Comment:

Next
Steps:

Limiting Factor and No
Treatment Reason

Total Treatment
Acres Proposed: 0

Data updated before 10:00 AM

**Out of YOE -- Treatments
Prescribed with No Limiting Factor**

Year of Entry: 2012



Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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Prescription
Specs:

Other
Comments:

Next
Steps:

**Total Treatment
Acreage Proposed: 0**

Stand	Roscommon Mgt. Unit		5 – Forested Stands			Compartment: 036
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2012
						General Comments:
1	4130 - Aspen	High Density Pole	13.0	45		TA stand with scattered L & XL pine and oak, TA has hypox canker starte, cut now to regenerate aspen
2	6117 - Lowland Deciduous, Mixed Coniferous	Low Density Pole	2.0	45		low/wet stand of lowland hardwoods with mixed conifers next to Robinson Creek
3	4191 - Mixed Upland Deciduous with Conifer	High Density Log	11.3	70	81-110	mix of all species/products but mostly oak SL/XL over O/A/WP?JP poles, scattered R/W/J pine XL, hold 10 years until A to northwest has regenerated then thin and manage for a mixed stand of oak/pine
4	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	10.0	109		black spruce/cedar swamp with fairly open u.s.
5	4130 - Aspen	High Density Sapling	27.7	17		nice A3 stand, growing well and healthy, scattered conifer saps also
8	42220 - Natural Jack Pine	High Density Pole	32.0	Uneven Age		stand appears to be 2 aged/multi-aged jack pine with the oldest JP 1940 YOO, stand is dry upland but has a high water table within rooting depth of the jack pine, numerous pockets of J3 which are almost pole-size, stand should hold 10 years with minimal volume loss due to the multiple ages of jack pine
9	6126 - Lowland Jack Pine	Low Density Sapling	7.7	26		bog jack pine mixed with a few hardwoods
10	42121 - Planted Jack Pine, Mixed Deciduous	High Density Sapling	29.7	13		cut 1994, seeded 1995, parts filled in with bare root stock in 1997
11	4132 - Aspen, Jack Pine	High Density Sapling	27.6	27		aspen and natural jack pine regeneration
17	42121 - Planted Jack Pine, Mixed Deciduous	High Density Sapling	6.7	15		small stand of planted jack pine adjacent to a bog/treed bog
18	6129 - Mixed Coniferous Lowland Forest	High Density Pole	18.1	109		cedar/black spruce swamp
19	4311 - Pine, Aspen Mix	High Density Sapling	22.6	26		natural jack pine just reaching pole size, scattered larger trees which will eventually be super-canopy trees, upland stand butts grades into a lower terrain adjacent to creek and bog JP to the north, contains inclusion of W9 in a wetter run along the creek, east edge is heavy to black spruce/white pine/tamarck along Robinson Creek
20	4311 - Pine, Aspen Mix	High Density Pole	49.2	27		mix of oak/aspen/maple/jack pine regeneration with residual R/W pine left when cut, approx 10 SF of R/W poles and SL left when cut
21	42220 - Natural Jack Pine	High Density Pole	5.5	39		nice yooung jack pine stand - probably fire origin, lok at in 10 years fro possible harvest with adjacent stand



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Roscommon Mgt. Unit

5 – Forested Stands

Compartment: 036

Data updated before 10:00 AM

Year of Entry: 2012



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
22	4122 - Oak, Pine	High Density Log	12.9	83		oak stand with pockets heavy to either JP or Oak SL, oak and jack pine poor quality, north part has O/J u.s. due to a wildfire in 1996, south part is heavy to RP SL and poles with O/JP SL mixed in, cut or hold 10 years as desired
29	42250 - Pine, Oak	High Density Pole	33.0	76		mature jack pine and oak which needs to be regenerated
32	42120 - Planted Jack Pine	High Density Sapling	101.3	17		jack pine plantation with scattered oak saps
33	4126 - White, Black, N. Pin Oak	High Density Log	39.9	94	81-110	mostly WO SL intermixed with MO and BTA poles and SL, scattered R/W/J pine of various sizes, north end has marginally better oak
35	4130 - Aspen	High Density Sapling	13.3	17		nice A3 stand with scattered WP saps
36	42220 - Natural Jack Pine	High Density Pole	32.7	60		2 aged/multi-aged JP stand with scattered oak/RP, some oak where stand is open to west, pockets of J3 scattered thru-out stand and some parts are more open-grown, good amount of oak regeneration in spots
37	42260 - Natural Pine, Mixed Deciduous	High Density Log	6.9	94	81-110	2 aged stand of oak and pine going towards all aged, WO/MO SL with WP poles and saplings in the u.s., should hold stand 10-20 years until WP u.s. is fully merch. and then thin to avoid damaging the u.s. now if o.s. is removed
38	4310 - Pine, Oak Mix	High Density Log	15.8	Uneven Age	81-110	large wolfy WO/NPO with smaller WP/RM/Aspen/Oak, WP saplings in the understory, developing into an all-aged stand, recommend holding 10-20 years and letting u.s. WP develop more before treating, parts of stand may even have had A/RM removed 15-20 years ago, stand is converting from oak to pine
39	4122 - Oak, Pine	High Density Log	7.2	90	111-140	MO/WO over-story with smaller and slightly younger jack pine in the u.s., scattered R/W pine poles and SL



Stand	Cover Type	Acres	Gen Cmts:
6	622 - Lowland Shrub	15.1	
7	310 - Herbaceous Openland	4.5	
12	310 - Herbaceous Openland	19.2	
13	310 - Herbaceous Openland	51.7	
14	623 - Emergent Wetland	3.9	
15	623 - Emergent Wetland	12.2	
16	6225 - Bog	9.8	
23	310 - Herbaceous Openland	14.6	
24	6229 - Mixed lowland shrub	16.0	"L" with encroaching conifers
25	622 - Lowland Shrub	23.7	
26	622 - Lowland Shrub	7.9	
27	310 - Herbaceous Openland	91.1	
28	623 - Emergent Wetland	177.9	
30	310 - Herbaceous Openland	130.6	
31	6225 - Bog	6.9	
34	6225 - Bog	5.0	
40	6225 - Bog	8.5	



7 – 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.

Data updated before 10:00 AM

Stand	SCA Type	SCA Name	Acres	Comments
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8 – 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.

Data updated before 10:00 AM

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

Conservation Area	Type	Description
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	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.
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.
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.