



Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 83

Entry Year 2015

Acreage: 1,770

County Marquette

Management Area: Dead Horse Moraines

Revision Date: 08/06/2013

Stand Examiner: Theresa Sysol

Legal Description:

T43N R24W Section(s) 22-24

Identified Planning Goals:

To maintain the health and sustainability of the forest, while providing for wildlife, fisheries, environmental and recreational needs. Falls within a known deer wintering area, with timber management a lesser priority.

Soil and topography:

Primarily Carbondale and Tawas mucks with slightly higher grounds of Shoepac-Ensley, Charlevoix-Ensley.

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

Private ownerships to the south, either for recreational or residential purposes. State lands to the north and west.

Unique Natural Features:

None listed with MNFI. Potential for calypso orchid and ram's head lady's-slipper. Lots of cedar type. Potential for great blue heron rookery. Potential for gray wolf.

Archeological, Historical, and Cultural Features:

none identified with HAL.

Special Management Designations or Considerations:

Dead Horse Moraines Management Area

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations:

Compartment 83 is found within the Dead Horse Moraines Management Area; which is Ground Moraines in southeastern Marquette, southwestern Alger, and northwestern Delta Counties. The State Forest covers about 88,000 acres and is mostly contiguous. The dominant Natural Communities are poor conifer swamps, mesic northern forests, and dry northern forests. Major forest cover types include northern hardwood, aspen, and mixed lowland conifer. This management area provides multiple benefits to the public including forest products, dispersed recreational activities, and habitat for fish and wildlife species. The Dead Horse Moraine management area contains a large proportion of hardwood forest which regenerates well partly due to the heavier snow cover and lower deer numbers than the southern portion of this Management Area where regeneration is more problematic. The primary focus of wildlife habitat management in the Dead Horse Moraine Management Area are: mast (hard and soft); mature forest (upland deciduous, especially aspen and mixed forest with little understory); coarse woody debris, early successional forest, and deer wintering complexes.

The following have been identified as featured species for the Dead Horse Moraine Management Area: Black Bear, Pileated Woodpecker, Ruffed Grouse, and White-Tailed Deer. However, the featured species concept does not preclude the management for other wildlife species within a particular MA, rather it is simply intended to be as a tool to help prioritize or focus habitat management.

For lands purchased with Pittman–Robertson Act or Game and Fish funds, the primary objective of vegetative management must be wildlife restoration.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of peat and muck and medium-textured till. There is insufficient data to determine the glacial drift thickness. The Ordovician Trenton and Black River Groups subcrop below the glacial drift. The Trenton and Black River are quarried for stone/dolomite elsewhere in the UP. Gravel pits are not located in the area and potential appears to be limited. Abandoned iron mines are located eleven miles to the northwest. Section 23 was previously leased for metallic

exploration. There is no economic oil and gas production in the UP.

Vehicle Access:

Extremely limited access, due to surrounding private lands and/or lowland grounds.

Survey Needs:

none

Recreational Facilities and Opportunities:

Mainly local hunting opportunities.

Fire Protection:

Response time would be well over an hour, and control efforts could take more than 4 hours, due to access issues and lowland soils. Alternate ground suppression tactics would be required.

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: 083
 T43N R24W Sec. 22, 23, 24
 County: Marquette
 Unit: Gwinn
 YOE: 2015
 Acres: 1,770 GIS Calculated
 Examiner: Theresa Sysol
 Map Revised: 08/06/2013
 Map Phase: Pre-Review

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

22 23 24



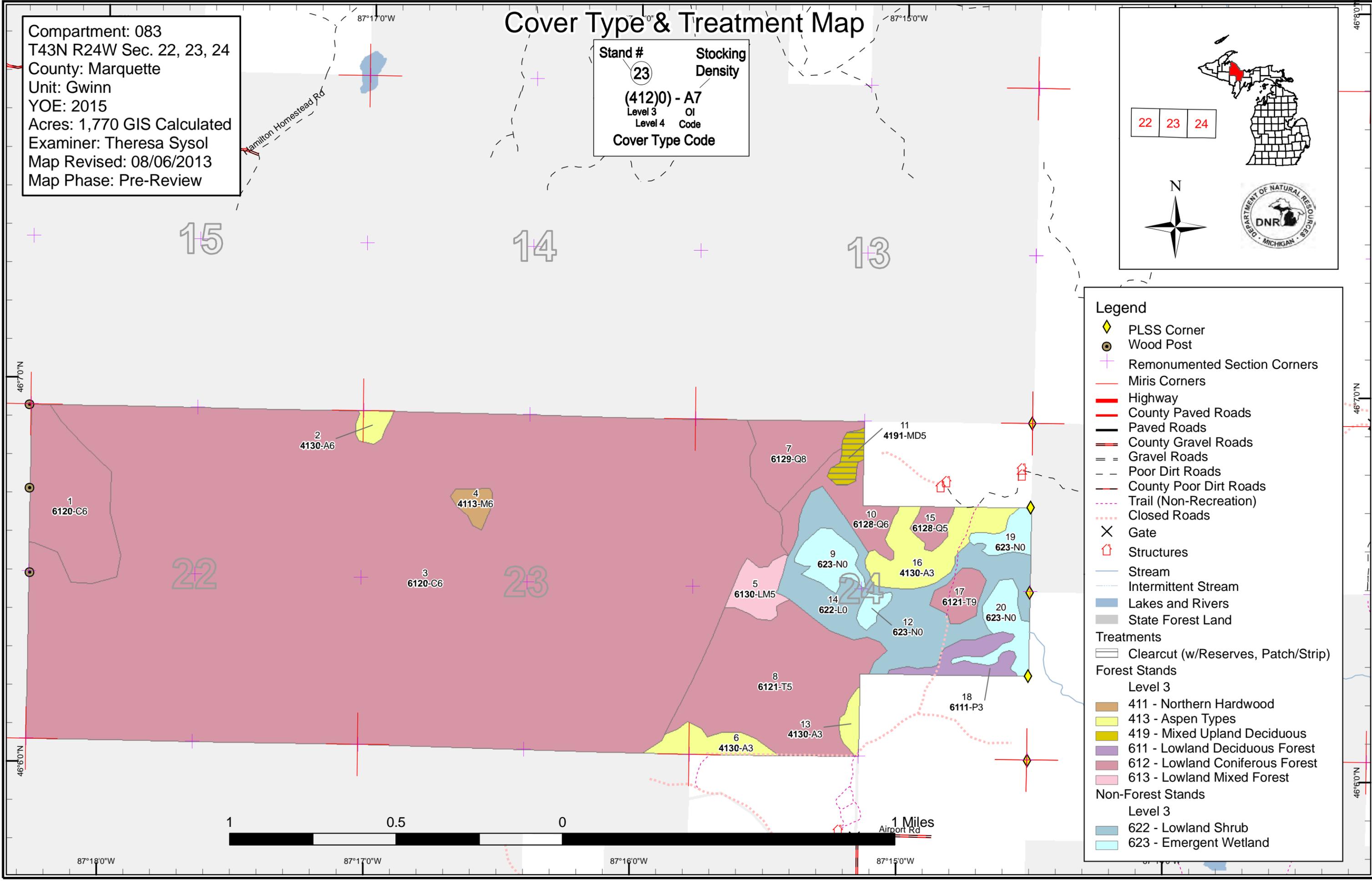
Legend

- PLSS Corner
 - Wood Post
 - Remonumented Section Corners
 - Miris Corners
 - Highway
 - County Paved Roads
 - Paved Roads
 - County Gravel Roads
 - Gravel Roads
 - Poor Dirt Roads
 - County Poor Dirt Roads
 - Trail (Non-Recreation)
 - Closed Roads
 - Gate
 - Structures
 - Stream
 - Intermittent Stream
 - Lakes and Rivers
 - State Forest Land
- Treatments**
- Clearcut (w/Reserves, Patch/Strip)
- Forest Stands**
- Level 3
- 411 - Northern Hardwood
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest
 - 613 - Lowland Mixed Forest
- Non-Forest Stands**
- Level 3
- 622 - Lowland Shrub
 - 623 - Emergent Wetland

46°7'0"N
46°6'0"N

46°8'0"N
46°7'0"N
46°6'0"N

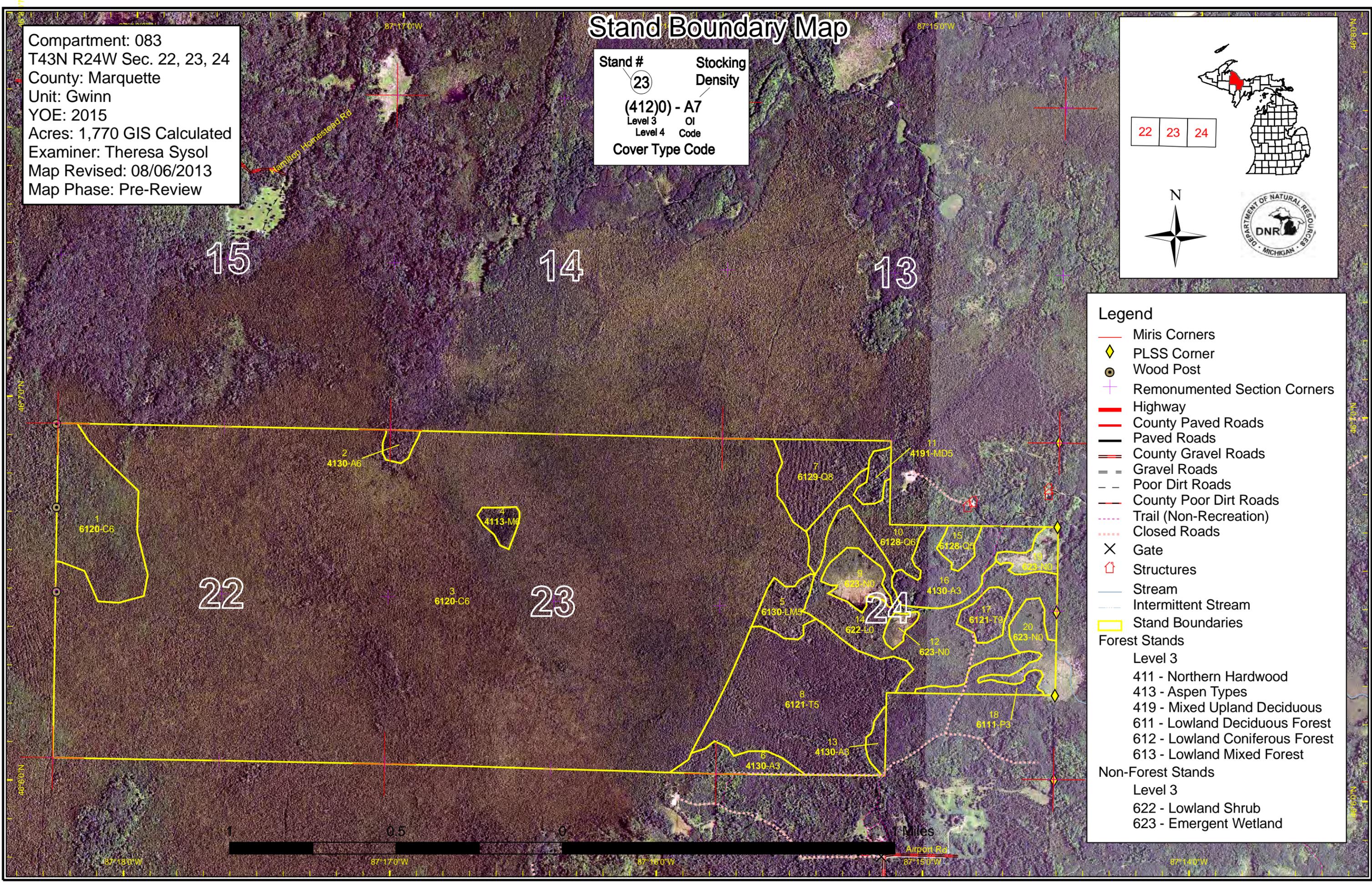
87°18'0"W 87°17'0"W 87°16'0"W 87°15'0"W



Stand Boundary Map

Compartment: 083
 T43N R24W Sec. 22, 23, 24
 County: Marquette
 Unit: Gwinn
 YOE: 2015
 Acres: 1,770 GIS Calculated
 Examiner: Theresa Sysol
 Map Revised: 08/06/2013
 Map Phase: Pre-Review

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



Legend

- Miris Corners
- ◆ PLSS Corner
- Wood Post
- ⊕ Remonumented Section Corners
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- == Gravel Roads
- - Poor Dirt Roads
- - County Poor Dirt Roads
- - Trail (Non-Recreation)
- ⋯ Closed Roads
- × Gate
- ⌂ Structures
- Stream
- Intermittent Stream
- ▭ Stand Boundaries

Forest Stands

Level 3

- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

Non-Forest Stands

Level 3

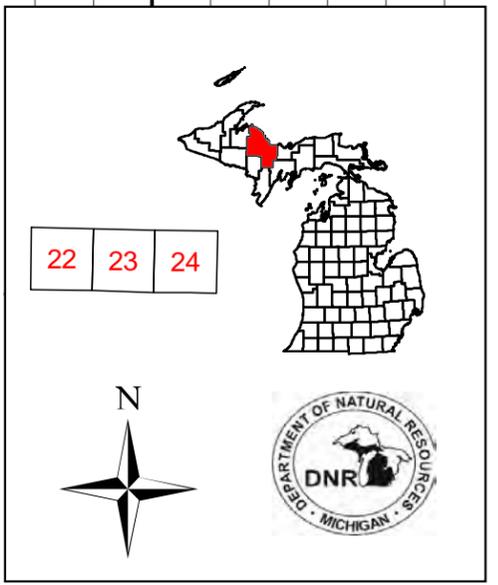
- 622 - Lowland Shrub
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87°17'0"W

Special Conservation Areas & Site Conditions Map

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



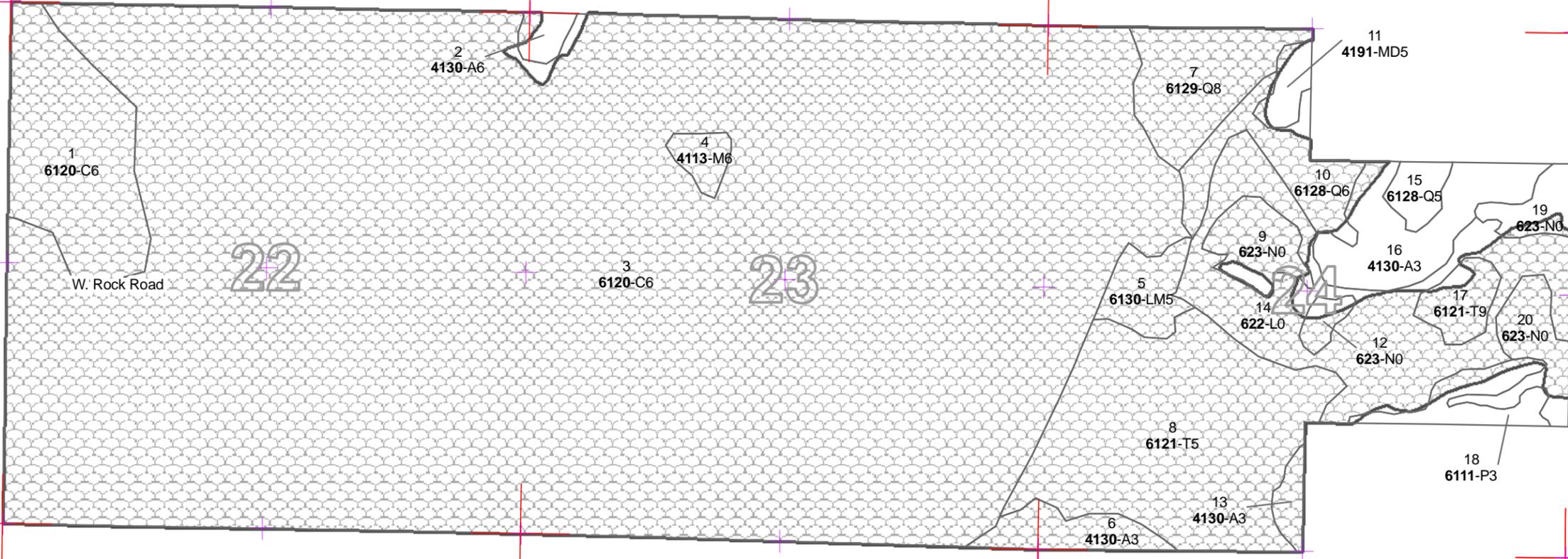
15

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46°7'0"N

Legend
 — Miris Corners
 □ Stand Boundaries
 □ Reviewable SCAs
 ■ SCA Removal



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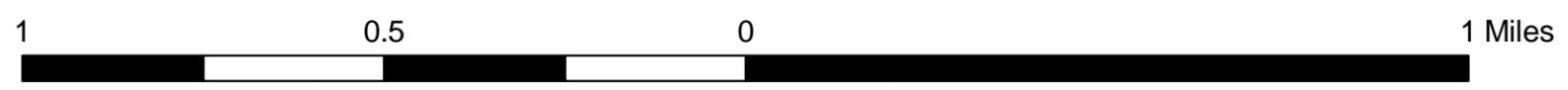
23

19

46°6'0"N

46°7'0"N

46°6'0"N



87°18'0"W

87°17'0"W

87°16'0"W

87°15'0"W

87°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	0	0	54	5	0	0	0	0	0	0	0	0	0	0	60
Cedar	0	0	0	0	0	0	0	0	65	1271	0	0	0	0	1337
Lowland Aspen/Balsam Poplar	0	0	0	15	0	0	0	0	0	0	0	0	0	0	15
Lowland Conifers	0	0	0	0	0	0	25	0	34	0	0	0	0	7	67
Lowland Mixed Forest	0	0	0	0	0	0	0	15	0	0	0	0	0	0	15
Lowland Shrub	86	0	0	0	0	0	0	0	0	0	0	0	0	0	86
Marsh	46	0	0	0	0	0	0	0	0	0	0	0	0	0	46
Mixed Upland Deciduous	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7
Northern Hardwood	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6
Tamarack	0	0	0	0	0	0	120	11	0	0	0	0	0	0	131
Total	132	0	54	20	0	0	0	145	33	106	1271	0	0	7	1770



Report 2 – Proposed Treatment Summaries

Gwinn Mgt. Unit
Year of Entry 2015

Compartment 083
Total Compartment Acres: 1,770

Acres by Treatment Type

Commercial Harvest - 7	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
Mixed Upland Deciduous	7	0	0	0	0	0	7
Total	7	0	0	0	0	0	7

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	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
11	32083011-Cut	7.0	4191 - Mixed Upland Deciduous with Conifer	Medium Density Pole	82	51-80	Harvest	Clearcut	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal

Prescription Remove all aspen, balsam fir; leave a few paper birch, red maple (through spec); and leave all cedar, white spruce.

Specs:

Other Private access issues. Negotiate cut (scale sale) with sale already prepared and sold in the Esc MU, which is ~ 3/4 miles to the east if possible.

Comments: Otherwise, too difficult to sell as is. Most likely winter cut only. Stand is slowly converting to longer rotation species.

Next Steps: Monitor for successful regeneration of mixed species.

Steps:

Proposed

Start Date: 10/01/2013

**Total Treatment
Acreage Proposed: 7.0**



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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

Gwinn Mgt. Unit
Theresa Sysol : Examiner

Compartment 083
Year of Entry 2015

Availability for Management

Total Acres	Acres		Dominant Site Conditions	No	3H	2H	2G
	Available	Not Available					
60	60		Aspen	60			
1337		1337	Cedar		1,271		65
15	15		Lowland Aspen/Balsam Poplar	15			
67	7	60	Lowland Conifers	7		34	25
15		15	Lowland Mixed Forest			15	
7	7		Mixed Upland Deciduous	7			
6		6	Northern Hardwood			6	
131		131	Tamarack			131	
1,637	89	1,548	Total Forested Acres	89	1,271	186	91
	5%	95%	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	Not Available	2G: Too wet (sensitive soils, does not include access issues)	65	3H: Deer Wintering Areas			
Comments:							
003	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	169	2G: Too wet (sensitive soils, does not include access issues)	3H: Deer Wintering Areas	2B: Unknown if access through adjacent landowner(s) is possible	
Comments:							
004	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	11	2B: Unknown if access through adjacent landowner(s) is possible	No Limiting Factor		
Comments:							

Report 5 – Site Conditions

Gwinn Mgt. Unit
Theresa Sysol : Examiner

Compartment 083
Year of Entry 2015

005	Not Available	2G: Too wet (sensitive soils, does not include access issues)	25	2B: Unknown if access through adjacent landowner(s) is possible
Comments:				
006	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	7	3H: Deer Wintering Areas
Comments:				
007	Not Available	3H: Deer Wintering Areas	1,272	2G: Too wet (sensitive soils, does not include access issues)
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
W. Rock Road	Potential Old Growth		SCA Removal	1676.6
Comments				
SCA is covered by Deer Wintering Complex layer				



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	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.

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Gwinn Mgt. Unit

Report 8 – Forested Stands

Compartment: 083
Year of Entry: 2015

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6120 - Lowland Cedar	High Density Pole	65.4	92		
2	4130 - Aspen	High Density Pole	5.3	38		Part of timber sale cut in 1970's.
3	6120 - Lowland Cedar	High Density Pole	1271.5	106	141-170	Extremely wet stand. Perched roots, some blowdown. Ground cover of sphagnum, lab tea noted.
4	4113 - R.Maple, Conifer	High Density Pole	6.5	92		Isolated hardwood island within cedar swamp.
5	6130 - Fir, Aspen, Maple	Medium Density Pole	14.5	83		Very small island patches and low ground timber within swamp.
6	4130 - Aspen	High Density Sapling	14.5	23	51-80	Small portion of stand (~1.5 acs) was not treated, and contains more pole/log sized aspen, maple, cedar and fir. Grasses, some hazel ground cover noted - edges are more lowland ground cover.
7	6129 - Mixed Coniferous Lowland Forest	Medium Density Log	34.5	93		Tamarack over cedar with thick tagalder. Very wet.
8	6121 - Tamarack	Medium Density Pole	119.8	76	1-50	Tamarack with heavy tagalder understory. Isolated patches of birch, aspen and fir, which are being replaced by red maple, fir saplings as they die out. Cedar present is mainly in small clumps of 3 or 4 trees dispersed throughout stand.
10	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	25.2	79		dead ash and paper birch within. Sphagnum ground cover
11	4191 - Mixed Upland Deciduous with Conifer	Medium Density Pole	7.0	82	51-80	Small upland stand of timber - older aspen converting to red maple and fir.
13	4130 - Aspen	High Density Sapling	5.2	20		Stand edges are lowland with residual aspen, spruce and heavier tagalder.
15	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	7.5	Uneven Age	51-80	Part of "North Days River Block" sale #025-85. Mix of upland and lowland grounds; clump red maple sprouts. Ground cover noted - club moss.
16	4130 - Aspen	High Density Sapling	34.6	25		"North Days River Block" sale # 025-85 - cut 3/1986 - 2/1988. Mix of upland and lowland aspen. Club moss ground cover noted.
17	6121 - Tamarack	High Density Log	11.2	89	81-110	Almost pure stand of tamarack - trace amount of aspen, maple, fir and spruce. Ground cover noted includes grasses, sedge and sphagnum.

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Gwinn Mgt. Unit

Report 8 – Forested Stands

Compartment: 083
Year of Entry: 2015



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
18	6111 - Lowland Balsam Poplar	High Density Sapling	14.9	33		T. sale #16/75A - "South Days River Sale" (~10 acs) cut Nov, 1975 - Feb, 1982. Slightly higher grounds are heavier to quaking aspen, balsam fir with ground cover of bracken fern, club moss noted.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
9	6239 - Mixed Emergent Wetland	15.3	No	Unspecified	Beaver flooding/water
12	6239 - Mixed Emergent Wetland	4.3	No	Unspecified	Beaver flooding/water
14	6229 - Mixed lowland shrub	86.3	No	Unspecified	
19	6239 - Mixed Emergent Wetland	9.8	No	Unspecified	Standing dead timber/snags within. Beaver flooding.
20	6239 - Mixed Emergent Wetland	16.7	No	Unspecified	Beaver flooding/water