



## ROSCOMMON FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 79      ENTRY YEAR: 2012

Compartment Acreage: 1126      County: Roscommon

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**Revision Date:** 1/27/10

**Stand Examiner:** D. Ekdom

**Legal Description:** T23N R04W Sections 28, 29, & 33

**Management Area:** Houghton Lake Wetlands

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

**Soil and Topography:** Most of the compartment is flat to slightly rolling except for center of Section 29 which is hilly to fairly steep in spots with a NE aspect

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** Compartment is a solid block of state land broken up by US-127 and is bounded by state land on the north and northwest and private property on the rest of the compartment. Land use on private property includes farmland with permanent residences, wooded acreages with either seasonal or permanent residences, and sub-divisions with either seasonal or permanent residences.

**Unique, Natural Features:** Documented reports of black tern, least bittern, and osprey within the compartment with a great blue heron rookery on stands to the north.

**Archeological, Historical, and Cultural Features:** Documented reports of archeological site(s) within the compartment.

**Special Management Designations or Considerations:** The south unit of the Houghton Lake Flats is within the compartment and is classified as a Special Conservation Area (SCA).

**Watershed and Fisheries Considerations:** Houghton Lake Flats and Houghton Lake on the east side of the compartment. There is also a large wetland complex west of US-127.

**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 within the Houghton Lake Flats such as eagles, osprey, and great blue herons.

**Mineral Resource and Development Concerns and/or Restrictions:** Surface sediments consist of peat/muck and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is the Mississippian Michigan Formation. The Michigan is quarried for gypsum in the State. Most of the nearby gravel pits are associated with upland areas. Several gravel pits are located in Section 3. Gravel potential is thought to be good in the upland areas. East Norwich Field lies seven miles to the northwest. The field has produced over 15.9 million BO and 15.7 Bcf gas

primarily 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:** Vehicle access to most of the compartment exterior is good via county roads but restricted by US-127. The south dike of the Houghton Lake Flats is protected by a wildlife gate.

**Survey Needs:** None necessary at this time.

**Recreational Facilities and Opportunities:** No developed recreational facilities within the compartment except for a wildlife viewing platform along Old 27 in Section 28. The rest of the compartment receives moderate hunting pressure, mostly from locals.

**Fire Protection:** Fire protection in this compartment is not a problem due to close proximity of suppression forces and wet terrain. However, there is a well developed wildland-urban interface within the compartment.

**Additional Compartment Information:** This compartment has many records of invasive species, mostly associated within or on the boundary of the Houghton Lake Flats. Proposed treatments include 25 acres of final harvests in aspen and jack pine cover types and 12 acres of thinnings in oak cover types.

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

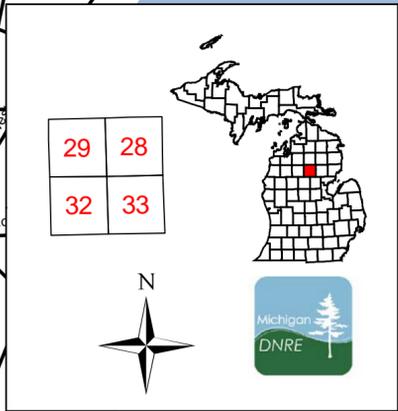
- ◆ **Cover Type by Age Class**
- ◆ **Cover Type by Management Objective**
- ◆ **Compartment Volume Summary**
- ◆ **Proposed Treatments – No Limiting Factors**
- ◆ **Proposed Treatments – With Limiting Factors**

➤ **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

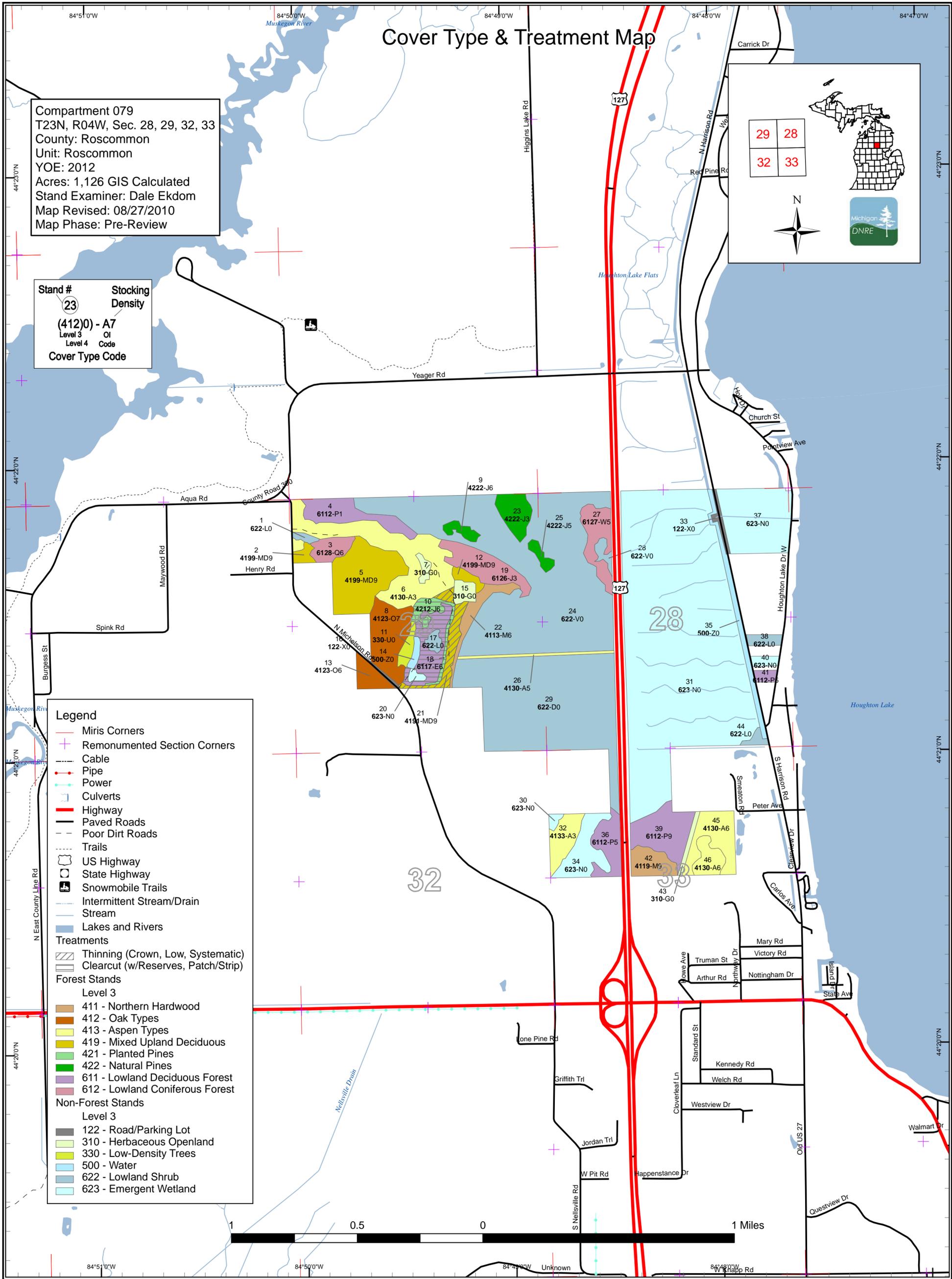
Compartment 079  
 T23N, R04W, Sec. 28, 29, 32, 33  
 County: Roscommon  
 Unit: Roscommon  
 YOY: 2012  
 Acres: 1,126 GIS Calculated  
 Stand Examiner: Dale Ekdorn  
 Map Revised: 08/27/2010  
 Map Phase: Pre-Review



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

## Legend

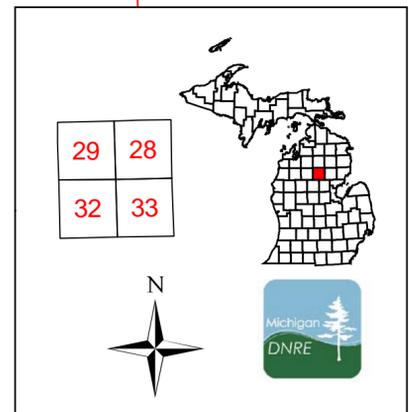
- Miris Corners
- Remonumented Section Corners
- Cable
- Pipe
- Power
- Culverts
- Highway
- Paved Roads
- Poor Dirt Roads
- Trails
- US Highway
- State Highway
- Snowmobile Trails
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers
- Treatments
  - Thinning (Crown, Low, Systematic)
  - Clearcut (w/Reserves, Patch/Strip)
- Forest Stands
  - Level 3
    - 411 - Northern Hardwood
    - 412 - Oak Types
    - 413 - Aspen Types
    - 419 - Mixed Upland Deciduous
    - 421 - Planted Pines
    - 422 - Natural Pines
    - 611 - Lowland Deciduous Forest
    - 612 - Lowland Coniferous Forest
  - Non-Forest Stands
    - Level 3
      - 122 - Road/Parking Lot
      - 310 - Herbaceous Openland
      - 330 - Low-Density Trees
      - 500 - Water
      - 622 - Lowland Shrub
      - 623 - Emergent Wetland



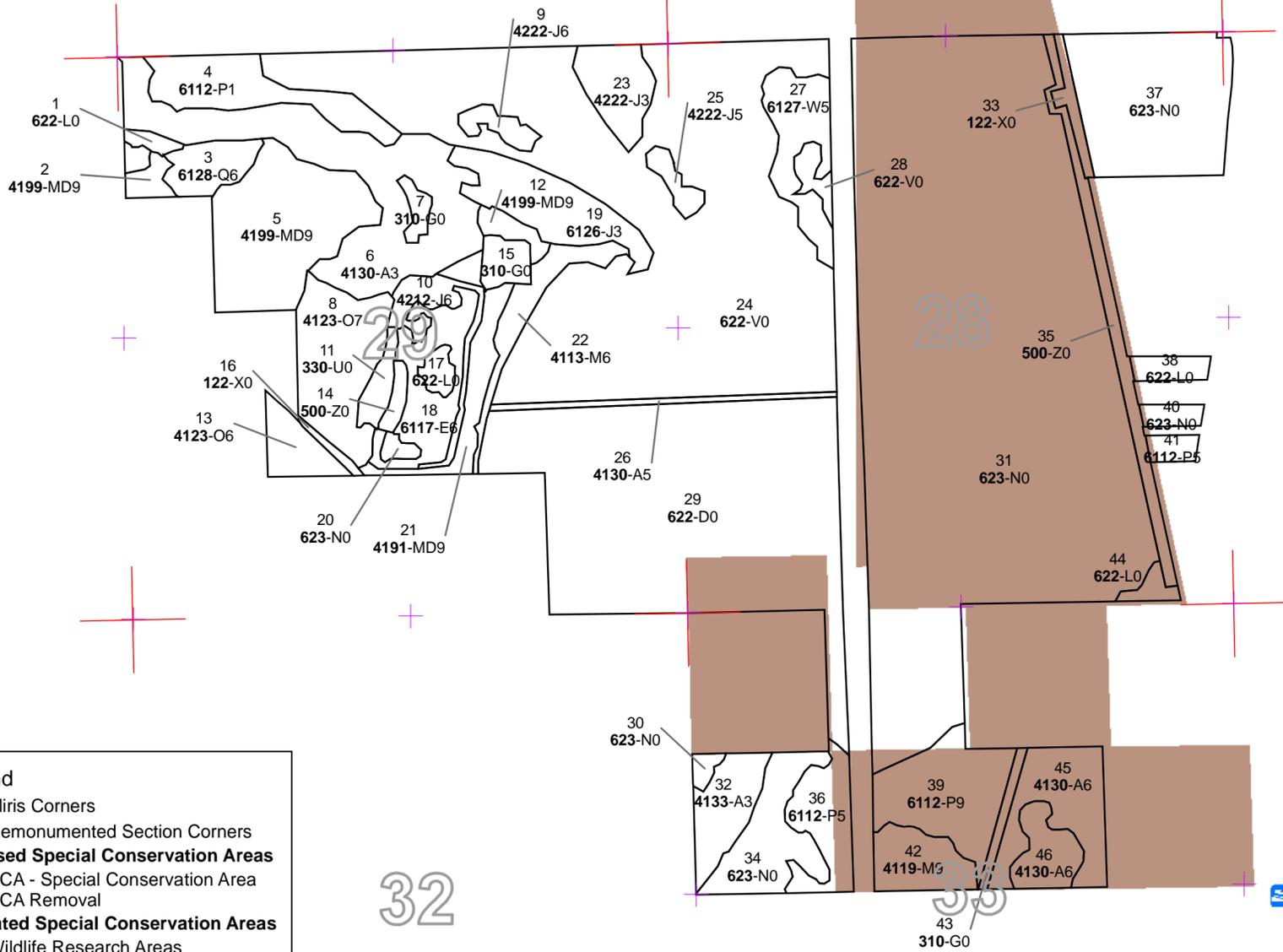


# Dedicated & Proposed Special Conservation Area Map

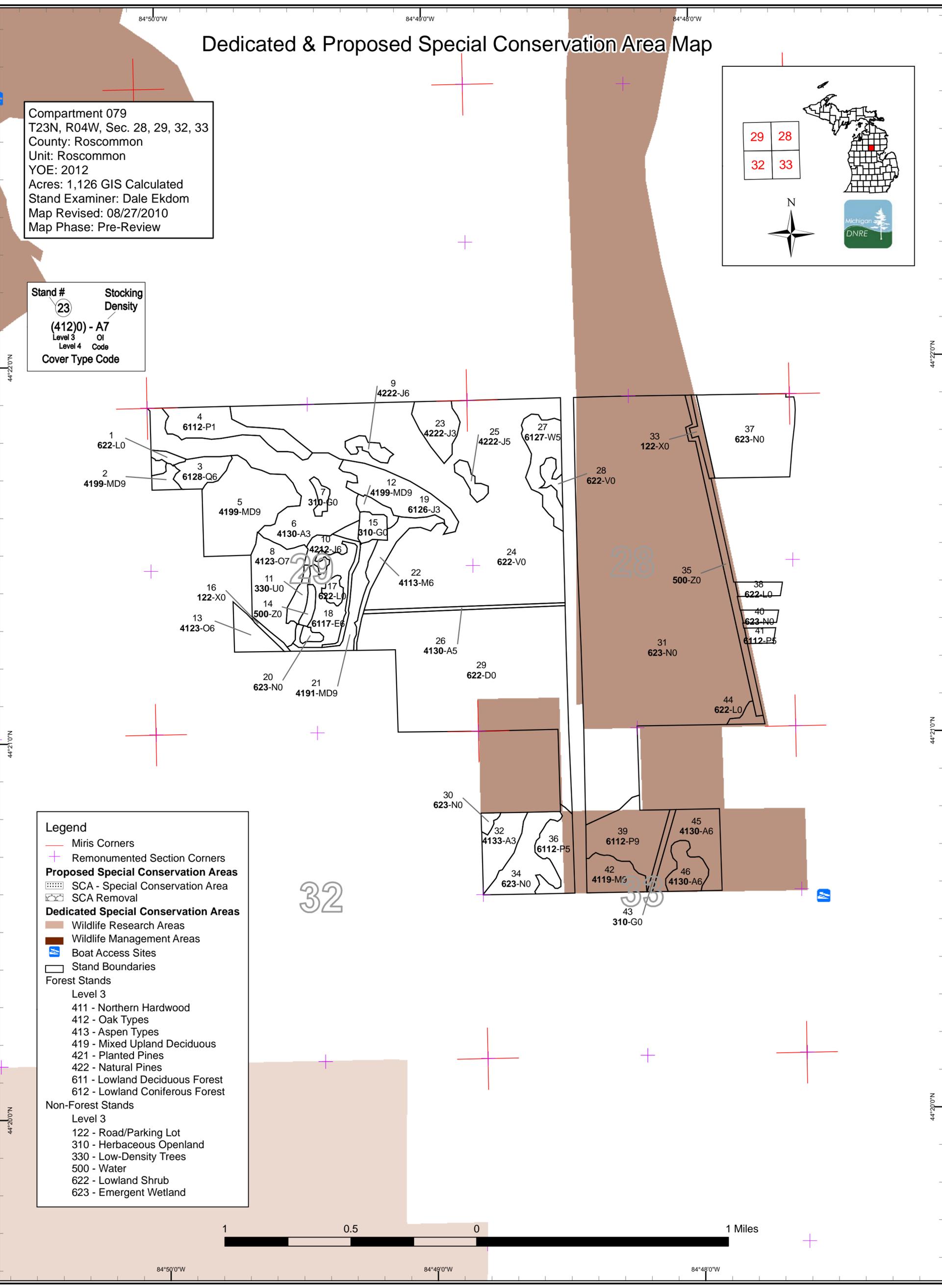
Compartment 079  
 T23N, R04W, Sec. 28, 29, 32, 33  
 County: Roscommon  
 Unit: Roscommon  
 YO: 2012  
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 Map Revised: 08/27/2010  
 Map Phase: Pre-Review



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



- Legend**
- Miris Corners
  - ⊕ Remonumented Section Corners
  - Proposed Special Conservation Areas**
  - ▨ SCA - Special Conservation Area
  - ▩ SCA Removal
  - Dedicated Special Conservation Areas**
  - Wildlife Research Areas
  - Wildlife Management Areas
  - ⚓ Boat Access Sites
  - Stand Boundaries
  - Forest Stands**
  - Level 3
  - 411 - Northern Hardwood
  - 412 - Oak Types
  - 413 - Aspen Types
  - 419 - Mixed Upland Deciduous
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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	54	12	0	13	0	0	0	19	0	0	0	0	0	97
Bog	209	0	0	0	0	0	0	0	0	0	0	0	0	0	0	209
Herbaceous Openland	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Jack Pine	0	0	31	0	0	8	0	0	0	7	0	0	0	0	0	47
Low-Density Trees	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Lowland Aspen/Balsam Poplar	0	0	19	0	0	3	0	0	0	24	0	0	0	0	14	60
Lowland Conifers	0	0	0	0	0	0	16	0	0	8	0	0	0	0	0	24
Lowland Deciduous	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	17
Lowland Shrub	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Marsh	379	0	0	0	0	0	0	0	0	0	0	0	0	0	0	379
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	5	48	0	0	0	3	56
Northern Hardwood	0	0	0	0	0	10	0	0	0	0	0	0	0	0	11	21
Oak	0	0	0	0	0	0	0	0	0	8	25	0	0	0	0	33
Treed Bog	139	0	0	0	0	0	0	0	0	0	0	0	0	0	0	139
Urban	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Water	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
<b>Total</b>	<b>772</b>	<b>0</b>	<b>104</b>	<b>12</b>	<b>0</b>	<b>50</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>72</b>	<b>73</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>28</b>	<b>1126</b>



## Table 2 – Proposed Treatment Summaries

Data updated before 10:00 AM

Roscommon Mgt. Unit  
Year of Entry 2012

Compartment 079  
Total Compartment Acres: 1126

### Acres by Treatment Type

Commercial Harvest - 36	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
Jack Pine	8	0	0	0	0	0	8
Lowland Deciduous	17	0	0	0	0	0	17
Mixed Upland Deciduous	0	0	0	0	11	0	11
<b>Total</b>	<b>25</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>36</b>



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
10 71079010-Cut	8.3	42120 - Planted Jack Pine	High Density Pole	47	Harvest	Clearcut	Planted Red Pine, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription</u> final harvest stand by cutting all aspen and jack pine but thin rim of RP from below by removing 1/3rd of the volume, mark oak mast trees to								
<u>Specs:</u> leave, no retention due to small size of stand, steep slopes, and desire to expand aspen areas of the stand								
<u>Other</u> remove every 3rd row where possible or remove 15' - leave 30' up/down slopes where it's not feasible to remove rows, leave out of the sale any								
<u>Comments:</u> areas with really steep slopes which can't be negotiated with equipment								
<u>Next</u> trench and plant red pine except in areas heavy to aspen regeneration AND areas where red pine was thinned								
<u>Steps:</u>								

12 71079012-Cut_exp-1	1.8	4199 - Other Mixed Upland Deciduous	High Density Log	89	Harvest	Crown Thinning	Other Mixed Upland Deciduous	Cmpt. Review Proposal
<u>Prescription</u> cut all aspen and thin rest of species by marking to cut leaving 90 SF/Acre residual BA of mostly oak, favor white oak over red oak and red oak								
<u>Specs:</u> over other hardwoods, no retention due to small size of stand and stand age, manage to retain a mix of oak and other hardwoods in the canopy, leave all conifers for diversity								
<u>Other</u> opening up the canopy enough to create some regeneration holes to encourage more oak regeneration is an option but is not necessary if it is								
<u>Comments:</u> not feasible								
<u>Next</u>								
<u>Steps:</u>								

18 71079018-Cut	16.5	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	44	Harvest	Clearcut	Aspen, Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> final harvest to regenerate aspen, mark well-crowned oak for wildlife mast, no retention due to health concerns and desire to expand the aspen								
<u>Specs:</u> type, buffer pond to the west, "L" type in the center, and wet meadow to the south, cut during the dormant season on dry or frozen ground to maximize sprouting and reduce the potential for rutting								
<u>Other</u> any combination of aspen/jack pine to a fully stocked stand is acceptable, plant/seed jack pine if aspen soes not regenerate to a fully stocked								
<u>Comments:</u> stand								
<u>Next</u> regeneration survey								
<u>Steps:</u>								

21 71079021-Cut	9.6	4191 - Mixed Upland Deciduous with Conifer	High Density Log	91	Harvest	Crown Thinning	Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal
<u>Prescription</u> thin stand by cutting all aspen and jack pine and marking pine/hardwoods to cut, residual target BA is 90 - 120 SF/Acre depending on starting								
<u>Specs:</u> density, favor white oak over red oak and oak/pine over other hardwoods, leave a buffer if needed on the lowland to the east, no to minimal retention due to age and configuration of the stand								
<u>Other</u> signs in trespass on the south side of the stand, opening up the canopy enough to create some regeneration holes to encourage more oak								
<u>Comments:</u> regeneration is an option but is not necessary if it is not feasible								
<u>Next</u>								
<u>Steps:</u>								

**Total Treatment  
Acreage Proposed: 36.2**



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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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#Error

Prescription  
Specs:

Other  
Comment:

Next  
Steps:

Limiting Factor and No  
Treatment Reason

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**Total Treatment**  
**Acres Proposed: 0**

Data updated before 10:00 AM

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

Year of Entry: 2012



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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  
Comments:

Next  
Steps:

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**Total Treatment  
Acreage Proposed: 0**

Stand	Roscommon Mgt. Unit		5 – Forested Stands			Compartment: 079	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Data updated before 10:00 AM	
2	4199 - Other Mixed Upland Deciduous	High Density Log	3.0	Uneven Age	111-140	NHW stand with conifer and oak component, all aged with at least 3 age classed, hold 10 years and treat with oak stand to the east	
3	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	8.3	89		wet drainage area and transition zone with conifers and hardwoods	
4	6112 - Lowland Aspen	Low Density Sapling	18.9	14		hummocky ground with a high water table, wettest parts are heavy to tag alder	
5	4199 - Other Mixed Upland Deciduous	High Density Log	38.3	91	51-80	2 aged going towards all-aged, u.s was cut in 1984, stand has NHW components including sugar maple and ironwood and consists of oak SL overtop RM/SM/BTA poles and saps, east and south parts are more A6/A3 with scattered oak SL and should probably be managed for aspen in 20-30 years, rest of stand should be held 10-20 years until bulk of u.s reaches merchantability and then thin to start managing as all-aged oak/NHW stand	
6	4130 - Aspen	High Density Sapling	53.5	14		Mostly upland but with pockets of wetter aspen or lowland brush type especially on the north edge along the lowland areas, upland and transition areas are BTA and lower/wetter areas are TA	
8	4123 - Red Oak	Low Density Log	25.0	91			
9	42220 - Natural Jack Pine	High Density Pole	3.8	89		island of slightly higher ground surrounded by marsh/"L"	
10	42120 - Planted Jack Pine	High Density Pole	8.3	47	51-80	stand is in a bowl created by barrow pit excavated by construction of US-127, stand was planted jack pine in center with 6-10 rows of red pine on the rim and upper slopes of the barrow pit after operations ceased, stand has scattered aspen clones and solitary aspens and scattered mixed oak, jack pine was growing well except for the last 12 -15 years when the canopy closed, RP growing well but jack pine starting to stagnate, thin to improve growth of jack pine for the last 10 years of its rotation OR take now and re-plant to RP, RP SI is 70+ (65 feet at 43 years)	
12	4199 - Other Mixed Upland Deciduous	High Density Log	5.2	89	111-140	oak /maple stand with scattered BTA and WP, north portion is more oak/white pine with wetter terrain and will probably be white pine if left, some oak starting in the u.s. in the south portion	
13	4123 - Red Oak	High Density Pole	7.7	89	141-170	red oak decent quality and just reaching log size, scattered areas heavy to aspen, aslo scattered WP on east side, some oak seedlings started	
18	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	16.5	44		aspen stand in old barrow pit, TA and JP are both declining with some hypox canker starting on TA, expand stand into adjacent JP stand where possible	



S t a n d	Roscommon Mgt. Unit		5 – Forested Stands			Compartment: 079	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2012	
19	6126 - Lowland Jack Pine	High Density Sapling	19.9	14			bog jack pine stand with lots of BB/LL ground cover but spots of higher ground within stand also, no FTP found for this stand although parts appear artif. regenerated (possibly seeded)
21	4191 - Mixed Upland Deciduous with Conifer	High Density Log	9.6	91	171-200		stand is composed of oak, aspen, and pine sawlogs with RM saplings and poles and scattered areas heavy to WP saplings, RM saplings are almost pole size in spots, several areas also are heavy to WP poles, stand is long and narrow and wraps around the south and east sides of the barrow pit
22	4113 - R.Maple, Conifer	High Density Pole	9.9	44			stand is mostly RM poles with scattered oak & pine XL, not ready to treat yet
23	42220 - Natural Jack Pine	High Density Sapling	11.5	13			stand was cut with similiar stand to the north in Compt. 77 during winter 1996, tops were left for seed, appears to be a small inclusion of slightly older A3 on the NE side
25	42220 - Natural Jack Pine	Medium Density Pole	3.4	89			island of slightly higher ground in middle of large wetland
26	4130 - Aspen	Medium Density Pole	4.2	44			long skinny upland stand with lowland on both sides, stand was a constructed causeway to truck fill from barrow pit to US-127 during construction of the highway, stand is mostly aspen with a few pine poles and saps
27	6127 - Lowland Pine	Medium Density Pole	15.8	57			JP/RP/Aspen island of slightly higher ground surrounded by wetlands/US-127, lots of dead/dying JP and aspen, RP and RM doing well however, bulk of stand is lowland with poor potential for any management due to terrain and access, wettest spots have tag alder in the u.s. with some pine regeneration starting in more open spots and on the edges
32	4133 - Aspen, Mixed Pine	High Density Sapling	11.9	26			nice aspen stand which is growing well, must have gained access across private or stand was habitat cut
36	6112 - Lowland Aspen	Medium Density Pole	13.7	Uneven Age			lowland stand with some upland, bulk of stand is hummocky ground with a high water table and has numerous wet runs and pockets, lowland aspen converting to lowland maple, all-aged with at least 3 age classes 1. mature/over-mature TA SL with black ash poles in the wettest spots 2. 3-5" RM poles with black ash poles in the weeter spots, and 3. seedling/saplaing RM with black ash seedlings in spots
39	6112 - Lowland Aspen	High Density Log	24.3	89	81-110		parts of this stand are upland, other parts are low and wet (esp. on north and west ends) and may not be operable, 2 aged stand with matrue aspen SL over NHW poles and saps, aspen is declining and should be cut if access can be gained and stand is oeprable when dry or frozen
41	6112 - Lowland Aspen	Medium Density Pole	2.7	44			small, very wet aspen stand, no spot for a landing, possibly invasive species present (Vines)
42	4119 - Mixed Northern Hardwoods	High Density Log	11.3	Uneven Age	81-110		NHW stand heavy to RM as RM saps are almost pole size, BTA dropping out of stand, NHW species are low quality



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Roscommon Mgt. Unit

**5 – Forested Stands**  
*Data updated before 10:00 AM*

Compartment: 079  
Year of Entry: 2012



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
<b>45</b>	4130 - Aspen	High Density Pole	19.2	89	111-140	A6 stand with good component of NHW species both in the canopy and the u.s., should convert to NHW species if left uncut, aspen doing OK and should hold 10 years with little volume loss due to site productivity
<b>46</b>	4130 - Aspen	High Density Pole	8.7	41		nice A6 stand, should hold 10-20 years with little volume loss due to age and site productivity



Stand	Cover Type	Acres	Gen Cmts:
1	622 - Lowland Shrub	1.8	
7	310 - Herbaceous Openland	2.4	
11	330 - Low-Density Trees	4.1	
14	50 - Water	2.2	
15	310 - Herbaceous Openland	4.6	
16	122 - Road/Parking Lot	1.3	
17	6220 - Alder/willow	2.6	lowland shrub with scaatered TA & JP
20	6233 - Wet Meadow	1.6	
24	6225 - Bog	205.5	
28	6225 - Bog	3.1	
29	6224 - Treed Bog	139.0	
30	623 - Emergent Wetland	1.6	
31	623 - Emergent Wetland	311.3	Ho. Lk. Flats - South Unit
33	122 - Road/Parking Lot	3.5	
34	623 - Emergent Wetland	18.1	
35	50 - Water	13.3	
37	623 - Emergent Wetland	43.9	
38	622 - Lowland Shrub	3.8	



Stand	Cover Type	Acres	Gen Cmts:
40	623 - Emergent Wetland	2.7	
43	310 - Herbaceous Openland	2.9	
44	6229 - Mixed lowland shrub	2.4	stand was probably black ash last YOE but was called "L", now it truly is an "L" as most ash trees are dead or dying



**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*

<b>Stand</b>	<b>SCA Type</b>	<b>SCA Name</b>	<b>Acres</b>	<b>Comments</b>
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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	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.