



Compartment Review Presentation

Roscommon Forest Management Unit

Compartment 26

Entry Year 2015

Acreage: 1,272

County Roscommon

Management Area: Houghton Lake Wetlands

Revision Date: 05/22/2013

Stand Examiner: Dale Ekdom

Legal Description:

T24N R04W Sections 28 & 29

Identified Planning Goals:

Compartment is in the Houghton Lake Wetlands Mgt. 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:

Compartment is a solid block of state land except for a 5 acre private parcel in the SENE of Section 28 and is surrounded by state land except in the northeast corner of Section 28. Private land in the area is mostly permanent residences on 5-10 acre wooded parcels.

Unique Natural Features:

No identified MNFI concerns.

Archeological, Historical, and Cultural Features:

None noted or detected during fieldwork.

Special Management Designations or Considerations:

A large portion of this compartment is within the Deadstream Swamp HCVA.

Watershed and Fisheries Considerations:

Deer Farm Creek starts in and flows through Section 29.

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, postglacial alluvium and peat and muck. The glacial drift thickness varies between 200 and 400 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 located over one mile away and potential appears to be limited. East Norwich Field is located two miles to the northwest. The field has produced over 15.9 million BO and 15.7 Bcf gas primarily from the Devonian Richfield Formation. It is in secondary recovery operations currently. The entire Compartment is leased for oil and gas development.

Vehicle Access:

Vehicle access to the east part of the compartment is excellent via county roads, forest two-tracks, and the snowmobile trail. Vehicle access to the middle and west part of the compartment is non-existent due to swampy wet terrain.

Survey Needs:

None necessary at this time.

Recreational Facilities and Opportunities:

The Co. Rd. 104 snowmobile/ORV trailhead and its companion ORV and snowmobile trails are within the compartment. This compartment also experiences heavy recreational hunting and trapping including deer, bear, and turkey hunting.

Fire Protection:

The east portion of the compartment is heavy to hardwood cover types and the west portion is mostly swamp conifer types.

Additional Compartment Information:

Compartment has seen lots of illegal ORV use in the past but a major RDR was rehabilitated in 2005 and 2006 using ORV funds and illegal ORV use has decreased. Illegal dumping has also decreased as part of this rehabilitation project was to close off vehicle access to an old township landfill where dumping was a problem.

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

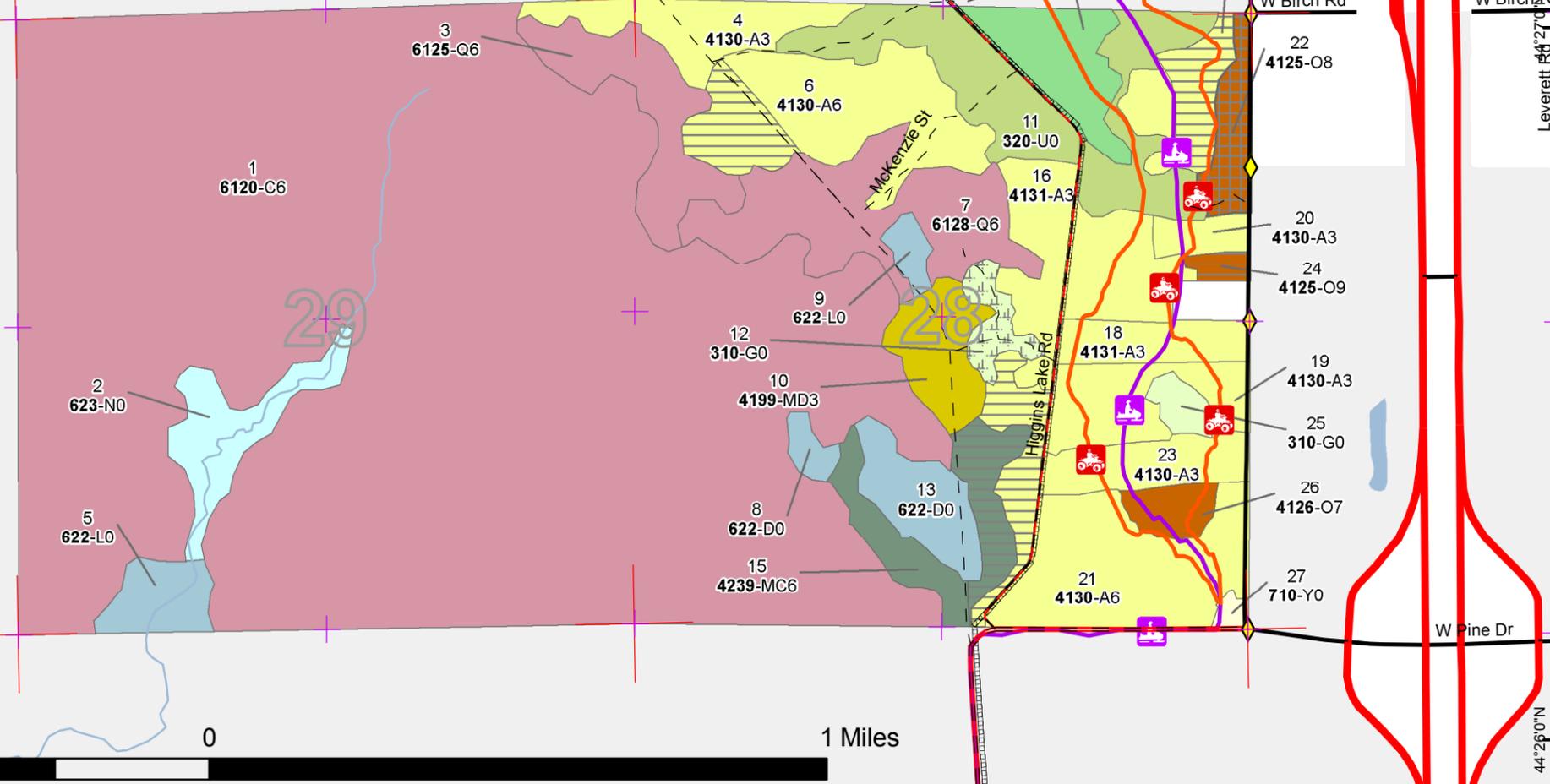
Compartment: 026
 T24N R04W
 Sections 28, 29
 County: Roscommon
 Unit: Roscommon
 YOE: 2015
 Acres: 1,273 GIS Calculated
 Examiner: Dale Ekdorn
 Map Revised: 08/05/2013
 Map Phase: Web Post

Legend

Miris Corners	Snowmobile Trail	Non-Forest Stands
Remonumented Section Corners	ORV Trail	Level 3
PLSS Corner	ORV Trails	310 - Herbaceous Openland
Highway	Snowmobile Trails	320 - Upland Shrub
County Paved Roads	Treatments	622 - Lowland Shrub
Paved Roads	Clearcut (w/Reserves, Patch/Strip)	623 - Emergent Wetland
County Gravel Roads	Seed Tree (w/Reserves)	710 - Sand, Soil
Poor Dirt Roads	Other Treatment - See Comments	State Forest Land
County Poor Dirt Roads	Forest Stands	
Pipeline	Level 3	
Stream	412 - Oak Types	
Intermittent Stream	413 - Aspen Types	
Lakes and Rivers	419 - Mixed Upland Deciduous	
	421 - Planted Pines	
	423 - Other Upland Conifers	
	612 - Lowland Coniferous Forest	

29 28

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



84°52'0"W 84°51'0"W 84°50'0"W 84°49'0"W 84°48'0"W 44°27'0"N 44°26'0"N

Stand Boundary Map

Compartment: 026
 T24N R04W
 Sections 28, 29
 County: Roscommon
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Legend

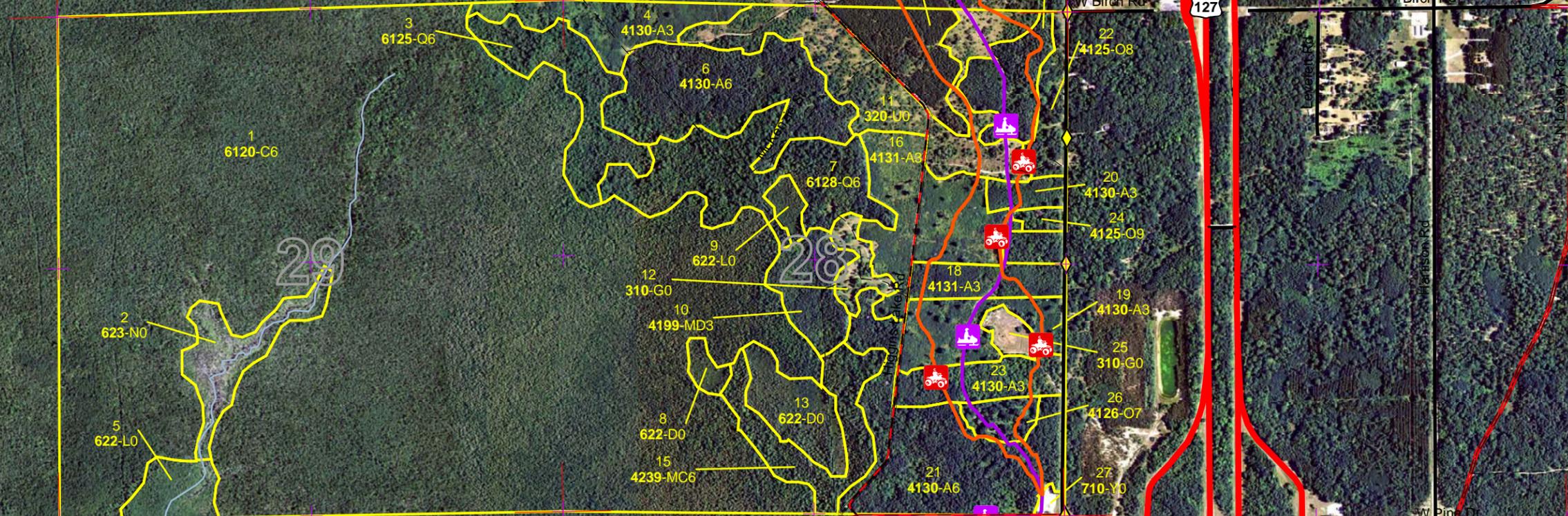
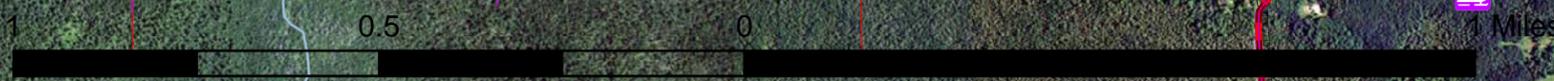
- Miris Corners
- Remonumented Section Corners
- PLSS Corner
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Pipeline
- Stream
- Intermittent Stream
- Snowmobile Trail
- ORV Trail
- ORV Trails
- Snowmobile Trails
- Stand Boundaries

29 28

Stand #
 23

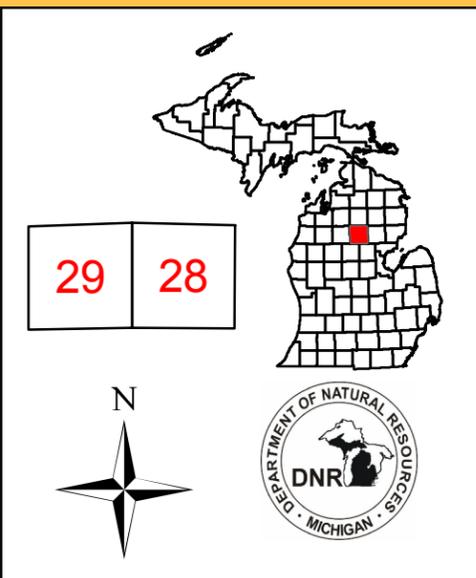
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code

Cover Type Code



Special Conservation Areas & Site Conditions Map

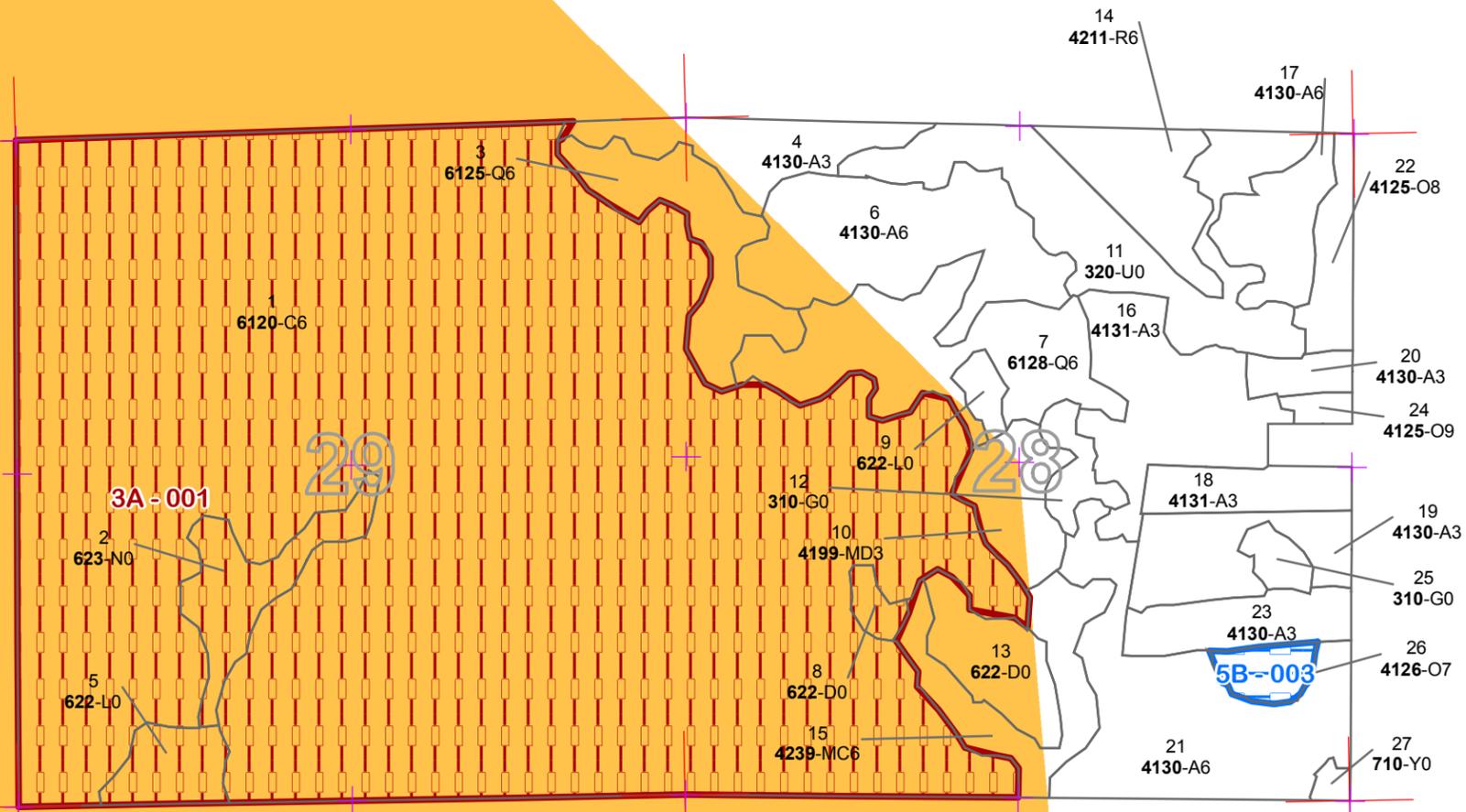
Compartment: 026
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Legend

- Miris Corners
- Remonumented Section Corners
- Site Condition Available
- Available w/ Constraints (Factor - Number)
- Unavailable (Factor - Number)
- Dedicated Special Conservation Areas
- High Priority Trout Stream Buffer and National Natural Landmarks
- Cold Water Streams
- Stand Boundaries

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



84°51'0"W 84°50'0"W 84°49'0"W 84°48'0"W 84°47'0"W

44°28'0"N 44°27'0"N 44°26'0"N

44°28'0"N 44°27'0"N 44°26'0"N

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	81	0	36	0	125	0	0	0	0	0	0	0	0	0	242
Cedar	0	0	0	0	0	0	0	0	0	0	751	0	0	0	751
Herbaceous Openland	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	0	75	75
Lowland Shrub	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Marsh	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Mixed Upland Deciduous	0	0	17	0	0	0	0	0	0	0	0	0	0	0	17
Oak	0	0	0	0	0	0	0	0	0	0	11	10	0	0	21
Red Pine	0	0	21	0	0	0	0	0	0	0	0	0	0	0	21
Sand, Soil	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Treed Bog	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Upland Conifers	0	0	0	0	0	0	0	24	0	0	0	0	0	0	24
Upland Shrub	51	0	0	0	0	0	0	0	0	0	0	0	0	0	51
Total	202	0	74	0	125	0	0	0	24	0	762	10	0	75	1273



Report 2 – Proposed Treatment Summaries

Roscommon Mgt. Unit
Year of Entry 2015

Compartment 026
Total Compartment Acres: 1,272

Acres by Treatment Type

Commercial Harvest - 63	Tree Planting - 0	Other - 7
Habitat Cut - 0	Opening Maintenance - 0	

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen Types	37	0	0	0	0	0	37
Oak Types	3	0	11	0	0	0	14
Other Upland Conifers	12	0	0	0	0	0	12
Total	52	0	11	0	0	0	63



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
6	71026006-Cut	12.7	4130 - Aspen	High Density Pole	47		Harvest	Clearcut	4130 - Aspen	Cmpt. Review Proposal

Prescription final harvest and manage for aspen, leave oak SL and R/W pine SL's for diversity/mast, expand into stand to the west where feasible. buffer and/or paint out lower wetter areas for BMP's

Other dormant season cut and accept whatever type/amount of regeneration occurs, cut part west of old RR grade

Next Steps:

Proposed Start Date: 10/01/2014

15	71026015-Cut	12.2	42390 - Mixed Non-Pine Upland Conifers	High Density Pole	85		Harvest	Clearcut with Reserves	4136 - Aspen, Mixed Conifer	Cmpt. Review Proposal
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Prescription final harvest and manage for hardwoods/pine, leave oak and R/W pine for diversity and mast, cut with stand to the east so aspen will expand into this stand as much as possible

Other buffer and/or paint out wetter edges and pockets for retention and BMP's, plant/seed JP if stand is not fully stocked after 2 years, cut east arm

Next Steps:

Proposed Start Date: 10/01/2014

17	71026017-Cut	11.1	4130 - Aspen	High Density Pole	47		Harvest	Clearcut	4130 - Aspen	Cmpt. Review Proposal
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Prescription final harvest and manage for aspen, leave oak and R/W pine for mast/diversity/visual

Other no retention as the intent is to expand this stand into surrounding brushy areas, consider a dormant season cut if it can done w/o interfering with the SMT, cut part east of the SMT, use appropriate sale specs to protect the snowmobile and ORV trails and warn riders of logging operations

Next Steps:

Proposed Start Date: 10/01/2014

21	71026021-Cut	13.4	4130 - Aspen	High Density Pole	47		Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
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Prescription final harvest and manage for aspen, leave oak and R/W pine for diversity/mast

Other buffer and/or paint out any wetter swales for retention and BMP's, consider dormant season cut, cut part west of Higgins Lake Road

Next Steps:

Proposed Start Date: 10/01/2014



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
22	71026022-Cut	11.3	4125 - Black, N. Pin Oak	Medium Density Log	100	1-50	Harvest	Seed Tree with Reserves	4121 - Oak, Aspen	Cmpt. Review Proposal
<u>Prescription</u> seed tree cut leaving up to 20 SF/Acre of better quality mast trees, favor white oak where possible <u>Specs:</u> <u>Other</u> retention will be oak which was marked to leave, protect u.s. (esp. oak) as much as possible, accept whatever species/amount of regeneration <u>Comments:</u> occurs, leave small inclusion of A3 in the north part of the stand for visual, use appropriate sale specs to protect the snowmobile and ORV trails and warn riders of logging operations <u>Next Steps:</u> <u>Proposed Start Date:</u> 10/01/2014										
24	71026024-Cut	2.8	4125 - Black, N. Pin Oak	High Density Log	112	1-50	Harvest	Clearcut	4125 - Black, N. Pin Oak	Cmpt. Review Proposal
<u>Prescription</u> final harvest to release oak/RM u.s. and regenerate any remaining aspen, use 4" spec to save u.s., mark up to 10 SF/Acre to leave for mast <u>Specs:</u> and visual on Deadstream Road, <u>Other</u> no retention other than oak seed trees due to age and size of the stand, accept whatever species and amount of regeneration occurs, consider a <u>Comments:</u> small negotiated sale for this stand, use appropriate sale specs to protect the snowmobile and ORV trails and warn riders of logging operations <u>Next Steps:</u> <u>Proposed Start Date:</u> 10/01/2014										
12	NF_71026012-Other	7.3	3102 - Grass				Other	Unspecified	310 - Herbaceous Openland	Cmpt. Review Proposal
<u>Prescription</u> wildlife opening maintenance as specified by WLD <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next Steps:</u> <u>Proposed Start Date:</u> Unspecified										
Total Treatment Acreage Proposed:		70.8								

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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

Compartment 026

Dale Ekdorn : Examiner

Year of Entry 2015

Availability for Management

Availability for Management			Dominant Site Conditions			
Total Acres	Acres Available	Acres Not Available		No	5B	3A
242	242	0	Aspen	242		0
750	0	750	Cedar	0		750
75	75		Lowland Conifers	75		
17	17		Mixed Upland Deciduous	17		
21	21		Oak	14	7	
21	21		Red Pine	21		
24	24		Upland Conifers	24		
1,150	400	750	Total Forested Acres	393	7	750
	35%	65%	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 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	786	1A: Federal/State/Local Law			
Comments: SCA deadstream swamp - national natural landmark							
003	Available	5B: Retention for regeneration purposes	7				
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
Comments				



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	Non-Dedicated Natural Areas and National Natural Landmarks	This category is comprised of those Natural, Wilderness and Wild Areas that have been nominated or proposed for legal dedication, but for which legal dedication by legislature has not occurred. The nomination process is defined by Part 351, Wilderness and Natural Areas, of the Natural Resources and Environmental Protection Act, 1994 PA 451. The program is administered by the DNR. Nominations require the submittal of a Natural Areas Nomination Packet to the DNR. This is an active program, with proposed sites in various stages of review. Final dedication of nominated Natural, Wilderness and Wild Areas is accomplished through legislative action.
HCVA	Legally dedicated Natural Areas, Wilderness or Wild Areas	The nomination process is defined by Part 351, Wilderness and Natural Areas, of the Natural Resources and Environmental Protection Act, 1994 PA 451. The program is administered by the DNR. Nominations require the submittal of a Natural Areas Nomination Packet to the DNR. This is an active program, with proposed sites in various stages of review. Final dedication of nominated Natural, Wilderness and Wild Areas is accomplished through legislative action.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6120 - Lowland Cedar	High Density Pole	750.8	104		East edge of Deadstream Swamp - SCA/HCVA
3	6125 - Lowland Black Spruce, Jack Pine	High Density Pole	27.9	Uneven Age		hummocky but somewhat operable if access can be gained across wetter drainage/potholes with tag alder which are scattered thru-out the stand. some parts are heavier to hardwoods (mostly RM), other parts are heavy to Hemlock, jack pine, and/or NWC,
4	4130 - Aspen	High Density Sapling	21.6	9		nice TA regeneration cut with stand to the north in 71025, regenerated in 2003, 2 small inclusions of WP SL in west end of stand, west of the RR grade/pipeline the stand is sparser with Hemlock poles scattered along the RR grade
6	4130 - Aspen	High Density Pole	49.4	47		A6 wiht numerous small brushy areas and wet potholes, scattered oak and R/W pine L & XL's, southeast arm has BF saplings and poles scattered thruout, some evidence of hypox canker within stand with upland aspen starting to thin itself out and lower ground aspen growing well but still smaller, cut all/part or hold as necessary to satisfy MA plan
7	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	47.4	Uneven Age		nice W9 stand which varies from W6 to true W9 to Q6/9, scattered areas heavy to hemlock and/or XL WP which is 26+ inches dbh and or C6, appears to have been select cut in spots in the past
10	4199 - Other Mixed Upland Deciduous	High Density Sapling	16.9	24		cut to 4" spec in 1988, transition zone with upland/lowland terrain, hummocky ground with some wetter potholes, scattered basam fir and black spruce saps also
14	42110 - Planted Red Pine	High Density Pole	21.0	27	81-110	RP planted in 1985, NE tip of stand and very south tip of stand are J6
15	42390 - Mixed Non- Pine Upland Conifers	High Density Pole	24.0	85		transition zone between upland hardwoods to the east and the Deadstream Swamp on the west, west arm is several islands of somewhat higher ground cut by wetter swales and surrounded by bog and swamp, east arm is mostly high ground except for the far north and west edges of the stand, higher ground is WP/RM/BF and the lower ground is BS/BF/NWC. lots of wildlife tracks and other signs in this stand, consider cutting east arm this YOE with the aspen to the east or hold and cut in 10 years with the aspen to the east,
16	4131 - Aspen, Oak	High Density Sapling	38.0	6		A3 vut 2006, TA saps with scattered oak XL left for mast
17	4130 - Aspen	High Density Pole	17.6	47		poor quality TA with some hypoxylon canker starting especially on the bigger SL aspen left from the "choppers choice" cut in the 1960's. south end is more even-aged wth less hypox. visible, heavy u.s. of hawthorn in much of the stand
18	4131 - Aspen, Oak	High Density Sapling	13.5	24		aspen regenerated in 1988, should be A6 next YOE
19	4130 - Aspen	High Density Sapling	21.3	6		a3 cut in 2006, left scattered oak SL/XL for mast

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Roscommon Mgt. Unit

Report 8 – Forested Stands

Compartment: 026
Year of Entry: 2015

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
20	4130 - Aspen	High Density Sapling	6.0	24		nice A3 regenerated in 1988, should be A6 next YOE
21	4130 - Aspen	High Density Pole	58.0	47		poor quality TA with bulk of aspen pole-size but some SL TA scattered thru-out and heavy ins spots, stand is 2 aged as a result of a "choppers choice" cut in the 1960's, hypox. canker starting on the oldest aspen, SW corner and part east of Higgins Lake Road is heavier to poles and has areas heavy to WP poles, there is one wet swale in the center of the stand which could /should be left for retention/visual
22	4125 - Black, N. Pin Oak	Medium Density Log	11.3	100	1-50	2 aged oak stand of generally poor quality, a few areas have nice A6 clones of approx. 45 years of age, good u.s. of oak & other species, consider removing over-story, stand also has an approx. 1-2 acre inclusion of A3 on the north end which is 24 years old which could be left for visual
23	4130 - Aspen	High Density Sapling	16.6	24		A3 regenerated in 1988, should be A6 next YOE
24	4125 - Black, N. Pin Oak	High Density Log	2.8	112	1-50	Oak stand where merch A/RM were removed approx 20 years ago, oak overstory declining/dying. there are a few scattered RP and White Oak SL's within stand, oak is poor quality, cut or hold for diversity/visual
26	4126 - White, Black, N. Pin Oak	Low Density Log	6.9	112	1-50	shelterwood cut in 2005 and now 2 aged, stump-sprout RM with stump-sprout and seedling oak, understory not fully stocked but getting there, scattered areas heavy to RM seedlings, retain O/S as shelterwood for now and evaluate for O/S removal in 10 years, best oak in the compartment in terms of quality and species



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
2	623 - Emergent Wetland	19.9	N/A	Unspecified	
5	622 - Lowland Shrub	11.7	N/A	Unspecified	
8	6224 - Treed Bog	3.8	No	Unspecified	
9	622 - Lowland Shrub	4.0	N/A	Unspecified	
11	3205 - Mixed Upland Shrub	51.0	No	Unspecified	upland shrub with scattered JP saps/poles, PC saps/poles, and oak SL's, scattered areas heavy to A3 or O3,
12	3102 - Grass	7.3	Yes	High (NonForested)	
13	6224 - Treed Bog	17.5	No	Unspecified	
25	3102 - Grass	4.6	Yes	Low (NonForested)	old landfill, blocked off with gate/guardrail and some trenching/planting to keep illegal ORV traffic out of opening
27	710 - Sand, Soil	1.8	Yes	High (NonForested)	ORV/SMT trailhead