

Roscommon Forest Management Unit Compartment Review Presentation

Compartment #72 Entry Year: 2014
Compartment Acreage: 694 County: Roscommon

Revision Date: 7/31/2012

Stand Examiner: Doug Bates

Legal Description: T24N R04W Section 03 & 10

Identified Planning Goals: Houghton Lake Wetlands Eco-Regional Management Area

Management Goals: Provide for sustainable ecosystem based management. Maintain healthy and diverse

forested stands for wildlife, recreation and the production of forest products.

Soil and Topography: Terrain is flat, but low and wet. The Major soil type is Rifle peat.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The compartment is a solid block of state with no private land in holdings and is surrounded on all sides but the south by other state land. The south is very heavy residential in either subdivisions or lakefront residences. Both US-127 and Old 27 pass through north and south.

Unique, Natural Features: The compartment is on the east edge of the Dead Stream Swamp and contains the start of the Muskegon River.

Archeological, Historical, and Cultural Features: None identified.

Special Management Designations or Considerations: Designate a stand composed of 120+ year old hemlock and supercanopy white pine that appears to not have an disturbance by harvesting at the turn of the century for a Special Conservation Area.

Watershed and Fisheries Considerations: Protect the numerous drainages and sheet flow areas that lead into Houghton Lake, the Muskegon River, and the Dead Stream Swamp biodiversity.

Wildlife Habitat Considerations: Maintain ecosystem diversity in the compartment to benefit both game species such as deer, grouse, rabbits, turkeys, as well as other non-game species such as the bald eagle and Blanding's turtle.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of peat/muck. 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 elsewhere in the State. Most of the nearby gravel pits are associated with upland areas. There are no uplands areas near here and potential is limited. Enterprise Field lies three miles to the southwest. The field has produced over 4.7 million BO primarily from the Devonian Richfield Formation. It is in secondary recovery operations currently. None of the State land in the compartment is currently leased but leases are located one mile to the west.

Vehicle Access: Numerous public roads traverse the compartment, but vehicle access into the compartment's interior from the county roads is non-existent due to the low, wet terrain.

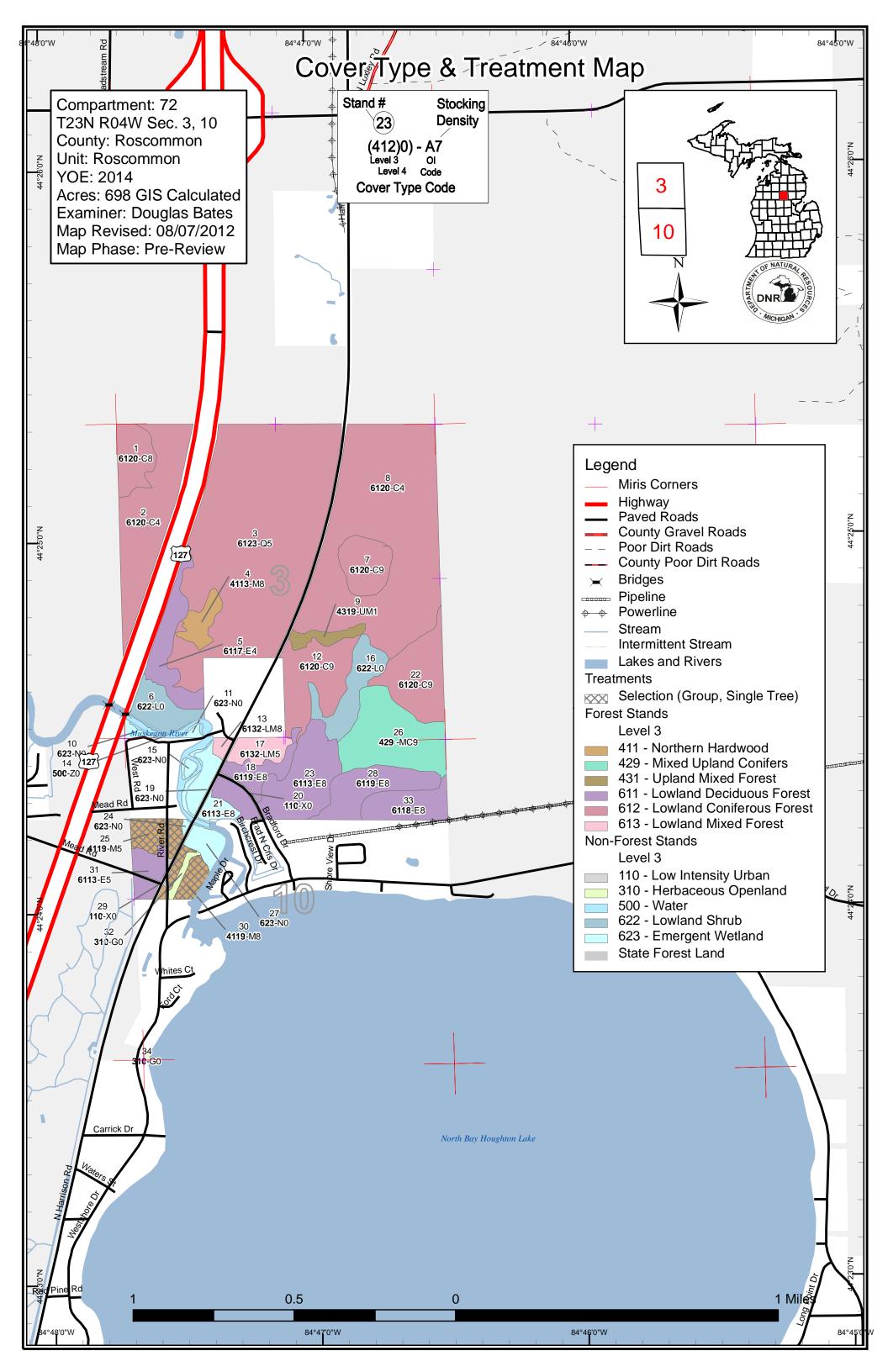
Survey Needs: No survey work currently needed.

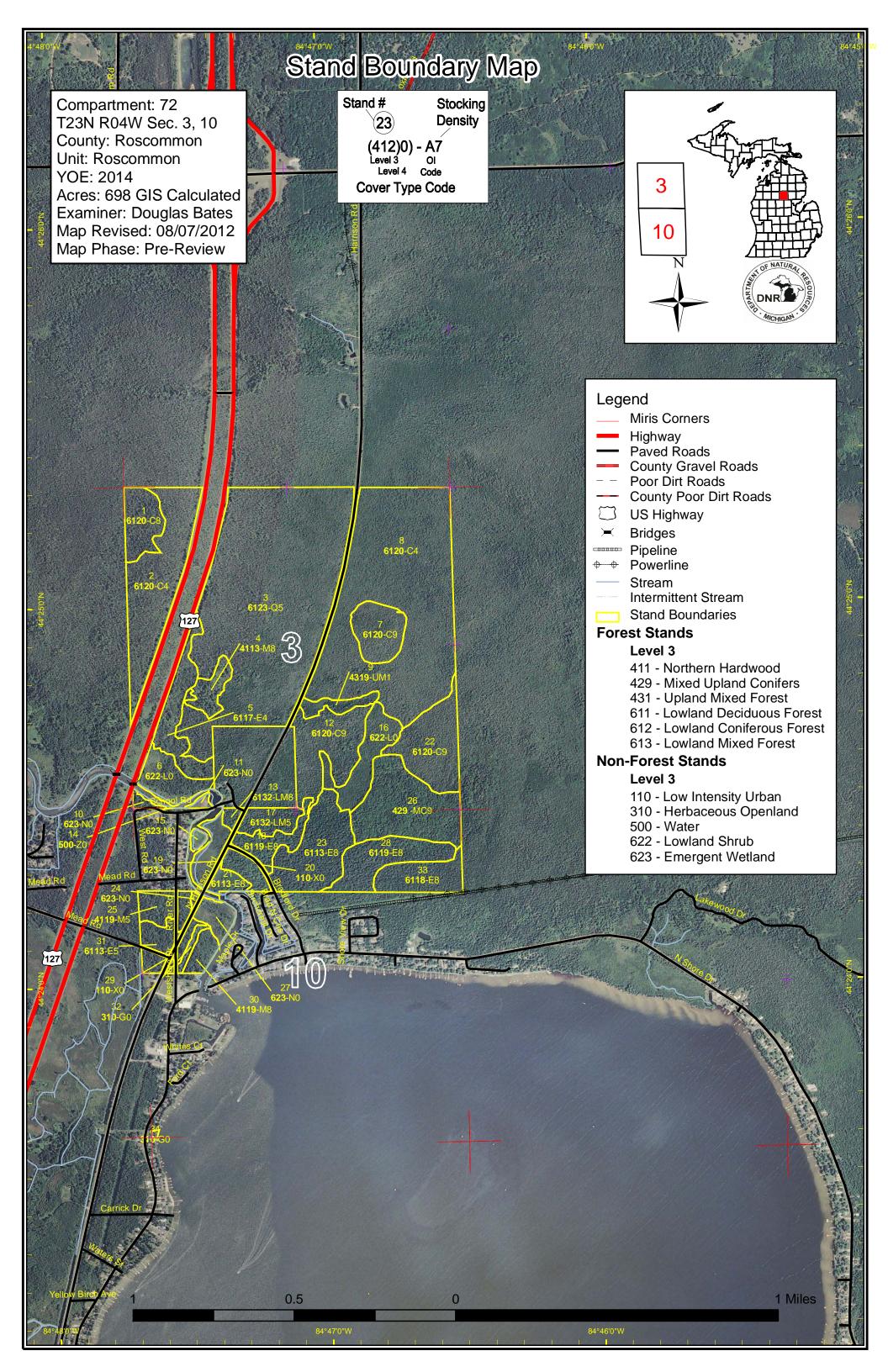
Recreational Facilities and Opportunities: Houghton Lake and the Muskegon River.

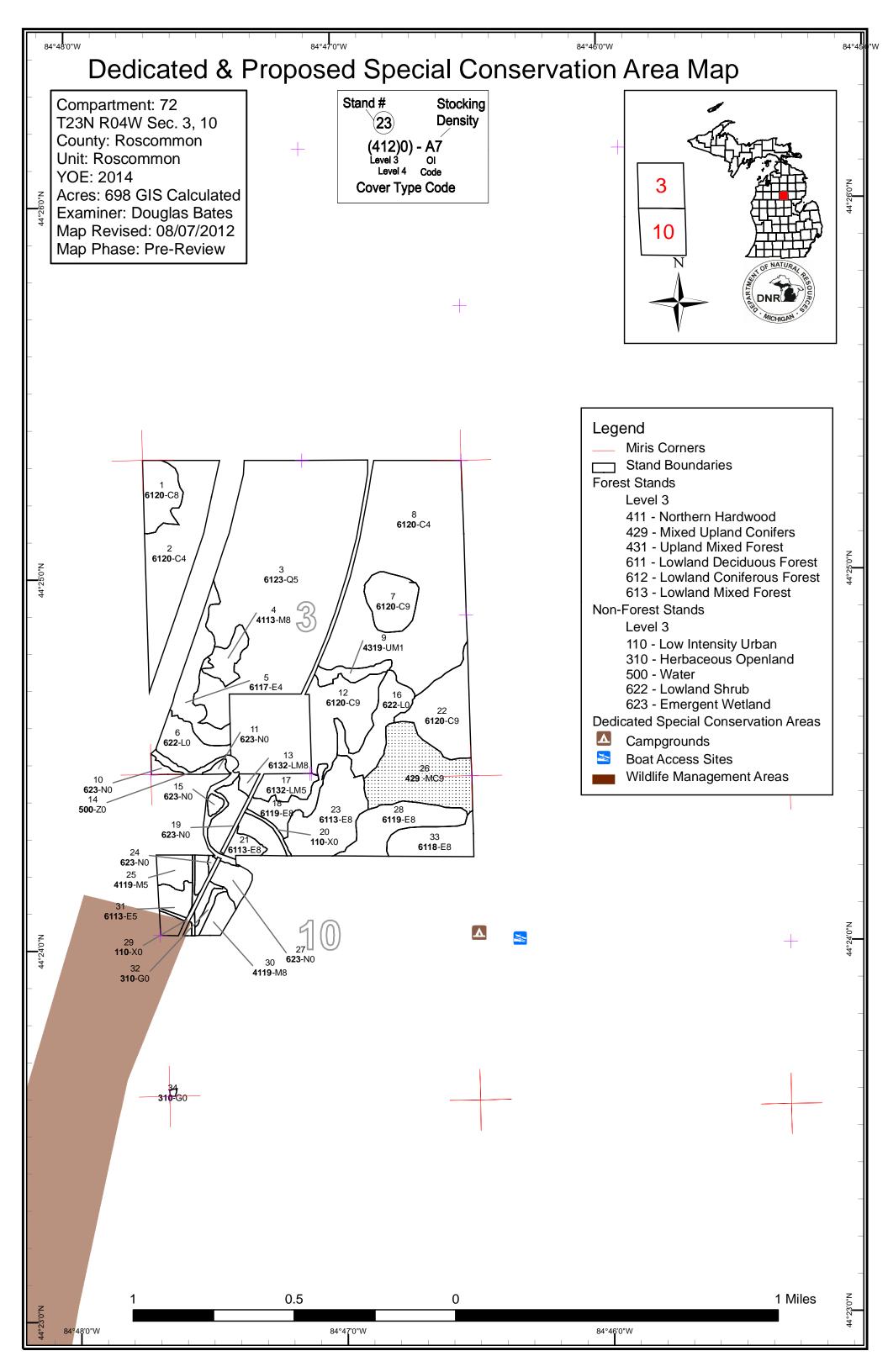
Fire Protection: Fire potential in this compartment is low due to the wet terrain and fuels even with the heavily urban area to the south. In drought years the potential may increase couple with the poor access into the compartment via roads and fire suppression apparatuses' covering this area.

Additional Compartment Information: Emerald Ash Bore has infested the area so salvage of the ash in areas where accessible will be performed out of YOE. A small isolated parcel of this compartment lies south of the main body and has a water channel that leads into Houghton Lake and is used by Wildlife Division to regulate water levels into the Houghton Lake Flats marsh.

- ➤ The following reports from the Inventory are attached:
 - **♦** Total Acres by Cover Type and Age Class
 - **♦** Proposed Treatment Summary
 - **♦** Proposed Treatments No Limiting Factors
 - **♦** Proposed Treatments With Limiting Factors
 - **♦** Stand Details (Forested and Nonforested)
 - **♦** Dedicated and Proposed Special Conservation Areas
- > The following information is displayed, where pertinent, on the attached compartment maps:
 - ♦ Base feature information, stand boundaries, cover types, and numbers
 - **♦** Proposed treatments
 - ♦ Details on the road access system







Compartment 072 Year of Entry 2014

Roscommon Mgt. Unit Douglas Bates : Examiner



Age Class

Age Class																
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Cedar	0	0	0	0	0	0	0	0	0	265	0	0	0	0	265	
Herbaceous Openland	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	ĺ
Lowland Conifers	0	0	0	0	173	0	0	0	0	0	0	0	0	0	173	1
Lowland Deciduous	0	0	0	0	8	0	0	0	40	62	0	0	0	0	110	ĺ
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10	
Lowland Shrub	31	0	0	0	0	0	0	0	0	0	0	0	0	0	31	
Marsh	25	0	0	0	0	0	0	0	0	0	0	0	0	0	25	
Northern Hardwood	0	0	0	0	0	0	0	0	25	0	0	0	0	0	25	
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	39	0	0	39	
Upland Mixed Forest	0	0	6	0	0	0	0	0	0	0	0	0	0	0	6	ĺ
Urban	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Water	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
Total	69	0	6	0	182	0	0	0	65	338	0	39	0	0	698	



Table 2 – Proposed Treatment Summaries

Roscommon Mgt. Unit

Compartment 072

Year of Entry 2014

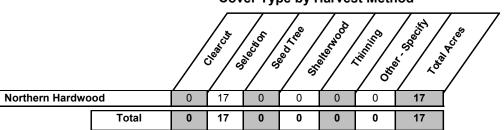
Total Compartment Acres: 697.8

Acres by Treatment Type

Commercial Harvest - 17 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



Roscommon Mat. Unit

Table 3 -- Treatments Prescribed with No Limiting Factor

Com Yea

partment: 072	NOF NATURAL
r of Entry 2014	DNR
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t а **Treatment** Acres CoverType Size Stand BA **Treatment Treatment Cover Type Approval** n Density Name Method Objective Status Age Range d Type 71072025-6.7 111-140 25 4119 - Mixed Medium Harvest **Group Selection** 4116 - Mixed N. Cmpt. Review Density Hardwood - Aspen Cut1 Northern Hardwoods Proposal Pole

Prescription Treatment: Remove all ash and aspen to a two inch d.b.h.. Leave all oaks and mark in areas the remaining trees species so that the residual

Specs: basal area is 70

Long term MO: Salvage of EAB infected ash, regeneration of aspen pockets and regeneration of mixed hardwoods

Retention: Is a group selection harvest. There will be areas of other residual overstory where ash is not located due to salvage so none needed.

Other Lower depression areas scattered about stand that may hold water and possible lead to rutting. Work with producer to alleviate this concern. Comments: Will need to place a culvert in county road R.O.W. ditch for access.

Next Stand will regenerate naturally back into the areas where aspen overstory was present and there is young ash regeneration amongst the dying Steps: overstory that seems not to be affected by the bore at this time. The remaining site with be a diverse mix of upland decidous tree species left

post harvest.

Proposed

s

10/01/2013 Start Date:

71072030-30 5.5 4119 - Mixed Medium 87 81-110 Harvest **Group Selection** 4116 - Mixed N. Cmpt. Review Cut1 exp-0 Northern Hardwoods Density Log Hardwood - Aspen Proposal

Prescription Treatment: Remove all ash and aspen to a two inch d.b.h.. Leave all oaks and mark in areas the remaining trees species so that the residual

basal area is 70. Place the boundary line for the portion of the stand that borders the Muskegon River 100 feet back off of the river. Specs: Long term MO: Salvage of EAB infected ash, regeneration of aspen pockets and regeneration of mixed hardwoods

Retention: Is a group selection harvest. There will be areas of other residual overstory where ash is not located. None is needed.

Stand is broken into four parts by county roads. Harvest the portions on the east and west sides of N. Harrison Road along with portion that Other borders the Muskegon River. Do not harvest the small portion between N. Harrison Rd. and River Rd. May need culverts to access the stand in Comments:

the ditches along the county road R.O.W..

Stand will regenerate naturally back into the areas where aspen overstory was present and there is young ash regeneration amongst the dying Next Steps: overstory that seems not to be affected by the bore at this time. The remaining site with be a diverse mix of upland decidous tree species left

post harvest

<u>Proposed</u>

10/01/2013 Start Date:

71072030-30 2.7 4119 - Mixed Medium 87 81-110 Harvest **Group Selection** 4116 - Mixed N. Cmpt. Review Northern Hardwoods Density Log Cut1_exp-1 Hardwood - Aspen Proposal

Prescription Treatment: Remove all ash and aspen to a two inch d.b.h.. Leave all oaks and mark in areas the remaining trees species so that the residual Specs:

basal area is 70. Place the boundary line for the portion of the stand that borders the Muskegon River 100 feet back off of the river.

Long term MO: Salvage of EAB infected ash, regeneration of aspen pockets and regeneration of mixed hardwoods

Retention: Is a group selection harvest. There will be areas of other residual overstory where ash is not located. None is needed.

Stand is broken into four parts by county roads. Harvest the portions on the east and west sides of N. Harrison Road along with portion that Other borders the Muskegon River. Do not harvest the small portion between N. Harrison Rd. and River Rd. May need culverts to access the stand in Comments:

the ditches along the county road R.O.W..

Stand will regenerate naturally back into the areas where asepn overstory was present and there is young ash regeneration amongst the dying Next Steps: overstory that seems not to be affected by the bore at this time. The remaining site with be a diverse mix of upland decidous tree species left

post harvest

Proposed

10/01/2013 Start Date:

71072030-81-110 30 2.1 4119 - Mixed Medium Harvest **Group Selection** 4116 - Mixed N. Cmpt. Review Cut1_exp-2 Northern Hardwoods Density Log Hardwood - Aspen Proposal

Prescription Treatment: Remove all ash and aspen to a two inch d.b.h.. Leave all oaks and mark in areas the remaining trees species so that the residual basal area is 70. Place the boundary line for the portion of the stand that borders the Muskegon River 100 feet back off of the river. Specs:

Long term MO: Salvage of EAB infected ash, regeneration of aspen pockets and regeneration of mixed hardwoods

Retention: Is a group selection harvest, but there will be areas of other residual overstory where ash is not located. None is needed.

Stand is broken into four parts by county roads. Harvest the portions on the east and west sides of N. Harrison Road along with portion that Other_

borders the Muskegon River. Do not harvest the small portion between N. Harrison Rd. and River Rd. May need culverts to access the stand in Comments:

the ditches along the county road R.O.W..

Next Stand will regenerate naturally back into the areas where aspen overstory was present and there is young ash regeneration amongst the dying Steps: overstory that seems not to be affected by the bore at this time. The remaining site with be a diverse mix of upland decidous tree species left

post harvest.

Proposed

Start Date: 10/01/2013 Roscommon Mgt. Unit

CoverType

Size

Density

Stand

Age

Table 3 -- Treatments Prescribed with No Limiting Factor

BA

Range

Treatment

Type

Compartment: 072 Year of Entry 2014

Treatment

Method

Cover Type Objective Name Total Treatment

Treatment

s

n

d

Acreage Proposed:

d: 17.0

Acres

Roscommon Mgt. Unit Table 4 -- Treatments Prescribed with Compartment: 072 a Limiting Factor s Year of Entry 2014 n Treatment **Acres** CoverType Size Stand BA **Treatment Treatment Cover Type Approval** Name Method Objective Status Density Age Range Type d #Error Prescription Specs: <u>Other</u> Comment: <u>Next</u> Steps: <u>Proposed</u> Start Date: #Error

Total Treatment Acreage Proposed:

Limiting Factor and No Treatment Reason

0

Out of YOE -- Treatments Prescribed with No Limiting Factor

Year of Entry: 2014

Approval Status CoverType **Treatment Treatment Cover Type** Treatment Acres Size Stand BA Name Density Range Type Method Objective Age

Prescription Specs:

Other Comments:

Next Steps:

<u>Proposed</u>

Start Date: #Error

Total Treatment Acreage Proposed:

0

s t	Roscommon Mgt. Unit			5 – Fo	orested Sta	Compartment: 072 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6120 - Lowland Cedar	Medium Density Log	13.7	95		Same age as cedar in Stand 2, but higher ground resulting in better growth. More balsam fir in overstory and some in understory regeneration. Not accessible nor feasible for harvest.
2	6120 - Lowland Cedar	Low Density Pole	45.7	95		Sparse low quality cedar type with no regeneration at all. Tops dying out. Tag alder, cattails, and heavy reed canary grass as ground cover. Slightly lower elevation than Stand 1 so higher water level is resulting in poorer grow. Expressway impeding sheet flow. Not accessible nor feasible to harvest.
3	6123 - Lowland Fir	Medium Density Pole	173.2	40		More upland elevation with cedar dying out and no regeneration present. Only regeneration is balsam fir.
4	4113 - R.Maple, Conifer	Medium Density Log	7.7	87	81-110	There is a ring of cedar around the perimeter and then the ground rises in the middle where the red maple is growing. A harvest would be good but it is isolated by a large swamp on the east and the expressway to the west. It is regenerating naturally so don't feel a habitat cut is warranted at this time.
5	6117 - Lowland Deciduous, Mixed Coniferous	Low Density Pole	18.7	87		Heavy reed canary grass and tag alder ground cover. Regeneration in tree species is scattered and sparse. Mostly balsam fir with some red maple.
7	6120 - Lowland Cedar	High Density Log	15.4	90		Void of ground cover with a very dense forest canopy with few blow downs. Good shape with a slightly higher elevation than the surounding cover types. Only regeneration is cedar which is light and all over 25 feet tall. Heavy deer sign, appears to be a good thermal cover area. Evidence of some old fencing in stand. Imagery shows an old fence that enclosed about 75 percent of the stand. Appears to be an enclosure experiment more than likely to keep deer out of the cedar but there is no records found to confirm this,
8	6120 - Lowland Cedar	Low Density Pole	134.2	90		Lower site with cedar failing fast. Won't be long before cedar becomes lesser of a stand component in this site. Regeneration is non-existent except for some balsam fir. Mostly tag alder and reed canary grass.
9	4319 - Mixed Upland Forest	Low Density Sapling	5.5	27		A narrow ridge that was cleacut in 1985 for aspen regeneration. The aspen is however the least cover type. Signs it gets heavy deer browse. Surrounded by a cedar type where the deer are wintering up in.
12	6120 - Lowland Cedar	High Density Log	29.2	93		No sapling sized cedar in sub-canopy but instead part of the overstory. Cedar is still in fair shape but no new regeneration. Only regeneration present in sub-canopy is balsam fir and black ash.
13	6132 - Mixed Lowland Forest with Cedar	Medium Density Log	1.9	92		Emerald ash bore in the ash trees. Just into lowland class. Regeneration is a good mix. Leave stand as a buffer to the Muskegon River. There is no good access to the stand anyways and it is small in size.

s t				5 – Fo	orested Sta	nds Compartment: 072 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
17	6132 - Mixed Lowland Forest with Cedar	Medium Density Pole	8.6	95		Heavy deer sign with browsing hitting everything but the ash saplings. The overstory ash is heavily hit by the ash bore, No cedar regeneration under 30 feet in heigth. Ash regeneration is heavy and appears to not be affected by the bore at this time. It has balsam fir mixed through it as well.
18	6119 - Mixed Lowland Deciduous Forest	Medium Density Log	9.9	92		About an even mix of ash and red maple. Stand has areas were the ground is raised slightly and this is where the maple is growing. Could be harvested but access is poor, wet grounds make operating difficult, and is in a high traffic/visual area. Advise to leave as a visual buffer.
21	6113 - Lowland Maple	Medium Density Log	6.3	92		Lots of standing water. A poor quality forest that should be left to take care of itself. Not advisable nor feasible for a treatment.
22	6120 - Lowland Cedar	High Density Log	26.8	91		Moderate health cedar stand. Very little blow down. Some cedar regeneration present but all over 30 foot tall. Only regeneration getting past deer browsing is ash.
23	6113 - Lowland Maple	Medium Density Log	30.2	92		A large wide channel runs through the middle of this stand in a north/south direction draining water out of Stand 13. Other smaller drains flow into this channel from surrounding stands. This channel eventually dumps into the Muskegon River. Sawlog sized stand that has heavy ash bore sign. Very wet and would be very hard to operate in with current means. To much water present even in the winter to freeze so extensive soil damages would result.
25	4119 - Mixed Northern Hardwoods	Medium Density Pole	6.7	87	111-140	Sawlog sized red maple and ash. Ash has been heavily hit by the ash bore. Should be harvested, this will kept the aspen component present in stand and salvage some of the ash.
26	429 - Mixed Upland Conifers	High Density Log	38.8	119		Beautiful full hemlock and white pine mix stand. Some hemlock and pine are over 20 inches. Unique site with amount and size of hemlock present, rare in the area and should be left for future old growth stand. Some small depression holding water and have woody brush on the perimeters.
28	6119 - Mixed Lowland Deciduous Forest	Medium Density Log	21.1	88		Slightly higher ground than Stand 23. No standing water and tag alder understory. Ash has emerald ash bore. Stand could be harvested but access is very limited, and the soil conditions within the stand and the access route to are such that unless there is a heavy freeze major damage will result.
30	4119 - Mixed Northern Hardwoods	Medium Density Log	10.8	87	81-110	Decent stand with good red maple regeneration. The ash is infected with emerald ash bore and dying. It needs to harvested early to salvage these trees. The stand is fragmented by manmade barriers into four separate blocks. Can harvest 3 of the 4 blocks with a retention buffer strip along the Muskegon River.
31	6113 - Lowland Maple	Medium Density Pole	8.3	45		Some scattered saw sized aspen but majority of the stand is small pole sized red maple. Heavy red maple regeneration present. Ground is poorly drained as evident by presence of tag alder brush.

s t	Roscommor	Mgt. Unit		5 – Fo	orested Sta	Compartment: 072 Year of Entry: 2014	DNR DNR
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	. MICHIGAN
33	6118 - Lowland Deciduous with Cedar	Medium Density Log	15.8	95		Heavier component of cedar with numerous blow do understory regeneration, the only thing in the sapl ash. It is very thick with just traces of red maple about. The overstory ash though is infected with e bore.	ling size is scattered

6 - Nonforested Stands

Compartment: 072 Year of Entry: 2014



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
6	6220 - Alder/willow	13.5	No	Unspecified	tag alder swamp with just a handful of scattered ash and cedar trees.
10	6230 - Cattail	1.7	No	Unspecified	Cattail marsh with no signs of phragmites.
11	6230 - Cattail	1.3	No	Unspecified	Cattail marsh with no signs of phragmites.
14	50 - Water	8.0	No	Unspecified	Muskegon River
15	6230 - Cattail	1.5	No	Unspecified	Cattail island in the middle of the Muskegon River. No visible signs of phragmites.
16	6220 - Alder/willow	17.7	No	Unspecified	Tag alder swamp
19	6230 - Cattail	12.8	No	Unspecified	Cattail marsh with no signs of phragmites.
20	11 - Low Intensity Urban	1.4	No	Unspecified	Bradford Road
24	6230 - Cattail	0.6	No	Unspecified	Cattail marsh with no signs of phragmites.
27	6230 - Cattail	6.6	No	Unspecified	Cattail marsh along Muskegon River with no signs of phragmites.
29	11 - Low Intensity Urban	1.8	No	Unspecified	Mead and River Roads
32	3102 - Grass	2.1	Yes	High (NonForested)	
34	3102 - Grass	0.3	Yes	High (NonForested)	

Roscommon Mgt. Unit

Compartment: 072 Year of Entry: 2014



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.

Stand	SCA Type	SCA Name	Acres	Comments
26	Unique Site - SCA	71072026	38.8	

Compartment: 072 Year of Entry 2014



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.

Conservation Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Concentrated Recreation Area	Facilities that are designed and maintained for routine or heavy r State Forest campgrounds, motorized and non-motorized trails, t access sites.	
SCA	Habitat Area	An area that provide some specific need for the life cycle of wildle and Waterfowl Production Areas, deer wintering complexes in loopenings and savannas. Habitat areas are distinct from critical hendangered or threatened species (such as Kirtland's warbler or general in nature, are not primarily associated with threatened or covered by species recovery plans that are developed in cooperations.	wland conifer communities, grassland abitat designated for recovery of piping plover areas) in that they are more endangered species, and are not