



Newberry Forest Management Unit
Compartment Review Presentation
Compartment #42070 Entry Year: 2014
Compartment Acreage: 2,860 County: Chippewa

Revision Date: 9/6/2012

Stand Examiner: Jason Darling

Legal Description: T46N R7W. Sec: 1-4, 10-12 & 15.

RMU (if applicable): This compartment lies within the Tahquamenon River Basin Wetlands Management Area.

Management Goals: Maintain forest productivity, forest health, species diversification and age class diversification through proper silviculture treatments and natural processes.

Soil and Topography: Gogomain very fine sandy loam and Markey & Carbondale are the two main soil series within this compartment. Other soil series that are present include Rousseau, dark sub-soil-Alcona complex, Markey-Kinross-AuGres complex, Histosols and Aquent. The topography ranges from wet lowlands to gentle ridges and knobs.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The compartment is continuous State ownership, however it is surrounded entirely by private land. The private land access on the west side of the compartment is gated, however access is granted and a key is located in the Newberry Field Office. An easement to the State from Escanaba Paper Company for the existing dirt road which passes through the eastern portion of the compartment is located in the compartment folder.

Unique, Natural Features: MNFI lists no features within this compartment.

Archeological, Historical, and Cultural Features: There are no features listed by the Bureau of History within this compartment.

Special Management Designations or Considerations: The East Branch of the Tahquamenon River is the compartments west boundary. All BMP's that apply must be and will be implemented when carrying out any planned activities.

Watershed and Fisheries Considerations: Fisheries Values: Good to Excellent
Fisheries Concerns: East Branch Tahquamenon River, Riley Creek, and Big Beaver Creek are all designated trout streams and are all associated with this compartment. There are no prescribed treatments near the East Branch Tahquamenon River. Riley Creek and Big Beaver Creek have a prescribed clear-cut near them so a 200' buffer should be maintained along each of these streams.

Wildlife Habitat Considerations: Compartment 70 lies in western Chippewa county in the Seney Sand Lake Plain ecological sub-subsection and the Tahquamenon River Basin Wetlands Management Area where white-tailed deer, black bear, snowshoe hare and gray jay are featured species. The compartment is largely spruce and lowland conifer in the northern regions and aspen, northern hardwoods and lowland types in the southern half. The compartment is in the Hulbert deer yard which supports high numbers of deer during stressful winter periods. The east branch of the Tahquamenon river, Riley creek, and numerous drainages flow through the compartment and are important travel corridors for numerous wildlife species.

Species diversity of stands in the southern portion of the compartment is high and maintaining diversity in harvested aspen and hardwood stands will be important to meeting wildlife objectives. Conifer components of aspen stands are

commonly retained during harvest to increase stand diversity, provide nesting, denning and forage sites and cover. Large diameter aspen will occasionally be retained to provide food sources and later snags and den trees for wildlife. Hemlock will not be harvested in the compartment to benefit white-tailed deer and moose during winter months. In addition to featured species, notable wildlife species expected to use the compartment include pileated woodpecker, gray wolf, coyote, bobcat, and moose.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of peat and muck, lacustrine (lake) clay and silt and minor end moraine of coarse-textured till. There is insufficient data to determine the glacial drift thickness. The Ordovician Utica and Collingwood Shales and the Trenton and Black River Formations subcrop below the glacial drift. The Trenton and Black River are quarried for stone/dolomite in the UP. A gravel pit is located in Section 17 to the west. Potential should be good on the uplands in Section 1. There is no economic oil and gas production in the UP.

Vehicle Access: Access is limited due to the wet/clay soils throughout the compartment. Access has been granted to the State through a gate on the west side of the compartment. Vehicle/ORV access is possible but is limited to dry or snow covered conditions.

Survey Needs: None.

Recreational Facilities and Opportunities: Hunting and fishing are the main recreational opportunities, however they are limited by private access.

Fire Protection: Large fires in this compartment are not likely because of the hardwood and mixed conifer/hardwood lowland types. Travel times are long for this compartment and may increase fire size somewhat. Access with heavy wheeled suppression vehicles is limited and could challenge suppression tactics.

Additional Compartment Information:

- **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**

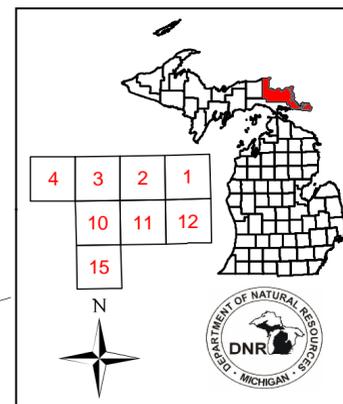
- **The following information is displayed, where pertinent, on the attached compartment maps:**
 - ◆ **Base feature information, stand boundaries, cover types, and numbers**
 - ◆ **Proposed treatments**
 - ◆ **Details on the road access system**

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Cover Type & Treatment Map

Compartment: 070
 T46N R07W Sec. 1-4, 10-12, 15
 County: Chippewa
 Unit: Newberry
 YOE: 2014
 Acres: 2,860 GIS Calculated
 Examiner: Jason Darling
 Map Revised: 10/05/2012
 Map Phase: Pre-Review

Stand #
 23
Stocking Density
 (4120) - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



Legend

- Miris Corners
- PLSS Corner
- Snowmobile Trails
- Gravel Roads
- Poor Dirt Roads
- Snowmobile Trail
- Stream
- Lakes and Rivers

Treatments

- Clearcut (w/Reserves, Patch/Strip)
- Seed Tree (w/Reserves)

Forest Stands

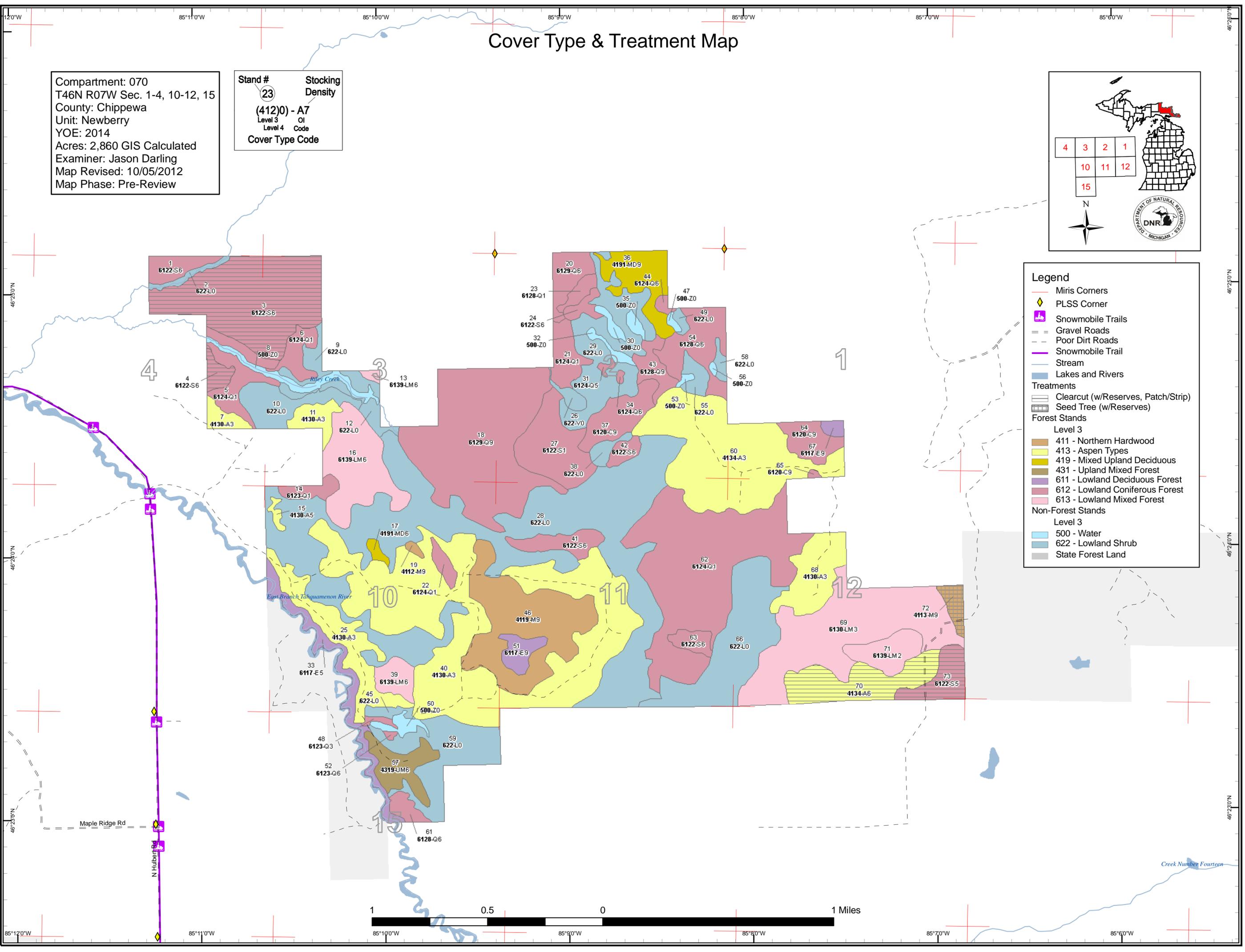
Level 3

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

Non-Forest Stands

Level 3

- 500 - Water
- 622 - Lowland Shrub
- State Forest Land



85°12'0"W 85°11'0"W 85°10'0"W 85°9'0"W 85°8'0"W 85°7'0"W 85°6'0"W

46°25'0"N 46°24'0"N 46°23'0"N 46°22'0"N

Maple Ridge Rd

N Hubert Rd

Riley Creek

East Branch Tahquamenon River

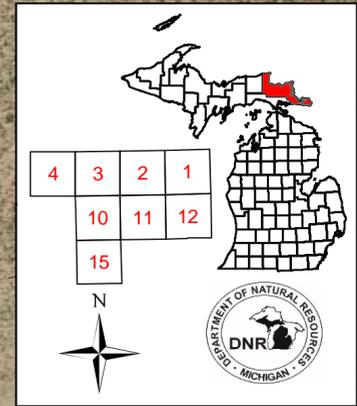
Creek Number Fourteen

1 0.5 0 1 Miles

Stand Boundary Map

Compartment: 070
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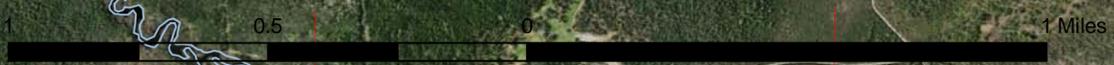
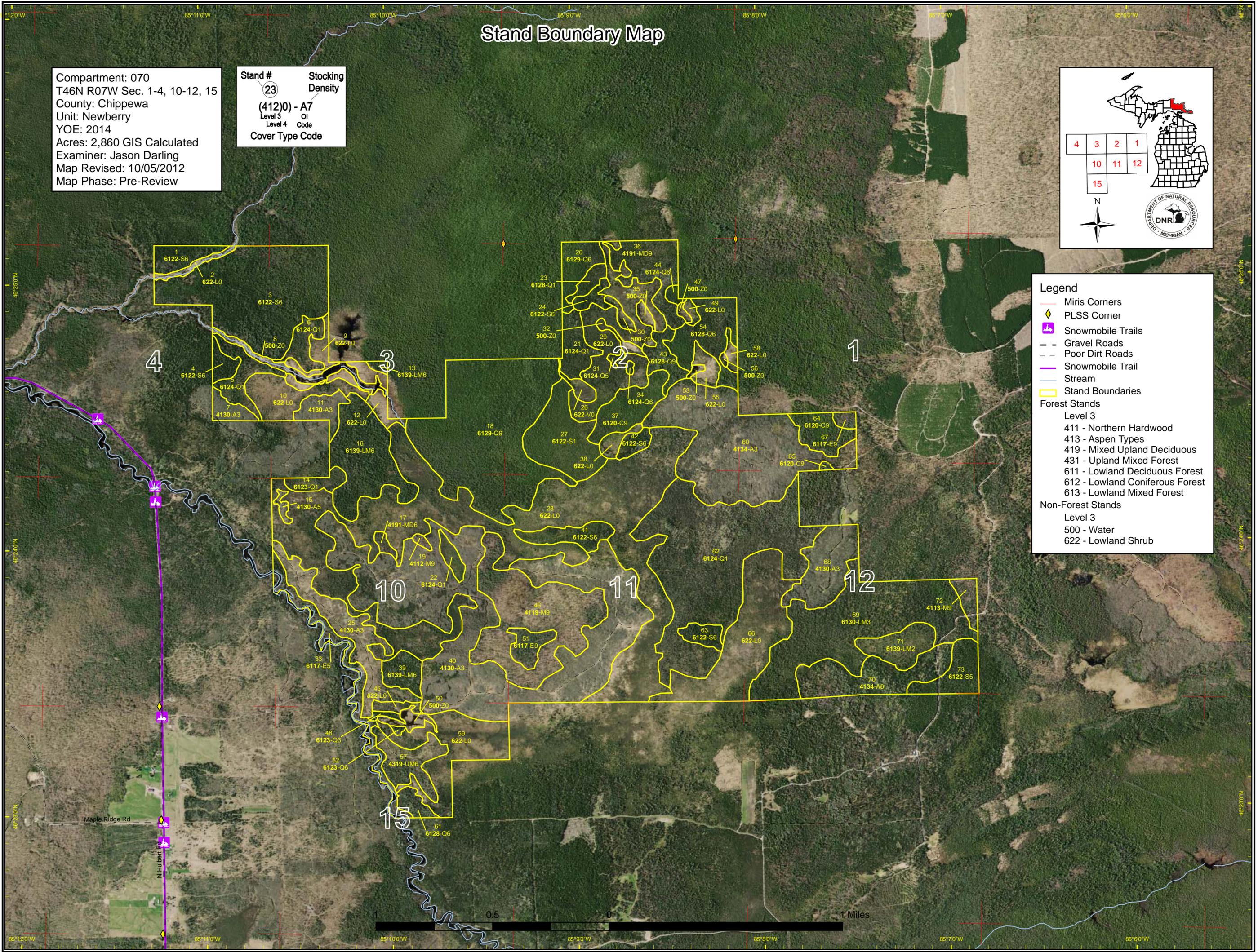


Table 1 – Total Acres by Cover Type and Age Class



	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	55	474	54	15	0	3	0	0	0	0	0	0	0	56	656
Bog	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Cedar	0	0	0	0	0	0	31	0	0	22	0	0	0	0	53
Lowland Conifers	0	0	0	0	50	0	332	3	0	192	0	0	0	0	576
Lowland Deciduous	0	0	0	0	0	34	0	4	13	0	0	0	0	0	52
Lowland Mixed Forest	0	0	0	165	26	0	0	0	0	0	0	0	0	72	263
Lowland Shrub	725	0	0	0	0	0	0	0	0	0	0	0	0	0	725
Lowland Spruce/Fir	0	0	0	0	0	0	53	0	239	0	0	0	0	0	293
Mixed Upland Deciduous	0	0	0	0	0	0	42	0	0	0	0	0	0	0	42
Northern Hardwood	0	0	0	0	0	0	0	10	116	0	0	0	0	0	126
Upland Mixed Forest	0	0	0	0	28	0	0	0	0	0	0	0	0	0	28
Water	40	0	0	0	0	0	0	0	0	0	0	0	0	0	40
Total	825	474	54	180	103	38	459	17	369	214	0	0	0	128	2860



Table 2 – Proposed Treatment Summaries

Newberry Mgt. Unit
Year of Entry 2014

Compartment 070
Total Compartment Acres: 2860

Acres by Treatment Type

Commercial Harvest - 236	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

	<i>Clearcut</i>	<i>Selection</i>	<i>Seed Tree</i>	<i>Shelterwood</i>	<i>Thinning</i>	<i>Other - Specify</i>	<i>Total Acres</i>
Aspen	56	0	0	0	0	0	56
Lowland Spruce/Fir	171	0	0	0	0	0	171
Northern Hardwood	0	0	10	0	0	0	10
Total	227	0	10	0	0	0	236



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
70	42070070-Cut	55.7	4134 - Aspen, Spruce/Fir	High Density Pole	62		Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal
<p><u>Prescription:</u> Clearcut. Retention will be in the form of scattered Aspen and White pine. All hemlock will be left for wildlife.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> Survey marker in the south east corner of the compartment. Winter access/harvest; need to address access issues with the landowners to the south.</p> <p><u>Next Steps:</u> Follow regeneration guidelines. Acceptable regeneration is any combination of species currently present.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										

72	42070072-Cut	9.9	4113 - R.Maple, Conifer	High Density Log	75	51-80	Harvest	Seed Tree with Reserves	4113 - R.Maple, Conifer	Cmpt. Review Proposal
<p><u>Prescription:</u> Leave a component of all species present. Focus on leaving large diameter, well formed overstory trees. Retain a BA of 20-40. Leave a component of large White pine and all hemlock for wildlife.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> Winter harvest; will need to address access issues with the landowner to the south.</p> <p><u>Next Steps:</u> Follow regeneration guidelines. Acceptable regeneration is northern hardwoods with a conifer component.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										

73	42070073-Cut	24.8	6122 - Black Spruce	Medium Density Pole	82		Harvest	Clearcut with Reserves	6124 - Lowland Spruce-Fir	Cmpt. Review Proposal
<p><u>Prescription:</u> Clearcut. Follow retention guidelines. Maintain species diversity within retention pockets. Leave a component of large White pine. All hemlock will be left for wildlife.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> Winter access/harvest; need to address access issues with the landowners to the south.</p> <p><u>Next Steps:</u> Follow regeneration guidelines. Acceptable regeneration is spruce and a component of species currently present.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										

**Total Treatment
Acreage Proposed: 90.3**

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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
3 42070003-Cut	137.7	6122 - Black Spruce	High Density Pole	89	51-80	Harvest	Clearcut with Reserves	6129 - Mixed Coniferous Lowland Forest	Cmpt. Review Proposal
<u>Prescription Specs:</u> Clearcut. Follow retention guidelines. Leave cedar pockets and all hemlock will be left for wildlife. Some (minimal) removal of hemlock will only be allowed for maneuverability.									
<u>Other Comment:</u> Survey control is poor. Access across PVT property is questionable. Portable bridge needed.									
<u>Next Steps:</u> Follow regeneration guidelines. Accptable regeneration is lowland conifers.									
<u>Proposed Start Date:</u> 10/01/2013									
<u>Limiting Factor and No Treatment Reason</u> 2D: Portable Bridge Needed (Dept. bridge will be adequate) Access and overall landscape is very wet. Stand in the far north would require 2 portable bridges.									

4 42070004-Cut	8.4	6122 - Black Spruce	High Density Pole	88		Harvest	Clearcut	6124 - Lowland Spruce-Fir	Cmpt. Review Proposal
<u>Prescription Specs:</u> Clearcut. Leave all hemlock except for minimal maneuverability removal.									
<u>Other Comment:</u> Survey control is poor. Access across PVT property is questionable. Winter harvest.									
<u>Next Steps:</u> Follow regeneration guidelines. Acceptable regeneration is spruce and other lowland conifers.									
<u>Proposed Start Date:</u> 10/01/2013									
<u>Limiting Factor and No Treatment Reason</u> 2B: Unknown if access through adjacent landowner(s) is possible									

**Total Treatment
Acreage Proposed: 146.1**

Out of YOE -- Treatments
Prescribed with No Limiting Factor

Year of Entry: 2014



Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
<u>Prescription Specs:</u>									
<u>Other Comments:</u>									
<u>Next Steps:</u>									
<u>Proposed Start Date:</u> #Error									

Total Treatment Acreage Proposed: 0



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6122 - Black Spruce	High Density Pole	15.6	89	51-80	Crossed two streams to get to the stand; access is very difficult. More cedar and larger spruce/tamarack in the northwest corner.
3	6122 - Black Spruce	High Density Pole	146.8	89	51-80	Small pockets of pure Cedar scattered throughout the stand.
4	6122 - Black Spruce	High Density Pole	8.5	88		Very nice spruce and tamarack stand. Tamarack is larger diameter than spruce. Site is quite dry at the time of inventory.
5	6124 - Lowland Spruce- Fir	Low Density Sapling	21.8	68		Mixed wetland site. Lots of tag alder throughout (over 3'tall).
6	6124 - Lowland Spruce- Fir	Low Density Sapling	15.3	68		Mixed wetland site. Lots of tag alder throughout (over 3'tall).
7	4130 - Aspen	High Density Sapling	9.5	25		
11	4130 - Aspen	High Density Sapling	14.8	30		Old road runs through the stand; wet but in fair condition.
13	6139 - Mixed Lowland Forest	High Density Pole	2.3	Uneven Age		
14	6123 - Lowland Fir	Low Density Sapling	10.3	42		
15	4130 - Aspen	Medium Density Pole	3.2	52	51-80	Small aspen pocket within alder brush.
16	6139 - Mixed Lowland Forest	High Density Pole	69.8	Uneven Age		
17	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	3.5	60	1-50	
18	6129 - Mixed Coniferous Lowland Forest	High Density Log	191.7	98		
19	4112 - Maple, Beech, Cherry Association	High Density Log	2.0	80	51-80	Nice advanced maple regeneration throughout the stand. Overstory is falling apart, lots of cull trees.
20	6129 - Mixed Coniferous Lowland Forest	High Density Pole	20.3	65		
21	6124 - Lowland Spruce- Fir	Low Density Sapling	19.8	45		
22	6124 - Lowland Spruce- Fir	Low Density Sapling	7.3	66		

Stand	Newberry Mgt. Unit		5 – Forested Stands			Compartment: 070	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2014	
23	6128 - Lowland Coniferous, Mixed Deciduous	Low Density Sapling	7.2	45			
24	6122 - Black Spruce	High Density Pole	7.0	83			
25	4130 - Aspen	High Density Sapling	54.7	5			Wet/clay soils. Road running through the stand is in good condition. Stand was part of North Hulbert Aspen: Sale # 42-040-04-01.
27	6122 - Black Spruce	Low Density Sapling	53.5	66			Low density trees; lots of tall tag alder.
31	6124 - Lowland Spruce-Fir	Medium Density Pole	1.7	62			Small island of lowland conifers.
33	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	34.3	54			River corridor; lots of beaver activity influencing timber.
34	6124 - Lowland Spruce-Fir	High Density Pole	1.1	66			
36	4191 - Mixed Upland Deciduous with Conifer	High Density Log	38.8	67			
37	6120 - Lowland Cedar	High Density Log	30.6	69			
39	6139 - Mixed Lowland Forest	High Density Pole	15.7	38			
40	4130 - Aspen	High Density Sapling	313.7	16			
41	6122 - Black Spruce	High Density Pole	19.2	88			
42	6122 - Black Spruce	High Density Pole	7.7	88			
43	6128 - Lowland Coniferous, Mixed Deciduous	High Density Log	15.7	66			
44	6124 - Lowland Spruce-Fir	High Density Pole	2.8	70			
46	4119 - Mixed Northern Hardwoods	High Density Log	114.0	82	81-110		Stand was thinned: Hulbert Island Hardwoods, complete 3/2007.
48	6123 - Lowland Fir	High Density Sapling	2.5	43			





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
51	6117 - Lowland Deciduous, Mixed Coniferous	High Density Log	13.5	89	111-140	Mixed lowland site within the hardwood island. Quite a few very large red maple throughout.
52	6123 - Lowland Fir	High Density Pole	1.1	43		
54	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	40.2	67		
57	4319 - Mixed Upland Forest	High Density Pole	28.2	42		Stand was part of North Hulbert Aspen: Sale # 42-040-04-01.
60	4134 - Aspen, Spruce/Fir	High Density Sapling	160.7	16		Stand was cut as # 42-031-94-01. Excelent aspen reproduction.
61	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	8.7	46		Beaver activity influencing timber along the river.
62	6124 - Lowland Spruce-Fir	Low Density Sapling	208.8	63		Varying densities of forested cover types. Alder dominates throughout but scattered conifers are present.
63	6122 - Black Spruce	High Density Pole	9.8	80		
64	6120 - Lowland Cedar	High Density Log	21.4	98		
65	6120 - Lowland Cedar	High Density Log	1.1	98		
67	6117 - Lowland Deciduous, Mixed Coniferous	High Density Log	4.1	70		
68	4130 - Aspen	High Density Sapling	44.0	23		
69	6130 - Fir, Aspen, Maple	High Density Sapling	149.4	30		Quite a bit of stocking and size class diversity. Occasional small pockets of pure cedar throughout the stand.
70	4134 - Aspen, Spruce/Fir	High Density Pole	55.7	Uneven Age		Aspen is two ages; 62 and 28. Large overstory trees with small aspen and balsam fir throughout. Lots of CWD.
71	6139 - Mixed Lowland Forest	Medium Density	25.8	40		Small diameter/short timber. Several openings with alder scattered throughout the stand.
72	4113 - R.Maple, Conifer	High Density Log	9.9	75	51-80	
73	6122 - Black Spruce	Medium Density Pole	24.8	82		Nice spruce; variable size classes. Timber is sporadic in places where it gets too wet. Lots of CWD.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
2	6229 - Mixed lowland shrub	5.5	No	Unspecified	Big Beaver Creek corridor. Tag alder and grass throughout the stand.
8	50 - Water	15.8	No	Unspecified	Riley Creek corridor.
9	6229 - Mixed lowland shrub	10.2	No	Unspecified	
10	6229 - Mixed lowland shrub	32.4	N/A	Unspecified	Very tall tag alder with scattered conifers throughout.
12	6229 - Mixed lowland shrub	19.4	N/A	Unspecified	
26	6225 - Bog	5.8	No	Unspecified	Sign of old beaver activity. Can hold water seasonally.
28	6229 - Mixed lowland shrub	386.3	No	Unspecified	Dominated by tag alder. Scattered individual trees and pockets of lowland conifers throughout the stand.
29	6229 - Mixed lowland shrub	80.0	No	Unspecified	
30	50 - Water	4.4	No	Unspecified	Lots of beaver activity.
32	50 - Water	4.6	No	Unspecified	Lots of beaver activity.
35	50 - Water	3.5	No	Unspecified	Lots of beaver activity.
38	6229 - Mixed lowland shrub	6.9	No	Unspecified	Lots of beaver activity.
45	6229 - Mixed lowland shrub	5.5	No	Unspecified	
47	50 - Water	1.8	No	Unspecified	
49	6229 - Mixed lowland shrub	3.0	No	Unspecified	
50	50 - Water	7.4	No	Unspecified	Lots of old beaver activity.
53	50 - Water	1.5	No	Unspecified	Lots of beaver activity.
55	6229 - Mixed lowland shrub	9.3	No	Unspecified	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
56	50 - Water	1.0	No	Unspecified	
58	6229 - Mixed lowland shrub	4.2	No	Unspecified	
59	6229 - Mixed lowland shrub	63.9	No	Unspecified	
66	6229 - Mixed lowland shrub	98.2	No	Unspecified	



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



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.

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	Wild and Scenic Rivers	Wild and Scenic Rivers are established under authority of the National Wild and Scenic Rivers Act, Public Law 90-542, as amended. Each Wild and Scenic River has a river specific Federal management plan, and State agencies may enter into written cooperative agreements with the administering Federal agency for the management of Wild and Scenic Rivers that are upon State-owned lands. There are 18 miles of Federal designated Wild and Scenic Rivers that are located within the State Forest.