

Compartment Review Presentation

Sault Ste. Marie Forest Management Unit

Compartment 182 Entry Year 2015 Acreage: 2,184 County Mackinac Management Area: County Line Hardwoods

Revision Date: 06/05/2013

Stand Examiner: Cory Luoto

Legal Description:

T44N-R11W, Sections 3-5, 10 & 11

Identified Planning Goals:

This compartment is located about three miles northeast of Curtis. The northern part of the Black Creek Flooding lies within compartment boundaries. The majority of the compartment is lowland swamp conifer and cedar. Other timber types include lowland poplar, lowland hardwoods, northern hardwoods, aspen and a red pine stand. The aspen and spruce – fir types are regenerating nicely and the hardwoods and red pine need regular treatments to promote health and growth.

Soil and topography:

Lowlands and swamps consist primarily of Markey and Carbondale mucks, with Spot-Finch and Markey-Spot-Finch Complexes. Upland are generally Amadon-Rock outcrop complex, Menominee loamy sand, Wallace sand, and Paquin sand. Level lowlands to rolling uplands.

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

The compartment is bordered by state land to the southwest, the northeast, and the east. The far southern portion of the compartment is primarily private. There are also several parcels of private land along the eastern and western portion of the compartment. The Mackinac/Luce County line is the north boundary.

Unique Natural Features:

Within the Western portion of the compartment there is a great blue heron rookery, osprey nests, an eagle nest, and the Black Creek headwaters.

Archeological, Historical, and Cultural Features:

The northern portion of the Black Creek Wildlife Flooding lies in section 5. The Tahquamenon Area School Forest is adjacent to the compartment.

Special Management Designations or Considerations:

Some stands within this compartment are only accessible in the winter through private land. ORV trails will be maintained and signed when harvesting stands.

Watershed and Fisheries Considerations:

This compartment contains the upper Black Creek above the Black Creek Flooding near Big Manistique Lake. No file information exists for these small streams. Implementation of BMP's will aid in preventing sediment input from road crossings and upland areas are critically important to protect spawning areas for stream-resident fishes.

Wildlife Habitat Considerations:

Compartment 182 is located in the County Line Hardwoods Management Area. Cedar swamp and marsh are common here. Part of the Black Creek Flooding State Wildlife Management Area is located on the western side of the compartment. Northern hardwoods and some aspen are located on the far eastern side. Species use of the compartment includes, but is not limited, to white-tailed deer, snowshoe hare, bobcat, black bear, coyote, beaver, otter, mink, eagles, osprey, and waterfowl including mallards and wood ducks.

Wildlife objectives in this compartment are to maintain and enhance species and structural diversity within the hardwood forests, and maintain the cedar cover. A component of beech will be retained in northern hardwoods, and some large wolfy trees will be left for potential hawk nests and future cavity nesting species. Cedar stands will be retained to provide wintering cover for white-tailed deer as well as habitat for bobcat, black bear, and numerous other wildlife.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine (lake) sand and gravel, peat and muck and coarse-textured glacial till to the west. The glacial drift thickness varies from insufficient data to determine thickness to 10 to 50 feet. The Silurian Burnt Bluff Group subcrops below the glacial drift. The Burnt Bluff is quarried for stone/limestone elsewhere in the UP. Gravel pits are located to the south and there may be potential on the uplands. There is no economic oil and gas production in the UP.

Vehicle Access:

Access to the eastern portion of the compartment is limited to Forest Trail which is a poorer quality county road. The hardwood stands have fairly good access from old logging two tracks. The interior of the compartment has a two track and several ice-roads but these originate on private land. Large portions of the compartment are inaccessible.

Survey Needs:

None

Recreational Facilities and Opportunities:

Snowmobile trail #457 traverses the southeast portion of the compartment. The Sandtown Motorcycle trail also traverses this same corner of the compartment. As much as possible, avoid the motorcycle trail; cut ORV marker trees above the markers whenever possible. Keep all trails clear of logging slash and debris.

Fire Protection:

The compartment cover types and low ground limit potential for any large scale fire problems. The potential for fire exists where human activity is present and in adjoining private lands. Access would be a problem for any fires occurring in the compartments interior. Vehicle access is very limited. Any fires in the lower areas would pose potential mop-up problems.

Additional Compartment Information:

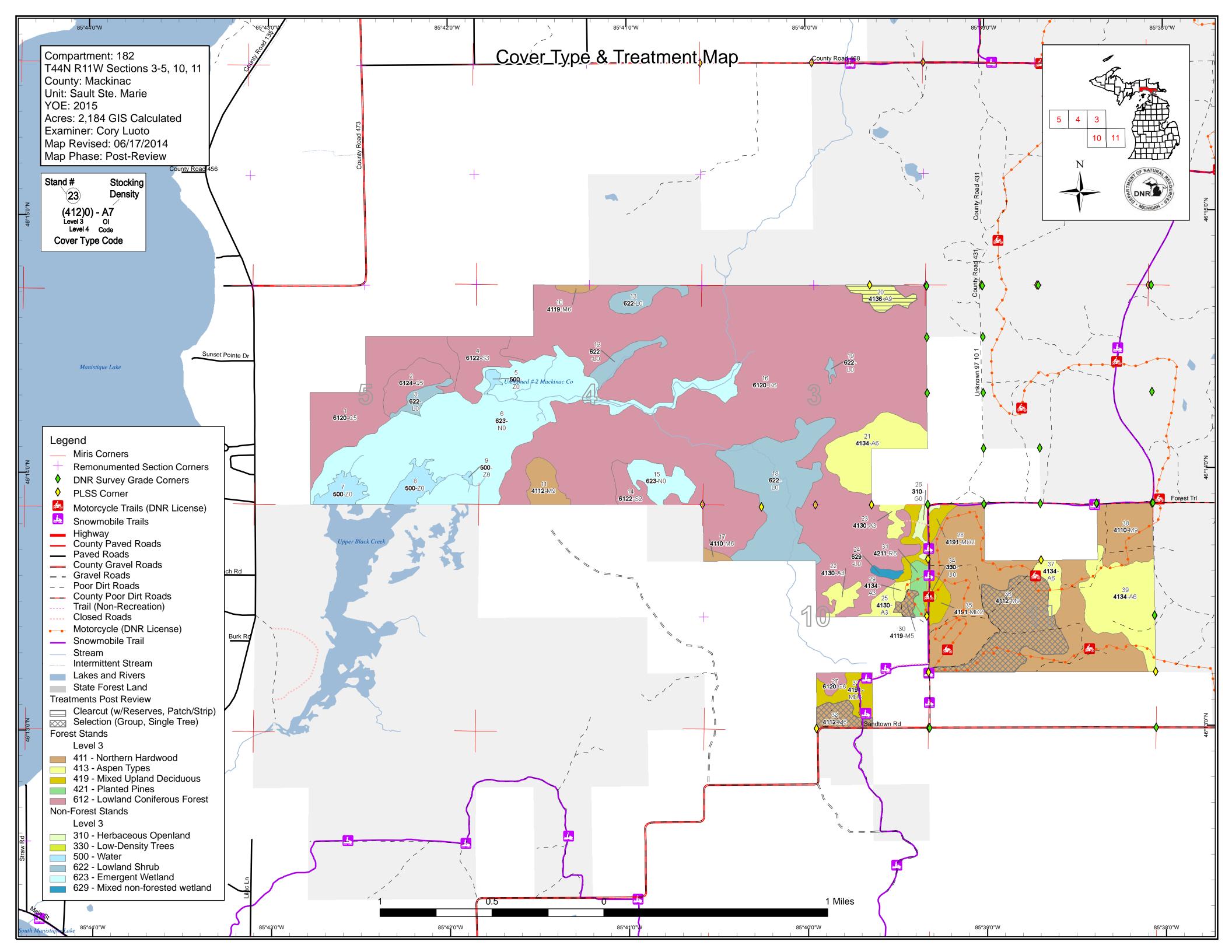
The following reports from the Inventory are attached:

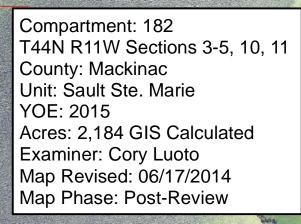
Total Acres by Cover Type and Age Class Cover Type by Harvest Method Proposed Treatments – No Limiting Factors Proposed Treatments – With Limiting Factors Stand Details (Forested and Nonforested) Dedicated and Proposed Special Conservation Areas Site Condition Details

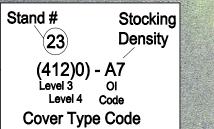
The following information is displayed, where pertinent, on the attached compartment maps:

Base feature information, stand boundaries, cover types, and numbers Proposed treatments Site condition boundaries

Details on the road access system







Manistique Lake

Legend

Miris Corners Remonumented Section Corners Survey Grade \diamond PLSS Corner \diamond ****** Motorcycle Trails (DNR License) <u>4</u> Snowmobile Trails Highway County Paved Roads Paved Roads County Gravel Roads ____ ____ Gravel Roads _ _ Poor Dirt Roads County Poor Dirt Roads Trail (Non-Recreation) Closed Roads ____ Motorcycle (DNR License) Snowmobile Trail Stream Intermittent Stream Stand Boundaries Forest Stands Level 3 411 - Northern Hardwood

413 - Aspen Types419 - Mixed Upland Deciduous421 - Planted Pines

- 612 Lowland Coniferous Forest

Non-Forest Stands

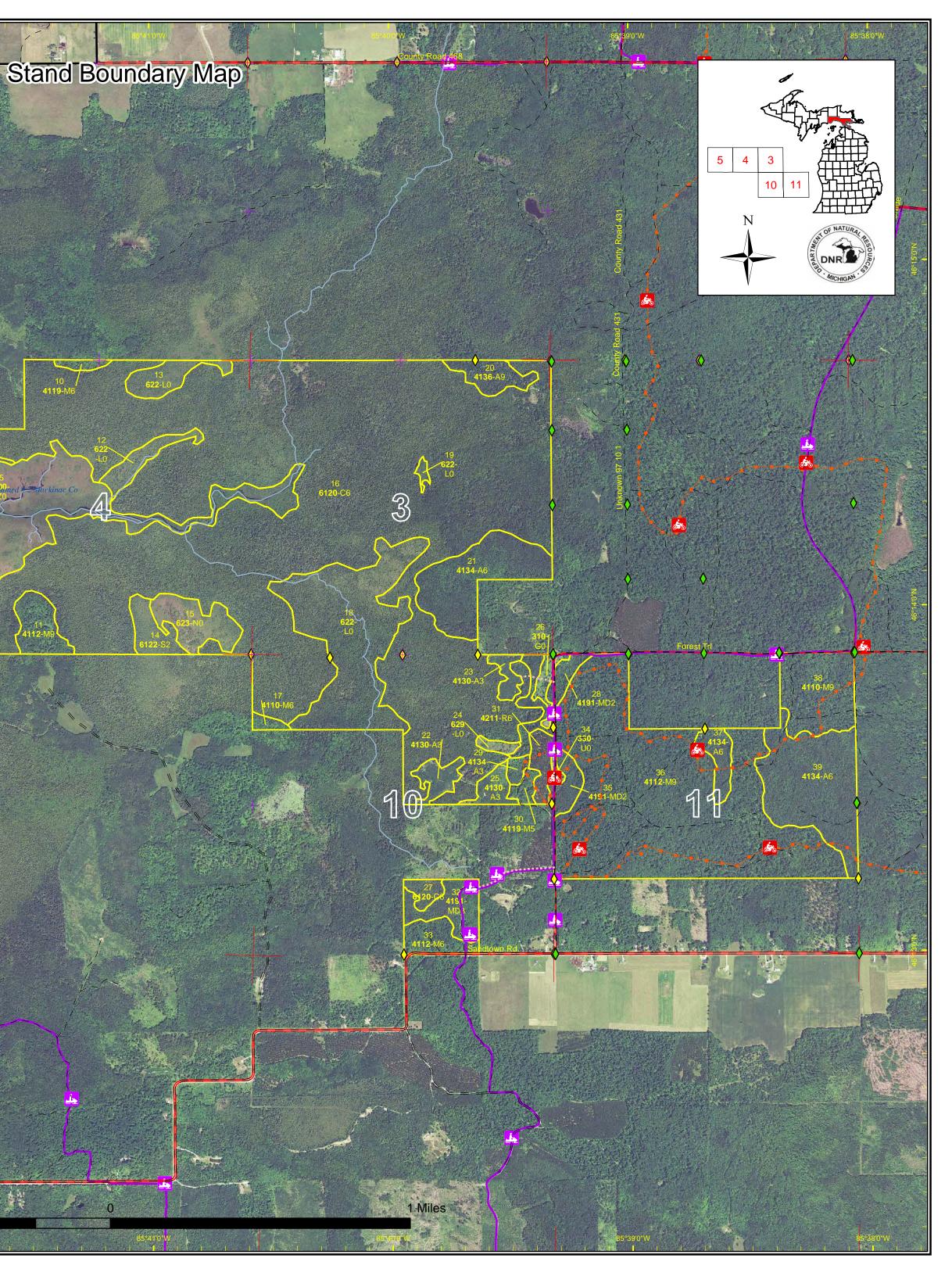
Level 3

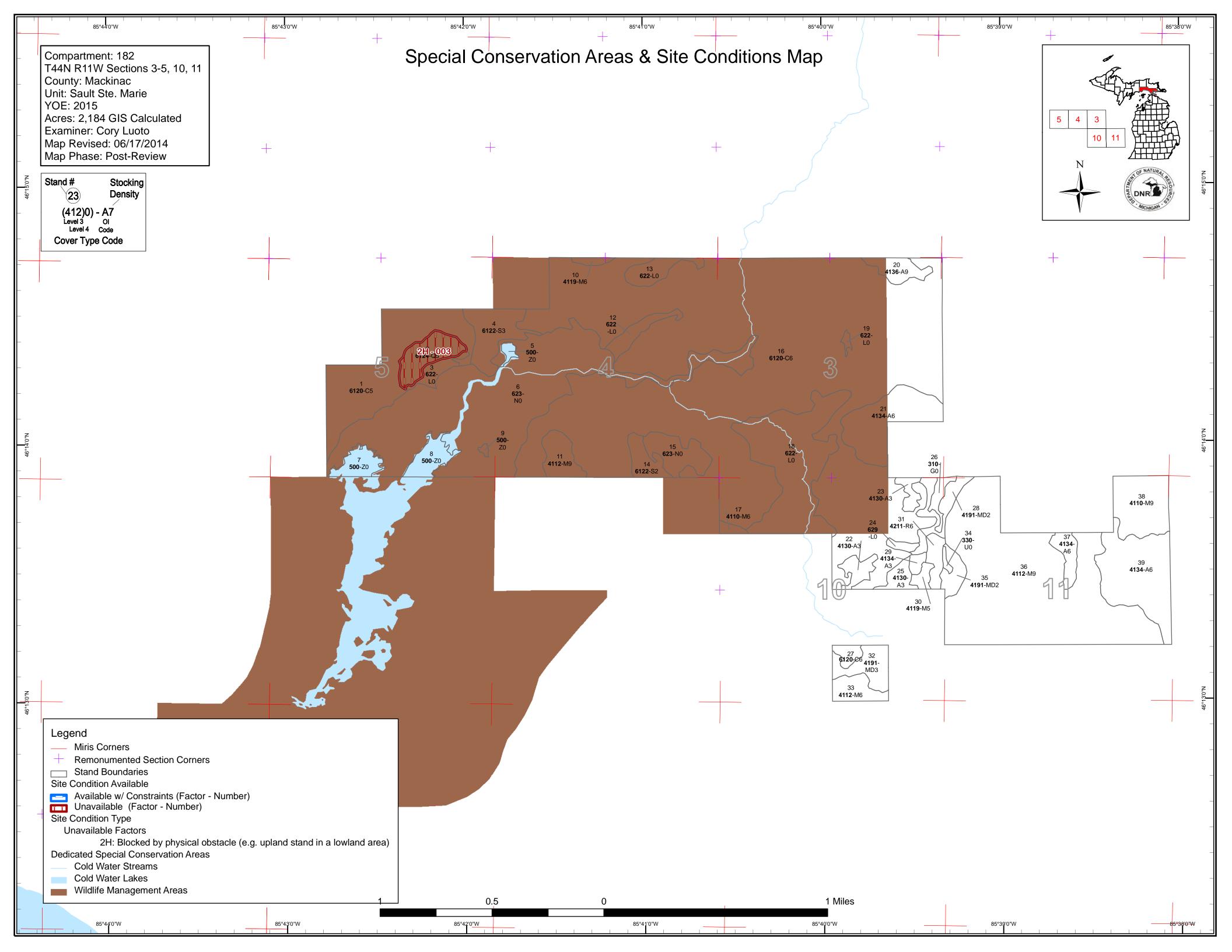
- 310 Herbaceous Openland
- 330 Low-Density Trees 500 - Water
- 622 Lowland Shrub
- 623 Emergent Wetland 629 Mixed non-forested wetland

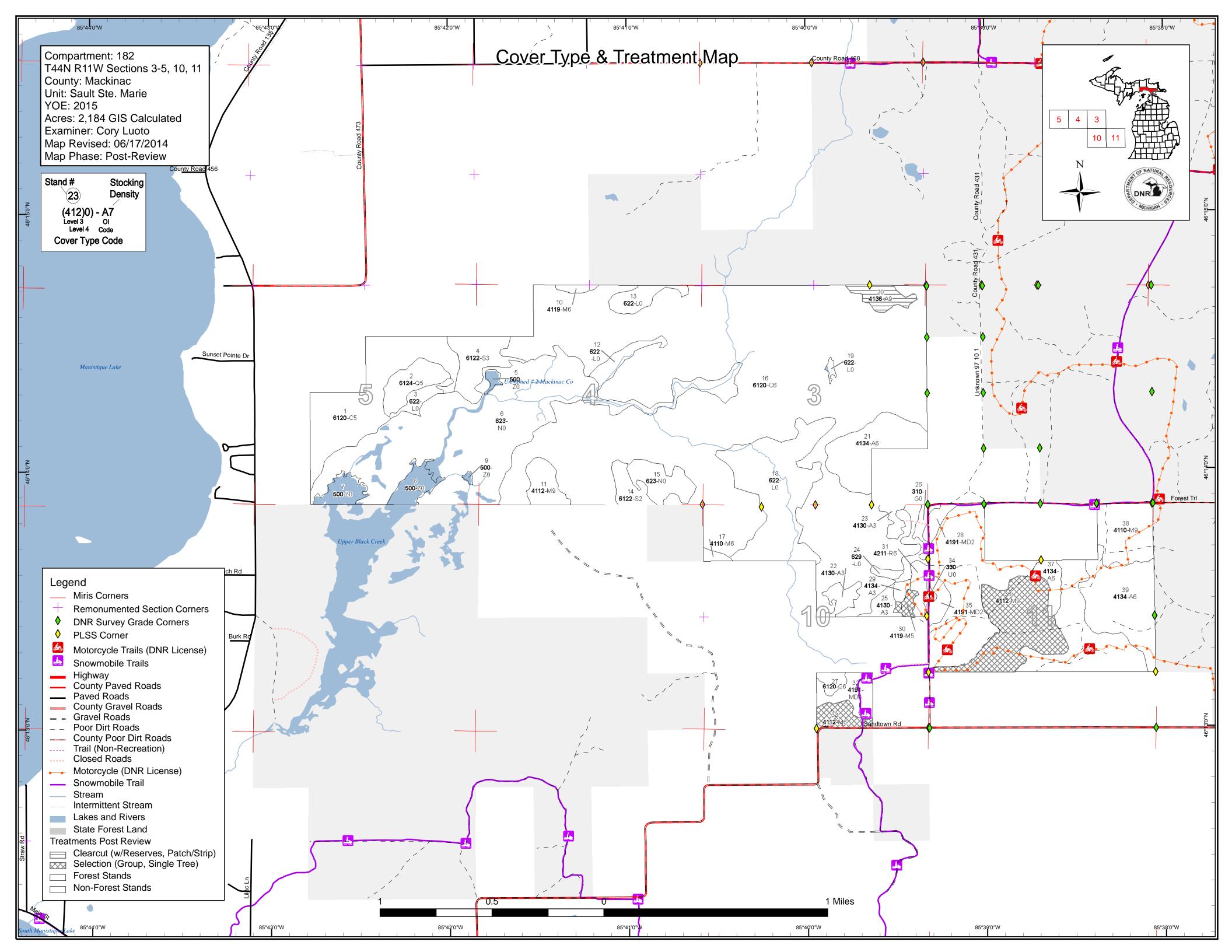
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Report 1 – Total Acres by Cover Type and Age Class

Sault Ste. Marie Mgt. Unit Cory Luoto : Examiner

Compartment 182 Year of Entry 2015



Age	Class
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	/	6.0	10 ⁷ 0	10-12	20.03 0.03	09- 14- 10-	55°	69.00	10,10,	99-90-90 99-90-90	69.00	⁷⁰⁰ , ⁷⁰³	120,179	220×12	ACCEPTION AND ACCEPTION ACCEPT
Aspen	0	24	15	124	0	14	0	0	0	0	0	0	0	0	176
Cedar	0	0	0	0	0	0	0	0	0	98	0	952	0	0	1050
Herbaceous Openland	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
.ow-Density Trees	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
owland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	23	0	23
owland Shrub.	147	0	0	0	0	0	0	0	0	0	0	0	0	0	147
owland Spruce/Fir	0	0	0	0	0	45	0	0	0	0	0	0	0	0	45
/larsh	301	0	0	0	0	0	0	0	0	0	0	0	0	0	301
Aixed Upland Deciduous	0	0	48	0	0	0	0	0	0	0	0	0	0	0	48
Northern Hardwood	0	0	0	0	0	0	14	8	281	41	0	0	0	0	345
Red Pine	0	0	0	0	0	0	10	0	0	0	0	0	0	0	10
Water	33	0	0	0	0	0	0	0	0	0	0	0	0	0	33
Total	488	24	63	124	0	59	24	8	281	139	0	952	23	0	2184



Total

A . MICHIGAN .	Sault Ste. Marie Mgt. Unit Year of Entry 2015						Compartment Total Compartment Acres:	
			Acres by T	reatment Ty	/pe			
	Commercial Harvest - 110	Tree Planting - 0	Other -	0				
	Habitat Cut - 0	Opening Maintenance - 0	1					
			Cover Typ	e by Harve	st Method			
			and the second s	Steelen oo	Kulin Stor Los	44CC		
	Aspen Types	14	0 0	0 0	0 14			
	Northern Hardwood	0	96 0	0 0	0 96			

Compartment: 182 Sault Ste. Marie Mgt. Unit **Report 3 -- Treatments Prescribed** Year of Entry 2015 with No Limiting Factor s t а Treatment BA Treatment Treatment Cover Type Acres CoverType Size Stand Approval n Method Objective d Name Density Age Range Type Status 13.7 4136 - Aspen, High 53 Clearcut with 413 - Aspen Fld. Tr. Bdy. -20 45182020-Cut Harvest Density Log Mixed Conifer Reserves Incomplete Prescription Clearcut with reserves following the retention guidelines. Leave mature aspen, and scattered conifer along edge Specs: Other Cut this stand with adjacent stand 58 in Newberry compartment 107 because of access. Comments: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, cedar, yellow and Next Steps: paper birch, balsam fir, white spruce, black spruce and white pine. Proposed 10/01/2013 Start Date: 4113 - R.Maple, 4119 - Mixed Medium 73 81-110 30 45182030-Cut 48 Harvest Single Tree Fld. Tr. Bdy. -Northern Hardwoods Density Selection Conifer Incomplete Pole Prescription Mark stand to 80 to 90 Basal Area. Retain some beech with the smooth bark and wildlife trees. Some ironwood, basswood and all juneberry and Specs: conifer should be left. Some larger canopy gaps may be desirable around the cherry and yellow birch if possible to regenerate those species and enhance the advanced regeneration present. Other Comments: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, beech, yellow and Next Steps: paper birch, ironwood, balsam fir, white spruce and white pine. Proposed 10/01/2014 Start Date: 45182033-Cut 33 14 3 4112 - Maple, High 68 81-110 Harvest Single Tree 411 - Northern Fld. Tr. Bdy. -Beech, Cherry Density Selection Hardwood Incomplete Association Pole Prescription Mark stand to 80 to 90 Basal Area. Retain some beech with the smooth bark and wildlife trees. Some ironwood, basswood and all juneberry and conifer should be left. Some larger canopy gaps may be desirable around the cherry and yellow birch if possible to regenerate those species and Specs: enhance the advanced regeneration present. Other Comments: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, beech, yellow and Next paper birch, ironwood, balsam fir, white spruce and white pine. Steps: Proposed 10/01/2014 Start Date: 45182036-Cut 76.9 Single Tree 36 4112 - Maple, High 89 81-110 Harvest 411 - Northern Fld. Tr. Bdv. -Beech, Cherry Density Log Selection Hardwood Incomplete Association Prescription Mark stand to 80 to 90 Basal Area. Retain some beech with the smooth bark and wildlife trees. Some ironwood if present and all juneberry and conifer should be left. Some larger canopy gaps may be desirable around the cherry and yellow birch if possible to regenerate those species and Specs: enhance the advanced regeneration present. Open up the drip line of the hemlock. Other Comments: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, beech, yellow and Next paper birch, ironwood, balsam fir, white spruce and white pine. Steps: Proposed Start Date: 10/01/2014 **Total Treatment**

Acreage Proposed: 109.7

S t		Sault Ste. Mar	rie Mgt. Unit	Mgt. Unit Report 4 Treatments Prescribed with a Site Condition Compartment: 1							
a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status	
		#Type!	#Type!								
<u>Spec</u>	ſ										
<u>Com</u> <u>Next</u> <u>Steps</u>											
<u>Prop</u> <u>Start</u>	<u>osed</u> <u>Date:</u> #Typ	e!									
<u>Limiti</u>	ng Factor										
A	Total Treatr creage Propo)								

Sault Ste. Marie Mgt. Unit

Cory Luoto : Examiner

Compartment 182 Year of Entry 2015

Availability for Management

Total Acres Acres

Dominant Site Conditions

Acres Av	ailable	Not Available		No	2H
176	176		Aspen	176	
1050	1050		Cedar	1,050	
23		23	Lowland Conifers		23
45	45		Lowland Spruce/Fir	45	
48	48		Mixed Upland Deciduous	48	
345	345		Northern Hardwood	345	
10	10		Red Pine	10	
1,696 1	1,673	23	Total Forested Acres	1,673	23
	99%	1%	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.

	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition					
003	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	23	2B: Unknown if access through adjacent landowner(s) is possible								
	Comments: Stand is a riparian area on the north end of Black Creek Flooding.											



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 – EXISTING SPECIAL CONSERVATION AREA DETAILS

* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

Conservati Area	ion Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions stocked trout populations and those of other coldwater fish spect conditions for coldwater fishes may occur in Michigan lakes if the groundwater inflows, or are located in colder (northern) areas of Director's action and designated as trout resources by Fisheries	ies to persist from year to year. Suitable ey are relatively deep, have substantial the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen cond stocked trout populations and those of other coldwater fish spec year to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	ies (e.g., slimy sculpin) to persist from ese conditions due to substantial
SCA	Habitat Area	An area that provide some specific need for the life cycle of wild and Waterfowl Production Areas, deer wintering complexes in lo openings and savannas. Habitat areas are distinct from critical h endangered or threatened species (such as Kirtland's warbler of general in nature, are not primarily associated with threatened o covered by species recovery plans that are developed in cooper	we whand conifer communities, grassland habitat designated for recovery of r piping plover areas) in that they are more r endangered species, and are not

Report 8 – Forested Stands



S t	Sault Ste. Marie	e Mgt. Unit		Report 8	- Forested	Stands Compartment: 182 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6120 - Lowland Cedar	Medium Density Pole	97.6	98		Poor quality, extremely wet cedar. Some areas are fairly sparce. Stand borders the Black Creek Wildlife Flooding.
2	6124 - Lowland Spruce- Fir	Medium Density Pole	23.2	134	51-80	Poor quality spruce stand. Mix of Black and white spruce plus cedar. Slightly higner ground than surrounding cedar but still lowland.
4	6122 - Black Spruce	High Density Sapling	31.5	51		Smaller, sapling size trees.
10	4119 - Mixed Northern Hardwoods	High Density Pole	3.3	72		Using Don Kuhr's data from the compartment to the north.
11	4112 - Maple, Beech, Cherry Association	High Density Log	17.6	89	51-80	Stand was thinned previous enrtry. Heavy deer browse.
14	6122 - Black Spruce	Medium Density	13.4	51		Small black spruce.
16	6120 - Lowland Cedar	High Density Pole	946.6	113		Very large cedar stand. Went into it from several different spots. Some variations in the imagery but it is all part of the same complex. Heavy deer use.
17	4110 - Sugar Maple Association	High Density Pole	3.1	82	81-110	Stand Data taken from adjacent compartment. Poorer quality sugar maple stand. Small dia's and low % of good boles. Thin heavy next entry.
20	4136 - Aspen, Mixed Conifer	High Density Log	13.7	53		Aspen ridge, Dying. Inventory data taken from the compartment to the north. Data collected by Don Kuhr. Stand will be set up when Newberry does the work in comp 42107.
21	4134 - Aspen, Spruce/Fir	High Density Pole	51.7	39	1-50	Stand has just transitioned from a sapling to pole stand. Still lots of sapling size stuff in the stand.
22	4130 - Aspen	High Density Sapling	9.1	12		Aspen is doing great. Very little conifer.
23	4130 - Aspen	High Density Sapling	6.2	12		Aspen is doing great. Not a lot of conifer.
25	4130 - Aspen	High Density Sapling	8.3	12		Aspen regen is doing great.
27	6120 - Lowland Cedar	High Density Pole	5.8	117	111-140	Small pocket of cedar. Not alot of deer sign in this small stand. Private land to the north was clear cut a few years ago. Will have to watch that to see if cedar regenarates.
28	4191 - Mixed Upland Deciduous with Conifer	Medium Density	17.7	29		This stand was an upland brush stand and a grassy opening in the previous inventory. It now has enough trees to be forested. It has a little bit of everything in it.
29	4134 - Aspen, Spruce/Fir	High Density Sapling	3.5	28		Stand has filled in nicely since last inventory. It will be a pole stand by the next inventory cycle.

S t	Sault Ste. Marie	ə Mgt. Unit		Report 8	– Forested	Stands Compartment: 182 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
30	4119 - Mixed Northern Hardwoods	Medium Density Pole	4.8	73	81-110	Red maple clumps, sugar maple, beech and a few cherry. There is a fair amount of spruce and balsam also. Thin down to 70-80 basal area. Concentrate the marking on red maple clumps and beech.
31	42110 - Planted Red Pine	High Density Pole	9.6	60	111-140	Nice red pine.Look at thinning or a clearcut in ten years. One big lone white pine in the stand. Awesome legacy tree.
32	4191 - Mixed Upland Deciduous with Conifer	High Density Sapling	19.8	29		This an upland Mackinac Mix stand. The east side has more decidous while the west has a greater conifer component.
33	4112 - Maple, Beech, Cherry Association	High Density Pole	14.3	68	81-110	Stand can be thinned. Heavy deer browse.
35	4191 - Mixed Upland Deciduous with Conifer	Medium Density	10.4	29		This stand is similar to the one to the north. Previous inventory it was an upland brush stand. It now has enough trees to be forested. It is a mix of everything.
36	4112 - Maple, Beech, Cherry Association	High Density Log	260.7	89	81-110	This is a large maple stand. Last entry over half of the stand was thinned. The central portion was thinned 17 years ago and is ready to be thinned again. Not alot of beech in the stand. There is a small patch of conifer in the south east corner of the stand. Heavy deer browse in most of the regen.
37	4134 - Aspen, Spruce/Fir	High Density Pole	11.1	28	1-50	Stand is just barely a pole stand. Lots of sapling size trees in the stand.
38	4110 - Sugar Maple Association	High Density Log	41.3	95	81-110	This stand was thinned 5 years ago. Look at thinning in ten years. Most of the beech was taken in the sale. Lots of deer browse.
39	4134 - Aspen, Spruce/Fir	High Density Pole	71.9	34	1-50	Stand has just transitioned from a sapling to pole stand. Still lots of sapling size stuff in the stand.

Sault Ste. Marie Mgt. Unit

Compartment: 182

Year of Entry: 2015

NATURA

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:	TCHIGA
3	622 - Lowland Shrub	9.0	Unspecified	Unspecified		
5	50 - Water	2.8	Unspecified	Unspecified		
6	623 - Emergent Wetland	277.3	Unspecified	Unspecified		
7	50 - Water	13.7	Unspecified	Unspecified		
8	50 - Water	15.2	No	Low		
9	50 - Water	1.0	Unspecified	Unspecified		
12	622 - Lowland Shrub	11.8	Unspecified	Unspecified		
13	622 - Lowland Shrub	14.2	Unspecified	Unspecified		
15	623 - Emergent Wetland	23.2	Unspecified	Unspecified		
18	622 - Lowland Shrub	107.0	Unspecified	Unspecified		
19	622 - Lowland Shrub	1.6	Unspecified	Unspecified		
24	629 - Mixed non-forested wetland	3.2	Unspecified	Unspecified		
26	310 - Herbaceous Openland	6.0	Unspecified	Unspecified		
34	330 - Low-Density Trees	1.5	Unspecified	Unspecified		